

Gazetteers of the Bombay Presidency

(Facsimile Reproduction)

RATNAGIRI AND SAVANTVADI

VOLUME X

Originally Printed in 1880 Reprinted in 1996 e - BOOK EDITION : 2006

Published By

The Executive Editor and Secretary
Gazetteers Department, Govt. of Maharshtra, Mumbai

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PROLOGUE

I am very glad to bring out the e-Book Edition (CD version) of the Ratnagiri and Sawantwadi District Gazetteer. This CD version is a part of a scheme of preparing compact discs of earlier published District Gazetteers.

Ratnagiri and Sawantwadi District Gazetteer was first published in 1880 by the British Government in the series of Gazetteers of the Bombay Presidency. The volume was edited by Mr. James M. Campbell, I.C.S. It contains authentic and useful information on several aspects of the district and is considered to be of great value to administrators, scholars and general readers. The revised edition of it was compiled and published in 1962. But the old gazetteer published during the British regime-contained much valuable information, which was not reproduced in the revised edition. Therefore, the department decided to reprint Ratnagiri and Sawantwadi District Gazetteer (1880). Accordingly it was reprinted in 1996. Considering its utility, need was felt to preserve this treasure of knowledge. In this age of modernization, information and technology have become key words. To keep pace with the changing need of hour, I have decided to bring out a CD version of this edition. It is also made available on the website of the State Government www.maharashtra.gov.in. I am sure, scholars and studious persons across the world will find this CD immensely beneficial.

I am thankful to the honourable Minister, Shri. Ashokrao Chavan (Industries and Mines. Cultural Affairs and Protocol), and the Minister of State, Shri. Rana Jagjitsinh Patil (Agriculture, Industries and Cultural Affairs), Shri. Bhushan Gagrani (Secretary, Cultural Affairs), Government of Maharashtra for being a constant source of inspiration.

Place: Mumbai DR. ARUNCHANDRA S. PATHAK

Date :26th January, 2007 Executive Editor and Secretary

PREFACE

I am happy to bring out this Facsimile Reproduction of the Ratnagiri and Sawantwadi District Gazetteer, which was first published in 1880by the British Government in the Series of Gazetteers of the Bombay Presidency. The Volume was edited by Mr. James M. Campbell I.C.S. This encyclopaedic volume was published 115 years ago and has now become scarce and gone out of print The second revised edition of the Ratnagiri District Gazetteer was published by this Department in 1962. However, the utility of the Ratnagiri and Sawantwadi Gazetteer in the Old Series is still undiminished, because it contains authentic and very useful information on several aspects of life, and has an impress of profound scholarship and learning. It has not lost its utility due to the mere passage of time. It is, therefore, felt necessary to preserve this treasure of knowledge for posterity. There is also a demand from scholars that all the Old Gazetteers should be reprinted even though a revised, edition is available. With these considerations in view the Gazetteer Volumes in the Old Series are being reprinted. I am sure, scholars and studious persons will find them very useful.

It may be pertinent to state that a totally rewritten Marathi edition of the Ratnagiri District Gazetteer is being brought out by us.

I am thankful to the Director, Government Printing and Stationery, Shri P. S. More and the Manager, Government Photozinco Press, Pune, Shri U. S. Sonawane and other staff in the Press for expeditiously completing the work of reprinting.

Mumbai:

DR. K. K. CHAUDHARI

1st March 1996

Executive Editor and Secretary.

PREFACE

THE chief contributor to the Ratnagiri Account is Mr. G. W. Vidal, C.S. Mr. Vidal has, besides supplying materials for parts of the sections on Trade, Manufactures, History, Land Administration, Subdivisions, and Places of Interest, prepared and revised the Description, Production, and Capital Chapters. For Land Administration and Places of Interest much assistance has been received from Mr. A. T. Crawford, C.S.

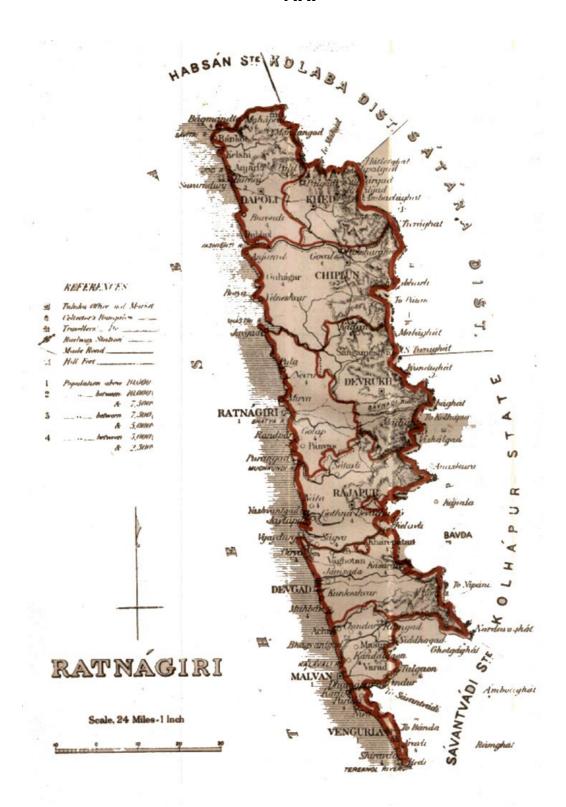
The bulk of the Savantvadi Account is from a memoir written for the Bombay Gazetteer by Colonel J. F. Lester the last Political Agent.

As far as possible the names of other contributors are shown in the body of the book.

August 1880. JAMES M. CAMPBELL.

Maharashtra State Gazetteers

MAP



Photozincographed Govt Office, Poona, 1880

RATNAGIRI FORT

RATNAGIRI TOWN



DESCRIPTION

[This chapter is contributed by Mr. G. W: Vidal, C.S, partly from materials supplied by Mr. A. K. Nairne, C.S., Mr. J. H. Todd, C.S., and Mr. C. B. Winchester, U.S.]

THE district of Ratnagiri lying between 15°40' and 18° 5' north latitude, and 73° 5' and 73° 55' east longitude, has an area of 3789 square miles, a population of 1,019,136 souls, and a land revenue of £101,342 (Rs. 10,13,420). [The population figures are those of the 1872 census., the revenue is that recovered during the year ending 31st July 1879,]

Boundaries

Except for two coast villages Bagmandla and Kolmandla on its north bank, the Savitri river for about twenty-four miles, from the coast to the old port of Mahapral, forms the northern boundary of the district, separating it from the native state of Janjira, or as it is usually called, Habsan. Leaving Mahapral the boundary follows an irregular chain of hills, that running south-east and joining the Sahyadri range at the Hatlot pass, divide Ratnagiri from the southern extremity of the Kolaba district. On the west lies the Indian Ocean, giving the district a seaboard of about 160 miles, from Bankot or Fort Victoria, to a point some two miles south of Fort Redi. On the east, the water shed of the Sahyadri hills from Hatlot to Naradva, forms a well defined natural boundary, and except for the one village of Gotna in Sangameshvar that passes beyond it, divides the district from Satara and Kolhapur. The southern boundary is more irregular. At the south-east corner, the Savantvadi state comes between Ratnagiri and the Sahyadri hills, leaving Ratnagiri a narrow tongue of land that runs down the coast line, and diminishes almost to a point near Fort Terekhol, the northern limit of the Portuguese province of Goa. This narrow strip of coast, scarcely more than four miles at its broadest point, forms the Vengurla sub-division.

Sub-divisions

The area included in the district of Ratnagiri is, for administrative purposes, distributed over nine sub-divisions. These, as shown in the following summary, have an average area of 421 square miles, 148 villages, and 113,237 inhabitants.

Ratnagiri Administrative Details, 1879.

				,	VILLAG	ES.			
	AREA IN	Govern	ment.	Alien	ated.	Total.			
NAME.	SQUARE MILES.	Villa	ges.	Ham	ilets.	Villa	Hamlets.		
	MILLS.	Inhabi- ted.	Uninh- abited.	Inhab- ited.	Uninh- abited	Inhab- ited	Uninha- bited	Inhabi- ted.	
Dapoli	500	2431/2	4	903		3		11	
Khed	390	142	1	535		4		24	
Chiplun	670	207	1	1181		5		41	
Sangameshvar	538	167	7	379		12		10	
Ratnagiri	430	154	1	549		6		13	
Rajapur	632	147	4	539		15		73	
Devgad	521	113	14	401	²⁵)	7	1	67	
Malvan	56	55	4	201		7	3	31	
Vengurla	52	9		136		1			
	3789	12371/2	36	4824	1	60	4	290	

continued..

Maha	AREA	VI	LLAGE		a Gaz	POPULATION	Land
NAME.	IN SQUARE MILES.	Govern- ment	Alien- ated		POPULATION, 1872	to the square mile.	REVE, 1879
							£
Dapoli	500	2471/2	3	2501/2	143,137	286	14,434
Khed	390	143	4	147	89,647	230	9363
Chiplun	670	208	5	213	164,953	246	16,830
Sangameshvar	538	174	12	186	107,891	201	12,620
Ratnagiri	430	155	6	161	120,576	301	10,578
Rajapur	632	151	15	166	136,544	216	15,340
Devgad	521	127	8	135	124,115	238	9275
Malvan	56	59	10	60	88,185	1575	8326
Vengurla	52	9	1	10	35,088	675	4677
	3789	1273½	64	1337½	1,019,136	269	101,342

Aspect

The district is formed by a narrow belt of low land, lying between the Indian Ocean and the Sahyadri hills, with a total length of about 160, and a breadth varying -from thirty to forty-five miles. Though hilly and rugged as a whole, the district presents in different parts many characteristic features. Near the Sahyadri hills the valleys are more open and the hills less rugged than towards the centre of the district, which is little else than a mass of wild rugged hills. These again, towards the coast, fall into nearly level plateaus, in great part made barren by a capping of laterito rock, cleft by deep narrow steepsided valleys and ravines, -through which rivers and streams find their way from the Sahyadri- hills to the sea. These rivers,' tidal and navigable, have on their banks the chief ports and nearly all the fertile land of the southern Konkari. Over the rest of the country the soil is miserably poor, most of it a stiff iron clay, often mixed with gravel. [Captain Wingate, 1185; Bum. Gov. Sel. II. G.]

Coast Line.

The coast is almost uniformly rocky and dangerous. At sea, from a little distance, the line of black steep cliffs seems unbroken, and most uninviting. But those who in small boats or native craft creep along the coast, find, one after another, bays and coves shut in between jutting points of black rock and edged with sand of perfect whiteness. Here and there a thin sprinkling of red earth contrasts with the black rock, and though there are no trees, there is, even in the hot weather, a fair covering of green brushwood. In places, the hills draw back a little, leaving at their base a rich level of rice fields, with generally a belt of cocoanut palms between them and the beach. Almost every ten miles is a river or bay, large enough to form a safe harbour for native craft, while at least four or five are by size and position fit to be leading ports and centres of foreign trade. The promontories at the mouths of the larger rivers are usually crowned with the ruins of old fortresses, and in one or two places, as at Suvarndurg and Malvan, rocky islands, divided from the mainland by narrow channels, still show the remains of strong Maratha fortifications. In the numerous bays and openings along the coast are extremely picturesque villages, shaded more or less densely by palm trees, the houses usually built in one or two long narrow lines, each house standing in its own little plot of cocoanut garden.

Inland Tracts.

Inland, the district is a series of raised laterite table lands with a varying depth of soil, the rock cropping out at frequent intervals. Between the table lands are valleys, the smaller ones mere beds of mountain torrents, the larger containing strips' of rice land, often fringed with betelnut groves or plantain gardens, with here and there a mango or jack tree orchard. Some of these table lands, especially those some way inland, are fairly wooded. But near the coast they are barren plains strewed with stones, with an occasional patch of soil in the crevices of the rock. Except in some of the alluvial lands at the heads of creeks and in a few watered tracts mostly in the south, the crops, sown in June, are reaped in November. From November to June the land is absolutely bare. During the rainy season, a coarse rank grass grows freely on

all the hill sides, but it has little value and makes poor fodder. The inland villages and hamlets lie usually in the valleys under clumps of shady mango, jack, and tamarind trees. Many of them in connection with their temples, have beautiful sacred groves, *Devrai*, preserved from ancient days. In these groves no branch or stick may be cut, save for the use of the temple or of the community. Above are lofty trees overgrown with creepers, ferns, and orchids, and linked by parasites trailing in graceful festoons; below is a tangled growth of bush and scrub intersected by mazy paths, the whole a mass of luxuriant vegetation, to a lover of nature one of the pleasantest features of the district.



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DESCRIPTION

Hills

From all parts of the district, the line of the Sahyadri hills bounds the eastern horizon. These mountains, both in form and size, are easily distinguished from any of the numerous spurs that roughen the surface of the district between the bases of the main range and the sea. In the Sahyadri hills both above and below the main range, the tops are often crowned or girded by large massive basaltic rocks. These, with little aid from art, can be made fortresses most difficult to reach, and to look at, almost impregnable. Many of them have springs of the finest water, and in all a supply can be secured in cisterns or reservoirs. These hills are crossed by numerous passes, which except in two or three places where made roads have been constructed by the British Government, form the only means of communication with the Deccan. The best known of these precipitous defiles are, taking them from north to south, the Hatlot, the Ambola, the north Tivra, the Kumbharli, the Mala, the south Tivra, the Amba, the Anaskura, the Kajirdi, the Phonda, and the Nardir passes. In climbing and on gaining the crest of these passes the scenery is on all sides most grand. Mountains rise behind mountains three or four thousand feet high, and covered with trees except where the huge black rock is too solid even for the hardiest shrub to take root. The hills are in places always green, and during the rainy season, especially towards its close, when torrents pour down the mountain sides, the vegetation is extremely rich, and gleams of sunshine, reflected from the breaking masses of clouds, give a thousand passing tints to every hill. Both at the opening and the close of the south-west monsoon, the most tremendous tempests and thunderstorms are common. To the west of the Sahyadri hills, which rise sheer from base to crest, the country is comparatively low, the plateaus seldom rising more than five hundred feet above sea level. So rugged and hilly is the whole district, that no detailed account of its innumerable spurs and eminences is possible. The lower hills are for the most part bare and treeless, and where trees occur, they are yearly stripped of their leaves and branches to be turned to ashes on the rice fields in the valleys below. Only here and there are lofty hills with slopes more or less covered with verdure. A few of these deserve special mention. Beginning from the north, the first hill of importance is the hog-backed Mandangad, a ruined fort, about fourteen miles from the sea in Dapoli, which, commanding a view of Mahabaleshvar, is itself a conspicuous land-mark for many miles round. South-east of Mandangad lies Palgad, also in Dapoli. Further on, in the same direction and in the Khed sub-division, three isolated hills of considerable height rise in a line parallel to the Sahyadris and separated from them by the narrow valley of the Tagbudi river. The northmost of these hills is Mahipatgad, which faces the Hatlot pass

and Makarandgad in the Satara district the famous 'Saddle back' of visitors to Mahabaleshvar; the central is Sumargad, and the southmost facing the Ambolighat is Rasalgad. All these hills are capped by strong perpendicular scarps of basalt, and two at least of them were, like all similar coigns of vantage, fortified by the Marathas. Except the Sahyadri ranges, there are no hills of any great height either in Chiplun, Sangameshvar, or Ratnagiri. Passing south to Lanja in Rajapur, Machal a triangular hill of considerable height is seen close to the old fort of Vishalgad, at the foot of, though detached from, the Sahyadris. Unlike most high Ratnagiri hills whose tops are narrow ridges or peaks, Machal ends in a fine broad plateau and could be made a sanitarium. The following table prepared from the Trigonometrical Survey Chart shows the heights and positions of some of the principal points from which observations were taken during the survey:

Ratnagiri Hills.

NAME.	SUB- DIVISION.		ORT ITU			EAST GITU	-	HEIGHT IN FEET.	SITUATION.
		0	,	"	0	,	"		
Kanta	Dapoli	17	57	30	73	7	40	1100	Hill on table land,4 miles south-east of Bankot.
Nigadi	ıräsh	17	42	10	73	13	37	952	Highest point of range of hills, about 4 miles south of Dapoli camp and 3 miles from the coast.
Bhuleshvar	Khed	17	45	8	73	22	22	906	Hill,½ mile northeast of Furas village, between Dapoli and Khed, about 13 miles from the coast.
Adur	Chiplun	17	24	9	73	12	41	352	A conspicuous hill known as Borya Head on the sea coast, about 12 miles south of Dabhel

Ratnagiri Hills—continued.

NAME.	SUB- DIVISION.		ORT			EAST GITU		HEIGHT IN FEET.	SITUATION.
		0	,	"	О	,	"		
Kumbharli	Chiplun	17	24	8	73	43	26	3435	Sahyadri range, ½ mile north of the Kumbharli
Jaygad	Ratnagiri	17	17	55	73	15	47	190	Highest tower of the fort.
Kaljondi	"	17	12	23	73	20	32	729	Highest point of a range of hills, 2 miles east of the village of Kaljondi and 6 miles from the const.
Varavda	"	17	11	48	73	16	32	218	Hill south-west of the village of Varavda on the sea coast, about 2 miles north of Malgund.
Mirya	11	17	1	34	73	18	6	464	Highest point of hill 2½ miles north of Ratnagiri fort.
Ratnagiri Fort,	31775	16	59	9	73	18	49	298	Light-house tower.
Nivendi	"	17	9	47	73	21	32	729	Hilt to the east of the village of same name, about 6 miles from the coast.
Tili Tek	11	16	50	35	73	20	21	397	Ridge of hills on sea coast, about 12 miles south of Ratnagiri.
Khavdi	Rajapur	16	48	35	73	31	50		Hill about a mile west of village of same name near Lanja, about 13 miles from the coast.

NAME.	SUB- DIVISION.		ORT ITU			EAST GITU		HEIGHT IN FEET.	SITUATION.
		0	,	"	0	,	"		
Manoli	"	16	55	11	73	50	30	3348	Western extremity of ridge running east and west about 4 miles south of the A'mba pass.
Gheria	Devgad	16	29	57	73	22	28	319	Hill on coast three miles south of Vijaydurg fort.
Bhutoba	11	16	15	26	73	28	13	367	Hill on sea coast about 16 miles south of Vijaydurg.
Shravan	"	16	14	33	73	36	42	695	Hill about 2 miles northwest of village of same name, about 9 miles from the coast.
Yelvan	11	16	25	2	73	54	18	3240	Highest point of hills, a mile and a half east of Sivgad fort.
Parula	Malvan	15	58	14	73	36	42	517	Hill in village of same name, eight miles north of Vengurla.

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Rivers

The numerous streams and watercourses, which form the river system of the district, vary little in the character of their course. Rising either in the Sahyadri hills, or in the various spurs connected with them, they traverse the country through narrow deeply cut ravines and deliver their tribute wave to the Indian Ocean after a short but tortuous course, seldom of more than forty miles. The general flow is from east to west, with in some instances a slight tendency to fall towards the south. A noticeable feature of these rivers is the suddenness of their windings. In many parts they have the appearance of land-locked lakes, until the passing of an outstanding hill shows the line of water stretching at right angles to its former channel. Though of comparatively small size and volume, and ill suited for irrigation, the principal rivers are of great value to the district. Their deep tidal channels, navigable for twenty miles or more, when supplemented by good roads between the sea-board and the Deccan, afford easy means of communication, and provide an outlet for the produce of the country; their broad estuaries offer good and safe anchorage for craft plying up and down the coast; and along their low

tidal banks are found the best rice lands of the district. Besides the larger rivers, there are many small streams, creeks, and inlets, which have no communication with the interior. And during the south-west monsoon innumerable little rills and rivulets springing up in all directions, drain into minute patches of level ground and convert them into rice fields.

The Savitri.

The Savitri or Bankot river, for its last twenty-four miles the northern boundary of the collectorate, is one of the five streams, panch ganga, which have their sources in the village of old Mahabaleshvar. Descending the mountain side in a narrow rocky channel, it passes by Mahad and Dasgaon through southern Kolaba, and roaches the Ratnagiri district at Mahapral, and after a total course of about fifty miles falls into the sea at Bankot. During its passage through the Ratnagiri district, it receives the waters of no tributary. The mouth of the Savitri is formed by bluff hills, jutting out on either side of the creek into the sea. Fort Victoria or Bankot crowns the southern headland. The old fort is still there, though in ruins, and on the shores of the creek are traces of the first English Residency in the southern Konkan. Bankot [Mr. Crawford's Report, 4430, 12th December 1877.] is only a fair-weather port. The passage is marked by buoys and beacons, but a rather formidable sand bar with at low water a depth of 2½ fathoms lies across the entrance to the anchorage. In 1853, at the end of the stormy season, a native vessel containing the wife, child, and servants of a member of the Bombay Council was wrecked off this bar, and perhaps without sufficient reason, it has ever since been considered dangerous. [Mr. Crawford's Report, 4430, 12th December 1877. The river is, for native craft, drawing seven feet of water, navigable thirty-six- miles to the town of Mahad in Kolaba; and for vessels of sixteen feet draught up to Mahapral in Ratnagiri, about twenty-four miles from the mouth of the river. Between Bankot and Mahapral there is no difficulty, and large craft work up on a single tide. Between Mahapral and Mahad the river narrows; shoals, and rocky ledges, and reefs are numerous; and even for small craft, navigation is both difficult and dangerous. Such craft are often three or four days working up from Mahapral to Mahad. Every year within these limits the creek is silting and becoming more difficult. The principal ferry across the Savitri is between Bankot and Bagmandla. Boats also, ply between Shipola, Panderi, Nigadi, and Mahapral, and the villages opposite to them in the Habshi's territory. After the first two or three miles, the scenery of the creek is particularly striking. The hill, rising boldly from the water's edge to a considerable height, are especially on the northern bank, clad with thick forests, which on some of the reaches surround the water on all sides, giving the creek the appearance of a mountain lake. Further inland, the hills draw back, giving place to broad belts of low land, divided from the water by mangrove swamps, and before Mahad is reached, the banks have become flat and uninteresting.

The course of the Vashishti is parallel to, and about thirty miles south of, the Savitri. This river, the largest and most important in the district, rises in the Tivra pass and takes its name from Vashisht, a follower of Ram, who is supposed to have inhabited that region. About fifteen miles from its source, after a rapid fall through rocky ravines, the river reaches the town and cotton mart of Chiplun, and at this point becomes tidal. Passing the island of Govalkot it suddenly widens, and after a course of twenty-five miles through low mud banks fringed with mangroves, it reaches the sea at the port of Anjanvel. Like the Savitri the entrance to the Vashishti is guarded by a formidable sand bar, which on the south bank leaves but a narrow passage, under the rocky headland on which stands the old fort of Anjanvel. On the north bank, a mile above Anjanvel lies the once famous port of Dabhol. Situated on a narrow strip of low ground between the creek and a precipitous hill, its present aspect does not suggest its former greatness. When gales from the north-west make the anchorage off Anjanvel fort dangerous, the numerous craft waiting to leave the river, lie off the Dabhol shore, where they are completely protected from the wind, and where there is sufficient water to float vessels of much heavier burthen than ever now enter the Vashishti. Still, neither Anjanvel nor Dabhol is more than a fair-weather port. The Jagbudi, the principal tributary of the Vashishti, rises near the Hatlot pass. In its first twelve miles its course lies from north to south. Here it turns at a right angle, and after twelve miles from east to west, reaches the town of Khed, the head-quarters of the sub-division of that name. It here meets the tidal wave and again turning sharply, continues its course for another twelve miles from north to south, till from the right it joins the Vashishti, about twenty miles from the coast. Several smaller tributary streams are, on either bank, received into the Vashishti. Up the larger of these the tide runs for some distance, and the smaller coasting boats can pass to villages a mile or two from the main river. The entrances to these smaller creeks are generally hidden by mud banks covered with mangroves, which bar the passage when the tide is out. The Vashishti is at any state of the tide, navigable for the largest craft as far as the village of Diva, about eight miles below Govalkot, the landing place for Chiplun. Very large craft work up on the tide to Govalkot itself, twenty-eight miles from the mouth of the river, and there discharge on the guays, constructed in 1860 by Sir M. R. Kennedy, or into flat boats which work up the narrow tidal gullet to Chiplun, three miles further. [Mr. Crawford's Report, 4430, 12th December 1877. The Jagbudi is also navigable for small craft as far as Khed. The triangular island of Govalkot or Map is formed by the division of the Vashishti into two channels at Chiplun. The northern channel, probably the original course of the river, but now passable only by small boats, forms one side of the triangle, while the base and the other side are the southern channel, which turns at an acute angle to re-join the main stream. The extreme length of the island is two

miles and its breadth one mile. At the apex of the triangle is a low hill, the ruins of an old fort, which guards the approach to Chiplun. The island, formed entirely of alluvial deposit, is highly tilled. About a mile below Govalkot is a group of small islands of salt marsh and mangrove swamps. There are two chief ferries across the Vashishti, between Taribandar and Dabhol, and between Maldoli and Hodkbad. The rive or becomes fordable at the eastern angle of the Govalkot island,

The Shastri.

The next river of importance is the Shastri. Rising in the Sahyadri hills near Prachitgad, after a total course of about forty miles it falls into the ocean at Jaygad, a rocky promontory jatting into the sea twenty miles south of the estuary of the Vashishti. Flowing' for about sixteen miles west, past the town of Sangameshvar, until it meets the Bay river at Phangas in the Ratnagiri sub-division. the course for a few miles changes abruptly to the north, and then takes a north-westerly direction to the coast. The tidal wave reaches as far as Pet, the modern Sangameshvar, two miles lower down the south bank of the river than the original town of that name During its course several small rivers unite with the Shastri. The principal of these is the Bay, which; rising in the Sahyadri range near the Amba pass, after a course of about thirty-five miles through a comparatively fertile valley, joins the Shastri on its left bank at Phangas about twenty miles from the coast. The Gadnadi from the Mala pass, meets the Shastri on its right bank, five miles lower down, while a smaller stream rising near Velamb in the Chiplun sub-division joins the Gadnadi on its right bank, two miles above the junction of the latter with the Shastri. Jaygad, at the mouth of the river, is a good and safe fair weather port, with a broader estuary and a less difficult bar than the Savitri or Vashishti. But the river soon narrows and shallows, and though vessels of moderate draught can still run up on the tide within a few miles of Sangameshvar, the channel is said to be gradually silting. The Gadnadi is navigable for small craft as far as Makhjan, the seat of a small trade. But the Bav very soon becomes too shallow for any but small boats. There are four chief public ferries across the Shastri, between Tavsal and Laiegan; between Tambhari and Kudli; between Phangas and Dingni; and between Sangameshvar and Asurda. The Bav is crossed by ferries as Vandri and Parchuri.

The Ratnagiri.

About twenty-five miles south of the Shastri lies the Ratnagiri river or creek, with no special name and comparatively unimportant. Rising in the Amba pass, it falls into the sea after a course of some forty miles. The mouth of the river is very narrow, and on the south side is guarded by a large sand bank. Outside the entrance and to the north, with alight-house at its extreme end, lies the promontory on which stands the fort of Ratnagiri. As this bay gives safe anchorage for small craft during the north-west winds, few vessels pass into the narrow creek. There are no important towns on its bunks. But small craft can

work up on the tide twelve miles as far as Harchiri. Up to this point the influence of the tide is ordinarily felt. But in the monsoon freshes, even at the very mouth of the river, the water has no taste of salt. There are two chief ferries, one between Ratnagiri and Bhata; the other between Someshvar and Pomendi.

The Machkundi.

About twelve miles south of Ratnagiri is another small river, the Muchkundi, which rises at Machal [The cave at Machal is the traditionary home of the gage Muchkund after whom the river is named.] near Prabhavli, and flows into the sea with the fort of Purangad on its northern bank. Small craft navigate the river twelve miles as far as Satavli.

The Jaytapur Creek.

The next river, the Jaytapur creek, rising in the Anaskura pass, after about twenty-five miles as a mountain stream, reaches the ancient trading town of Rajapur, where, in years gone by, the English and French had factories. Here it meets the tidal wave, and after another fifteen miles reaches the ocean at Yashvantgad, a promontory on its north bank about twelve miles south of Purangad. Yashvantgad is a fair weather port and the creek is navigable to within three miles of Rajapur. The entrance under Yashvantgad is narrow; but a mile or so further up, the river suddenly broadens into what at first sight seems a large landlocked salt lake, with an island in its centre, opposite Jaytapur. After passing this island the channel turns sharp to the south for two miles, when by a gradual curve it resumes its easterly direction. The principal ferries across this creek are two, between Yashvantgad and Jaytapur, and between Jaytapur and Nata. The Rajapur bay, as it is called, affords shelter from the north-westers which blow during the fair season, but with westerly winds there is a heavy short swell in the bay, which makes it a not very safe anchorage; at that time the north side of the bay should be resorted to. There are only seven or eight feet of water on the bar at low tide. But further in are depths of from eighteen to twenty-four feet abreast the large village of Jaytapur, inside on the left bank of the river. [Hydrographic Notice No. 17 by Lieut. F. W. Jarrad, R.N., 7.]

The Vijaydurg Creek.

Four miles south of Yashvantgad is the mouth of the Vijaydurg creek or Vagotna river. Rising in the Kajirda pass and flowing southeast for about fifteen miles, receiving on its way the waters of several smaller streams, this river reaches the tidal wave at or near Kharepatan. After this point its channel rapidly widens, and passing the quay of Vagotna on its left bank, reaches the ocean at Vijaydurg, a bold headland on the south side of the estuary, crowned by the ruins of an old fort. The mouth of the river is by the promontory of Vijaydurg completely sheltered from the south-west, and being split into several bays and backwaters, gives, all the year round, a splendid

anchorage to craft of large size. [In the fine season vessels may anchor anywhere in the harbour, the best position being in 31/2 fathoms mud and clay, at low water, with the extremes of the fort bearing from W.S.W. to S.W. Further in the water shoals quickly, but vessels of less than twelve feet draught can enter the river at any time, and lie in perfectly smooth water a cable from the shore abreast the landing place. A long ship should be moored head and stern, with the best bower to ebb, which in the freshets runs at the rate of nearly four knots an hour. The harbour is accessible and affords perfect shelter to vessels during the south-west monsoon, in the height of which steamers of the Indian navy conveyed troops there during the 1857 mutinies. It is high water, full and change, of the moon at 10 hours 37 minutes; mean springs rise 6 feet 9 inches, neaps 4 feet 10 inches. Hydrographic Notice, 17, 6. This river has no bar. At its entrance between Vijaydurg fort and the high cliffs to the north-east on which there is an old Maratha battery, there are depths of from twenty to twenty-four feet at low water. Inside it rapidly shoals, and 2½ cables further in the depth at low water is only from twelve to thirteen feet. [Ibid, 6.] After rounding Vijaydurg, the channel turns south-cast for four miles parallel to the line of coast, and then passing a small island in mid-channel, gradually curves to the east. At the bend of the river a large backwater runs south for two or three miles, forming the peninsula of Gheria, The creek is navigable for vessels drawing seven feet as far as the village of Vagotna, where guays have been built, and for smaller craft, up to Kharepatan twenty miles inland. The chief public ferry is between Vagotna and Kumbhavda.

The Devgad.

The Devgad river rises in the Sivgad pass, and, after a comparatively straight course of about thirty-five miles from east to west reaches the sea at the fort of Devgad which forms the southern headland about twelve miles south of Vijaydurg. There are no towns of any importance on its banks. Several small islands have been formed in the bed of the river in its tidal section, and it is only navigable for a few miles.

The A'chra.

The Achra, a small river taking its name from the chief town on its left bank, rises in a spur of the Sahyadri range near the Phonda pass, and has a southwesterly course of rather less than thirty miles to the sea. The entrance to the river is narrow, and lies about fourteen miles south of Devgad. Small craft can pass as far as Achra four miles from the mouth.

The Kalavli.

The Kalavli rises in the Naradva pass near Bhairugad, and for the first twenty-four miles forms the northern boundary of the Savantvadi state. At this point it receives the waters of a tributary stream, called the Gadnadi, and taking a southwesterly course, and passing in

succession Ramgad on the right and Malund and Masura on the left, reaches the ocean after another twenty miles at a small bay, three miles north of Malvan. For the last four miles it flows due south, separated from the sea only by a narrow spit of land. During its course, the Kalavli receives numerous small tributary streams. But the volume of water is comparatively slender, and the river navigable for only eight miles, has no important town on its banks. There are two chief ferries, between Masura and Bhagvantgad, and between Redi and Tondoli.

The Karli Creek.

The Karli river rises in the Sahyadri hills, near Manohargad in the Savantvadi state, and after a winding course of about thirty miles, passing Kudal on its left bank, and engulfing numerous small tributaries, reaches the Ratnagiri district and British territory at Talgaon. For the next fifteen miles, it forms the boundary between the Savantvadi state and Ratnagiri; then flowing west for four miles it turns sharp to the south, and following the line of the coast for four miles more, is to its mouth, eight miles south of Malvan, cut off from the sea only by a wall of sand hills less than half a mile broad. Navigable for a few miles only, it has no towns of importance on its banks.

Minor Creeks.

Besides these larger rivers, numerous smaller creeks and back-waters break the coast line, but have no communication with the interior. During the fair season several of these minor creeks afford shelter to small coasting vessels and fishing smacks, and to cross all or nearly all of them, ferries are wanted.

Beginning again from the north, the first of these smaller inlets is the Kelsi creek, lying midway between Bankot and Savarndurg. The entrance to this creek is narrow and difficult. On the north bank, a high steep brushwood-covered hill overhangs the narrow channel, while a long spit of sand and salt marsh flanks the southern bank. This creek is for some ten miles navigable for small canoes.

The Ada creek, some two miles south, is much like, but smaller than the Kelsi creek. In both of them large quantities of fish are netted.

Four miles south, lies the Anjarla creek or Jog river, important only as being the outlet for the produce of the teak forests, raised in the villages on its banks by Kanoji Angria about one hundred and fifty years ago, and still kept by Government as Imperial reserves.

Between the Jog and the Vashishti are no creeks or backwaters worth notice, and the coast line comparatively straight and regular gives little or no shelter. Between the Vashishti and the Shastri, and south of the open roadstead of Guhagar, lie two snug little bays, Palshet and Borya, sheltered from northerly winds by projecting headlands. Between the Shastri and the Ratnagiri rivers are four minor creeks at Ganpatipula, Karyat Nevra, Ara, and Kalbadevi, all of them

crossed by ferries. The Kalbadevi backwater from the Mirya bay, the stormy-season port of Ratnagiri, runs inland in two 'branches, one going eastwards to Majgaon and the other running four miles south to Ratnagiri. Both of these tidal creeklets are navigable. Between Ratnagiri and the Muchkundi a small creek runs up to Pavas, a town in the Ratnagiri sub-division. From this to the Devgad creek, there is nothing to notice. Between Devgad and the Achra river, two small streams of ho importance and having no local names, cross the Salshi portion of the Devgad sub-division. At Malvan a small bay and backwater make an indifferent harbour. Between Malvan and Vengurla, where is a small creeklet, no other creek remains to be noticed. Finally at Redi, the extreme south of the district, a small river falls into the ocean.

Lakes

The district contains no natural lakes and but few artificial reservoirs of any size or importance. The only reservoirs that call for notice are those at Dhamapur, Varad, and Pendur in the Malvan sub-division. Of their age or of their builders there is no record. The Dhamapur lake has an area of fifty-five acres, and a maximum depth of 371/2 feet. Formed by damming a valley with an earthen bank, though the dam leaks considerably, it holds water all the year round, and shews no tendency to silt. It waters about 500 acres, forty of them garden and the rest rice land. The Pendur lake covers fifty-two acres and has a maximum depth of twelve feet. The embankment is of earth, with a masonry waste weir and sluice. It holds water only till April, when the sluice is opened, and in the bed of the lake rice is grown. It waters about eighty acres, and has silted in places. The Varad lake covers thirty acres and has a maximum depth of from nine to twelve feet. On one side it has a masonry retaining wait. Like the Pendur lake it holds water only till April when its bed is used for growing rice. It waters about 110 acres, and shews no sign of silting. This lake was, in 1855, repaired by Government.

DESCRIPTION

Geology

The following sketch [Contributed by Mr. R. B. Foote, F.G.S., Geological Survey of India, from Notes by the late Mr. C. J. Wilkinson, formerly of the Geological Survey. When visited by Mr. Wilkinson, but little had been written about Ratnagiri geology. The earliest reference occurs in Mr. John G. Malcolmson's well known paper on the Fossils of the Eastern Portion of the Great Basaltic Districts of India, read to the Geological Society of London in 1837, where he describes his discovery of sandstones (quartzites) at A chra, north of Malvan. Mr. H. J. Carter, F.R.S., of the Bombay Medical Service (Jour. Bom. As. Soc. 1864) correlated the Ratnagiri clays with the Travancor beds, in which Lieutenant-General Cullen had discovered supposedly eocene fossils. Mr. Carter was of opinion that the Konkan laterite was a true decomposed trap, not a detrital rock like the Travancor laterite. Lieutenant A. Aytoun's Geology of the Southern Konkan, published in 1864 (Edinburgh New Philosophical Journal, New Series, IV., 671) referred chiefly to the districts Bouth of Ratnagiri, but contained some notes on the laterite seen near that station, which he considered distinctly detrital. Mr. Wilkinson's observations have as yet been published only - in brief form, in a paper drawn up by himself and published in 1871 (Geological Survey of India, IV. 44, under the title Sketch of the Geological Structure of the Southern Konkan); Mr. Wilkinson's more important observations were incorporated in Mr. Foote's memoir on The Geological Features of the South Maratha Country and adjacent districts (Geological Survey of India, Vol. XII. Part I. 1877).] of Ratnagiri geology has been compiled from the notes and maps of Mr. C. J. Wilkinson, formerly of the Geological Survey of India, who, owing to bad health, was himself unable to prepare it. The area examined by Mr. Wilkinson, extending from the southmost part of the district to about eight miles north of Ratnagiri town, and up to latitude 16° 6' north, includes the whole breadth of the district. Beyond that the eastern boundary of the surveyed area trends north-west till it strikes the Muchkundi river, about sixteen miles inland. Hence, the boundary runs north up to and along the left bank of the Bav river, till its junction with the Shastri. The whole of the area thus defined lies in the southern Konkan.

The rocks of this part of Ratnagiri belong to five groups. These, arranged in their true or descending order, are:—

- I. Post Tertiary, or Recent
- II. Upper do.
- III. Middle or Lower Tertiary
- IV. Upper Secondary
- V. Azoic

- 7 Subaerial formations and soils.
- 6 Alluvial deposits.
- 5 Konkan laterite.
- 4 Ratnagiri plant beds.
- Deccan trap and ironclay (laterite) series.
- 2 Kaladgi quartzites and shales. Gneissic (metamorphic) series
- 1 with trap and granite intrusions.

In describing these groups it will be most convenient to begin with the oldest, and consider the others in ascending order. Measured by the superficial

area they cover, by far the most important is the Konkan Laterite; the next is the Deccan Trap; the Gneissic series covers the third, and the Kaladgi quartzites the fourth largest area; the remaining rocks occupy very small surfaces, and are comparatively of little importance.

Gneissic or Metamorphic Series.

The peculiar rocks belonging to the great Gneissic or Metamorphic Series, which occurs so largely throughout the southern part of the peninsula and forms the foundation on which all the other formations rest, are but sparingly exposed in Ratnagiri, only in the southern parts along the sea coast and in the valleys of the Ashamat river and its affluents. The prevalent strike of the beds is north-by-west to north-north-west in the band of rocks running along the coast, with which it shows a remarkable parallelism, suggesting some connection between the strike of the rocks and the run of the coast. The predominant varieties of rock in this band are mica schists and quartzites, showing a certain amount of folding parallel to the line of strike. In the upper valley of the Ashamat river, gneiss and mica schists are most common, especially at and around Ashamat village itself, but Hornblendic schist with gneiss occurs also at several places higher up the river as near Harkul and Kupavda. Talcschists are met with at, and to the north of, Bidvadi four miles west of Ashamat. In this quarter the prevalent strike of the roaks is north-west to south-east, occasionally trending to east and west. The most northerly exposure of the gneiss occurs in a small inlier, surrounded by quartzites of the Kaladgi series, at the foot of the honda pass. Here light-coloured gneiss, with a little silvery mica, dips south-west, at an angle of about 30°.

Kaladgi Quartzites.

Kaladgi Quartzites and Shales occur in the southern Konkan, in numerous detached inliers, divided from each other by the overlying beds of the Deccan traps and the Konkan laterite. Only one of these inliers' is of considerable extent. This occurs at the foot of the Phonda pass, and extends north-west some fourteen or fifteen miles, covering between eighty and 100 square miles of surface. Of the inliers, the next in size is a very irregular-shaped patch, stretching about ten miles north from the right bank of the Ashamat river, at a point, a mile east of the coast. From the two principal villages within their area, the former has been described as the Lora, the latter as the Achra inlier. Several small inliers of quartzite lie at some distance south-east of the Achra area, and a perfect cluster of little inliers occurs along the banks of the Kharepatan stream, north of the Lora area. At Malvan, a small patch of these Kaladgi beds juts into the sea, and the Vengurla rocks, Sindhudurg, Kavda rock, and other smaller rocks off the coast, also consist of the same hard beds. These rocks belong, unquestionably, to the Kaladgi series, as developed in the Kaladgi and Belgaum districts. The lithological characters of the rocks in both quarters are identical, and their connection is established by the line of inliers which occurs in the Deccan trap region in the valleys of the Dudh ganga, Ved ganga, and Harankasi rivers, near Vaki Shengaon, and Ajra. The Kaladgi beds were formerly much more largely represented in the Konkan, but they suffered immense denudation, chiefly before the outpouring of the Deccan trap. Hundreds, if not thousands, of feet of beds were cut away, and what now remains is but a scanty ruin.

Near the Phonda pass and Lora, the members of the Kaladgi series may be well seen. They consist of white, yellow, or pink altered sandstones (quartzites, quartzite-sandstone) and shales, which lie unconformably on the upturned

edges of the old gneissic rocks. In the north-west corner of the Lora sandstone area is a group of hills, of which one, Salva hill, is about eight or nine hundred feet high. The arrangement of the beds in the main mass of the hill is difficult to determine, as the sides are thickly covered with detritus and brushwood; but at the western base, shales, generally associated with this sandstone occur, dipping slightly to the west and passing under the trap at its boundary while the summit of the hill is formed by a thick bed of sandstone pink in colour, and either horizontal or with a very slight dip westward. Other high hills and spurs on the edge of the Sahyadris are formed of sandstone lying on metamorphics, partially disclosed and capped by the same thick bed of sandstone, here dipping eastward, the two portions of the beds on the respective hills being apparently the remains of a low anticlinal axis. The intervening beds have been swept away, possibly before the trap covered the country. The first flows of trap poured into the hollows between the hills, for, at the boundary of this patch of sandstones, the trap is generally found at their bases. As the successive flows surrounded them, the highest remained islands in a trap sea. Finally, they were covered by some of the higher beds, now only seen in the scarped sides of the Sahyadris a few miles eastward. As has been mentioned, this trap has, except one or two patches, been twice denuded. The effects of this denudation on the trap, west of Salva hill, are rather curious, for, side by side with this hill, their bases almost touching, is another hill, conical in shape, and formed entirely of successive beds of trap. Nearly of the same height they are a strong contrast, the trap hill conical and barren, the lines of flow showing black and strong; and the sandstone hill long flatcapped and thickly wooded.

The central part of the Lora area is low. On the south side, towards Phonda, are considerable spreads of nearly bare, gritty, quartzite sandstone, much weathered on the surface. In the Lora river shales appear at one place dipping south-west at 30°. In a fresh section these are soft and argillaceous, in colour white and pink. In the river they are green and associated with quartzite bands. The country north of the Lora river is very flat and low, and covered with thick clay soil. The hills flanking the Sahyadris on the eastern side of the area are sandstone, capped by a very thick bed of the same rock. At the western base of Salva hill shales occur, passing under the trap. The shales must be calcareous here, for at their point of contact with the trap, they are transformed into a compact, light-blue rock, like limestone in which the lines of deposition are crumpled and indistinct. This calcareous rock occurs very locally, but is highly prized as the only source of lime in the district. Other shales, externally of lilac colour, occur in rolling beds on the south side of a low range of trap hills, which pass eastward from the eastern flank of the Salva hill group. The most northerly exposure of the Kaladgi beds appears to be at Panhala, two miles north-west of Kharepatan where there is a small sandstone inlier.

South-west of Phonda, light brown or bluish argillaceous shales underlie the low sandstone range. The shales, which are soapy to the touch,' are thinly fissile, and generally, rather soft, 'but contain here and there, harder and more silicious seams. In these the planes of deposition, which lie very close together, are well seen.

In the Achra inlier the sandstones form a small range, east and. south-east of the village. The hills here rise to a maximum height of about 300 feet, which exceeds that of the surrounding . laterite plateau. Though other varieties are found, the rock is chiefly white and of saccharoid texture. South-west of the village, the sandstones stretch into the sea. Shales occur intercalated among the lower beds of sandstone, and are seen in the river bank sections here, and

also further south at Chindurvadi. The beds dip south-westward or Roll about. The same or similar beds show a few miles north of Achra on the banks of a small river and its affluents, most at Hindla, Mitbav, and Naringa. On the south side of the lower reach of the Ashamat river the Kaladgi rocks appear in several detached patches, the most northerly of which is a small exposure of fine-grained white or yellow altered sandstone, lying south of the village of Chunavra, and dipping north-west at an angle of 10°. Similar sandstone is seen in the stream at Masda, where it shows a north-easterly dip.

In the ravines north of the small Masura river are dark blue or slate-coloured shales, weathering light blue or nearly white. They are sometimes hard, with a conchoidal fracture, sometimes soft, and soapy to the touch. South of the river the same peaty, argillaceous shales show in several ravines, as those of the Malgaon and Champhed streams. Near the end of the ravines they are covered by pink sandstone which is again overlaid by trap-flows and laterite. In the Kankavli patch, a little to the south-east, the pink sandstone and grey shales are both seen. At Malvan and in the islands off the coast the sandstone, or rather quartzite rock is white sometimes with spangles of golden mica. A small quartzite outlier occurs on either side of the Kudal river at Devli, a little distance from the sandspit which bends the river mouth to the south. Beds of quartzite occur at the mouth of the Pat stream near Nivti, but whether they belong to the Kaladgi series, or to the gneissic series, seems doubtful; their colour and texture point to the former, their lie, upturned at a high angle, suggests the latter. The same doubt seems to attach to the age of the quartzite, forming Redi point at the southern end of the district.

The Kaladgi rocks have been correlated, on good evidence, with the great Kadapa series of the eastern side of the peninsula, and with the Gwalior rocks in Central India.

Deccan Trap.

Resting with well marked unconformity upon the Kaladgi rocks, comes the great series of Trap flows, which, over the Decean and western India, were poured about the end of the cretaceous period. The space of time between the great denudation of the Kaladgi rocks and the outpouring of the trap was of immense duration, for the Vindhyan, a great azoic series, and the whole vast thickness of plant-bearing formations, now grouped under the title Gondwana Series, all came into existence during that interval. The Gondwana series represents the whole great mesozoic or secondary period below the cretaceous rocks, as known in peninsular India, and its oldest groups may be upper palaeozoic, while the Vindhyan series doubtless represents a good part of the palaeozoic period.

Except along the scarp of the Sahyadri mountains, but a short length of which was surveyed by Mr. Wilkinson, the trap series is not well exposed in the Ratnagiri district. The greater part of the exposed trap belongs to the very lowest flows, and the surface of these is generally covered by thick beds of Konkan laterite. Even where cut into by the numerous rivers, valleys, and ravines, the surface of the trap is very often greatly obscured by lateritic debris of all kinds, from great fallen masses to gravel and soil.

The great trap scarp and some of the great spurs were studied by Mr. Wilkinson near the Pondha pass, up which climbs the high road from Ratnagiri to Kolhapur. Here the Sahyadri spurs consist entirely of trap, with lines of flow, generally, easily traceable in the main mass of the hills. The result of the

irregular denudation of these beds is, that conical peaks have been left varying the otherwise even outline of the hills, and generally surmounted by sharp black joints of rock. A good example of this occurs in a spur south of Phonda, which runs west from the main range. In its peaks, portions of a thick bed of black columnar basalt are seen; the bed, of which these are outliers, being very conspicuous in the Sahyadris themselves. The lowest beds of the traps in the great spur, running west from the main range, south of Phonda are approximately of the same height as the laterite plateau of the west, under which they pass. The laterite forms a band of irregular breadth between the sea and the main trap area. The band is widest opposite the Phonda pass, where the laterite overlaps the trap on to the denuded surface of the Kaladgi beds in the Lora patch described in the last section. The trap is here covered by laterite for a distance of about twenty-six miles; but the width of the laterite band decreases rapidly to the north and still more to the south. At Kankeshvar near Devgad, the trap reaches the coast, and from the Devgad river, northward, forms the coast line, " skirting along the base of the laterite cliff overlooking the sea." This trap, black on the outside and greenish grey on fracture, has small hollows unfilled with any mineral. It contains also little patches of olivine. The flow seems to have a very slight seaward dip.

The varieties of trap exposed in the Phonda pass are thus described by Mr. Wilkinson. 'In the spur south of Phonda, up which the road passes, the lowest trap has a concretionary structure, decomposing into enormous boules some three or four feet in diameter. Further up, the trap is grey and porphyritic, still preserving the concretionary structure. Then it is black in colour and more like basalt. This is associated with pinkish amygdaloid, containing quartz and zeolites, the latter principally stilbite and heulandite. About five or six hundred feet from the crest of the nill is a thick black bed of columnar basalt, very prominent and stretching for miles. Portions of this bed can also be distinguished on the spurs, forming sharp peaks.'

A variety of coarse greenish brown trap, winch sometimes includes amygdaloids, was noted by Mr. Wilkinson in a ravine opening into the Kudal river, south-west of Dhamapur, about seven and a half miles east-south-east of Malvan.

No distinct point of volcanic outburst was found in the Konkan, but two or three trapdykes were noted by Mr. Wilkinson, which differ in their mineral character from the great majority of trapdykes traversing the metamorphic rocks in the country above the Sahyadris, and which seem to be more nearly akin to the Deccan traps, and may, perhaps, really belong to the same period. One of these occurs on the coast about a mile east of Nivti, north-west of Vengurla. The dyke of columnar basalt has broken through the metamorphic hard hornstones and quartzites, and for a short distance flowed over them. The age of these particular metamorphic rocks is doubtful. They may be gneissic, but they may equally well belong to the Kaladgi quartzites.

No inter-trappean formations were noted in the Konkan, nor does Mr. Wilkinson mention any iron-clay formation resulting front decomposition of the Deccan trap rocks.

Ratnagiri Plant Beds.

Resting upon the denuded surface of the Deccan trap at Ratnagiri is a deposit of white clay, in which the remains of plants ere found in the condition of lignite. This deposit may with good reason be ranked with the lignite-yielding

beds discovered by the late Lieutenant-General Cullen in Travancor. The two formations are regarded as of the same age, because of the similarity of their geographical position, and the similarity, if not identity, of their lignites and fossil resins.

Mr. Wilkinson described the plant bed at Ratnagiri as ' a thickness of a few feet of white clay seen to be resting on the trap in well and other sections, imbedding fruits, and containing thin carbonaceous seams, composed for the most part of leaves.' He adds: 'This is separated from the soft laterite above by a ferruginous band about an inch thick, having much the appearance of haematite. It is vesicular with quartz-filled hollows.' Mr. Carter, who thought these Ratnagiri clays identical with the Travancor beds, mentions the occurrence of blue clays at Ratnagiri. The Travancor beds consist of blue clays with intercalated lignites and mineral resin in olive brown earth, resting upon blue, green, gritty, argillaceous limestone, containing Orbitolites malabarica and shells some of which, such as Strombus fortisi, Cerithium rude, Ranella bufo, Cassis sculpta-, Valuta jugosa, Conus catenulatus and C. marginatus, have also been found in the tertiary beds in Cutch and Sind, where they appear to belong to beds of uppermost eocene or eniocene age. Except the first, all are figured in Colonel Grant's paper on the geology of Cutch. [Trans. London Geol. Soc, Second Series, V. 289; or the re-print in Carter's Geological Papers on Western India. These Travancor beds underlie the local laterite, which General Cullen considered to be the detritus of the gneissic beds, that form the southern Ghats; an opinion strongly supported, by the discovery (1862) of a truly conglomeratic variety of clayey laterite at Cottayam in Travancor. Probably, because of their imperfect preservation, the nature of the fruits and leaves has been described neither from Travancor nor from Ratnagiri.

Further study of the infra-lateritic deposits in the Konkan is much required, and is urged upon Ratnagiri residents.

Konkan Laterite.

Of all the formations met with in the southern Konkan the remarkable argillo-ferruginous deposit known as Konkan Laterite covers the greatest surface, and most affects the appearance and character of the country. Its geographical position, strictly analogous to that of the laterite deposits of the Coromandel coast, suggests its being a sedimentary formation; but it is a deposit that does not reveal its origin on cursory inspection; and some observers, whose opinions merit consideration, among them Captain G. Wingate and Mr. H. J. Carter, have regarded it as the result of decomposition of trappean rocks, and, therefore, as identical in character with the Deccan ironclay (laterite). The latest observer, Mr. Wilkinson, has not expressed any positive opinion on the subject as a whole. Probably, he took the sedimentary origin for granted, or was unaware of the controversy. What light his notes give is in favour of the sedimentary origin. Referring to this peculiar deposit, he speaks in various places of 'laterite sandstones', 'laterite conglomerates', and ' shaley laterite'. Parts of the formation are therefore clearly of sedimentary origin. No evidence is advanced in favour of the trappean hypothesis, except the lithological resemblance of the Konkan laterite to the iron-clay (laterite) of the Deccan. But the vast difference in geographical position is against the trap theory, and the lithological resemblance exists as strongly between the Konkan laterite and the Travancor and Coromandel laterites, both of which are true sedimentary deposits in all probability of marine origin.

One very great objection to a trappean origin is that it involves an

outpouring of trap, long after the close of the Deccan trap period; and of such further outflow no other evidence exists in the Konkan. How long a time must have passed before the completion of the great plain of marine denudation on which rest the eocene plant beds of Ratnagiri and the overlying Konkan laterite, is proved by the immense thickness of trap, not less than from 2500 to 3000 feet, removed after the close of the Deccan trap period.

The laterite makes the country monotonous, forming waving and in many places flat plateaus, sheets of black slag-like rock. The laterite plateau with a general elevation of between two and three hundred feet, is, except where it is worn away and leaves a deep arable soil, bare and black with no vegetation but scanty grass and a few stunted trees. It is cut through by numerous rivers, the largest of which rise in the Sahyadris, and after flowing across a comparatively open, trap country, enter the laterite by deep ravines which widen towards the sea, the rivers becoming broad tidal creeks. In these ravines, along the banks of the rivers, are villages with every available spot of their rich alluvial soil, growing rice and other grain. At the coast, the laterite forms bluff cliffs, in the lower part of which the trap is disclosed. Speaking of the laterite at Ratnagiri, which rests upon the plant beds, Mr. Wilkinson says 'On exposure the soft laterite soil hardens rapidly. Here and along the coast it is very thick, trap showing only in deep sections, and at the base of the cliffs. East of Ratnagiri, the laterite stretches fifteen or twenty miles; beyond this, the trap hills are more irregular in outline and rise gradually towards the main range of the Sahyadris. The eastern boundary of the laterite runs west of Lanja, in a southeast direction, passing coast of Rajapur to Kharepatan. About Phonda it is found nearer to the Sahyadris than in other places. In speaking of the laterite boundary, reference is made to the boundary of the plateau, which has a very constant elevation, and consists of a series of flat-topped or slightly waving hills, separated from one another by deep stream-hollowed ravines. Further east, laterite occurs in patches, many of them outliers of the great mass but oftener at a lower level, the product of the denudation of the older laterite. These often have the appearance of true laterite, but are more generally found as gravel, sandstone, or conglomerate.' It has already been stated that at various places Mr. Wilkinson found that the laterite was locally an unquestionable sedimentary deposit. One instance of this occurs at Redi, where ' the laterite is shaley, and contains shreds of fossil wood.' Similar shaley structure was also observed at Kankeshvar, about three miles south-south-east of Devgad. Here in some places the laterite is hard and compact, and consists largely of haematite. ' It is, however, often white, or light pink, with hollows filled with clay.' Like the trap-flows the surface of the laterite plateau shows a gentle dip towards the sea coast.

Alluvial Deposits.

The Ratnagiri Alluvial Deposits are of two kinds, sea and river. Neither is of any extent or importance. To the sea alluvium belong the recent shell beds on the sides of the creek north of Malvan. These beds are formed of broken shells and sand stiffened into a mass. They lie some distance above the present high water mark, and have a slight westerly dip. There are similar beds at Devgad. The sand spits, by which the mouths of the Kudal and Ashamat rivers are for considerable distances bent south, must all be reckoned as sea alluvium. They are doubtless due to the prevailing northerly coast current.

The river alluvia are limited to the lower reaches of the several creeks, and are almost entirely obscured by wet cultivation.

Subaerial Formations.

Among Subaerial Formations must be reckoned the small, blown sand hills on the coast, near Malvan and Devgad, where they cover the raised beds of sea alluvium of subaerial origin, as also the various patches of pseudo-laterite rocks, before alluded to as re-consolidated from the debris of the true Konkan laterite or other older ferruginous rocks, as in the red soil formed by the decomposition of the Deccan trap at Sankedi to the north-east of Ashamat. The soils depend almost entirely on the character of the sub-rock by whose decomposition they have been formed. Those formed by the decay of the trappean rocks vary a good deal in colour, from blackish grey to light brown and deep red. As might be expected from the quantity of iron they contain, the laterite soils are generally red. The quartzites of the Kaladgi series give rise to sandy soils, and the shaley beds to clays. The great development of clayey soil on the Kaladgi rocks, exposed in the Lora area, is in all probability due to the decomposition of such shaley beds in low-lying positions, which give rise to swampy flats.

Water-bearing Strata.

As regards its water supply, [From notes by Mr. J. Elphinston, C. S., 1872.] the district may be divided lengthwise into five belts or strips: the sea coast; an inland belt of laterite eight or ton miles broad; a second ten mile belt of mixed laterite and basalt; a third belt of basalt six to eight miles wide; and fifth, the foot and spurs of the Sahyadri hills. Along the sea coast some of the largest villages, as Harnai, Guhagar, Ratnagiri, Shiroda, and Redi, stand on sandy beds. All these are supplied with drinking water from wells, fed generally by the sea, filtering through the sand. This water, though more or less brackish, is by no means unwholesome. The supply is abundant, and as almost every house has its own well, the water is preserved clean and free from surface impurities. Other coast villages, such as Dabhol, Murud, Anjarla, Kelsi, and Velas stand on artificially or naturally reclaimed marshy lands, or on beds formed from silt gathered near the mouths of rivers. These, owing to their naturally rich soil, are thickly studded with gardens, all watered from wells, which also supply drinking water to the inhabitants. In these gardens, especially during the rainy season, every bit of cowdung, house sweepings, ashes, and filth of every kind is used as manure, and as a consequence, a great deal of organic matter finding its way into the wells, breeds fevers and other epidemics. Even in these villages pure water is usually found in springs, in the sides of the overhanging hills. The second or laterite belt, immediately behind the sea coast, is supplied with drinking water partly from wells, and partly from hillside springs. The wells are not many, and are never the sole water, supply. Except in a few tidal-creek villages, where the water is brackish, they are mostly fed by freshwater springs. The hill-side springs used for drinking are carried in open channels to the houses, and where the houses are some distance apart, the water is generally pure and good. The third, or mixed laterite and basalt belt, is mostly supplied from wells, with in a few cases the help of running springs. The supply is both abundant and wholesome. In the fourth or basalt belt, the water-supply is scanty and bad. The villages mostly depend upon jharas or dabkhols, hollows dug in the beds of streams, lined on all sides, and covered over from above with wooden beams. Entrances made on the downstream side are, to prevent their being filled with debris, every year closed before the monsoon floods. The monsoon water-supply of these villages, drawn from the running streams, is subject to all kinds of pollution, the people using the beds of streams as latrines, and throwing into them all their house-sweepings. The villages in the fifth belt, immediately at the foot of the Sahyadri hills, have in many places good wells lined with timber. In others, holes dug in the beds of streams are resorted to. But in these villages the chance of pollution is small. There are no settlements above them, and the streams bring pure rain water gathered from the hills. A statement [G.R. Genl. Dept. 2521,26th June 1872.] prepared in 1872, shewed that out of 1329 towns and villages, with a population of 573,876 souls, 544 villages had separate wells for the upper and lower castes: 445 villages had wells used by the higher castes only: and in 474 villages, the water of running streams, in 13 villages, pond water, and in 276 villages, water drawn from holes dug in the beds of streams, was used for drinking purposes.

Hot Springs.

Hot springs are found in various parts of the district. The line of springs runs half-way between the Sahyadri hills and the sea, and seems to stretch both north and south of the Ratnagiri district. Three villages, two in the Dapoli subdivision and one in Rajapur, have been named-Unhala from their hot springs. There are similar springs near the towns of Khed and Sangameshvar, and at the villages of Aravli and Tural in the Sangameshvar sub-division. The water of all these springs, as far as taste and smell form any test, seems strongly impregnated with sulphur. But Dr. A. Duncan, who in 1837 examined the water, came to a different conclusion. He writes 'The water of all these wells is so far as I could ascertain, to the taste both insipid and sulphury. Does this latter result from its insipidity, for I can find no trace of sulphur in it, nor of iron, nor of alkali, nor of iodine, nor of any thing? And when it has been cooled and freely exposed to the air, it becomes a pleasant, and a healthy water to drink. It would seem to be simply boiled water, yet it may contain foreign ingredients, although, with my limited means, I have been unable to discover them.' [Trans Bom. Med and Phy. Soc. I 259.] The temperature of the water varies in different springs from 100° to almost the boiling point (212°), and at Tural the experiment of poaching an egg has been successfully performed. Cisterns have been built to enelose'most of the hot springs. Dr. Duncan remarks that ' one of these wells was formerly much frequented for a variety of ailments, cutaneous, dyspeptic, and rheumatic. As a bath, the water affords a remedy of great power in several forms of rheumatism. It excites the appetite, and is therefore serviceable in some forms of dyspepsia. I have also observed cases of debility, without lesion or apparent disease beyond perhaps a want of relish for food, considerably benefited. I am less acquainted with the effects produced on cutaneous ailments, but on some of these, I infer, a bath of this sort cannot be otherwise than beneficial.' The water is still much used for bathing and washing clothes, but is not regarded by the natives as having any special sanctity. The springs appear to be perpetual, and are no doubt the remains of volcanic activity.

Intermittent Springs.

On the top of a hill about two miles from Rajapur, close above the Unhala hot spring, a curious phenomenon is from time to time observed. Certain springs, at irregular intervals but almost always during the fair season, bubble up, and suddenly and without warning overflow the rocky soil, covering a considerable area of ground. This apparent freak of nature can only be accounted for, on the hypothesis of an underground syphon forcing the water through a permeable stratum. The natives regard the phenomenon as a miracle, and believe the water to be a true stream of the sacred Ganges. According to local tradition, the springs were first observed some three hundred

years ago, and up to the year 1821, continued to flow regularly every year for a month or six weeks in January or February. From that date to the present time, the phenomenon has been manifested only once in every two or three years. It occurred in February 1876; but has not since been observed. The area covered by the springs, about 3150 square yards, is surrounded by a high stone wall, and paved with stones. Fourteen cisterns of various sizes have been built to receive the water. The water invariably begins to overflow in the first of these cisterns, which holds less than a cubic foot. Within a few minutes of its first appearance, the remaining cisterns are rapidly filled. These cisterns are in no way connected with each other. Only one cistern overflows, and here the water is let off through the mouth of a cow, carved out of stone. The volume of water pouring through this outlet is estimated to have a diameter of 2¾ inches. This last cistern is said always to hold water, while the remaining cisterns run dry as soon as the springs cease to flow. During the overflow, the water bubbles up through all the interstices in the pavement, as well as through the beds of the cisterns. The spot is held in great veneration, and devout Hindus, unable to perform the journey to Benares, believe the water of these springs to be equally efficacious with that of the Ganges itself. Their awakening is hailed with joy for hundreds of miles, and it is estimated that while the supply of water lasts, about four hundred pilgrims daily visit the springs. Their history is said to be told in the *Medini Puran*. According to the local legend a Kunbi, called Gangaji Salunka, was in the Habit of going regularly every year to the Vithoba temple at Pandharpur. At last he grew too old and feeble to make the journey. Working in his field on the day on which he ought to have started for Pandharpur, he was so grieved at the thought that he could no longer accomplish his cherished task, that he sat down and wept. The deity taking pity on his distress and to reward his lifelong devotion, to his unspeakable delight caused a stream of pure Ganges water to well up around him.

Climate

The climate of the district, though moist and relaxing, is on the whole decidedly healthy. The rainfall is abundant and comparatively regular. The south-west monsoon breaks on the coast usually about the 4th of June,, and the rains continue with little intermission to the middle or end of October. The average fall registered at the civil hospital Ratnagiri, for the twenty-eight years ending 1878 is 101 inches and 49 cents. [Dr. F. C. Barker, M.D., Civil Surgeon, Ratnagiri. The available details for the city of Ratnagiri annual rainfall are:

Ratnagiri Rainfall, 1851 1878.

YEAR.	Inches.	Cents.	YEAR.	Inches.	Cents.	YEAR.	Inches.	Cents.
1851	126		1861	120	17	1870	93	37
1852	119	45	1862	103	98	1871	73	80
1853	90	16	1863	95	64	1872	84	12
1854	145	35	1864	99	66	1873	83	64
1855	63	56	1865	111	63	1874	121	60
1856	111	45	1866	106	5	1875	136	48
1857	74	84	1867	92	5	1876	68	25
1858	103	43	1868	88	32	1877	89	71
1859	86		1869	101	43	1878	165	66
1860	86	6						

] During this period the highest fall recorded was 165.66 inches in 1878; and the lowest 63.56 in 1855. The supply of rain at Ratnagiri is somewhat less than the average recorded for the whole district.

Ratnagiri Rainfall, 1851 -1878.

YEAR.	Inches.	Cents.
From 1851 to 1860	100	63
" 1861 to 1870	101	23
" 1871 to 1878	102	90
Average from 1851 to 1878	101	49

The records of the several stations, where rain-gauges have been used continuously for the ten years from 1868 to 1877, give, taking the rainfall of each year from the 1st May to the 30th November, a combined average of 109 inches and 46 cents. As a rule little or no rain falls between December and April.

Average Rainfall, 1868-1877.

CTATION	DICTANCE FROM THE COACT	AVERA	GE FALL
STATION.	DISTANCE FROM THE COAST.	Inches.	Cents.
Dipoli	About 57 miles	112	24
Mandangad	, 14 ,	133	41
Khed	" 20 "	130	59
Chiplun	" 25 "	126	58
Sangameshvar	" 20 "	127	25
Rajapur	" 20 "	113	32
Lanja	" 20 "	126	88
Guhagar	On the coast	76	27
Ratnagir	Ditto	88	74
Malvan	Ditto	73	52
Vengurla	Ditto	90	71
	Combined average	109	46

There are however occasional exceptions, the most notable occurring on the 15th January 1871, when 1575 inches fell at Ratnagiri within a few hours. This cyclone, for such it was, swept up the coast with great violence. The steamer Outram foundered in the gale off Vengurla, and numerous small native craft were wrecked along the coast. The wind also caused much damage to houses on the coast, and hundreds of trees were everywhere uprooted by the storm.

Another very violent storm of a cyclonish character swept the coast on the 22nd and 23rd May 1879. Up to the hour when the hurricane burst in its full fury, there had been no signs of its approach. Few of the numerous native vessels caught in the open sea were able to weather the storm or make safe anchorage. Many vessels were wrecked even while anchored in the parts and harbours throughout the line of coast. The list of casual ties was heavy, A coasting steamer was beached to save life near Vengurla, and upwards of 150 native vessels were wrecked, with a loss of over 200 lives and about £27,500 (Rs. 2,75,000) worth of cargo.

It is noticeable that the supply of rain inland averages considerably more than on the coast, and that, as might be expected, the fall is, other conditions being equal, heavier or lighter, according as the point of observation is further from or nearer to the great Sahyadri range, which powerfully attracts the rain clouds. Mandangad is an exception to this law. Considerably higher than any of the other inland stations, it shows a greater average though further removed from the Sahyadri hills than Khed, Chiplun, Sangameshvar, Rajapur, or Lanja.

The humidity of the Ratnagiri station is relatively great. The average mean at 10 A.M. in 1878 was G4.75 per cent and at 4 P.M. 69.66 per cent. The climate on the sea coast and for some miles inland is very temperate, extremes of heat and cold being-never felt. The following tables and chart [Prepared by Dr. F. C. Barker, M.D., Civil Surgeon, Ratnagiri.] give the results of thermometer readings in the shade, taken at the civil hospital Ratnagiri, in two series, (A) from 1871 to 1870, and (B) from the 1st January 1877 to the 30th June 1878. The mean annual temperature is shown by A to be 81° 45' and by B to be 81° 66'. According to Mr. Chambers [Meteorology of the Bombay Presidency, 184.] the annual mean is 80° 8' and the range between the greatest and least monthly means 7°.

SERIES (A).

Averages taken from the monthly average temperatures of the six years ending 1876.

V	TAD	Janu	ıary.	Febr	uary.	Ma	rch.	Ар	ril.	Ма	ay.	June.	
YE	EAR.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
1871		72.5	83.8	73.1	85.9	75.8	87.0	81.7	90.9	82.8	91.5	81.87	85.8
1872		70.8	84.0	70.6	85.5	77.9	88.4	80.6	91.0	83.7	91.6	82.2	86.2
1873		68.9	83.8	78.0	86.6	75.9	87.6	81.3	90.3	82.8	10.8	80.7	85.1
1874		69.4	83.6	70.2	83.8	73.4	88.6	77.4	88.7	82.9	91.3	79.7	84.7
1875		68.4	83.6	71.1	84.1	72.2	89.3	81.2	89.1	83.6	91.5	80.2	84.3
1876		72.4	88.1	68.7	85.9	73.9	87.3	79.2	89.0	83.5	92.5	81.6	86.7
A	Maximum.		84.4		85.3		88.0		89.0		91.6		85.4
Average.	Minimum.	70.5		71.6		75.6		80.2		83.2		81.0	
Average range		13.9		13.7		12.4		8.8		8.4		4.	4
Mean temperature		77.45		78.45		84.6		87.4		81.4		83	.2

SERIES (A)—continued.

Averages taken from the monthly average temperature of the six years ending 1876—continued.

,	/EAD	Ju	ly.	Aug	ust.	Septe	mber.	Octo	ber.	November.		December	
1	ÆAR.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
1871		79.9	82.6	79.9	82.6	77.3	81.9	78.4	87.1	77.4	88.0	74.4	87.5
1872		79.3	81.7	79.2	83.2	78.3	83.4	76.6	88.9	75.7	88.4	77.5	86.5
1873		79.9	81.4	79.5	83.1	78.0	82.9	76.0	85.8	74.5	87.3	72.4	86.6
1874		79.0	81.6	783	81.4	78.3	80.6	78.3	82.4	74.0	84.2	72.0	86.3
1875		80.1	81.6	78.9	82.3	78.8	82.6	74.2	87.1	74.3	88.8	73.7	88.2
1876		80.1	81.2	79.0	83.0	77.8	83.7	75.8	87.1	73.0	90.0	72.5	86.0
A	Maximum.		82.0		82.5		82.5		86.0	-	87.7		86.8
Average	Minimum.	79.6		79.1		78.0		76.3		74.8		73.7	
Average range		2	.4	3	.4	4	.5	9	.7	12	2.9	13	31
Mean temperature		80.8		80.8		80.25		81.15		81.25		80.25	

Mean annual temperature 81° 45'.

SERIES (B).

Observations from 1st January 1877 to 50th June 1878. [These observations were taken with sell-registering thermometers, supplied by the Observatory in a shed prepared under the Superintendent's directions.]

VI	= A D	Janu	ıary.	Febr	uary.	Mar	ch.	Ap	ril.	Ma	ay.	Jur	ne.
Y	EAR.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
1877	nara	67.6 86.8		69.2	65.7	72.7	88.0	76.0	89.3	79.1	91.5	78.0	88.7
1st Janu 30th 187	-	68.4	86.1	69.6	88.8	73.7	88.6	77.7	91.1	81.1	93.0	78.8	88.9
Average	Maximum.		86.4	1	87.2	I	88.3		90.2	1	92.2	1	88.8
Average	Minimum	68.0		69.4		73.2		76.8		80.1		78.4	
Average	range	18	3.4	17	7.8	15	5.1	13	3.4	12	2.1	10).4
Mean ter	mperature	77	7.2	78	3.3	80.	76	83	3.5	86	.15	83	3.6
V	- A D	Ju	ly.	Aug	ust.	Septe	mber	Octo	ber.	Nove	mber.	Decer	nber.
Y	EAR.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
1877		78.9	87.5	77.0	83.0	75.9	85.5	75.6	87.1	73.3	92.6	73.0	91.5
1st Janua June 187	ary to 30th												
Average	Maximum.		87.5		83.0		85.5		87.1		92.6		91.5
Average	Minimum.	78.9		77.0		75.9		75.6		73.3		73.0	
Average	Average range		8.6		6.0		9.6		11.5		19.3		3.5
Mean temperature		83	3.2	80.0		80.7		81.35		82.95		82.25	

Mean annual temperature 81° 66'.

According to both series of observations the lowest minimum average is reached in January. On the 7th January 1873 the lowest minimum and maximum limits, 63° 5' and 73°, reached during a period of observation extending over four years, were registered by Dr. C. Joynt M.D., at his house in Ratnagiri. The maximum and minimum rises are nearly regular and uninterrupted during each successive month from January to May, the exceptions being the maximum of February 1876, which is 2° 2', and the minimum which is 3° 7' lower than that of January of the same year, and the maximum of February 1877 which is 1° 1' lower than that of January. There is a marked fall in the maximum temperature from May to June, and a less marked, but still perceptible fall in the minimum. There is a similar fall between June and July. During July, August, and September the readings shew little variation either in the maxima or minima, the rise or fall during these months apparently depending entirely on the scarcity or abundance of rain. The range of the thermometer is also very slight at this period, and very much less than at any other time of the year. From September to October there is a marked rise in the maximum temperature and at the same time a fall in the minimum, the only exception occurring in July 1877, when the maximum, owing to the exceptionally scanty rainfall, stood higher than in October. Similarly there is a uniform rise in the maximum from October to November, and except in 1875, a fall in the minimum. From November to December there is, with one or two exceptions, a fall both in maxima and minima. The readings in Series A show May to be the hottest month, the thermometer giving a mean average temperature of 87° 4', and at the same time the highest maximum average of 91° 6'. Series B also shows the highest mean temperature for May (86° 15'); but the average maximum was exceeded by that of November, (92° 6'), in 1877. This high temperature in November was abnormal, and is accounted for by the deficiency of the rainfall of that year. The subjoined table [Prepared by A. Pollard, Esquire, Honorary Surgeon, Dapoli. gives the results of the thermometer readings at the civil hospital of Dapoli for the years 1871 to 1877 inclusive. From this it will be seen that the mean annual temperature of Dapoli is rather more than five degrees lower than that of Ratnagiri, 76° 27' as compared with 81° 45' and 81° 66' shown by the, Ratnagiri observations, and that the average maxima and minima are also uniformly lower for each month in the year. According to Mr. Chambers the annual mean is 78° 5', and the range between greatest and least monthly means 9° 5'.

Dapoli.

Thermometer readings at the Civil Hospital, Dapoli, 1871-1877.

YEAR.	Janı	uary.	February.		Ма	rch.	Ap	April.		ay.	June.	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
1871	63	82	65	84	65	92	75	89	76	88	73	88
1872	56	82	59	86	70	89	75	92	74	90	75	90
1873	62	79	64	85	62	85	72	85	76	87	76.5	81.5

YEAR.		January.		February.		March.		April.		May.		June.	
		Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
1874		62	79.5	64.5	79.5	68	81	73	85	79	85.5	76.5	81.5
1875		61	77	65.5	79	71	83	76	86	78.5	85.5	78	82
1876		65	78	62.5	79	73	81	69	86	77	87	76	87
1877		60	84	61	84.5	65	87	68	90	73	88	74	89
Average	Maximum		81.6	-	82.4	-	85.4		87.5	-	87.2		85.5
	Minimum	61.3		63	i	67.7		72.5		76. 2		75.5	
Average range		10	0.3 19.4		.4	17.7		15		11		10	
Mean temperature		66	.45	72.7		76. 5		80		81.7		86.5	

YEAR.		July.		August.		September.		October.		November.		December.	
		Min.	Max.	Mi <mark>n.</mark>	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
1871		74	86	74	79	71	80	73	84	74	85	66	84
1872		74	80	73	79	73	80	66	83	86	84	66	83
1873		76	79.5	76	78.5	74.5	78	72	82	69.5	82	67	81.5
1874		75	78	75	78	75	78.5	73	79 5	67.5	80	66	79
1875		75.75	79	75	78	74	77	72	80	70	81	67	78.5
1876		74	81	73	78	71	80	67	83	67	84	60	83
1877		76	83	74	82	75	85	72	82	67	85	68	83
Average	Maximum	1	80.07		78.9	1	79.8		81.8	1	83	1	81.7
	Minimum	75.2	-	74.2	J	73.8	d	70.7	9-7	71.7	e	65.7	-
Average range		4.87		4.7		6		11.1		11.3		16	
Mean temperature.		77.4		76.5		76.8		76.2		76.8		73.7	

Mean annual temperature 76° 27.

Vengurla.

The annexed statement gives the result of the meteorological observations at the sea coast town of Vengurla in the extreme south of the district, during the year 1857:-

Vengurla Meteorological Return, 1857.

MONTH.	Mean Temperature.	Mean Daily Range.	Mean Maximum.	Mean Minimum.	Mean Sun's Temperature.		
January	77.22	12.16	83.32	71.12	90.09		
February	77.14	14.00	84.21	70.07	95.53		

MONTH.	Mean Temperature.	Mean Daily Range.	Mean Maximum.	Mean Minimum.	Mean Sun's Temperature.
March	79.81	11.19	85.41	74.22	97.55
April	81.49	10.63	86.66	76.33	101.13
May	83.12	4.16	85.70	81.54	97.16
June	81.15	7.50	84.90	77.40	85.80
July	78.72	7.83	82.61	74.80	89.25
August	77.72	2.22	78.83	76.61	82.00
September	77.86	3.80	79.76	75.96	81.12
October	81.27	4.03	83.29	79.25	84.93
November	80.45	8.10	84.50	76.40	85.13
December	80.22	11.19	85.83	74.61	84.41

continued..

MONTH.	Deite	Wind.	Days of	
	Rain.	Direction.	Force.	Sunshine
	Inches.			
January		N.E. & W	Moderate.	31
February		N.E. at 8a.m. and W. at 1 p.m.	Do.	28
March		Do.	Do.	31
April		N.W. & W.	Calm	30
May	18.2	N.W.& S.W.	Stormy	23
June	34.89	S.W. & S.S.W	Do.	tee-rs
July	46.49	Do.	Do.	1
August	25.92	Do.	Do.	20
September	4.67	West & W.S.W.	Do.	16
October	3.46	Westerly	Do.	19
November	.25	Easterly and Westerly.		27
December		N.E. & W.	Do.	31

Dapoli.

After the close of the south-west monsoon, north-westerly breezes prevail throughout the remainder of the year, blowing with more force and regularity during the hot months of March, April, and the first half of May, and tempering the greater heat of this period of the year. On the coast and inland, as far as the cool sea breezes penetrate, the hot season is perhaps the most agreeable, and at the same time the healthiest season of the year. The breeze usually springs up from nine to ten in the morning and lulls shortly after sunset. The nights are still, but seldom oppressive, and the little wind that blows is a land breeze. The mornings until the sea breeze sets in are the hottest and most trying time of the day. At a distance of fifteen or more miles from the sea, greater extremes of heat and cold are experienced, and during March, April and

May, both days and nights are oppressive. At Chiplun, Khed, or Sangameshvar, the thermometer during the hot season will shew 105° at noon for days and sometimes weeks together, and the wind is both hot and moist. In the tract of country at the foot of the Sahyadri range the heat is still greater during the hot weather, being intensified, as the natives assert, by the refraction of the trap rocks at the summits of the hills. Dapoli is generally considered the healthiest station in the district, its equable temperature, excellent drinking water, and the fine open plain on which it stands specially fitting it for a military cantonment, and a residence for Europeans all the year round. On the other hand, the Mandangad or Bankot portion of the Dapoli sub-division, owing to the prevalence of fever, is perhaps the least healthy part of the district. The rest of the collectorate including all the south, which is comparatively hotter than the north, is generally healthy though enervating and relaxing.

The climate may be considered favourable for recovery from miasmatic fever even of long standing, and perhaps for rheumatism when the constitution is unimpaired, favourable for those whose livers suffer from the dry heat of the Deccan, unfavourable for constitutional debility, nervous affections, chronic dyspepsia, and all complaints requiring a light and bracing atmosphere; fatal in the monsoon to those subject to bowel complaint. Children thrive well and appear for the most part plump and lively; yet new-comers from a dry climate are apt to suffer from boils.

Maharashtra State Gazetteers

PRODUCTION

SECTION I.-MINERALS.

Minerals

[Except the mineral, forest, and fish sections, this chapter is the work of Mr. G. W. Vidal, C.S.]

ACCORDING to a legend, the truth of which the presence of quartz makes not improbable, gold used to be found near Phonda at the foot of the Sahyadri hills. In the south very pure specular iron is in small quantities associated with the quartz rock. And all the laterite of the district is charged with iron [In 1873 while digging a well in the jail garden at Ratnagiri large iron stone nodules in the form of hollow shells containing scoriae were found diffused through the laterite. And though wells near had no metallic flavour, the water of this well was so strongly impregnated with iron, both in the ferrous and ferric states, that the smallest addition of nagent threw down copious precipitates of Prussian and Turner's blue. C. Joynt, M.D.] though in too small a proportion to make it worth smelting. Near Malvan iron ore is found, not far under ground, in detached masses on the tops of hills, its presence being marked by small ferruginous surface fragments. The ore is massive and compact; outside It is brown or reddish brown and inside steel grey and glimmering; it is brittle, and of a yellowish brown. The fragments are sharp, the fracture flat conchoidal, and the specific gravity 3.32. Before the blow pipe it yields a dark blue shining enamel. Its constituents are water, black oxide and peroxide of iron, alumina, silica, and a trace of manganese and magnesia. It contains a steel grey lamellar powder difficult of solution both in nitric and muriatic acid. [Assistant Chemical Analyser to Government; Jour. Bom. As. Soc, 1 435. There are several veins close to the mamlatdar's office at Malvan, three of them showing on the surface. These, it seems probable, must, at some distance below, be at least as rich as on the surface, and this belief is strengthened by observing the immense- blocks of quartz rock jutting into the sea, which both in their horizontal and vertical fractures, seem to be joined by iron rusted away under the continued action of salt water. One man and boy, with pickaxe and crowbar, could in one day raise 400 pounds of good ore from the surface, veins. In former times the Malvan mines and those at Gothna, a village above the Sahyadri hills, were much worked. In 1844 the smelting of iron was carried on at Masura, Kalavali, Varangaon, and several other villages, with in most cases, four smelting furnaces in each village. To extract the iron the ore was left in the sun for a week or two and was then made brittle by roasting and powdered. The furnace was round, three feet high, and narrowed from 11/2 feet below to one foot above. In this about sixteen pounds of fine powdered charcoal were laid, and on the charcoal cinders and charred wood were piled, and the whole lighted.

Iron

When blown into a mass of fire, about one pound weight of the powdered ore mixed in water with an equal quantity of powdered charcoal was thrown in, and this was repeated at intervals till after about three hours smelting a mass of iron about ten pounds in weight, was formed in the bottom of the furnace. This, dragged out by a pair of large pincers, wan placed on an anvil, and beaten by heavy hammers. The smelting was generally repeated twice a day in the morning and in the evening, the outturn of each smelting being worth about a shilling, half of which went to the bellowsman. Though the process was known to the cultivating classes they never practised it, and it was left as a monopoly to a wandering class known as Dhavdas. [Jour. Bom. As. Soe. I. 436.] In the smelting large quantities of fuel were used, and in 1844 partly from the increasing dearness of fuel and partly from the fall in the price of iron, it was made only in small quantities. Formerly the yearly outturn was worth about £200 (Rs. 2000). In 1855 a Mineral Viewer sent to examine the Malvan and Savantvadi mines reported that superior iron could be obtained, but from the want of coal the quantity would always be small. It would never meet the demand for railway bars though it might supply a superior iron for general purposes. The local manufacture is said to have now almost entirely ceased.

Coal.

At certain depths are occasionally found remains of trees changed or changing, into a kind of coal in which is imbedded a large quantity of crystallized pyrites. Some of the seeds of the trees occur separately with similar crystals imbedded in their centres.

Tale.

Below the laterite crust appear- in some places, as in the Ramgad district, immense veins of talc associated with and running into quartz rock. This, made into cooking pots and dishes, is sold in small quantities, the vessels being valuable to chemists as they can stand the most intense heat.

Stone.

The [Contributed by C. Brereton, Esquire, C.E., Executive Engineer.] stones used for building purposes are blue basalt or trap and laterite. A soft description of sand stone is found near the sea shore, but it is only fit for use in works of an inferior class. This stone is cut into oblong blocks of a small size, and walls,, built of this material with a coping of a harder kind of stone, have a neat appearance. Trap stone is found in most parts of the district, but it varies much in quality and a good deal of it is unfit for building purposes. The best quality is hard, of a light colour, breaking with a clean fracture, and ringing when struck with a hammer. The black stone of which the old fort at Harnai is built, is soft and the ramparts are now fast crumbling away. Trapstone work of a common class can be executed cheaply, but good cutstone work, for which carefully dressed stones are required, is expensive, as, for this class of work, masons have, as a rule, to be brought from the Deccan. The cost of quarrying trapstone varies from 10s. to £1 12s. (Rs. 5 - 16) the 100 cubic feet, according to the size of stone and class of work required. Laterite, the stone most in use, is a claystone impregnated with iron in the form of red and yellow ochres with a perforated and cellular structure. It is easy to work, but care is required in the choice of stone as the inferior sorts decay rapidly when exposed to the weather. The masons, who work in laterite, called *kokirs*, are mostly native Christians from Goa. Laterite stone cost at the quarry from 8s. to 10s. (Rs. 4-5) the 100 cubic feet. It may be obtained of almost any size. The rate for the best sort of laterite masonry work is £2 10s. (Rs. 25) the 100 cubic feet.

Road Metal.

In making and repairing roads two kinds of metal are used, trap and laterite. The former costs 10s. (Rs. 5), and the latter from *is.* to 6s. (Rs. 2 - 3) the 100 cubic feet.

Sand and Clay.

Sand or gravel of a good quality is found in the beds of most streams and rivers. The rates vary from 3s. to 7s. (Rs. $1\frac{1}{2} - 3\frac{1}{2}$) the hundred cubic feet. The metallic sand, used instead of blotting paper for drying ink, is found at the mouths of several of the rivers. A superior kind of red clay for the manufacture of butter-pots, bowls, and water jars is found at Malvan.

Lime.

The lime in general use is made from calcined cockle shells. There is an inexhaustible quarry of these shells in the bed of the Ratnagiri creek near the village of Juva, about two miles from Ratnagiri. This quarry supplies the whole district with lime, which, according to quality, in Ratnagiri costs from £1 4s. to £1 10s. (Rs. 12-15) the 100 cubic feet. Shell lime possesses but little Cementing properties and only answers when used with laterite stone. Unless mixed with portland cement it is not fit for use in high class trap masonry. Lime stone is found at Chuna Kolvan in Rajapur and in the Salva hill in Devgad. The stone found at Salva is of a superior description and yields when burnt a large percentage of lime, but owing to the isolated situation of the quarry the lime is so costly that it is cheaper to get lime from Bombay which eosts delivered at Ratnagiri £2 16s. (Rs. 28) the 100 cubic feet.

Tiles and Bricks.

Good brick-earth is found in several parts of the district. The best at the village of Patgaon in Sangameshvar. Burnt bricks are made at Khed and Chiplun and are suitable for rough work. The usual price is 14s. (Rs. 7) the thousand. The rate for tiles Varies from 6s. to 7s. (Rs. $3 - 3\frac{1}{2}$) the thousand. Ridge tiles cost 4s. (Rs. 2) the hundred.

SECTION II-FORESTS AND TREES.

Forests

In 1756, when Fort Victoria was captured by the British, most of the tributary ravines and water-courses of the lower reaches of the Bankot creek were clothed with fine teak. [Hove (December 1788) mentions that the hills on both sides near Fort Victoria were overgrown with high teak wood trees almost to the

marshes. In another place he says (194) the country is one wood. At the same time further up, near the town of Mahad the hills were totally destitute of verdure (193). Gov. Sel. XVI. Forbes (1771) speaks of the western hills near Fort Victoria as bleak and barren. Oriental Memoirs, I, 190. Curved teak logs known and highly prized as 'Bankot knees' were largely exported to Bombay, and highly prized able that the ribs and framework of most of the fine old ships of the Indian Navy came from Bankot and its neighbourhood. Gradually all forest on the borders of the Savitri and Vashishti rivers was felled, used in ship building on the creeks, or removed to the Bombay yards. At the same time, Arab traders were carrying to Zanzibar the best timber along the Ratnagiri and Muchkundi rivers. The Marathas had large ship-building yards at Malvan and Vijaydurg. But while they consumed much fine timber, the rulers thought for the future and took steps to preserve the supply. The only valuable teak reserve now left in the south Konkan, 'Bandh tivra' in the Dapoli sub-division, and the Mhan, Dhamapur, and Pendur forests at Malvan were sown by Kanhoji Angria about 1680, and in all their territories his successors stringently enforced forest conservancy. Half-way between Bankot and Rajapur, too far from Rajapur and with trade insufficient to attract the Arab ships, the lands along the south banks of the Shastri river and its tributatary the Bay were covered with fine forest, mostly teak, much of it of a large size. About the beginning of the present century the district was richly wooded. This was mostly brushwood, but on the slopes and spurs of the Sahyadris, on the undulating red soil strip that runs midway between the Sahyadri range and the sea, and on the banks of many streams, rivers, and estuaries, there was abundance of ain, kinjal, and teak of nogreat size but hard and lasting, much valued for shipbuilding. At this time the district was thinly peopled, and except round the hill forts, cultivation was scarcely possible. The Peshwa Bajiray, and after the transfer of the district (1818), the British Government imported and settled labourers; tillage gradually spread, fire and the axe cleared large tracts of dense scrub and even of fine timber, and areas nearly as large again were gradually laid bare to supply wood ashes to enrich the new fields. The Maratha Government always cared for its trees and forests. Though allowed to supply their own wants, the people seem to have been prevented from selling or exporting timber. For sometime the British Government maintained the old restrictions; but about 1829, on the suggestion of the Collector Mr. Dunlop, the forests-were, for the most part, placed at the disposal of the people. The land-holders, it was thought, would regard the forests as among their best resources, use them thriftily, and husband them with care. But with almost all, the grant was considered a charter for unlicensed, unlimited, and unguarded wood-cutting. The nearness, and the ease and cheapness of the sea carriage to Bombay tempted the people to busy themselves in felling, cutting, and carrying timber. Untold quantities of Ratnagiri wood were, year after year, sent to Bombay. The forests on the south banks of the Shastri and Bav rivers had, until Mr. Dunlop's proclamation, stood almost uninjured. After the proclamation, the land-holders sold the standing timber as fast as they could find buyers, and fleets were built of the largest native craft. [About twenty years ago, Mr. Crawford found several of these ship-owners in a flourishing condition. One of them had no less than thirty-one shibads, the largest native craft ranging from 275 tons (1100 khandis) burthen downwards, built on the Shastril The result is that for the present the Ratnagiri forests are

almost destroyed.

The present tree-covered area, nearly 100,000 acres or about four per cent of the whole district, may be divided into four parts: Government reserves, private forests, cocoanut gardens, and village groves. The principal Government reserves are: Bandhtivra in the Dapoli sub-division; Vadibeldar and Mahipatgad in the Khed sub-division; Vishalgad in the Rajapur sub-division; and Mhan, Dhamapur, and Pendar in the Malvan sub-division. The private forests, some of them exceedingly well-cared for, varying from one-half to 500 acres belong to 434 persons in 162 villages. The cocoanut groves fringe the sea coast and the shores of all estuaries; they are very dense and increase in area every year. As regards the village groves of the 1337 district villages, scarcely one has not mango, oil-nut, [Undi or undini, Calophyllum inophyllum.] and jack trees in profusion. Each division, vada, of the village, Brahman, Mhar, or Chambhar, nestles in the shade of its fruit trees, while the nooks and ravines are often covered with thick clumps of wild fig, [Ficus retusa, nandruk.] banian, and other large forest trees. The following statement shows in detail the distribution of the tree-covered area of the district:

Ratnagiri Tree-Covered Area, 1878.

SUB- DIVISION.	Villages.	Government reserves.		Private reserves.		Cocoanut groves.		Village plan ta- tioas.	Total Area.	
		Acres.	Gun- thas.	Acres.	Gun- thas.	ACTAS	Gun- thas.	Acres.	Acres.	Gun- thas.
Dapoil	250	2756	32	1802	11	1681	21/2	12,500	18,740	51/2
Khed	147	2488	5	763	201⁄4	88	34½	7350	10,690	19¾
Chiplun	213	856	28	638	30½	831	381/2	10,650	12,978	171⁄4
Sangameshvar	155	112	14			4	32	7750	7867	6
Ratnigiri	146			202	18	1575	16	7300	9077	34
Rajapnr	212	2988	38		6	58	12	10,000	13,617	16
Devgad	135			10,448	30	338	4	6750	17,336	34
Malvan and Vengurla	79	2042	29	6		3315	31	3950	9314	20
Total	1337	11,245	26¼	13,862	35¾	7894	10½	66,850	99,852	32½

^{*}The area of village plantations is only a rough estimate.

So far the forest denudation seems not to have affected the rainfall, nor has it so impaired the timber resources as to raise the fear that the district will suffer from want of good and cheap building material, whether for native coasting craft or for houses. For the smaller craft the local supply suffices, and for larger boats good and cheap timber can be easily brought from the Malabar coast. The abundance of cocoanut leaf mats and bamboos, makes the demand for house timber small. It is easily supplied on the spot. In one respect the loss of so much forest has harmed the district. Their sources and upper courses stripped of trees, the torrents sweep away large quantities of soil, and this settling in the

still tidal basins is filling the beds of the navigable rivers. The Savitri, along whose banks the denudation is complete, has suffered most. The Vashishti, whose banks and adjoining ravines are also bare, has become impassable for large craft, four miles lower than in former days. On the Shastri river, Sangameshvar where not thirty years ago the largest native vessels could load and unload, is now six miles from the nearest navigable point. In like manner, the Muchkundi, Rajapur, and Vijaydurg rivers have silted for miles below the once large ports of Rajapur and Kharepatan.

The measures proposed by the Collector Mr. Crawford, in November 1878, for forest conservancy and extension, were the increase of the present, and the creation of new Government reserves; the encouragement of land-holders willing to establish or extend private forests; and the reassertion of Government rights more or less abandoned in the past ten years. [Forest details are compiled from Mr. Crawford's Report, 2861, dated 21st November 1878 and from H. E. the Governor's Minute dated 31st July 1878.] As regards khoti villages, the scheme approved by Government for the extension of forest reserves is as follows: where the Khot or hereditary farmer of the village revenues is prepared to hand over assessed lands suitable for forests,. Government on their part agree to remit the assessment and to pay to the Khot one-third of the value of the forest produce when sold from time to time. [Bom, Gov. Res. 4884 of 1879.]

Trees

Liquor-yielding Trees.

From an economic point of view the cocoanut palm, Cocos nucifera, is by far the most important tree in the district. It replaces the brab or palmyra Borassus flabelliformis, and the wild date tree, Phoenix sylvestris, which are so plentiful in the northern Konkan. The cocoanut gardens are with few exceptions situated on the sea coast, on beds of sandy deposit or of silt brought down by the rivers. The soil of the river silt being much richer, the gardens are proportionally more valuable. As a rule, trees owned by Brahmans and Marathas are kept for fruit only, while those held by Bhandaris are tapped for their juice or toddy. But many Brahmans who will not themselves engage in the tapping or liquor-trade, have no scruple about letting their trees to Bhandaris for this purpose. From the earliest times cocoanut trees have, under one form or another been subjected to special cesses, a distinction being always made between trees reserved for fruit and trees kept for tapping. In the former case the individual trees were occasionally taxed; but more often the land itself was, without reference to the number of trees standing on it, assessed at high and special rates. A special cess was under the Peshwa's rule, levied on every tree tapped for liquor, bhandar-mad, and the right to collect this cess was, under the name of katekumari, farmed in the Malvan and part of the present Devgad sub-divisions, and elsewhere collected direct by the state. The maximum leviable rate was in Malvan and Devgad $2\frac{1}{2}d$. (1 a. 8 p.) a month, or 2s. 6d. (Rs. 1\frac{1}{4}) a year on each tree tapped. Under the new system a special license is granted to tap trees, at a fired rate for each tree, and under certain conditions as to the number of trees included in the license. The licensees are allowed to sell toddy by retail at the foot of the tree, but not to distil, the latter privilege being vested exclusively in the licensed shopkeepers for the sale of country spirits. The total area of land under cocoanut cultivation is 7894 acres. The exact number of cocoanut trees in the district cannot be stated with accuracy. But counting 100 trees for each acre of garden land, which is an extreme estimate, an approximate total of 789,400 trees is reached. The following table shews in the settled sub-divisions the number of trees for which tapping licenses were granted for the five years ending 1876-77:—

Ratnagiri Liquor-Yielding Trees, 1872-1877.

CHE DIVICION	TREES LICENSED TO BE TAPPED.								
SUB-DIVISION.	1872-73,	1873-74.	1874-75.	1875-76.	1876-77.				
Ratnagiri	9581	12,314	11,726	6048	5299				
Chiplun	7731	5437	6373	5057	5454				
Khed	31	31	40	46	71				
Dapoki	10,174	10,388	10,874	10,560	8013				
Total	27,517	28,170	29,013	21,711	18,837				

Toddy-yielding trees let at from 2s. to 6s. (Rs. 1 - 3) a year, the yield varying for each tree from thirty-five to sixty-four imperial gallons (8-16 mans). Ordinarily, three kinds of palm spirits are manufactured, called respectively rasi, phul or dharti, and pheni, rdsi being the weakest and pheni the strongest spirit. In some places a still stronger spirit called *duvasi* is manufactured. The strength of these spirits probably varies greatly in different parts of the district. [Three samples of toddy spirits from Ratnagiri priced respectively 4 annas 11 pies(71/2d.), 2 annas 7 pies 4d.), and 1 anna 11 pies (3d.) per reputed quart bottle were found by analysis to be 25-2, 60.1, and 69.7 degrees bel low proof. Report of the Chemical Analyser to Government. 1878-79, 27.] The average wholesale rates at which the farmers buy stock from the manufacturers are for the imperial gallon, tddi 2¾d. (1 a. 10 p.), rasi 8?d. (5 as. 7 p.), phul Is. 1?d. (8 as. 9 p.), pheni 2s. 6¾d. (Rs. 1-4-6), and duvdsi 4s. 9½d. (Rs. 2-6-4). Retail prices vary considerably according to locality. In Ratnagiri the prices formerly fixed by regulation were 1s. 11¾d. (15 as. 1.0p.) the gallon for rasi, 2s. 4d. (Rs. 1-2-8) for phul, and 4s. 3\(^4d\). (Rs. 2-2-6) for pheni. Recently, fixed wholesale and retail prices have been abolished, and the farmers permitted to arrange their own terms with the Bhandaris on the one hand, and their customers on the other. In the villages and landing places on the coast, where toddy, both sweet and naturally fermented, is easily procurable in every Bhandari's garden, the consumption is comparatively much larger than that of distilled spirits. But in the inland districts, Where, owing to the distance from the trees the importation of sweet juice is next to impossible, fermentation setting in within twenty' hours of its extraction, no fresh and but little fermented toddy is consumed.

The spirits are distilled in private stills, licensed to be kept at certain Bhandaris' houses under fixed conditions, as required in proportion to the number of trees licensed to be tapped in the vicinity. One still is usually allowed

for every hundred trees, and the still-pot is limited to a capacity of twenty gallons (5 mans). The following estimate shews roughly the profits derived from cocoanut cultivation, the trees being kept for fruit only, and being grown on the best coast garden, agari bagayat, land. The calculation gives for each tree a net yearly profit of 2s. $4\frac{1}{2}d$. (Rs. 1-3-0)-The dotalis, are: average yearly produce of 100 cocoanut trees; 8000 cocoanuts at 8s. (Rs.4) the 100, £32 (Rs. 320); 800 sersi of fibre at 6 pies a ser £2-10 (Rs. 25); 800 palm leaves, jhamps, at 3 pies a leaf, £1-5 (Rs. 12-8); firewood £1 (Rs. 10). Total £36-15 (Rs. 367-8). Average yearly expenditure incurred on a garden containing 100 trees. Wages of a labourer for eight months in the year to water 50 trees a day on alternate days at 10s. (Rs. 5) a month, £4 (Rs. 40); yearly charge to cover original cost of a masonry well £30 (Rs. 300) and estimated to last 50 years, say 12s. (Rs. 6); yearly charge to cover original cost of a masonry duct, £2-10 (Rs. 25) to last 50 years, 1s. (8 as.); annual charge for fencing garden, 12s. 6d. (Rs. 6-4); (Government assessment on one acre of garden land including local fund cess, say £1-12 (Rs. 16); yearly cost of watering 100 trees, by water-lift worked by a single bullock, ropes 4s. 9d. (Rs. 2-6); 200 earthen pots 2s. (Rs. 1); sticks to fasten the pots to the rope 1s. (S as.); yearly charge for beam for the water wheel costing 10s. (Rs. 5), and lasting five years, say 2s. (Rs. 1); other timber 2s. (Rs. 1); keep of bullock £1 (Rs. 10); yearly charge for a pair of cogged wheels costing 10s. (Rs. 5), and lasting 10 years 1s. (8 as.); yearly charge on outlay of £2 (Rs. 20) for bullock, to work for 10 years, 4s. (Rs. 2); yearly charge on outlay of £2 (Rs. 20) for two teak posts to last 10 years, 4s. (Rs. 2); contingencies 2s. (Rs. 1); total £2 2s. 9d. (Rs. 21-6). Yearly interest; at 6 per cent on a capital of £200 (Rs. 2000) invested in land £16 (Rs. 160); grand total £25 3d. (Rs. 250-2). This scr is 28 rupees weight, or about $\frac{7}{10}$ ths of a pound. The profits from the inland gardens, dongri. vagayat, are much less. The returns from tapped trees cannot be estimated with any accuracy, but they may safely be assumed to be considerably higher. A cocoanut tree as a rule yields no return either in fruit or juice for the first eight or ten years, though under exceptional circumstances trees occasionally bear in their sixth year. The trees live for seventy or eighty years, but do not generally bear fruit for more than sixty years. If tapped they become unproductive much sooner.

The only other liquor -yielding palm found in the district is the *raimad* or *surmad*, Caryota ureas, it is generally distributed, but is tapped only in the Dapoli sub-division, where are several scattered plantations. These trees are Government property, and their number is 2692. The right to tap them and sell the juice in its sweet state at the plantations, is yearly put up to auction.

Timber Trees.

The following is a list of the principal timber trees found in the district:—

Teak, sagvan Teciona grandis, grows in suitable localities on the slope, of mils, but seldom attains any size, the trees being principally useful for rafters. It is plentiful in the Dapoli sub-division where there are some flourishing reserves, and scarce in Khed and elsewhere throughout the district. Blackwood, shisav, Dalbergia sissoo, sparingly distributed, is of small size and crooked growth. Ain, Terminalia tomentosa, or Pentaptera coriacea, grows plentifully in the Khed sub-division and elsewhere. Kinjal, Terminalia paniculata, is also plentiful, and

like the ain much used for plough handles. Khair, Acacia catechu, is common. Catechu, hat, extracted from the heart wood of this tree used to be the source of a small revenue to Government, and of employment to the aboriginal tribe of Katkaris, who derive their name from the occupation. Nana, Lagerstraemia lanceolata, is common. Taman, Lagerstraemia reginae, common and generally distributed near the coast, but not found far inland, yields good timber. Its rich lilac flowers make it a conspicuous object during the hot season. Asana, Briedelia retusa or spinosa, generally distributed, is a valuable timber tree. Hedu, Nauclea or Adina cordifolia, common on the coast is of large size, the wood rather soft. Arjun, Terminalia or Pentaptera arjuna, the white ain, common near streams and rivers, grows to a very large size. Bakul, Mimusops elengi, found mostly as a cultivated tree, is preserved chiefly for its strong smelling flowers which are used for garlands. Kumbha, Careya arborea, is common, of small size and generally crooked. Karambel, Olea dioica, is common on the slopes of the Sahyadri hills. Bhendi, Thespesia populnea, grows freely near the sea coast. The Babul, Acacia arabica, is not found within the limits of the district, and every attempt to introduce it has failed. Bamboos, Bambusa vulgaris and Dendrocalamus strictus, are cultivated with great success, and the Casuarina, suru, Casuarina equisetifolia, has been found to thrive well in the Dapoli subdivision. The sand hills on the coast would make excellent casuarina groves.

Fruit Trees,

The commonest Fruit Trees are mango, amba, Mangifera indica, which grows luxuriantly everywhere, and is in Ratnagiri, Dapoli, and Bankot, highly cultivated by grafts. Jack, phanas, Artocarpus integrifolia, is found with the mango in every village homestead throughout the district. It is carefully cultivated everywhere and attains a large size. Dr. Gibson mentions that he has seen in the old forts at Suvarndurg and Eatnagiri jackwood pillars four feet in diameter. Undi, Calophyllum mophyllum, is common on the coast, and valuable on account of the bitter oil extracted from the seeds. The trunks of this tree are scooped out into canoes. The Indian Mangosteen, ratambi or kokam, Garcinea purpurea, generally distributed yields the vegetable concrete oil sold as Kokam. This oil is used in the southern districts as a substitute for butter. The dried acid fruit is also used in cookery and with the addition of syrup and water makes a palatable cooling drink. In the Collector's garden at Ratnagiri some trees, said to have been grafted from plants brought from the Straits, yield delicious fruit just like the imported, mangosteen. Cashewnut tree, kaju, [The local vernacular name kdiu appears to be restricted to the Konkan. The tree is indigenous to the West Indies. It is probable that the Portuguese on its introduction to the west coast of India, called it kaju, as a rendering of the Brazilian acajou. The French by a similar transliteration called it *cashew.*] Anacardium occidental, grows plentifully especially in the southern sub-division. The fruit is eaten, and the astringent juice is used by native workmen as a flux for soldering metals. Tamarind, chinch, Tamarindus indica, is common about village sites. The Black Plum, jambul, Eugenia jambolana, is common everywhere. Wood apple, kavanthi, Feronia elephantum, is generally distributed. Beheda, Terminalia belerica, is common. Bibva, Semecarpus anacardium, the marking nut tree and the Jujube tree, bor, Zizyphus jujuba, are common everywhere both on the coast and inland. The Gallnut tree, hirda, Terminalia chebula, grows well. The galls are

used for dyeing, but in this district seldom for ink making. The bark is used for tanning. A'vli, Phyllanthus emblica, and Soapnut, ritha or ringi, Sapindus laurifolius, are also found throughout the district. Of the above trees the wood of the jack and the tamarind is used extensively as timber, while the scooped out trunks of the mango and the undi furnish serviceable canoes.

The following trees are also more or less commonly cultivated in irrigated garden lands:—

Cocoanut, naral mad, Cocos nucifera; Betelnut, supari or pophal, Areca catechu; Lime, limbu, Citrus acida; Guava, peru, Psidium pomiferum; Citron, mahalungi, Citrus medica; Plantain, kel, Musa sapientum; Pumelo or Shaddock, papnas, Citrus decumana; Pine apple, ananas, Ananas sativus; Bullock's heart or Sweet Sop, ramphal, Anona reticulata; Custard apple, sitaphal, Anona squamosa; Pomegranate, dalimb, Punica granatum.

Cesses on Fruit Trees.

Under the Peshwa's rule certain fruit trees were subject to a cess, dast, varying in amount in different localities. This tax is still levied in those subdivisions where the survey settlement has not been introduced. There has been no fresh lenumeration of trees since the district came under British rule, and in levying the cess no account is taken of increase or decrease in their number. Permission however is required before cutting downany tree subject to the cess. The particular trees taxed in khoti villages vary slightly in different parts of the district. The following list embraces all: Jack, Artocarpus integrifolia; ratambi, Garcinia purpurea; undi, Calophyllum inophyllum; tamarind, Tamarindus indica; cashew, Anacardium occidentale; cocoanut, Cocos nucifera; and betelnut, Areca catechu. The two last are subject to the cess only when grown on other than garden lands. In Government villages where the survey settlement has not been introduced a fee is levied on the produce of all trees bearing valuable or marketable produce. As an illustration of the very minute supervision exercised by the native revenue officers under the Peshwa's rule, one or more banyan trees, Ficus indica, in the Ratnagiri sub-division, were subjected to the cess on account of the number of uncli, Calophyllum inophyllum, berries dropped beneath them by a colony of flying foxes, who had taken up their quarters there. The banyan trees were in themselves valueless, but the fortunate owner who thus secured a plentiful crop of oil bearing material, was not suffered to escape paying his fair share of the spoil to the state. An average betelnut tree will produce annually from two to three pounds of nuts, worth from 1s. to 1s. 6d. (8 to 12 annas). The produce of jack trees varies greatly, according to the soil and the trouble bestowed on their cultivation. Under very favourable conditions a jack tree will produce as many as 400 jacks, but this is exceptional. As a rule it is found that the trees which produce the fewest jacks make up for the deficiency in number by the increased weight of the fruit. The average yearly profit on each jack tree may be estimated at about 4s. (Rs. 2). Grafted mangoes are by far the most profitable of all fruit trees. In a good season a matured tree will yield a crop of from 800 to 1000 mangoes, which at 8s. (Rs. 4) a hundred, will sell for from £3 4s. to £4 (Rs. 32 - 40). Fruit from specially good grafts commands a considerably higher price. Common mango trees yielding an equal weight of fruit do not return a yearly profit of more than 2s. (Re. 1).

Tamarind trees, which are comparatively poor in this district, yield about half a hundredweight of fruit, worth about 1s. (8 as.). A good cashewnut tree, Anacardium occidentale, will in Malvan, where much trouble is taken in their cultivation, yield a yearly profit of not less than 10s. (Rs. 5). Elsewhere the profit does not exceed 2s. (Re. 1). The undi, Calophyllum inophyllum, yields a crop of fruit which will produce from 28 to 35 pounds of oil worth about 9s. (Rs. 4½); while the wood apple, kavanthi, Feronia elephantum, produces 14 pounds of oil valued at 3s. (Rs. 1½). A full sized kolcam tree, Garcinia purpurea, yields every year from 1s. to 2s. (8 as. to Re. 1) worth of concrete oil. The yearly produce of a gallnut tree, hirda, is, if collected, worth about 1s. (8 as.); and of a beheda, Terminalia belerica, the fruit of which is used medicinally, about 3d. (2 as.) The avli, Phyllanthus emblica, also yields about 3d. (2 as.) worth of fruit, which is dried and used both for medicine and food. Plantains return about 6d. (4 as.) a tree. There are numerous other trees such as the bor, Zizyphus jujuba, whose fruit is picked and eaten, but not brought to market.

Sacred and Ornamental Trees.

Besides trees already enumerated, such as the mango, the tamarind, and the jack, there are many trees, useful chiefly for shade and ornament, to be found near villages and temples, and in roadside avenues. Among these are:

The Banyan, *vad*, Ficus indica; the *pimpal*, Ficus religiosa; the wild fig tree, *umbar*, Ficus glomerata; the *bel*, Ægle marmelos; the *nanaruk*, Ficus retusa; the *nim*, Melia azadirachta; the *karanj*, Pongamia glabra; the *satvin*, Alstonia scholaris; the *pangara*, Erythrina indica; the silk cotton tree, *shevari*, Bombax malabaricum; and the beautiful bastard teak tree, *palas*, Butea frondosa.

Firewood

The supply of firewood throughout the district is obtained chiefly from the silk cotton tree, Bombax malabaricum; the *pangara*, Erythrina indica; the *kajra*, Strychnos nux vomica; the *bel*, Ægle marmelos; the *avli*, Phyllanthus emblica; the *chapt*, Michelia champaca; the *haranj*, Pongamia glabra; the *satvin*,, Alstonia scholaris; the *kandul*, Stereulia urens; and other trees and shrubs too numerous to mention. The *ain* and the *kinjal*, Terminalia tormentosa and paniculata, are the principal sources of the *rab* or ash manure used in agriculture throughout the district. The salt marshes also produce several species of mangroves which are sold from time to time on behalf of Government and are useful for firewood.

PRODUCTION

SECTION III.-DOMESTIC ANIMALS.

Animals

Domestic.

The live stock reared in the district are of very inferior breeds. The pasturage is, both inland and on the coast, poor and devoid of nutriment. No Indian millet, juvari, Sorghum vulgar-, is grown, and the straw of the nachni, Bleusine corocana, is but a poor substitute. Except during the latter months of the rainy season, green fodder is not procurable, and harali grass, Cynodon dactylon, is scarce and difficult to get. The cattle are lean, ill -fed, and of, stunted growth. Sheep imported from the grazing grounds above the Sahyadris very rapidly deteriorate, while horses, however well cared for, lose condition. Goats alone appear to thrive, but even they are of inferior breed and give but little milk. Bufaloes are of two breeds, the Jafarabad and the country-bred, the former being held the more valuable and being scarce. Good milch buffaloes cannot be obtained, and if imported from the Deccan d stricts, give a reduced supply of milk. The average price of a country-bred she-buffalo is about £4 (Rs. 40) and of a bull £2 10s. (Rs. 25). A few Jafarabad cows are also kept here and there as well as the country breed. The average price of country-bred bullocks is £2 (Rs. 20), and of cows £1 10s. (Rs. 15). Sheep are rarely kept, except near the larger towns, where there is a meat-eating population; and even where the consumption of mutton is considerable, sheep farming is an unprofitable speculation. Few if any sheep are bred in the 'district, the butchers' stocks being replenished, as required, by importations from the Deccan. [Probably no sheep would ever come down into the Konkan, but for the fact that the Dhangars reap a rich harvest from money paid to pen and graze their flocks on the best rice lands in the valleys. The young shoots, after the rice has been cut. afford good pasturage, and the sheep droppings plentifully manure the ground before it is roken up by the plough. The Dhangar is usually paid in kind about 14 pounds (1/2 a man) of rice in husk a night for every hundred sheep penned on the ground. The Dhangars bring ponies and bullocks with them to carry the grain thus amassed which they trade for cash and at the end of the season they have usually saved a good round sum in cash, with which and their flocks they retreat to the Deccan in the monsoon. In the northern sub-divisions, Chiplun and Khed, the Dhangar having come down by the Kumbarli or other passes with large flocks, directly the rice lands are dry enough to bear a sheep's tread, graze their way along by Mahad, Roha, Nagothna, Pen, Kaliyan, and Thana to the wholesale marts at the Bombay municipal slaughter houses at Bandora, where the whole flock is easily sold for a good price Mr. A T Crawford, C. S.] Sheep are kept by Musalman butchers only, and the mutton is eaten chiefly by such Marathas and Musalmans as can

afford to pay for the luxury. All castes except Brahmans, Shenvis, Jangams or Lingayat priests, and Kasars occasionally eat sheep and goat's flesh, though, many will not do so openly; and the majority of the population are, except on great and special occasions, too poor to purchase meat. The average price of a full-grown sheep is about 8s. (Rs. 4). Goats are kept in every village throughout the district, and by all classes of the people. Brahmans and Shenvis keep goats for milk only, while Marathas, Kunbis, Musalmans, Mahars, Dhangars and others keep them for meat as well as milk. No care whatever is bestowed on the breeding of goats and they are permitted to graze, save where there are standing crops, unrestrictedly over rice stubble and hill sides alike, the latter not withstanding their rocky and unpromising appearance and scanty herbage, affording ample means of sustenance. He-goats sell for 6s. (Rs. 3.) and she-goats for about 4s. (Rs. 2). As might be expected, Ratnagiri is not a horse-breeding district, and very few horses are kept even by the more wealthy natives. Except on the main lines of road, riding is usually a slower mode of progression than walking. The rugged paths from village to village, strewn with laterite boulders, and plateaux of slippery sheet rock, are frequently impassable for horses, or at least so difficult and dangerous to man and beast, that the attempt is not worth while. The higher Government officials, Mamlatdars, and others whose duty compels them to travel from place to place, very rarely keep ponies, preferring the greater ease and safety, and perhaps equal speed of the country doli, for which, from amongst the Kunbi class, bearers can be easily procured in every village. The Kunbi bearers, long used to such work, carry the doli or palki on their heads by means of cross bars attached to the main pole, and do not carry the pole on the shoulder, as is the custom of professional Hamals. Although they do not attain the speed and precision of the latter, they are decidedly safer and less liable to slip in going over difficult places. Donkeys are rarely kept and the few that are found are mostly the property of vagrant tribes. There are no cameis.

The following statement shews the number of animals returned for each sub-division of the district for the year 1877-78:

Ratnagiri Stock Return, 1877-78.

SUB- DIVISION.	Bullocks.	Cows.	He buffaloes.	She buffaloes.	Horses.	Mares.	Foals.	Goats and Sheep.
Malwan	22,466	12,589	7531	3901	39	11	1	3946
Devgad	86,813	24,917	6568	5950	37	18		7617
Rajapur	28,752	24,870	3276	6550	29	9		9093

SUB-DIVISION.	Bullocks.	Cows.	He buffaloes.	She buffaloes.	Horses.	Mares.	Foals.	Goats and Sheep.
Ratnagiri	19,533	13 359	2082	3658	38	5		4292
Sangameshwar.	10,652	9538	1515	1909	40	5		5715
Chiplun	29,673	20,607	5138	5503	52	12	1	6293
Khel	16,270	12,319	3527	3294	8			2779
Dapoll	22,489	16,399	3831	4478	53	14	1	6320
Total	186,648	134,598	33,468	35,243	296	74	3	46,055

Except Brahmans, Shenvis, Parbhus, Lingayats, Gujars, Bhatias, Marvadis and Kasars, all castes keep poultry. At the same time the presence of cocks and hens about a house is usually a sign of scanty means; for the well-to-do invariably break up their poultry yard as soon as the profits derived from it are no longer a matter of importance. Poultry are kept for profit only, and never for pleasure or ornament. Two breeds of fowls are ordinarily met with, the Surat, and the country-breed, the former being greatly superior in size. The average price of a Surat cock is 2s. (Re. 1) and of a hen 1s. (8 as.) Country-bred cocks and hens are worth respectively about Is. (8 as.) and 6d. (4 as.) In a few large towns ducks are kept, but not to any extent. Geese, turkeys and guinea-fowls are seldom, if ever, seen, except near the houses of European residents. They can, at very moderate prices, be bought from Goanese breeders, who from time to time visit the district with young stock. As a consequence of the recent establishment of a regular thrice-a-week line of small steamers touching at all ports, agents from Bombay come and buy poultry and eggs for the Bombay market, taking away from one port sometimes as many as three or four thousand eggs. These supplies are now daily advancing in value and they will soon range little below Bombay rates.

SECTION IV. -WILD ANIMALS.

Wild

The Ratnagiri district, with but few forests of any size, and most of these situated on the precipitous slopes of the Sahyadri range, is from the sportsman's point of view, essentially a poor district. Large game such as Tiger, Sambur and Bears are scarce and their haunts more or less inaccessible. To obtain Bison the boundary of the district must be overstepped. Panthers are not uncommon, but little help in finding them can be expected from the villagers, who as a rule are totally without experience or ambition in the matter. In the southern sub-division until about fifteen years ago, panthers used to be very common, and from their familiar way of

frequenting villages in pursuit of dogs, cats, and goats, were called village tigers, garnti vdghs. One village from its great number of panthers was called Vaghotan. Of late the villagers have exterminated panthers by firing the hill sides, where among the boulders the panthers had dens. Wild Boars are plentiful in suitable places; but from the nature of the ground, hunting them on horseback is impossible. Similarly, though Hares, Jackals, and Foxes, inhabit the steep rocky hills, coursing is, if not an impossible, at least an unsatisfactory sport, dangerous alike to man, horse, and dog. Two species of Deer and Antelope are found, and these alone perhaps of all the four-footed game in the district repay pursuit.

On the other hand, from a naturalist's point of view, the district is not without interest; several families such as the Rodents and the Cheiroptera are well represented, and afford a hitherto but imperfectly explored field. The following is a list of the principal animals found in the district, classified in the order given in Jerdon's Mammals of India.

Order—PRIMATES.

STMIADÆ.

Farm. — SIMIADÆ. The Monkeys or Simiadae are represented by (1) a species of Langur, probably Presbytis or Semnopithecus entellus, the Hanuman or vanar, and (2) the little Macaque-or Bonnet monkey, makad or kelte, Macacus radiatas. The latter is readily distinguished from its various congeners by a cap of long hair resting flat on the crown. This wig, which is very frequently parted down the middle, either by accident, or perhaps through vanity, gives its possessor a very knowing and human appearance. Both species are plentiful and distributed universally throughout the district; but the Langurs are perhaps more often seen, as they affect the neighbourhood of large villages and towns, while as a general rule the bonnet monkeys prefer the wilder forests and more secluded haunts. Both species are equally mischievous when occasion offers. The natives rarely take any steps to stop their depredations or punish the marauders, preferring with characteristic patience to submit to the removal of the tiles or thatch from the roofs of their houses, and the plunder of their gardens and granaries. Occasionally, an old male angur, who, by reason of his general incompatibility of temper and tyrannical disposition, has, as a strong but necessary measure, been ostracised by the unanimous voice of his tribe, and compelled to lead a solitary and morose life, vents his ill-temper by frightening women and children, and making himself generally obnoxious in the village. The assistance of a European officer is sometimes sought to shoot roque monkeys I remember a roque monkey of enormous size at the Godi or Dock village pear Vijaydrug, who actually assaulted single men passing near his haunts, wrested sticks from them, bit them severely and was even accused of having tried to rape a woman. At last, the whole neighbourhood assembled and surrounding his haunts with stout fishing nets drove him into them and clubbed him to death. Mr. A. T. Crawford, C S.] of this description; but such instances are rare and the case must be hopelessly incurable, before such aid is sought. It is a common belief amongst the Konkanig that a gun which has once shot a monkey can, never again shoot straight. The Katkaris, a wild forest tribe, who subsist almost entirely by hunting, now that their more legitimate occupation of preparing catechu, *kat*, has been interfered with, habitually kill and eat monkeys shooting them with bows and arrows. In order to approach within range, they are obliged to have recourse to stratagem, as the monkeys at once recognise them in their ordinary costume. The ruse usually adopted is for one of the best shots to put on a woman's robe, *sari*, under the ample folds of which he conceals his murderous weapons. Approaching the tree on which the monkeys are seated, the disguised *shikari* affects the utmost unconcern, and busies himself with the innocent occupation of picking up twigs and leaves. Thus disarming suspicion, he is enabled to get a sufficiently close shot to render success a certainty. Both the Langur and the Bonnet monkeys can be easily tamed, but the latter are far more lively and interesting pets than the former.

CHEIROPTERA.

Sub-Order—Cheiroptera are represented by the common Flying Fox or Fruit Bat, vad vagul, or dhamka, Pteropus medius, or P. edwardsii, as it is usually, but erroneously styled; one species of Vampire bat, Megaderma lyra; and three or four other small bats. Flying Foxes are exceedingly plentiful. They feed chiefly on the fruit of the various fig trees, and of the undi, Calophyllum inophyllum, and do a considerable amount of damage. They are also accused of drinking the fresh juice of the cocoanut from the vessels or gourds hung up to receive it and in some cocoanut gardens gins are habitually set to catch the thieves.

Order— INSECTIVORA.

The common musk rat, Sorex caerulescens, is common everywhere, but no other representatives of this order have hitherto been observed in this district.

Order—CAENTVORA.

URSIDÆ

Fam.—UESIDURSIDÆ. The Indian Black or Sloth Bear, asval, Ursus or Melursus labiatus, is within the limits of this district occasionally seen on the western slopes of the Sahyadri range during the cold season. It is generally believed that during the hot months of March, April, and May, when only are the forests sufficiently thin for the pursuit of large game, most of the bears cross the watershed to the cooler regions of the upper Sahyadris, Ghat Mdtha, where also they can obtain a richer supply of their favourite food, the fruit of the wild fig tree, umhar, Ficus glomerata.

LUTRINUÆ.

The Badger, Weasel, and Marten families, Melididce and Mustelidce, have no representatives in the district; but the common Indian otter, *ud*, Lutra nair, is plentiful on all tidal creeks and backwaters, and affords excellent sport when found in shallow water or on the mud banks of. the creeks. During the heat of the day they repose under the thick cover of the mangrove trees and other bushes, which grow on the swamps of the tidal creeks, and start forth shortly before sunset in parties of four or five to fish

in the open rivers. The native fishermen seldom molest them, and until fired at frequently, they are comparatively fearless, diving and gambolling all round the boats. When alarmed, if cover is available on the banks of the river, they will instantly leave the water; if not, they endeavour to elude pursuit by long dives and clever doubles. For the sport, at least two small canoes well manned and handled, and able to turn rapidly, are necessary, besides a complement of two or three beaters on foot on either bank of the river.

FELIDÆ.

Fam. - FELIDÆ The Tiger, vagh, Felis tigris, is scarce, and is seldom seen away from the dense cover of the Sahyadri range. Panthers, biblya, Felis pardus, of small size are found all over the district in hill and temple forests, preying on goats, dogs, small cattle, and occasionally entering houses. They are seldom shot, the Konkanis, as a rule, being very indifferent sportsmen, quite unable to beat a forest with any method and precision, much less to track and mark down large game. Hunting Leopards, chittas, Felis jubata, are, it is believed, found occasionally in the Sahyadri range; but they are rare visitants. The only other members of the cat family are the Leopard Cat, Felis bengalensis, exceedingly rare and confined to the Sahyadri range, and the Common Jungle Cat, baul, Felis chaus, found everywhere, and a very regular nocturnal visitor to every district camp.

VIVERRIDÆ

Fam.— VIVERRIDÆ The Striped Hyaena, taras, Hyaena striata, is common, and the steep rocky hills of the district are peculiarly favourable to its existence. A species of Civet Cat, kasturi or juvadi manjar, Viverra malaccensis, is found in the district, and when the anal pouch has been at once extracted, its flesh is said to be eaten and esteemed by the Marathas, Kunbis, and other castes. The Common Tree or Toddy Cat, manuri or kandechuar, Paradoxurus musanga, is distributed generally. It is a great pest to poultry-keepers, destroying out of apparently mere wantonness every fowl it can lay hands on, without any regard to its actual requirements or appetite. It also robs fruit trees and has a decided liking for palm toddy. The Mangus, Herpestes griseus, is also exceedingly common everywhere.

Canida.

Fam.— CANIDÆ. The Jackal, kolha, Canis aureus, and the Indian Fox, kokad, Vulpes bengalensis, are both common. Wolves are unknown, but packs of Wild Dogs, kolsinda, Cuon rutilans, have been seen in the Sahyadri range, and are well known to the hill peasantry, who have many wonderful tales as to their destruction of tigers.

Order — **RODENTIA.**

RODENTIA.

Omitting the Cetacea, which order is probably represented by the Plumbeous Dolphin, Delphinus plumbeus, and the Indian Fin Whale, Baloenoptera indica, the Rodents according to Jerdon's classification, come next. Of these the chief representatives are (1) the Bombay Red Squirrel,

Sciurus elphinstonei, only found in thick forests in the Sahyadri range: (2) the Common Squirrel, *kharuti*, Sciurus palmarum, universally distributed: (3)-the Porcupine, *salu*, Hystrix leucura, rare: (4) the Common Hare, *sasa*, Lepus nigricollis, and several species of Rats and Mice, including the giant of the family, the Bandicoot, *ghus*, Mus-bandicota. Hares are not nearly so plentiful in this district as in the Deccan, and owing to the ruggedness of the country, coursing is a sport which affords little amusement and some danger.

Order—UNGULATA.

UNGUIATA. SUIDÆ

The sole representative of this order is the Indian Wild Boar, dukar, Sus indicus, found both in the Sahyadri hills and near the coast, in brushwood overhanging the tidal creeks. During the hot months and at low tide, the pigs in the vicinity of the creeks habitually resort to the mangrove swamps, khajans, where they wallow for hours together. In such situations hog hunting from horseback is impossible, as indeed it is throughout the district. The pigs of this district are like the cattle, a lean lanky race, sharing in the general poverty and dearth of nourishing food, contrasting very unfavourably with their sleek sugar-fed brethren of the Deccan. They do a large amount of mischief. Native sportsmen hunt them perhaps more than any other animal, but the pig, as a rule, hold their own, and wherever there is thick forest, their number does not seem to diminish. Native beaters have a very wholesome fear of the species, and take care to give a very wide berth to a full grown boar, knowing by experience that if his chosen path be blocked, the boar though unwounded, will usually elect to charge rather than to retreat.

Tribe—RITMINANTIA.

RUMINANTIA.

The Ruminants found within the limits of the district are: (1) the sambar, Rusa Aristotelis, restricted to the Sahyadri range and difficult to obtain; (2) the Spotted Deer, chital, Axis maculatus, also restricted to the dense Sahyadri forests and seldom seen; (8) the common Rib-faced or Barking Deer or Muntjac, bhekra or jangli bakri, Cervulus aureus, as distinguished from the Four-horned Antelope, Tetraceros quadricornis, also called bhekra by, the Marathas, sparingly distributed throughout the district in the thicker hillside forests, from the coast to the summits of the Sahyadri range; (4) the Mouse Deer, pisora, Memimna indica, restricted to the Sahyadri forests and but seldom seen, looking when put up more like a hare than a deer from its elevated hind quarters and diminutive size; (5) the Four-horned Antelope, bhekra, Tetraceros quadricornis, generally and plentifully distributed, found alike in thick and thin forest rocky and almost barren hills and dense groves, wherever the low bushes on which it feeds give sufficient herbage. Bison, gava, Gavaeus gaurus, may possibly on rare occasions stray within the limits of the district, but they cannot be properly included in the list. One or two herds range along the Sahyadris; but they keep to the more level portions of the crest, Ghat Matha, and have not been known of late years to cross the watershed. The nilgai, Portax pictus, is unknown within Ratnagiri limits. Of the deer mentioned above only two species, the Barking Deer, Cervulus aureus, and the Four-horned Antelope, Tetraceros quadricornis, are found in sufficient numbers and in sufficiently accessible places to repay the trouble of shooting them. The venison of both species is excellent, and in a district where mutton is scarcely obtainable, and a fish and fowl diet is a matter of necessity, it is all the more appreciated. These two species are to the Konkan, what the Black buck, Antelope bezoartica, and the Gazelle, chikara, Gazella bennettii, whom they replace, are to the Deccan. Owing to the name bhekra being applied indiscriminately to both species, they are, though utterly distinct, very frequently confounded, and more especially the does. The horns of the Muntjac buck, jangli bakri, have their bases or pedicles covered with, hair for some inches up, and are rough and wrinkled, while the does have in the place of horns bristly tufts of black hair. On the other hand the true Four-horned Antelopes, bhekras, have in the bucks two pairs of smooth horns, the posterior pair being considerably shorter than those of the Muntjac, and not covered with hair at the base, and the anterior pair being mere bony knobs, never more than an inch and a half long. The does of this species have, like the Muntjac does, no horns; but the bristly tufts are wanting; and the canine teeth, conspicuously long in the upper jaws of the Muntjacs of both sexes, are altogether wanting in the female four-homed antelope, and are comparatively much shorter in the male.

SECTION V.- SNAKES.

Snakes

The district is everywhere more or less infested with snakes, both venomous and harmless, but they are perhaps more plentiful in the Rajapur and Devgad sub-divisions than elsewhere. Both species and individuals are numerous, and the barren rocky hills, little frequented by man, and giving innumerable hiding places, specially favour their existence. The mortality from snake-bite is always exceptionally large in this district, as compared with others in the Presidency. In 1856 no less than 257 deaths were recorded: in 1872, 108: in 1873, 122: in 1874, 102: in 1875, 144: in 1876, 123 and in 1877, 103. Large sums have been disbursed by Government from time to time in rewards for their destruction, but as yet there has been no very marked diminution in the number of deaths. [In 1856 (29th October), on account of the very high death-rate from snakebites, Government on the suggestion of Mr. Bettington, Police Commissioner, agreed to offer rewards at the rate of 1s. 6d. (12 as.) for a cobra and 1s. (8 as.) for other venomous makes. A month later (28th November) Mr. Bettington, on tour in Ratnagiri, found the people taking to snake-killing with alarming zeal. Leaving all other work, they soon became experts, and every day brought hundreds of snakes to the Mamlatdar's station. The cost was serious, and he suggested that for all but cobras, the rewards should be reduced to 3d. (2 as.) The reduction was made, but the slaughter of snakes continued so active and proved so

costly, that on December 10th, the Magistrate stopped all rewards except for cobras. In eight days (December 2 - 10) at a reward Of 3d. a snake, 115,921 snakes were killed, and of this total, nearly one-half (50,476) were in one sub-division. In about a fortnight over £2040 (Rs. 20,400) were spent in rewards. Deaths from Snake-Bites in the Bombay Presidency, 29th April 1872. Bom. Gov. Res. Genl. Dep. 78 of 1872. In 1875, 62,780 snakes were destroyed at a cost of £197 93/4d. (Rs. 1970-6-6); in 1876, 140,828 snakes were killed for £441 15s. (Rs. 4417-8), and in 1877, 75,899 for £238 13s. 8¼d. (Rs. 2386-13-6). [The present (1879) rate of rewards is 3d. (2 as.) for a cobra and ¼d. (6 pies) for other sorts of poisonoua snakes.] It is observable that the mortality from snakebite is much larger during the rainy months than at other periods of the year. It is known that snakes are more active, and secrete a greater quantity of venom during wet weather than during the dry season. The long grass found on all hill sides and waste places, during the latter rainy months, renders the detection of snakes more difficult than at other times of the year. It is probable that in many cases the heavy rain drives snakes into human habitations for shelter and in pursuit of the rats, mice, and frogs, which during these months abound. During times of scarcity and failure of crops, the poorer villagers in some parts make a regular occupation of snake-hunting for the sake of the rewards. Going out in small parties of two to three men, they turn over stone after stone on the rocky hill sides in search of their prey. After a successful day's hunt, a basket of from forty to fifty snakes, consisting with but few exceptions of the Fursa species, Echis carinata, will be despatched to the nearest Mamlatdar's station. There are no professional snake-charmers among the regular inhabitants. Here and there a Maratha or Kunbi acquires some dexterity in catching snakes alive and handling them, and having learnt to repeat at the same time a few incantations, professes to be able to make snakes bend to his will.

Hitherto no exhaustive scientific examination has been made of the various species of snakes found in the district, and it is therefore impossible to give a complete list, or to identify more than a few of the commoner kinds. Moreover the vernacular names are hopelessly confusing. Several species of entirely distinct families are frequently classed together under one name and the ignorance and superstitions which prevail amongst the natives with regard to snakes, render their statements, even as to the simplest matters of fact, misleading and unreliable.

The following is a list of the best known species found in the district:

HARMLESS COLUBRINE SNARES.

Pythonidae.

PYTHONIDAE. - The Indian Python, *ar*, Python molurus (L.), is occasionally but very rarely seen in thick forests and groves. Very exaggerated accounts of its size and power are given by natives. It is popularly believed to kill both men and cattle by constriction. Its length is stated by Dr. Nicholson [Elementary Treatise on Ophiology, 50.] to be from ten to twenty feet. In addition to the *ar*, the natives distinguish another variety of Python, by the name of *chitei*. The two snakes, however, are identical.

Erycidae.

ERYCIDAE. — The Black Sand Snake, *dutonda*, Eryx johnii, (Russell), or a closely allied species, the Red Sand Snake, Gongy-lophis conicus (Schneider), is found here and there, but is not common. The name *dutonda* or double head is derived from the short thick tail of this snake, which is mutilated by snake charmers, so as to make it resemble a second head. This species is said to grow to about four feet, of which the tail is only one-twelfth.

Oligodontidae.

OLIGODONTIDAE. — Several species of filletted ground snakes are found, two of which have been doubtfully identified as Oligodon subgriseus, (D and B), and Simotes Russellii, (Daudin).

Lycodontidae.

The Lycodon, Lycodon aulicus (L.), a harmless species, is not uncommon. In its colouring it bears some resemblance to the venomous *Krait*, and is one of the several species which the natives unite under the name of *manyar*.

Colubridae.

COLUBRIDAE. — The Rock Snake, dhaman, Ptyas mucosus (L.), is abundant throughout the district. It is found on the edges of rice fields, grassy hill sides, and frequently about haystacks. It preys chiefly on rats and field mice, and is usually seen in pairs. It grows from seven to eight feet in length. The name dhaman is applied to this snake by Muhammadans and Marathas alike. Natives also frequently call this snake the adhela, a term applied, it appears, in other parts of India to the Hamadryad, Ophiophagus elaps (Schlegel). But the common belief is that the adhela is distinct from the dhaman, and a smaller species. If so it may possibly be the slender dhaman, Ptyas korros (Reinw). This latter species, however, has not yet been identified, and its occurrence is very doubtful. The natives have a superstition regarding the adhela, that its bite is dangerous to man on a Sunday, but not on any other day of the week.

The Checkered Snake, pandivad, Tropidonotus quincunciatus (Schlegel), usually called the water-snake, is found throughout the district, frequenting ponds, river-beds and water-courses. Frogs are its chief food, but now and then one may be seen swimming along the surface of a river or pond with a fish in its mouth. This species grows to about four feet, and is one of the very few snakes which the natives admit to be harmless.

The Green Ground Snake, Tropidonotus plumbicolor (Cautor), is also common about Ratnagiri and is believed by natives to be venomous.

Driophidae.

DRIOFHIDAE.—The Common Green Tree or Whip Snake, sarpatali, Passerita mycterizans (L.), not common in this district, but found occasionally, is frequently seen in a snake-charmer's collection. It attains a considerable length, the attenuated tail being nearly as long as the body. It has a peculiarly pointed snout. It is generally believed by natives to attack the eyes of travellers passing under the trees it infests; but is perfectly

harmless.

Dipscdidae.

DIPSADIDAE. — The common brown tree-snake, Dipsas Gokool (Gray), is also found throughout the district. It is one of the many species indiscriminately called *manyar* by the natives, and erroneously believed to be venomous.

Many other species of harmless Colubrine Snakes, no doubt, occur, and are distinguished by the natives by special names; but their identity has not hitherto been clearly established.

VENOMOUS COLUERTNE SNAKES.

Elapidae.

ELAPIDAE. — The Cobra, nag, Naja tripudians (Merrem), of the spectacled or monocellate variety, is found everywhere, although not often seen owing to its nocturnal habits. It affects human habitations more, perhaps, than any other species. Many superstitions are current amongst the natives as to its cunning and revengef ulness. It is believed that a cobra, if accidentally or purposely hustled out of the path it is taking or the spot it is resting in, will follow the aggressor for miles by land and water, until it can find a favourable opportunity of inflicting its deadly bite, and that it will easily and unerringly identify its enemy amongst a crowd. As an instance, a story is told of a Brahman, who was travelling along the coast road from Guhagar to Dabhol. Shortly after leaving Guhagar, he met a cobra on the road, and the cobra was compelled, though not molested, to turn aside and make room for the traveller who continued his journey. The revengeful reptile followed the man, gliding swiftly and unobserved behind him for some six miles, until they reached the Vashishti river. There the man crossed the creek in the ferry boat, a passage of upwards of a mile, and on landing at Dabhol proceeded to a rest-house, where he passed the night with some fifty other travellers. The wily cobra swam the creek after the ferry boat, followed the man to the resthouse, concealed itself until sleep had overtaken the travellers; and then gliding swiftly to its innocent and unsuspecting victim, wreaked its horrible revenge.

The Hamadryad, Ophiophagus elaps (Schlegel), has not hitherto been found in this district.

Of the genus Bungarus, neither the *Krait*, B. caeruleus (Schlegel), nor the Malayan Bungarus, B. fasciatus (Schlegel), is known with certainty to occur; but it is possible that one of the two species does so. Some specimens called *manyar*, sent from Mahabaleshvar for examination to the Grant Medical College, Bombay, were declared venomous, [Gov. Rec. Finl. Dept. 4528 of 1873.] and a *manyar* found in Ratnagiri was subsequently declared identical with the Mahabaleshvar *manyar*. The species though pronounced venomous was not, it appears, discriminated. The description given by Dr. G. C. Bell of the Mahabaleshvar *manyar* seems to correspond, as far as it goes, with B. fasciatus. He observes that 'those caught in dark localities and with the skin recently cast present a much darker appearance, and the cross bars are white and destitute of the yellow colour observable in older skins.' According

to the natives, there are three varieties of *manyar*, which they distinguish as the *dhania*, the *gansi*, and the *kadboli manyar*. Of these the *gansi* is the largest, and the *kadboli* the smallest. Possibly the *gansi* is a true Bungarus, and the others distinct species of harmless colubrine snakes. For instance, Lycodon aulicus, Simotes Russellii, and Dipsas Gokool are frequently called *manyar a*. Most natives are familiar with names as names; but very few can apply them with any confidence to particular specimens. As regards the *dhania* and the *kadboli* it is commonly believed that they never use their teeth as weapons of offence. To account for injuries said to be inflicted by them, the *kadboli* is supposed to wound with its tongue, while the *dhania* has an unfortunate habit of causing certain death to human beings, by merely casting its shadow over them from a tree or the roof of a house. The *gansi manyar* alone is credited with the possession of poison fangs.

VIPERINE SNAKES.

Viperidae.

VIPERIDAE.—The Chain Viper, ghonas or kandur, Daboia elegans (Russellii, Gray), the well known Cobra de Manilla The name Cobra de Manilla is corrupted from Cobra monil or Coluber moniilger. of the Indo-Portuguese, corresponding with the Tic Polonga of Ceylon, is found throughout the district. It is conspicuously marked with three rows of whiteedged oblong brown spots. It grows to a length of about five feet, has very long and formidable fangs, is of thick build, and somewhat slow and sluggish in its movements. It preys on rats and occasionally attacks and kills sitting hens. The bite of this viper is highly dangerous. The natives, as usual, distinguish three varieties of ghonas, the dhdnia, the fakia, and the kusada. The dhania is the true Daboia elegans, and the term is very appropriate to the species, having reference to its handsome bead-like markings. A specimen of a snake called fakia ghonas by the natives, was, after examination at the Grant Medical College, doubtfully identified as Coluber lachesis. The third and smallest variety, the kusada ghonas, so called from the effects produced by its bite, a sloughing of the bitten part as in leprosy, is probably only another name for the fursa, Echis carinata. The snake which the natives call the kandur is probably the full grown Daboia, the name of dhania ghonas being applied to younger and smaller specimens. Vipers of sufficient size to be called kandurs are very rare. [Report dated March 8th, 1862. I have seen several large chain vipers, and myself killed some which were immediately called kandurs by the natives. In the largest of the chain vipers the marks fade with age, and to some extent blend with the body colour. It is then, so far as I could gather, that the natives thinking them another species call them kandurs. Mr. A. T. Crawford, C.S.] The following description of the kandur by Dr. E. de Crespigny, late Civil Surgeon, Ratnagiri, seems to point conclusively to its identity with the Daboia elegans. It is described as a large reptile, five or six feet in length when full grown, of an olive colour, marked with large oval regular well-defined brown spots; large flat triagonal head covered with scales; fangs immense. The effects of the kandur's bite seem to shew themselves immediately, and from the reports of the native police, it appears that congestion of the lungs with haemoptysis invariably occurs, followed by coma and death. A man, reported

to have been bitten in the early morning, went to sleep again, and awoke with oppression of the chest, difficulty of breathing, eyes sunken, head heavy, viscid phlegm hawked up, and described as being very tenacious and capable of being drawn out six or eight yards without parting, this latter symptom being considered a certain sign of *kandur* bite. In another case, a woman bitten by a *kandur* suddenly became insensible and vomited black blood.

The fursa, Echis carinata (Schneider), is by far the commonest species of venomous snake in the district, and is identical with the 'Kapar' of Sind. It is abundant on all rocky hill-sides, seldom venturing from under cover of rocks and boulders. From its diminutive size and dangerous bite, this snake is perhaps more dreaded than any other species. Seldom exceeding twelve to eighteen inches in length it can easily conceal itself, and even coil up unseen in a native shoe; When disturbed, it displays great activity and strikes with the utmost ferocity at the first object that presents itself. It may readily be distinguished from all other snakes by the peculiarity of its markings, consisting of a connected chain of white arches or semicircles on each side, cutting into a median or vertebral row of white spots, and by its strongly peeled scales, shieldless head, and vertical pupil. The body colour is in various shades of brown. The natives distinguish several varieties of fursa; but they are all referable to one species. The fursa is accountable for most of the yearly deaths from snakebite. The action of the virus of this adder on the human system is peculiar, and the effects produced by it appear to differ from those of any other known species. The symptoms of fursa bite have been thus described. 'Slight pain in the bitten part with local oedema, increasing up to the third or fourth day, and then gradually subsiding; swelling of the neighbouring lymphatic glands; giddiness and heaviness of the head relieved by emetics and purgatives, and a marked tendency to haemorrhagic diathesis as evinced by the troublesome trickling of blood from the bitten part when lanced, and from abrasions of the skin where these exist. In some cases there is also bleeding of the mouth. The average of 62 fatal cases gives death in 4½ days.' Ordinary fatal symptoms are, bleeding at the top of the upper gum, bleeding from new and half healed scars, bleeding from the bitten part, heaviness of the head, and lock-jaw, almost invariably. Bubo in the groin or arm-pit is another symptom. None of these, however, except lock-jaw are invariably fatal symptoms. The bleeding takes place at any time after the bite, from one to two hours afterwards, up to the seventh or eighth day.' Thus the action of a fursa bite is very slow as compared with other deadly snakes. [Dr, E. de Crespigny, Civil Surgeon, Ratnagiri, 8th March 1862.] ' A man bitten by a cobra, after three or four hours' lethargy, sleeps quietly out of life. Another, bitten by a fursa lives from three to twenty days, his head quite unaffected, but with blood issuing from his eyes, nose, and mouth, and oozing through all the pores of his skin, and then an oppression of the chest comes on, from which he dies.' [Mr. G. Campbell, Superintendent of Police, Ratnagiri, 13th April 1860.] The efficacy of ammonia in counteracting the effects of a fursa bite has been the subject of much discussion. Mr. Campbell, a former Superintendent of Police, found it effectual both at the early and later stages. On the other hand, Dr. E. de Crespigny, Civil Surgeon of the district in 1862, was inclined to the opinion that liquor ammoniae was inert in these cases, and that in the instances of recovery from its use, recovery would have taken place as well without it. He mentions instances of sloughing of the fauces and obstinate vomiting having been induced by improper administration of ammonia, and adds that 'if long continued it is calculated to exaggerate all the peculiar hemorrhagic symptoms observed in bad cases.' In 1861, out of 285 cases sixty-two deaths occurred from *fursa* bites. Of these sixty-two fatal cases, fifty-four were treated with ammonia. In the Ratnagiri Civil Hospital, a native remedy, the root of a herb called *pangla*, has, for some years past, been used with success both internally and as a paste for external application to stop the haemorrhage.

SECTION VI.-BIRDS.

Birds

A great part of the Ratnagiri district is still, as regards its avifauna, almost a terra incognita, and but little is known with certainty as to the distribution of species within its limits. The geographical situation of the district would lead to the expectation of finding an intermingling of the typical forms of Central or Continental and of Southern or Peninsular India. The little experience that has been gained partially confirms this expectation. At present, this is little more than speculation, and the subject has yet to be worked out exhaustively. Careful comparisons of large series of specimens from different localities may perhaps hereafter lead to the discovery of many interesting intermediate forms, groups, and sub-species, more or less clearly distinguishable from the typical forms to which they most nearly approach.

On the whole the district cannot be said to be very rich either in species or individuals. With the exception of the Grallatores and Insessores, the various orders are somewhat weakly represented. The absence of partridges, sandgrouse, bustards, and cranes, and the comparative dearth of quails makes the district an indifferent game country. On the other hand, duck, snipe, and golden plover are plentiful, and the alluvial banks of the tidal creeks, the mangrove swamps, salt marshes, and flooded rice fields afford feeding grounds to innumerable waders.

The diversified aspect of the country should give good opportunities for studying the distribution of species, as affected by physical conditions. Beginning from the sea, the first aspect is a rocky coast with numerous bays and indentations, fringed with cocoanut gardens and tidal estuaries, bordered by mangrove swamps and mud banks. Immediately above the sea beach succeeds a belt of low, rugged, laterito capped hills, and rocky plateaus for the most part bare, or but scantily clothed with low thorny bushes, intersected at irregular intervals by the deep precipitous ravines cut by the tidal rivers. Here with the exception of the village sites, which are more or less well covered with leafy trees, there is little or no verdure, and cultivation

is chiefly confined to the alluvial banks of the rivers. Further inland, the country becomes more elevated, the hills more undulating and more thickly covered with brushwood and pollarded trees. Well shaded villages and luxuriant groves are dotted about, and the laterite is gradually replaced by trap. Lastly, the Sahyadri mountains rise abruptly from the low lands at their base, with innumerable spurs and slopes richly clad with evergreen forest.

With so many and varied features, and with an elevation ranging from the sea level to upwards of 3000 feet, much diversity of animal forms and species might naturally be expected. The waders, swimmers, divers, and generally speaking all the aquatic and oceanic species are restricted to the coast and the broad tidal estuaries, extending inland only so far as the tidal wave exerts its influence up the various rivers. On the other hand, the birds of prey, with the exception of the fishing eagles, the pigeons, doves, and the great majority of the perchers, range throughout the district from the coast to the Sahyadri hills. Amongst these are a few, whose habitat lies only in the higher ranges of the Ghats, and other species approach the coast only where spurs of the Sahyadria stretch, in a line of unbroken forest, westwards to the sea.

Though, compared with the northern Konkan and the Habsi territory on the north, and with Savantvadi, Goa, and Kanara on the south, the Ratnagiri district presents a decidedly denuded appearance, till, as regards its ornithology, it is essentially a forest tract; and the prevailing species of birds are such as might be expected in a humid well-wooded forest country, rather than in bare open plains, such as are seen to the cast of the Sahyadri range. Of this the following are prominent instances. The common Ratnagiri paroquet is the Rose-headed species, Palaeornis purpureus, the Rose-ringed Paroquet, Palceornis torquatus, being comparatively a scarce bird. Similarly, the common dove of the district is the Spotted Dove, Turtur suratensis, replacing entirely the Little Brown Dove, Turtur cambayensis. The Jungle Myna, Acridotheres fuscua, in great part replaces the Common Myna, Acridotheres tristis, and the Red-whiskered Bulbul, Otocompaa fuscicaudata, (Jerd. 460, bis) is almost equally as common in the well wooded tracts as the Madras Bulbul, Molpastes Haemorrhous. Passing over the Sahyadri range ' into the Satara district, even within a few miles of the watershed the reverse is clearly seen. The species mentioned as common in Ratnagiri, are on the eastern side of the hills restricted to the immediate neighbourhood and the well wooded slopes and spurs of the Sahyadri range. Further east, these species are entirely replaced by the Rose-ringed Paroquet, the Little Brown Dove, the Common Myna, and the plainer coloured Madras Bulbul. Many similar instances might be adduced. Numerous species, such as the Common Green Barbet, the Southern Yellow Tit, the White-winged Ground Thrush, the Green Bulbul, and other forest-loving birds are common throughout the Ratnagiri district. On the other hand, birds which more or less exclusively affect dry open plains, such as Sand grouse, Courier plover, Bustard, and others are either unknown, or so rare as to be seldom seen.

In the subjoined list of species the scientific names are, as far as can be ascertained, those fixed by the latest authority, [Tentative list of the Birds of India, Stray Feathers, VIII. 73 et. sea, corrected up to 1st March 1879. Allan

Hume.] and in each instance the number, according to Jerdon's Birds of India, is added for convenience of reference. Species separated since the publication of that work are marked by the addition of *bis, ier,* or *quater* to the number given to the species, most nearly resembling them. The list containing 265 species must be more or less incomplete. But it is believed that, as far as it goes, it will be found accurate. All species of doubtful occurrence have been excluded and separately enumerated.

Order- RAPTORES.

RAPTORES.

This order is represented by four species of Vultures, three Falcons, one Hawk, five Eagles, one Buzzard (Poliornis), two Harriers, two Kites, and nine Owls. The true Buzzards have no representatives. The above are all that can at present be said with certainty to occur. But when the higher ranges of the Sahyadri hills have been more thoroughly explored, it is probable that other species will have to be added. Many birds of prey are rare and occasional visitants, living in the most inaccessible hills and densest forests, seen with difficulty, and with still greater difficulty obtained for examination.

Vulturidae.

Fam.—VTTLTUEIDAE.—The Indian King or Black Vulture, Otogyps calvus, (Scop. Jerd. 2), is occasionally but rarely seen. It is not known to breed within the limits of the district.

The Long-billed Brown Vulture, Gyps indicus, (Scop. Jerd. 4), which will probably prove to be the paler variety or western form of G. indicus, separated by Mr. Hume as G. pallescens, is plentiful in the large fishing villages on the coast, and may always be seen feeding in company with the white-backed vulture. All along the coast are many breeding places, rocky cliffs and bluff headlands, such as this bird delights in. It seems to be a permanent resident, but its nest has not yet been discovered.

The White-backed Vulture, Pseudogyps bengalensis, (*Gm. Jerd.* 5), is by far the commonest vulture in the district, and is universally distributed. It breeds from December to February on the tops of lofty mango, silk cotton, [Bombax malabaricum.] and other trees, generally in thick groves. The nests are large stick platforms with a slight depression lined with green mango leaves. A single white egg is laid, averaging 3.12 x2.5 inches. These vultures usually build in small colonies, two or three nests being often found on one tree. If their nesta are invaded, they make no attempt to defend their young.

The White Scavenger Vulture, Neophron ginginianus, (Baud: Lath.), N. percnopterus (Lin. Jerd. G), the Dirt Bird or Pharaoh's Chicken, is seen in pairs here and there throughout the district, but is by no means plentiful. They breed at the same time and often in company with, and on the same tree as, the white-backed vulture, appearing to be on the best of terms with their neighbours, each taking an interest in the other's concerns. They usually lay two eggs, greyish white, more or less thickly blotched and speckled with dingy, red. Konkani Marathas call all vultures gidh, but dignify the dirt bird or scavenger with the more aristocratic name of pandri ghar, white kite.

Falconidae.

Fam. — FALCONIDAE. Sub-Fum.—FALCONINAE. — The Perigrine Falcon or Bhyri, Faleo perigrinus, (*Gmel. Jerd.* 8), is, during the cold weather, occasionally seen on the coast, and on rocky islands off the mainland, such as Suvarndurg fort. Here, as elsewhere, it is a rare bird.

The Red-headed Merlin or Turumti, Chiquera falco, (*Baud. Jerd.* 16), is also rare, but is said to be a permanent resident. It is comparatively common in the adjoining Satara district, where in January and February it breeds on mango and tamarind trees, laying from three to four eggs. These falcons are, when building, extremely noisy and vicious, attacking all intruders, such as crows and kites, with the greatest audacity.

The Kestrel, Cerchneis tinnunculus, (*Gmel. Jerd.* 17), makes its appearance in small parties in October, at the beginning of the cold weather, and leaves about the middle of March. It is not so plentiful in this district as in the Deccan plains.

Major Lloyd in his general Konkan list gives in addition to the above the Shahin, *Falco perigrinator*, (*Sund. Jerd.* 9), and the Laggar, Falco jugger, (*Gray. Jerd.* 11), and in all probability they are to be found in this district; but the writer, having failed as yet to obtain specimens, has omitted them from the local list of falcons.

Accipitrinae.

Sub-Fam.—ACCIPITRINAE.—The Shikra, Astur badius, (Gmel. Jerd. 23), is universally distributed and a permanent resident, breeding in March and April, usually laying in a very loosely constructed stick nest four pure unspotted eggs of a greenish white. No other hawk is known with certainty to visit the district. It is possible that the Besra Sparrow Hawk, Accipiter virgatus, (Tern. Jerd. 25), occurs in the higher Sahyadri ranges. A straggler from a party of European Sparrow Hawks, Accipiter nisus, (Lin. Jerd. 24), may also now and then have been seen in the cold weather; but there is as yet no authentic record of its appearance.

Aquilinae.

Sub-Fam. — AQUILINAE. — The Dwarf or Booted Eagle, Hieraetus pennatus, (*Gmel. Jerd.* 31), is rare. Specimens have been obtained by the writer in the Dapoli and Chiplun sub-divisions.

The Crested Hawk-Eagle, Limnaetus Cirrhatus, (*Gmel. Jerd.* 35), is by far the commonest eagle in the district, and is universally distributed from the sea coast to the foot of the Sahyadris. Very destructive to poultry yards, it preys also on bush quail and has been seen pursuing green pigeon unsuccessfully from tree to tree. It also attacks and kills small snakes, though this latter occupation is probably exceptional. It is usually alone. The breeding season opens about the latter end of December and continues up to the end of April. They begin building early in Deoember, taking like the Shikra a very long time about their work. Nests, apparently finished, are found some weeks before any eggs are laid. The nest is always placed on the fork of a tree, high up, and is a large loose structure of sticks, lined

throughout with green mango leaves. A mango tree is usually chosen for the nest and it is noticeable that although there may be numbers of Pariah Kites, Milvus govinda, Brahmani Kites, Haliastur indus, and other Raptores in the neighbourhood, the particular clump of trees chosen by the pair of crested hawk eagles is held by them as their exclusive property, and no trespassers are allowed to build anywhere near. The only exception to this, ever observed by the writer, was a pair of brown fish owls, who had reared a pair of young ones in a hole in a tree adjoining the tree containing the eagle's nest. The owls, being hidden by day, perhaps escaped the tyrant's notice. Those eagles make no attempt to actively defend either young or eggs from human invaders, and appear to desert their nests, not only when robbed of eggs, but even, if only looked at and examined before an egg has been laid. A single egg only is laid. Out of twelve nests found by the writer with eggs or young, no instance occurred of more. The eggs are greenish white and devoid of gloss, shewing a beautiful pale green lining when held up to the light. The average measurement of seven eggs taken by the writer was 2'65 by 1.91. The natives call this eagle the Shenderi ghar, in allusion to its conspicuous black crest.

The Lesser Indian Harrier Eagle, Spilornis melanotis, (*Jerd.* 39, *bis*), replaces in this district its well known and larger congener the Crested Serpent Eagle, Spilornis cheela. (*Jerd.* 39). It is sparingly distributed throughout the district, generally frequenting hill sides and low brushwood, and is soliary in its habits. It is a permanent resident, and breeds in the hot weather. It is by Konkani Marathas mis-called *Mhorangi ghar*, a name which applies more properly to the Crestless Hawk Eagle, Nisaetus bonellii, (*Jerd.* 33). Snakes, lizards, and frogs form its chief food.

The Osprey, Pandion haliaetus, (Jerd. 40), is common on the larger tidal creeks and estuaries, where fish are plentiful. Of its nest building nothing is known. It is often seen in company with the next species.

Aquilinae.

The Greybacked Sea Eagle, Haliaetus lencogaster, (Gmel Jerd. 43), is found all down the seaboard of the district and for a few miles up the larger tidal rivers. It is a permanent resident, and breeds regularly year after year in the same nest in November and December. The nests are huge stick platforms five feet or more in diameter. They lay two white eggs, measuring about 3 X 2.06 inches. At all times, whether breeding or not, the nests are the homes and head-quarters of the sea eagles. Here they always return after each trip in search of food, and here also, both in and below the nest may be found the debris of their meals, snake bone and skins, fish bones, and occasionally, as the poultry keepers in the fishing villages ' well know, half-eaten domestic fowls. The ground below an old nest is always covered with a thick layer of bleached bones. They do not appear to be very particular in their choice of a building site. Any lofty tree with a strong horizontal branch suits their purpose. Sometimes they build in the mango trees, which shade the fisherman's huts, and sometimes in cocoanut gardens, though never on cocoanut trees. One pair has for many years past occupied a gigantic nest in a banyan tree, overhanging the sea wall of the picturesque old island fort of Suvarndurg. No more than one pair of adult birds is ever seen at this fort, and the young birds are, as soon as they can shift for themselves, probably driven off to seek fresh hunting grounds. The eagles usually hunt in couples, making short trips up and down the coast, boating up the shallow water on the sea-shore in quest of food. Both when perched and on the wing, they utter a loud, clear, resonant far-reaching cry. The native local name is *Kakani*.

Major Lloyd gives as Konkan species the following eagles: The Spotted Eagle, Aguila clauga (*Pall. Jerd.* 28); the Fawny Eagle or Wokhab, Aguila vindhiana (*Frankl. Jerd.* 20); the Black Eagle, Neopus malaiensis, (*Remvardt. Jerd.* 32); the Crestless Hawk Eagle, Nisaetus bonelli, (*Tem. Jerd.* 33); the Common Serpent Eagle, Circactus gallicus. (*Gml. Jerd.* 38); and the Crested Serpent Eagle, Spilornis cheela, (*Daud. Jerd.* 39). Any or all of these may occur in the Ratnagiri district, but they have not hitherto been recorded as found in any particular locality within the limits of the district. It may be observed that in all probability the Crested Serpent Eagle, or Harrier Eagle, Spilornis cheela, is replaced not only in Ratnagiri, but throughout the Konkan by the smaller race, Spilornis melanotis (*Jerd.* 39 *bis*), above described. [Since the above was written a specimen of Spilornis cheela has been obtained in Savantvadi.]

Buteoninae.

Sub-Fam.—BUTEOXINAE.— The White-eyed Buzzard, Poliornis teesa, (Frankl. Jerd. 48), has been obtained in the south and in Ratnagiri by Dr. Armstrong, and in Dapoli by the writer, but it appears to be scarce everywhere.

The Pale Harrier, Circus macrurus, (*S. G. Gm. Jerd.* 51), is abundant everywhere in the cold season. They come in October just when the Southern Crown Crest, Spizalauda, malabarica, (*Jerd.* 765 *bis*), and the Little Finch Lark, Pyrrhalauda grisea, (*Jerd.* 760), are rearing their young broods on the bare rocky plateaus thinly covered with coarse grass. Numbers of young nestling larks, ill-hidden from their keensighted enemies, are destroyed by the harriers. By day they hunt either singly or in pairs, beating silently over plain and hillside for young birds, lizards, mice, and locusts. By night they gather in large parties, roosting on the ground, often under cover of long grass. Montague's Harrier, Circus cineraceus (*Mont. Jerd.* 52), probably visits the district in the cold season, but has not yet been obtained by the writer.

The Marsh Harrier, Circus aeruginosus, (*Lin. Jerd.* 54), is also occasionally found in the cold weather, but is not common.

Milvinae.

Sub-Fam.—MILVINAE.—The Maroonbacked or Brahmani Kite, Haliastur indus, (Bodd. Jerd. 55), is comparatively common on the coast, but is not often seen inland, or at any distance from water: Crabs appear to be its chief food. It breeds from January to April. On the coast, cocoanut palms are their favourite site. Inland they choose any large available tree, occasionally mangrove trees in mud swamps. They usually lay two eggs, white minutely

speckled with reddish brown. They desert their nests on very small provocation, and at once begin building a fresh. They never make any active defence of young or eggs, but if their nest be invaded, fly round overhead in short circles. Once when the writer's birdnester had climbed a tree to examine one of their nests, an unfortunate screech owl, Strix javanica, flew innocently out of an adjoining tree, and was at once attacked with the greatest ferocity by both the parent kites, who vented their wrath on it by swooping at it, and striking viciously at its back, pulling out handfuls of feathers. The kites did not pursue the owl far, and their victim escaped a 'sadder and a wiser' bird. The Konkani name for this kite is tambadi mhorangi.

The Pariah Kite, Milvus govinda, (*Sykes, Jerd.* 56), is too well. known to need description. No village is without them and all the natives have a wholesome hatred of them, for they do without doubt kill chickens, especially when they have young. They breed in January, February, and March, choosing any high tree, but generally a mango, and making the usual stick platform lined with rags and leaves. Two is the normal number of eggs, and the eggs vary greatly in colour, shape, and size, the commonest type being a dingy white ground thickly blotched at the larger end with red. They defend their eggs and young with great vigour, and the robbing of their nests is at all times a perilous undertaking. They dash at the intruder who climbs the tree, one on either side of him, flying opposite ways, striking at him as they rush past with wings and claws. Considerable nerve is required to repel these attacks, especially when, as usually happens, the tree is a difficult one to climb, and the birdnesters' time is fully occupied in keeping his own balance. Pariah kites are called *ghar* or *Kobadi gahr* by the Konkanis.

Strigidae.

Fam.—STRIGIDAE. — The Indian Screech Owl, Strix javanica, (*Gmel. Jerd.* 60), is found here and there throughout the district, but is nowhere common. It is entirely nocturnal in its habits, and hides by day in holes of decayed trees and buildings. It breeds in December and January.

The Brown Wood Owl, Syrnium indrani, (*Sykes. Jerd.* 63), has been procured by Dr. Armstrong at Fanasgaon in the Devgad sub-division. It appears to be rare, and has not been observed in the northern portion of the district where the next species, the mottled wood owl, is comparatively common.

The Mottled Wood Owl, Syrnium ocellatum, (Less. Jerd. 65), is found in the northern sub-divisions of Khed and Dapoli and Sangameshvar, and probably elsewhere, in suitable localities. As a rule it does not affect heavy forest, preferring mango clumps on the outskirts of villages. It is less common near the coast than inland. They nest in January and February in holes and depressions of trees, ten feet or so from the ground, laying two very spherical creamy white eggs. The young, if taken from the nest, become very gentle and good tempered., and will with great gusto devour lizards, grasshoppers, and cockroaches. Dogs are their greatest aversion. Whenever a dog enters a room or tent where are captive owls, the birds puff out all their feathers and lower their heads like angry turkeycocks, snapping their

mandibles with great rapidity, and pretending to be very bold. They also readily learn to distinguish friends from strangers, and will snap and show evident signs of alarm on the appearance of a strange face. Entirely nocturnal, they take little notice of anything that happens by day. In confinement their wing bones become very brittle, and liable to fracture and dislocation.

The Rock Horned Owl, Bubo bengalcnsis, (*Frankl. Jerd.* 69), is found amongst rocky cliffs overhanging tidal creeks and mountain streams, and is rather common. It appears to perch on trees as well as on rocks, though when disturbed from a tree it always flies to the rocks. It comes out directly the sun is down, and is always on the alert and easily disturbed in the day time. It has a deep dissyllabic hoot, which may be syllabled *hoo! hoo!* the last syllable being prolonged. Rats, lizards and crabs are its chief food. The writer has seen one feeding on the remains of a peafowl, which he had wounded the evening before, but owing to the darkness, was unable to recover. It breeds in January or February on the ground, making no nest, but scooping out a hole in the earth usually under cover of a projecting boulder or ledge of rock, laying three or four, rarely five, round white eggs of the usual owl type.

The Brown Fish Owl, Ketupa ceylonensis, (*Gmel. Jerd.* 72), is common throughout the district. It affects thick forests and lofty trees always near water. Fish and crabs form its chief food. They thrive well in confinement, and will eat raw or cooked meat, the former by preference, as well as fish. They drink water freely and greatly enjoy a bath. This fish owl and the rock horned owl are both called *human* by the natives of the Konkan, the term *Ghubad* being usually applied to the screech owl and the hooting or mottled wood owl. They breed from January to March in holes and depressions of trees, at no great height from the ground, laying usually two eggs. The nests have no lining, but are usually strewn with powdered bark. The cry of this owl is a long deep aspirated sigh, excessively human in its intonation. To those unaccustomed to it, and by nature superstitious, this repulsive laugh, as Tiekell describes it, when heard close overhead in the dead of night, is an alarming sound.

Brace's Scops Owl, Scops brucii, (*Hume. Jerd.* 74 *sept*), has been obtained by the writer at Khed, and will probably be found elsewhere, but it appears to be rare.

Strigidae.

The Malabar Scops Owl, Scops malabaricus, (*Jerd.* 75. *quater*), a curious little horned owl, is throughout the district found in thick groves and cocoanut gardens. The natives call it *Kuta*, an imitation of its low soft call. It is strictly nocturnal, never appearing until after sundown. By day it hides in holes of decayed trees and occasionally in crevices of dry wells. It is usually seen in pairs. They nest in January in holes of trees, laying three or four glossy white eggs almost spherical. Unlike other allied species, they are extremely gentle and timid, and if caught on their nests, make no attempt to retaliate by pecking or clawing. The young birds have a grey tinge all over their plumage, which turns with age to rufous.

The Spotted Owlet, Carine brama, (*Tern. Jerd. 76*), the well known *pingla* of the Deccan, has been obtained by Dr. Armstrong at the Fonda pass, and on one ocasion by the writer in the Dapoli sub-division. Its occurrence in these localities is perhaps exceptional, as it does not appear to have been found elsewhere. The spotted owlet is plentiful in the west of Satara, and may here and there extend itself down the western slopes of the Sahyadris. From the base of the Sahyadris to the sea it appears to be almost entirely replaced by the next species.

The Malabar Owlet, Glaucidium malabaricum, (Bly. Jerd. 78), is found in a form pronounced by Mr. Hume to be intermediate between Athene malabaricum and Athene radiatum, the Jungle Owlet, and almost as near the latter as the former. It is plentifully distributed, and in the northern subdivisions appears almost entirely to replace the Spotted Owlet, pingla, Athene brama (Tern.), so common in the adjoining district of Satara. The Malabar owlet is a lively little bird, and diurnal in its habits, flying from tree to tree, and uttering its clear tremulous whistling call at intervals throughout the day. It seldom hides itself in holes of trees, except during the breeding season, March and April, when it lays three or four round white eggs, undistinguishable from those of the preceding species. When caught or wounded it is extremely visions defending itself with its sharp claws with much vigour. The writer has seen this bird fly out from a tree in the full blaze of the morning sun, and make an unsuccessful swoop at a wounded treewarbler, which had just been shot and was fluttering slowly to the ground. This species is by the natives called kutruz, a term also applied to the little Scops Owl, kuta, in the Deccan.

In his list of Konkani owls, Major Lloyd includes the Indian Scops Owl, Scops pennatus, (*Hodg. Jerd.* 74). This species appears to be entirely replaced in Ratnagiri by the Malabar Scops, (*Jerd.* 75 *quat.*) The Jungle Owlet, Glaucidium radiatum, (*Tick. Jerd.* 77), is also given as a Konkan bird. As before mentioned, the owlet found in Ratnagiri has been pronounced to be the Malabar Owlet, Athene malabaricum, (*Jerd.* 78), or more strictly a form intermediate between Athene malabaricum and Athene radiatum.

The Grass Owl, Strix Candida, (*Tick. Jerd.* 61); the Dusky Horden Owl, Bubo coromandum, (*Lath. Jerd.* 70); and the Brown Hawk Owl, Ninox scutellatus, (*Raffl. Jerd.* 81), have not hitherto been seen in Ratnagiri.

Order— INSESSORES.

INSESSORES.

The large and various order of the Perchers comprising the swallows, goatsuckers, bee-eaters, rollers, kingfishers, hornbills, parrots, woodpeckers, barbets, cuckoos, honeysuckers, hoopoes, shrikes, minivets, drongos, flycatchers, thrushes, babblers, bulbuls, orioles, robins, chats, wrenwarblers, treewarblers, wagtails, pipits, tits, crows, magpies, starlings, weaver-birds; amadavads, sparrows, buntings, finches, and larks are fairly represented both in species and individuals. From the coast to the Sahyadri hills, perchers of all kinds flourish in abundance. The various aspect of the district and its irregular configuration afford ample means for the wants and peculiarities of

the different families included in this order.

Tribe — **FISSIROSTRES.**

Hirundinidae.

Fam.—HIRUNDINIDAE. — Swallows, Martins, and Swifts, especially the first and last, are plentiful throughout the district, and particularly so on the sea coast. The natives apply the term *pakoli* to all the Hirundmidae indiscriminately.

Sub-Fam.—HIRUNDININAE.—The Common Swallow, Hirundo rustica, (Lin. Jerd. 82), is not a permanent resident and as far as is known does not breed in the district. It is therefore less often seen than its congeners. It appears in the cold weather in great numbers and leaves about the middle of March.

The Wiretailed Swallow, Hirundo filifera, (*Steph. Jerd.* 84), is a permanent resident, though sparingly distributed. They breed in rocks overhanging streams, under bridges and culverts, making a beautiful cup nest lined with feathers, laying two or three delicate white eggs spotted with red, and when fresh shewing a pink tinge.

The Redrumped or Mosque Swallow, Hirundo erythropygia, (*Sykes, Jerd.* 85), is the common swallow of the district, found plentifully in all parts, both inland and on the coast. They make retort-shaped mud nests under the caves of buildings, under ledges of rocks and other similar places. The interiors of ruined fort buildings are an especially favourite place with them. The nests are usually single. These swallows appear to breed only in the hot weather, but nests in a more or less complete state of preparation are found all the year round. The theory is, that ' the long retort-shaped nests well lined with feathers are built as winter residences, and the less developed ones as breeding places.' [Nests and Eggs of Indian Birds. Allan Hume, 76.] This is perhaps borne out by the fact, more than once noticed by the writer, that the winter nests of this species are used as roosting places by the Indian Swift, Cypselus affinis.

The Dusky Crag Martin, Ptyonoprogne concolor, (*Sykes. Jerd.* 90), is found sparingly all down the coast. They breed in the hot weather, making a beautiful cup nest lined with feathers under the ledges of rocks overhanging the sea shore, laying three or four white eggs minutely speckled with brown. These nests are always found single. No other martins are known to occur, though probably, during the cold weather, the Mountain Crag Martin, Ptyonoprogne rupestris, visits the higher Sahyadri ranges.

Cypselinae.

Sub-Fam.—CYPSELINAE.—The Common Indian Swift, Cypselus affinis, (Gray. Jerd. 100), is plentifully distributed, being especially common about the rocky coast head-lands. Numbers breed every year, during April and May, in the rocks at the base of the sea wall of the island fort of Suvarndurg. They are gregarious in their habits and a dozen or more nests may be found all joined together in clusters.

The nests, and especially the outermost ones of the group, though they look very untidy and unfinished, are strongly made. The materials used are

grass and feathers, stuck together with gluten, the latter shewing more in the lining than outside, and giving the interior a very sticky appearance. The entrance to the nests is usually at the top through a narrow crevice left unattached to the rock. The eggs, usually three to a nest, are a delicate white, very elongated and transparent. These Swifts use no mud in building their nests.

The Palm Swift, Cypselus batassiensis, (*E. J. Gray. Jerd.* 102), is an inhabitant of this district, although the palmyra tree, Borassus flabelliformis, with which it is usually associated, and on which alone it is said to nest, is almost unknown. One solitary old palmyra, perhaps the only one in the district, stands on the crest of the cliff overhanging the village of Bankot, the northern boundary of the district. In this tree a pair of Palm Swifts were seen to roost for several nights running in April and May, but of their tiny watch-pocket nest no trace was found. These Swifts have also been seen and taken at various times of the year in cocoanut gardens at Ratnagiri, where no palmyra palms are found.

The Edible Nest Swiftlet or Salangane, Collocalia unicolor, (*Jerd.* 103), is, as Jerdon has stated, found on some rocks rising out of the sea, about twelve miles off the port of Vengurla.

The Vengurla swiftlets breed in March and April, in caverns of the rocks, the nests being made of inspissated saliva, in the form of white gelatine, pure white when fresh, but when old, brownish and mixed with extraneous substances. The rock on which the nests are found is about four miles long. The right of collecting the nests is every year farmed on behalf of Government, and for the ten years ending 1877-78, brought an average revenue of £2 17s. (Rs. 28½). The farm is always taken by Goanese and the produce is dried and sent to Goa. The average yearly yield is stated to be about 28 pounds, which makes the Government royalty about 2s. the pound; and this estimate is probably below the mark. The quantity produced is said, of late years, to have greatly fallen off. Jerdon, on what authority is not stated, gives the annual produce as a hundredweight. Under any circumstances the farm must be a profitable one. According to McCulloch, [Commercial Dictionary, 1871.] the common price at Canton for birds' nests of the first sort is £5 18s. $1\frac{1}{2}d$. the pound; for the second sort about £4 14s.; and for the third sort about £2 15s. the pound.

The Indian Crested Swift, Dendrochelidon coronata, (*Tick. Jerd.* 104), is distributed throughout the district, and appears to be equally common near the coast as near the Sahyadris. It seems to be a permanent resident. According to Mr. Hume, this species of Klecho breeds from April to June on bare dead branches of forest trees, laying a single elongated white egg. The nest is 'a very shallow half saucer composed of thin flakes of bark, gammed probably by the birds' own saliva against the side of a tiny horizontal branch. The nest is nowhere more than ? inch in thickness, is at most ½ inch deep in the deepest part, and can be exactly covered by a half crown. The parent bird, though slender, is fully ten inches in length, and consequently the bird, when sitting across the nest and the tiny branch to which it is attached, completely hides the nest, and no one would suspect that there was any nest

at all.' [Hume's Nests and Eggs of Indian Birds, 92.] The writer has not found any nests of this species. [No other swifts have been observed in Ratnagiri, but the Alpine Swift, Cypselus melba, (*L. Jerd.* 98), has been obtained in Savantvadi.]

Caprimulgidae.

Fam.— CAPRIMULGIDAE.—The Jungle Nightjar, Caprimulgus indicus, (Lath. Jerd. 107). This species of goatsucker having the tarsus feathered appears to be rare. A single specimen was obtained by the writer in a thick grove near Guhagar. It was, contrary to the usual habits of the family, found perched high in a tree after the sun was well up.

The Common Indian Nightjar, Caprimulgus asiaticus, (*Lath. Jerd.* 112), is common wherever there is sufficient forest to give cover by day. It is very plentiful on the hillsides overhanging the north bank of the Kelsi creek in the Dapoli sub-division, which are covered with thick scrub brushwood. Here any evening after sunset, great numbers of these birds may be seen, hunting noiselessly a few feet above the bushes, after the various moths and insects that fill the air. Perching at short intervals on the bare ground, they utter their well known cry, which has been aptly compared to the sound made by a stone scudding over ice. The native name for this and other species of goatsuckera is *kapu*.

Franklin's Nightjar, Caprimulgus monticolus, (Frankl. Jerd. 114) a larger species, at once distinguishable from its congeners by its unfeathered tarsus, and wholly white outer tail feathers, is perhaps equally common, at any rate in the north of the district. In addition to the above species, it is probable that Sykes' Nightjar, Caprimulgus marathensis (Sykes, Jerd. 113), inhabits the Sahyadri forests. The latter species as well as the Nilghiri Nightjar, Caprimulgus kelaarti, (Blyth. Jerd. 108), is included in Major Lloyd's list of Konkan birds.

Merodipae.

Fam.—MEROPIDAE. — The Common Indian Bee-eater, Merops viridis, (Lin. Jerd. 117), is plentifully distributed throughout the district. In the day time it is usually seen alone or in small parties. Taking up a position on a branch or stalk of coarse grass, it makes frequent short sallies after its insect prey, returning with the utmost regularity to the same perch, time after time, for hours together. In the evening the bee-eaters of one locality all gather together, and after disporting themselves for some time in one large flock, retire to roost night after night in the same trees. The local Maratha name for this bird is pathal kirli. No other species of bee-eater has been recorded from Ratnagiri. The writer has, however, received specimens from Savantvadi of the Bluetailed Bee-eater, Merops Philippensis (Lin. Jerd. 118). Major Lloyd mentions the Chesnutheaded Bee-eater, Merops Swinhoii, (Hume. Jerd. 119), as found in the southern district of the Konkan, while Mr. Fairbank says it is found on the hills in the Goa and Savantvadi forests.

Coraciadae.

Fam.—CORACIADAE.—The Indian Roller, tas or dhau, Coracias indica (Lin. Jerd. 123), is the only species of roller found. Though nowhere very plentiful,

and not often seen near the coast, a few birds are always found about wellwooded inland villages. Mr. Fairbank describes this species as a cold weather visitant leaving the Maratha country in March, and Major Lloyd calls it a winter visitant to the Konkan. The writer is inclined to think that the roller is in many cases a permanent resident. He has had no opportunities of verifying this during the rainy months. But in the Khod sub-division in the latter part of March, he has found several nests with fresh eggs, and it is clear that the young broods from these nests would not have been ready for a long migratory flight before the middle or end of May, if so soon. Captain G. F. L. Marshall, R.E., in his 'Birds Nesting in India' enters the Indian roller's breeding season as from the latter end of March to the first half of June, while another observer, Mr. F. R. Blewitt, has found eggs in July. [Nests and Eggs of Indian Birds. A. O. Hume, 104.] The nests mentioned above would therefore appear to have been exceptionally early, and birds breeding later would have to defer their migration till after the burst of the rains. In the western districts of Satara, the writer has also observed no very appreciable diminution in the number of rollers up to the end of April. The roller breeds in holes of decayed cocoanut, mango, silk-cotton and other trees, laying, as a rule, four very glossy broad oval eggs. The nests have usually no lining of grass or feathers, but are simply covered over with powdered bark.

Haloyonidae.

Fam.— HALCYONIDAE.— The Brownheaded Kingfisher, Pelargopsis gurial,' (Pearson. Jerd. 127), commonly called the Storkbilled Kingfisher, has been obtained at Rajapur, and has also been noticed at Ratnagiri, but is rare.

The Whitebreasted Kingfisher, Halcyon smyrneusis, (*Lin. Jerd.* 129), is widely distributed; but individuals are comparatively scarce. It is more often found near small woodland streams than in large tidal creeks, and unlike other kingfishers, is often seen perched in dry brushwood at a considerable distance from Water.

The Whitecollared Kingfisher, Halcyon chloris, (*Bodd. Jerd.* 132). The occurrence of this bird on the west coast of India was unexpected. Hitherto, according to Mr. Hume, it has been known to occur only in the Sunderbands, and thence down the Burman and Malayan coast, and at the Andaman islands. The writer found a small colony of these birds at Kelsi in the Dapoli sub-division, settled near the village, in a mangrove swamp on the banks of a small tidal creek. They have also been found in a similar situation in Ratnagiri, and further search may lead to their discovery in other parts of the district. The whitecollared kingfisher never pounces, but catches small crabs and mollusces out of the mud, preferring this to deepwater-fishing.

It has a peculiar shrill call, which it utters both when perched and on the wing Its nest has not yet been discovered.

The Common Indian Kingfisher, Alcedo bcngalcnsis, (*Gmel. Jerd.* 134), is one of the commonest birds in the district. It swarms on all the tidal cricks, in lagoons and mangrove swamps, and every little pond or large well is tenanted by a pair or more of these industrious little fishermen. It is abundant also on the sea coast, wherever a rocky beach or cavernous cliff

affords a perch, from whence to pounce on its finny prey. They breed in holes of river banks in the hot weather, but the nests are placed so far in, and the mouths of the holes arc so small that they are difficult to obtain.

The Pied Kingfisher, Ceryle rudis (*Lin. Jerd.* 13G), is also common, but not nearly so plentiful as the last. It seems to be more a freshwater species than most other kingfishers, and is less often seen in tidal waters than in fresh inland rivers. It is particularly abundant on the Krishna and other Deccan rivers, where it becomes exceedingly familiar, diving with the utmost unconcern amongst the crowds of bathers and clothes-washers who frequent the steps on the banks. The Konkani Maratha name for all kingfishers is *disa.* Major Lloyd also enters the Threetoed Kingfisher, Ceyx tridactylus, (*Pall. Jerd.* 133), as a Konkan species only met with near secluded forest streams. If it occurs in Ratnagiri, as is probable, it must be a rare bird.

Bucerotidae.

Fam.—BUCEROTIDAE.—The Great Hornbill, Dichoros cavatus, (Shaw Jerd. 140). The eccentricities of this bird; the imprisoning of the brooding female in a hole of a tree, with mud plastered round so as to leave only a small opening; its paintbrush with an inexhaustible supply of yellow oil paint, with which it performs its toilet by decorating various parts of its plumage; its loud braying call and extraordinary appearance are well known. According to Jerdon, Goa is the northern limit of its distribution. It is, however, found throughout the Ratnagiri district, and at least in the south of Kolaba. As a rule, this species keeps to the, slopes of the Sahyadris and the well wooded low lands at their base. It is more rarely found in the neighbourhood of the sea. During the cold weather, individuals are often seen at Dapoli, and at this period they appear to wander far and wide in search of the ripe berries and fruits, which form their staple food. Like the African species they will kill snakes when they see them. They are usually found in small parties of four to six birda occasionally in pairs, but rarely single. One or more pairs are said to breed regularly near Poladpur, in the Mahad sub-division of the Kolaba district. This and the next species are by Konkani Marathas called garud pakshi.

The Malabar Pied Hornbill, Hydrocissa coronata, (*Bodd. Jerd.* 141), has been obtained by Dr. Armstrong in the southern sub-divisions and it also visits Ratnagiri and Sangameshvar. Its habits are similar to the last. It appears not to extend so far north as the great hornbill. In addition to the above hornbills, the Jungle Grey Hornbill, Tockus griseus, (*Lath. Jerd.* 145), has been obtained in the Savantvadi forests, which probably form its northern limit It has not been recorded from Ratnagiri.

Tribe-SCANSORES.

Psittacidae.

Fam. — PSITTACTDAE. — The Roseringed Paroquet, Palceornis torqnatus, (Bodd. Jerd. 148),t lie common Deccan species, is comparatively scarce, but widely distributed. Like all other paroquets, it nests in holes of trees during the hot months of March and April, laying four or more white glossless eggs. In the east of Satara, the natives fancy that individuals of this species

breeding in banyans and *pipals* prove better talkers than those who nest in mango, tamarind, and other trees. In taking young birds from the nest they are always guided by this whimsical idea, which does not appear to extend to the Konkan. Paroquets are called by the natives *kir* and *popat*. In this district caged parrots only are called *raghu*.

The Roseheaded Paroquet, Palaeornis purbureus, (*Mull. Jerd.* 149), is the common species of the district. It is abundant every where from the coast to the Sahyadris, and is very destructive to standing crops. Its nest-building and breeding season are the same as that of the last species.

The Bluewinged Paroquet, Paloeornis columboides, (*Vig. Jerd.* 151), a lovely species with dove grey head and blue wings, is found only in the Sahyadri forests.

The Indian Loriquet or Lovebird, Loriculus vernalis, (*Sparrm Jerd.* 153), is plentiful in certain localities, as Dapoli and Ratnagiri; but seems not to be widely distributed. During the rainy season they appear at Ratnagiri in large flocks, frequenting the banyan trees in fruit, and keeping up a continual low whistling chirrup. This species is called *karta* by the natives.

Picidae.

Fam.—PICIDAE.—The Yellowfronted Woodpecker, Picus marathensis (Lath. Jerd. 160), is not very common, but is occasionally seen in thin forest throughout the district.

The Southern Pigmy Woodpecker, Yungipicus nanus, (*Vig. Jerd.* 164), has been obtained by Dr. Armstrong at Bhavda at an elevation of 2000 feet. It has not been recorded from any other locality and appears to be rare.

The Goldenbacked Woodpecker, Chrysocolaptes sultaneus, (*Sodgs. Jerd.* 166), a beautiful bird, is found here and there in the inland tracts at the base and on the slopes of the Sahyadris. It is not nearly so common as the Smaller Goldenbacked Woodpecker, Brachypternus puncticollis, (*Malh. Jerd.* 181).

The Blackbacked Woodpecker, Chrysocolaptes festivus, (*Bodd. Jerd.* 167), the handsomest perhaps of all the group, is not uncommon about Ratnagiri, being found in the cocoanut gardens near the coast, as well as inland. The female, with her bright orange cap-like silk fresh-reeled from the cocoon, is particularly pleasing, and if less gaudy, is equally as pretty as her crimson-capped partner.

The Madras Rufous Woodpecker, Micropternus gnlaris, (*Jerd.* 179) has been obtained both in the north and south of the district. It affects thick groves and forests, and does not appear to frequent the coast. [Mr. Hume remarks of some specimens procured in the north of the district that they were not typical *Micropternus gularis*, but intermediate between this form and M. Phaeoceps (*Bly. Jerd,* 178).] All the specimens found by the writer had the head and tail smeared with resin, a fact first brought to notice by Mr. Elliot.

Malherbe's Goldenbacked Woodpecker, Brachypternus punctieollis, (Malh. Jerd. 181), is the common goldenbacked woodpecker of the district, and is

universally distributed, frequenting alike the cocoanut gardens on the coast and the inland forest tracts. It breeds in the hot months of April and May. Major Lloyd also includes Brachypternus aurantius (*Lin. Jerd.* 180). This species and Brachypternus punctieollis are very nearly allied, and may easily be confounded. Both may meet in the district, but the specimen sent from the northern sub-divisions to Mr. Hume were all pronounced to be typical Brachypternus punctieollis. All the specimens collected from the south by Dr. Armstrong are also *punctieollis*, and not *aurantius*.

Megalaemidae.

Fam, — MEGALAEIDAE. — The Malabar Green Barbet, Megalaema inornate, (Wald. Jerd. 193 his), which differs from the Common Green Barbet, Megalama caniceps (Frankl. Jerd. 193), by the almost complete absence of the white specks on the tertiaries and wing coverts, characteristic of the latter, is during the rainy season plentiful at Ratnagiri, and ranges from there to the Sahyadri slopes, where its loud familiar call is heard incessantly throughout the day. In the northern sub-divisions it is restricted to the Sahyadri forests, and does not, except perhaps during the rains, visit the neighbourhood of the coast. Both this and the next species are called koturga by the natives.

The Small Green Barbet, Megalaema viridis, (Bodd. Jerd. 194), appears to be confined to the Sahyadri forests, where it is equally plentiful with its larger congener, ranging throughout the whole length of the district.

The Crimsonbreasted Barbet, Xantholaema haemacephala, (*Mull. Jerd.* 197), the little Coppersmith or *tuktuk*, is one of the commonest birds in the district and is universally distributed. It nests in February and March, excavating holes in decayed trees, and laying three or fouur exceedingly long and cylindrical white eggs. Major Lloyd includes the Crimsonthroated Barbet, Xantholcema malabarica (*Blyth. Jerd.* 198), as a Konkan species; but it has not been obtained in Ratnagiri, although it is found in the neighbouring forests of Savantvadi.

Cuculidae.

Fam,— CUCULIDAE.— The Indian Cuckoo, Cuculus micropternus, (Gould. Jerd. 203), has been obtained at Ratnagiri. It appears to be exceedingly rare. It has a peculiar call which Jerdon describes as a "double note of two syllables each, a fine melodious pleasing whistle," and which Tickell likens to a "double repetition of the word cuckoo."

The Common Hawk Cuckoo, Hierococcyx varius, (*Vahl. Jerd.* 205), has been procured by Dr. Armstrong from the south of the district, but also appears to be rare.

The Indian Koel, Eudynamys honorata, (*Lin. Jerd.* 214), is found everywhere, both on the coast and inland. It begins calling at the end of May, and continues vocal up to the beginning of July, during which time it probably lays its eggs in the nests of late breeding crows, Corvus impudicus. According to the natives, the breaking out of this usually quiet unobtrusive bird into song or whistle denotes a prayer for the coming rain. The Koel seldom, if ever, alights on the ground, and the poor bird, they say, is thus,

for a great part of the year, deprived of its drinking water, depending on the scanty supply of dew collected on the leaves of the trees. Getting very thirsty towards the end of the hot weather, the Koel grows querulous and importunate for the coming rain, which shall refill the hollows of the trees with pure refreshing water. Several other cuckoos probably occur in the district; but they are shy birds and difficult to procure. The Piedcrested Cuckoo, Coccystes jacobinus (*Bodd. Jerd.* 212), and the Small Cuckoo, Cuculus polio-cephalus (*Lath, Jerd-* 201), have been found at Devrukh in the Sangameshvar sub-division.. The Indian Plaintive Cuckoo, Cacomantis passerinus (*Vahl. Jerd.* 208), should also occur, but no specimens have been obtained.

Centropodinae.

Sub-Fam.—CENTEOPODINAE.—The Common Coucal or Crow-pheasant, Centrococcyx rufipennis, (III. Jerd. 217), is found everywhere on the outskirts of villages, gliding with marvellous ease through tangled undergrowth and thick bushes. Its deep mournful note, sometimes single, sometimes in a discordant chorus, is to be hoard at all times of the day. The Konkani name for this bird is kukudkumba.

The Southern Sirkeer, Taccocua leschenaulti (*Lest-. Jerd.* 219), a peculiar species, with bristly head and bright cherry bill, has been found in the woods on the slopes of the hill fort of Mandangad, whence the writer obtained two specimens. A single specimen has also been obtained by Dr. Armstrong from the neighbourhood of the A'mba pass. It is a rare bird, in its habits much like the crow pheasant.

Tribe- TENUIROSTEES.

Nectarinidae.

Fam.—NECTARINIDAE.—The Violeteared Red Honeysucker, AEtho-pyga vigorsii, (Sylees. Jerd. 226), a beautiful species, is plentiful on the western slopes of the Sahyadri range. It is also found more sparingly near the coast in coceanut gardens.

The Amethyst Honeysucker, Cinnyris Zeylonica (*Lin. Jerd.* 232), is more widely distributed than the last, and more plentiful. The males keep their exquisite plumage throughout the year. Their nests are beautiful, hung from the slenderest twigs, and rocked to and fro by every breath of wind. The nest is pear-shaped narrowing in the middle, with a side entrance shaded by a tiny overhanging porch. The materials are the finest grass lined with soft down, and the nests are on the outside prettily decorated with chips of wood, spider-webs, dried flowers, cocoons, and anythingelse that pleases the fancy of the diminutive architects. They lay two, and occasionally three, tiny greenish white eggs speckled with minute brown spots. The jujube tree, Zizyphus jujuba, is a favourite place for their nests; but they are very fearless, often building in verandahs and house porches. The breeding season varies considerably; but nests have been found by the writer in January in this district, and in September and October in the Satara district.

The Tiny Honeysucker, Cinnyris minima (Sykes. Jerd. 233), is less common than the last, being more exclusively restricted to the Sahyadri

Tange, though a few 'are found here and there in the neighbourhood of the coast. They are common on the western slopes of Mahabaleshvar, and native birdcatchers, who find a too ready sale for them amongst the European residents, every year destroy large numbers.

The Purple Honeysucker, Cinnyris asiatica (*Lin. Jerd.* 234), is abundant everywhere from the coast to the Sahyadri hills, wherever flowering shrubs are found. The brilliant metallic hue of the male is donned only at the pairing season, and in his winter garb of grey-green little trace of his splendid wedding dress remains, save from the chin a central stripe of glossy violet. Both the nests and eggs of this species very closely resemble those of the amethyst honeysucker.

The Larger Purple Honeysucker, Cinnyris lotenia, (*Lin. Jerd.* 235), is also found in the district, but is much more scarce than the preceding, from which it differs chiefly in its longer and more rounded bill. It has been obtained in the Dapoli and Ratnagiri sub-divisions near the coast, and is probably distributed sparingly throughout the district.

Tickell's Flowerpecker, Dicceum erythrorhynchus (*Tick. Jerd.* 238), has been obtained at Ratnagiri, and is probably to be found in other localities. Its small size and its habit of keeping to the tops of the highest trees make it difficult to find. The nearly allied, but larger species, the Nilgiri Flowerpecker, Dicceum concolor (*Jerd.* 239), substituted in Major Lloyd's list for Dicaeum erythrorhynchua, has been obtained in Savantvadi. But all the specimens observed by the writer at Ratnagiri clearly belong to the latter species, which also, according to Mr. Fairbank, is found on the western slopes of Mahabaleshvar.

The Thickbilled Flowerpecker, Piprisoma agile (*Tick. Jerd.* 240), readily distinguished by its peculiar bill from all other sun birds, is found sparingly at Ratnagiri and also at Savantvadi.

Upupidae.

Fam.—UPUPIDAE. — The European Hoopoe, Upupa epops (*Lin. Jerd.* 254), is seen only in the cold weather, and is more common than the next species. The Indian Hoopoe, *sutar*, Upupa ceylonensis, (*Reich. Jerd.* 255), is found here and there throughout the district, and is to be seen near all well wooded villages. In the cold weather these birds associate in small parties of four or five. They feed exclusively on insects, which they pick up on the ground. No representatives of either the Treecreepers, Certhiadae, or the Nuthatches, Sittinae, have been observed in the district. [The Velvetfronted Nuthatch, Dendrophila frontalis, (*Horsf. Jerd.* 253), has been procured at Savantvadi.]

Tribe—DENTIROSTRES.

Laniadae.

Fam.—LANIADAE.—The Rufousbacked Shrike, Lanius erythro- notus, (Vig. Jerd. 257), is the common shrike of the district found everywhere in woods and hedgerows. This butcher bird, as it is popularly named, frequently impales its prey, crickets, locusts, and other insects, on thorns in bushes. It is a permanent resident.

The Baybacked or Hardwick's Shrike, Lanius vittatus (*Valenc. Jerd.* 260), is comparatively rare, and is not often seen near the coast, preferring the forests on the slopes of the Sahyadris. Both this and the last species are extremely vicious when caught alive or wounded.

The Common Wood Shrike, Tephrodornis pondicerianus, (*Gmel. Jerd.* 265), is both inland and on the coast very abundant in certain localities, in groves and gardens, where it is usually found in small flocks. It appears to be somewhat partially distributed. Wherever found it is a permanent resident.

The Little Pied Shrike, Hemipus picatus, (*Sykes. Jerd.* 267), has been obtained at Rajapur and is found in Savantvadi, but does not appear to extend to the north of the Ratnagiri dstrict.

Sub-Fam.— CAMPEPHAGINAE.— The Blackheaded Cuckoo Shrike, Volvocivora sykesi, (Strick. Jerd. 268), has in well wooded country been obtained by the writer in the Dapoli sub-division at Kelsi and Mandangad, and also at Khed and Guhagar. It has been found also at Ratnagiri, Rajapur, and Savantvadi, but is decidedly uncommon.

The Large Cuckoo Shrike, Graucalus macei, (*Less. Jerd.* 270), is common everywhere in well wooded tracts, village groves, and avenues. It is usually seen in pairs, and feeds entirely on the insects and fruit which it can find on trees, for it seldom, if ever, alights on the ground. It begins to breed as early as February, and is also said to breed during the rains at Dapoli. They build in forks of trees, making a shallow cup nest of fine twigs, very loosely put together. The eggs, two or three in number, are of a greenish fawn colour, with pale brownish red spots. This bird has a very sweet call. In addition to the above, the Grey Shrike, Lanius lahtora (*Sykes. Jerd.* 256), and the Malabar Wood Shrike, Tephrodornis sylvicola (*Jerd.* 264), appear as Konkan birds in Major Lloyd's list. The grey shrike is found in the Deccan and may extend to this district, but has not hitherto been recorded. The Malabar wood shrike does not probably come so far north as this district. The Dark-grey Cuckoo Shrike, Volvocivora melaschista (*Hodgs. Jerd.* 269), has been found in Savantvadi, but not in Ratnagiri.

The Orange Minivet, Pericrocotus flammeus, (Forst. Jerd. 272), or the Fiery-red Bird, as it is sometimes called by Europeans at Mahabaleshvar, is found sparingly on the western slopes of the Sahyadri range, throughout the length of the district, but does not make its way to the coast. The splendid red breast of the male, set off by his glossy blue head and upper plumage, makes him one of the handsomest birds in the country. Like the next species, the orange minivets associate in small flocks, moving briskly about from tree-top to tree-top, and keeping up an incessant chirping.

The Small Minivet, Pericrocotus perigrinus, (*Lin. Jerd.* 276), a beautiful little bird, is, wherever there are trees, common and abundant from the coast to the Sahyadris. Its habits are similar to the last species, but it is much more familiar and frequents low brushwood and hedgerows as well as lofty trees. This species breeds in June and July, making a very neat cup nest of fine twigs, which it places high up in the forks of trees, and laying two or three greenish white eggs freckled with brick-dust red.

Dicrurinae.

Sub-Fam.—DICRURINAE.—The Common Drongo Shrike, Buchanga atra (Herm. Jerd. 278), the 'King of the Crows' is one of the commonest birds of the district, and is universally distributed. It is equally plentiful on the bare rocky plateaus near the coast, where, failing trees, it perches" on cattle and goats, and in the well wooded inland tracts. It nests in April and May on forks of trees, laying four pinkish white eggs freckled with red spots. Its local vernacular name, govinda, applies equally to the next species.

The Longtailed Drongo, Buchanga longicaudata, (*Hay. Jerd.* 280), closely resembles the last, wanting the white spot at the gape, and is also abundant, though more confined to forest tracts than the king of the crows. Both are permanent residents and have similar habits.

The Whitebellied Drongo, Dicrurus caerulescens, (*Mull. Jerd.* 281), has been obtained by Dr. Armstrong from the south of the district, but is uncommon.

The Bronzed Drongo, Chaptia aenea, (*Vieill. Jerd.* 282), has also been obtained by Dr. Armstrong at Bavda at the foot of the Sahyadri range, in the Rajapur sub-division, but has not yet been found elsewhere.

The Malabar Rocket-tailed Drongo, Dissemurus paradiseus (*Scop. Jerd.* 285), is found at the extreme south of the district at Vengurla and the neighbouring villages. A nest found near Vengurla during the first week in April, is described as being made of a wiry grass rather loosely put together, and placed near the end of a branch of a large mango tree. The nest contained two eggs of a white ground colour, which unfortunately were destroyed.

Sub-Fam. —ARTAMINAE.—The Ashy Swallow Shrike, Artamus fiscua (Vieill. Jerd. 287), has been found in Vengurla cocoanut gardens.

Muscicapidae.

Fam.— MUSCICAPIDAE. — The Paradise or Royal Flycatcher, Muscipeta paradisi, (Lin. Jerd. 288), is found sparingly in all the well wooded tracts of the district. The adult males with their glossy black heads and flying white streamers are conspicuous objects when seen flitting like streaks of silver from tree to tree. The paradise flycatcher is a restless bird, seldom remaining long in one tree, and always on the move. It catches insects on the wing, and may often be seen in pursuit of its prey near some small tree-girt pool. The young males and females of all ages have the parts which are white in the adult male bright chestnut, and males in a state of transition from the chestnut to the white plumage are not unfrequently seen. This species is at Mahabaleshvar, where it is common, known to Europeans as the 'dhobi bird,' and is called by the natives the banpakhru.

The Blacknaped Blue Flycatcher, Hypothymis azurea, (*Bodd. Jerd.* 290), is found occasionally, but is not abundant anywhere, and is usually seen only in well wooded tracts. The males with their bright and delicate blue plumage, contrasting so effectively with their silky black caps are very beautiful birds.

The Whitespotted Fantail, Leucocerca lencogaster, (Guv. 293), an amusing

and familiar little bird, is very common. A pair or so are to be seen in almost every bush or tree in the district. Their quaint manners and grotesque antics are well known. Their dance, a short flight of a few feet to and from a branch of a tree, followed by a half pirouette, a lowering of head and wings, and a spreading of the broad tail, is kept up incessantly throughout the day. These fantails are usually seen in pairs. They are said to breed at Dapoli during the rainy season. The Whitebrowed Fantail, Leucocerca aureola (*Vieill. Jerd.* 292), is also a probable inhabitant, of the district. But all the specimens hitherto obtained by the writer are L. leucogaster.

The Southern Brown Flycatcher, Alseonax latirostris, (*Raffl. Jerd*-297), is rare. The writer obtained one specimen at Khed, and in the south of the district a few have been secured by Dr. Armstrong.

The Verditer Flycatcher, Stoporala melanops, (*Vig. Jerd.* 301), rare near the coast, is more plentiful in the well wooded country at the base of the Sahyadri hills.

The Blue Redbreast, Cyornis tickelli, (*Blyth. Jerd.* 305 and 306), is distributed sparingly in thick groves. It is usually seen alone, and is a very familiar bird, often entering temples and open sheds in pursuit of insects. Major Lloyd includes the Bluethroated Redbreast, Cyornis rubeculoides (*Vig. Jerd.* 304), as a Konkan species; this has not been found in Ratnagiri.

The Whitetailed Robin or Dwarf Flycatcher, Erythrosterna parva (*Bech. Jerd.* 323 *bis*), a familiar little bird, is often seen in clumps of trees in the cold weather, and has a confiding way of perching upon tent ropes. It is usually alone. It disappears in March or April before the male has fully assumed its orange-red breast.

Merulidae.

Fam. — MERULIDAE. Suh-Fam. — MYIOTHERINAE. — The Malabar Whistling Thrush, Myiophoneus Horsfieldi, (Vig. Jerd. 342), is in suitable places found all along the Sahyadri range, both on the slopes and at the base of the hills, but does not extend to the coast. Its rich mellow whistle, and its love of mountain waterfalls and burns are well known.

The Indian or Tellowbreasted Ground Thrush, Pitta brachyura (*L. Jerd.* 345), a beautifully plumaged bird, is found sparingly at the base and on the lower slopes of the Sahyadri range. It also, but more rarely, frequents thick gardens near the coast.

Sub-Fam.—MERULINAE.—The Blue Rock Thrush, Cyanocinclus cyanua, (Lin. Jerd. 351), is a cold weather visitant, and frequents bare rocky grounds and stony hills. It is common both on the coast and inland. It is almost always alone and feeds on the ground. It is a familiar bird and has a sweet note. It may often be seen like the "sparrow on the housetop," with which it is by some supposed to be identical, perched on the ruins of an old fort, or walls. It does not leave the district till the end of March or the beginning of April.

The Blueheaded Chat Thrush, Petrophila cinclorhynchus, (Vig. Jerd. 353), a pretty bird, chiefly confined to the ravines and slopes of the Sahyadri range.

It is common at Mahabaleshvar and has been obtained at Bavda in the Rajapur sub-division. According to Mr. Fairbank, this thrush is only a cold weather visitant: It has not been found near the coast.

The Whitewinged Bush Thrush, or Ground Thrush, Geocichla cyanotis, (Jard. and Sell. Jerd, 354), is common and a permanent resident. It is found in gardens, groves, and woods from the coast to the slopes of the Sahyadris. It is especially common at Dapoli, where its mellow song may be heard in every garden from the middle of May till July or August. They breed generally in mango trees, early in the rains, making a cup nest of grass, twigs, and roots, plastered with mud, and placing it low down in the fork of the tree. The eggs, three or four in number, vary greatly in colour and markings, the ground colour being either pale-green or fawn, closely freckled with several shades of brownish rod. These little thrushes are very vigorous and bold in defence of their young, and will fly at any intruder with great intrepidity. Their habits are very similar to those of the English song thrush.

The Blackcapped Blackbird, Merula nigropilea, (Lafr. Jerd. 359), is also widely distributed through the district, high and low, from the gardens on the sea board to the Sahyadri forests. It appears to be a permanent resident, as specimens have been obtained at all times of the year. It feeds on the ground as well as on the fruit of trees, but is more arboreal in its habits than the last species, and may often be seen in company with mynas, parrots, green pigeons, barbets, bulbuls, ioras, and other birds, enjoying the ripe red berries of a wide-spreading banyan tree. Major Lloyd includes amongst his list of Konkan merulidae, the Pied Blackbird, Turdulus wardi, (Jerd. 357), and the Orangeheaded Ground Thrush, Geocichla citrina (Lath. Jerd. 355), neither of which has been recorded from Ratnagiri. The orangeheaded thrush is, probably, entirely replaced in this district by the whitewinged species.

Timalinae.

Sub-Fam.—TIMALIKAE.—The Telloweyed Babbler, Pyctorhis sinensis, (Gruel. Jerd. 385), is found in small parties flying from bush to bush in low hillside brushwood. It is abundant in the Dapoli sub-division near the coast, and has also been found in the south of the district. It is a noisy bird, and has all the habits of the larger babblers, Malacocercus. It is said to breed at Dapoli in the rainy season in bamboo clumps in gardens, making a substantial nest of coarse grass, in construction and mode of attachment to upright twigs much like that of the English reed warbler. The eggs of this little babbler are very pretty, pinkish white, freckled, and spotted with red.

The Nilgiri Quaker Thrush, Alcippe poiocephala, (*Jerd.* 389), has, been obtained at Rajapur, and is common at Savantvadi. It has not yet been found in north Ratnagiri.

The Whitethroated Wren Babbler, Dumetia albogularis, (*Blyth. Jerd.* 398), is comparatively very scarce in this district. It has been obtained from the south by Dr. Armstrong and by the writer at Guhagar, and is common at Mahabaleshvar.

The Spotted Wren Babbler, Pellorneum ruficeps (Swainson. Jerd. 399), is also scarce. It is seen occasionally in small parties in thin bush, both inland

and near the coast. It is an amusing bird to watch, both when in bushes and when feeding on the ground; putting on very grotesque airs and graces, and continually chattering, and now and then breaking out into a mocking laugh.

The Southern Scimitar Babbler, Pomatorhinus horsfieldi, (*Sykes. Jerd.* 404), is found only on the slopes and at the foot of the Sahyadri range, where it is a permanent resident.

The Rufous-tailed Babbler, Malacocercus somervillei, (Sykes. Jerd. 435), is the common babbler in the district, entirely replacing the Whiteheaded Babbler, Malacocercus griseus (Jerd. 433) of the adjoining Deccan districts, and the Jungle Babbler, M. malabaricus (Jerd. 434), of the Nilgiris and Southern India. This species is spread abundantly throughout the district. Possibly at the extreme south other forms may occur intermediate between this species and either M. griseus or M. malabaricus. But all the specimens hitherto collected, both from the north and the south of the district, appear to be true and typical somervillei. These babblers, or old women as they are called, are equally common near the coast and inland, in gardens, brushwood, hedgerows, and village groves. They usually feed on the ground, hopping actively about, quarrelling and incessantly uttering their scolding nagging note. Their call is not, however, so loud as, and lacks, the peculiar jeering intonation of its congener, the Large Grey Babbler, M. malcolmi (Jerd. 436), which when long sustained has a decidedly irritating effect on the hearer. They nest in June and July in bushes and low branches of trees, laying three or four glossy greenish blue eggs. They are called *kekati* by the natives and occasionally chambharin. Major Lloyd includes in his list of Timalinae, the Jungle Babbler, Malacocercus malabaricus, (Jerd, 434), and the Rufous Babbler, Layardia Subrufa (Jerd. 437).

Brachypodidae.

Fam.—BRACHYPODIDAE. Sub-Fam.—PYCNONOTINAE.—The Ghat Black Bulbul, Hypsipetes ganeesa, (Sykes. Jerd. 446), has been obtained at Devrukh in Sangameshvar at the foot of the Sahyadri range. It seems rare and restricted to the Sahyadri forests.

The Yellowbrowed Bulbul, Criniger ictericus, (*Strickl. Jerd.* 450), appears to be plentiful at Bavda at the foot of the Sahyadris in the Rajapur sub-division, and probably occurs throughout the range.

The Whitebrowed Bush Bulbul, Ixos luteolus, (*Less. Jerd.* 452), has been obtained at Vijaydurg near the coast. It seems rare and has not been found in the north of the district.

The. Southern Redwhiskered Bulbul, Otocompsa fuscicaudata, (*Gould. Jerd.* 460 *his*), is found abundantly throughout the district, both on the coast and inland in well wooded country and patches of bush. In such situations it is quite as common, if not more common than the Madras Bulbul, Molpastea haemorrhous (*Gmel. Jerd.* 462). They are always found in small flocks. Their breeding season is during the hot months of April and May. The nest is a neat cup placed in bushes or forks of trees, and the eggs are reddish white spotted with bright red and purple. The native name for this species is *bulandi*.

The Common Madras Bulbul, Molpastes haemorrhous, (Gmel. Jerd. 462), is also abundant and frequents gardens, thin brushwood, and fruit trees. It is a more familiar bird than the last, and is more often seen in gardens and orchards. In a vegetable garden it is very destructive. Its note is not so sweet as that of the last species, but it makes a more intelligent and amusing cage bird. As at Satara, the Madras bulbul breeds in this district in September and October, and again in April. According to Mr. Hume, it breeds in the plains in June and July, and in the Nilgiris from February to April. The nests are rather neat cups of coarse grass, and the eggs, usually three in number, are dull reddish white blotched with rich lake or madder colour. The nests are placed in forks of trees and shrubs usually low down. These bulbuls show the greatest possible affection for their young, deserting them only at the last extremity. If a nest be found near a house, and the young birds be transferred nest and all to a cage hung in the verandah or a window, the parents will, until the young are fully fledged, continue to feed them fearlessly, entering the cage by its open door. After a day or two, if the cage be moved into a room, the old birds after much twittering and scolding will follow their brood inside, and will in a very short time fly in and out, as if the room belonged to them, bringing a fresh supply of food every five or ten minutes of the day. If one of the parent birds be caught and caged with the nestlings, the other will for a time be greatly excited, but in the end will undertake the keep of the whole family, feeding his or her mate through the bars of the cage, the captive parent passing on provisions to the young ones in the nest, as if nothing had happened.

Phyllornithinae.

Suh-Fam.—PHYLLORNITHINAE.—The Common Green Bulbul, Phyllornis jerdoni, (Blyth. Jerd. 463), is abundant in the well wooded tracts both on the coast and inland. The males differ from the females in having the chin and throat deep velvet black, the same parts being bluish green in the females. They are entirely arboreal, feeding on fruit and insects, and are usually found in pairs or small parties- The Malabar Green Bulbul, Phyllornis malabaricus, (Lath. Jerd. 464), which is distinguishable from its congener by the forehead of the male being golden instead of green, is also said to inhabit the Sahyadri range, but no specimens have been hitherto obtained in Ratnagiri.

The Common Iora, Iora tiphia, (*Lin. Jerd.* 467 and 468). Under this name are included the two varieties known as the Black-headed Iora, (*Jerd.* 467), and the Whitewinged Iora (*Jerd.* 468). The latest researches have shewn that there are no such constant variations between these two forms as to justify their separation as distinct species. [Stray Feathers (1874), II. 459.] The typical male of Iora zeylonica, (*Jerd.* 467) has in full breeding plumage the head, back and tail deep shining black, and the wings black with two white bars. The throat, breast and lower parts are bright canary yellow, and he is further adorned with tufts of white on the flanks. His mate is green above including the tail, and pale beneath. On the other hand, the male of Iora tiphia, (*Jerd.* 468), is green above with a black tail, and with yellow edgings to his black wings, and is yellow beneath, while his mate differs chiefly in having a green tail. Every intermediate form between these two types appears to have been met with. The iora in both forms is common in the

district, frequenting gardens, groves, and forests, sometimes alone, sometimes in pairs, and always on the move. In flying from tree to tree the blackheaded males are exceedingly pretty, fluttering and coquetting with their tails spread, and their silky white tufts fully exposed. They breed in this district during the hot weather. The nest, placed usually on a horizontal branch, is a very beautifully made delicate cup of the finest grass and spider web, very neatly put together without a single loose end. The eggs are usually white with a greyish tinge, with reddish streaks at the larger end. Like all the bulbuls, the ioras are permanent residents. [Sub-Fam,.—IRENINAE.—The Fairy Bluebird, Irene puella, (Lath. Jerd. 469), is known to come as far north as the Savantvadi forests. It is therefore probable that like the racket-tailed drongo, it may be found in the extreme south of the district. But as its occurrence is uncertain, it is excluded from the local list.]

Oriolinae.

Sub—Fam.—ORIOLINAE.—The Indian Oriole, Mango Bird or Oriolns kundoo, (Sykes. Jerd. 470), is comparatively rare in this district, though it is widely distributed. It is replaced to a great extent, especially towards the coast, by the blackheaded species Oriolus melanocephalus (Jerd. 472). On the other hand, Oriolus kundoo is the common species in the adjoining district of Satara to the east of the Sahyadris, and the blackheaded oriole is there seldom seen. The local native name for all the orioles is haldi, a very infelicitous term, implying that the bright golden yellow of the bird's plumage is the same hue as turmeric.

The Blacknaped Oriole, Oriolus indicus, (*Briss. Jerd.* 471), has been obtained at Devrukh at the foot of the Sahyadri range. It has nest been found in any other part of the district.

The Blackheaded Oriole, Oriolus melanocephalus, (*Lin. Jerd. 472*), is the common oriole of the district, and is found abundantly in all places, where there are trees. It feeds almost entirely on fruit. Its clear mellow note is well known, and its bright plumage makes it a universal favourite. Both orioles nest during the rainy months, and are permanent residents. In the general list of Konkan birds Major Lloyd includes the Southern Blackheaded Oriole, Oriolus ceylonensis, (*Bon. Jerd.* 473), and omits Oriolus melanocephalus. It appears to be doubtful (*see* Stray Feathers, I. 439) whether Oriolus ceylonensis is specifically distinct. But in any case the Ratnagiri specimens have been pronounced by Mr. Hume to be Oriolus melanocephalus.

Sylviadae.

Fam. — SYLVIADAE. Sub-Fam. — SAXICOLINAE.— The Magpie Robin, Copsychus saularis, (Lin. Jerd. 475), is spread abundantly throughout the district in gardens, groves, and hillside brushwood. It is seen either alone or in pairs, never in flocks. It feeds on the ground, entirely on insects, and has a rather sweet song. In this district these robins breed almost always in holes of trees in April and May. One nest found by the writer at Dapoli was lined throughout with the long thread-like leaves of the casuarina tree, Casuarina equisetifolia. They lay four or five greenish white eggs with reddish brown markings. While nesting they are exceedingly quarrelsome, and will attack

fiercely any birds that may, unconscious of committing any trespass, approach their lair. On one occasion an innocent myna was busy feeding on the ground just below the hole of a tree in which a hen robin was sitting. Without other provocation the choleric little robin flew out of her hole straight at her enemy, and after administering a vicious peck, was again snugly ensconced in her nest, before the poor dazed myna had time to see his aggressor. Quickly recovering his senses, he caught sight of a squirrel innocently feeding close by, and amply vindicated his honour by fiercely attacking the bystander, passing on the peck with interest and speedily driving his supposed enemy off the field. The magpie robin is called the *chitko* by Konkani Marathas.

The Shama, Cercotrichas macrura, :(Gmel. Jerd. 476), is rare, having been found only at Rajapur. But it is common at Savantvadi and probably extends throughout the Sahyadri range and the well wooded country at its base.

The Indian Black Robin, Thamnobia fulicata, (*Lin. Jerd.* 479), is also common on the rocky scrub-covered hillsides, overhanging creeks and rivers, and is also met with in and about villages. Neither this nor the last, both of which are permanent residents, affects thick forests. Its habits are similar to those of the magpie robin. The males are shining black with a white wing spot, and the females dingy brown with chestnut under-tail coverts. These robins also breed on ledges of rocks in April and May.

The Whitewinged Black Robin, Pratincola caprata, (*Lin. Jerd.* 481), 481), is also plentiful in suitable localities, but is less widely spread than either of the preceding species. It is found either alone or in pairs, on rocky bushy hills, but not in dense forest. It is a permanent resident, and is a less familiar bird than either Copsychus saularis or Thamnobia fulicata.

The Indian Bushchat, Pratincola indica, (*Blyth. Jerd.* 483), the same as or very nearly allied to the English meadow warbler, or whinchat, is found sparingly during the fair season in open ground, patches of tillage, and stony hillsides, but is nowhere abundant. It avoids forests, woodlands, and high trees, perching on walls and low bushes. The whinchats come early in October, the males in brown winter plumage. They stay till late in March, when most of the males are getting their black caps, wings, and tails, and bright rust-red breasts. The Nilgiri Black Robin, Pratincola bicolor, (*Sykes. Jerd.* 482), nearly allied to Pratincola caprata, but larger, occurs, at Mahableshvar, and probably extends to parts of Ratnagiri; but it has not hitherto been discriminated. No wheatears appear to visit Ratnagiri.

Ruticillirnae.

Sub-Fam.—RUTICHILLINAE.—The Indian Redstart, Ruticilla rufiventris, (Vieill. Jerd, 497), is a rather rare bird, very seldom seen in this district. It is a winter visitant only. It is much more common in the adjoining district of Satara, to the east of the Sahyadri range.

The Blue Woodchat, Larvivora superciliaris, (*Hodgsn. Jerd.* 507), has been obtained at Gotna in the Sangameshvar sub-division, the only village in this district whose lands overstep the western water-shed of the Sahyadris. It has

not been found elsewhere in the district.

The Indian Bluethroat, Cyanecula suecica, (*Lin. Jcrd.* 514), is found sparingly in the Dapoli sub-division, and probably elsewhere. It frequents reeds and long grass on the banks of river beds and mountain streams. According to Jeidon it is a cold weather visitant only.

Calamoherpinae.

Sub-Fam—CALAMOHERPINAE.—Of the Large Reed Warbler, Acrocephalus stentorius, (*Hemp* and *Ehr. Jerd.* 515), a single specimen has been obtained by the writer from some bushes on the river bank at Khed. There is no record of its occurrence elsewhere in the district.

The Lesser Reed Warbler, Acrocephalus dumctorum, (*Blyth. Jerd.* 516), an active little bird, is a regular cold weather visitant, but nowhere very common. It frequents alike trees, bamboo thickets, hedgerows, and high grass and sedge by rivers, ponds, and rice fields. When freshly moulted the prevailing colour of the head and upper plumage is a warm olive brown, which changes gradually to a plain earth brown. It has a peculiar note which has been happily likened to the sound made by a flint and. steel.

Drymoicinae.

Sub-Fam. — DRYMOICINAE. — The Indian Tailor Bird, Orthotomus sutorius, (G. R. Forster. Jerd. 530), is nowhere very abundant, but is found sparingly in gardens, hedgerows, and all well wooded tracts, both inland and near the coast. It is usually seen in pairs. The tailor birds are active restless little creatures, flitting incessantly from branch to branch and chirping loudly. Both sexes have rufous heads, and are olive green above and white beneath. The two central tail feathers of the male are considerably lengthened. They breed during the rainy months. The well known nest, a marvel of skill, is made by sewing one or more leaves, according to their size, into a round cup, the stitches being made with cobweb or cotton thread, or any similar material that comes handy, neatly fastened off and knotted. In the hollow thus formed, a soft deep nest of cotton wool is laid. The eggs are tiny white ovals, clouded and streaked with pale reddish brown.

The Ashy Wren Warbler, Prinia socialis, (*Sykes. Jerd.* 534), is also sparingly distributed, frequenting grassy hillside woodlands and low bushy ground. Like the tailor bird it breeds during the early part of the rainy season, making a very similar nest. The eggs are brick-red.

The Malabar's Wren Warbler, Prinia hodgsoni, (*Blyth. Jerd.* 538), the smallest of the group of wren warblers, and distinguished from the last species by the possession of twelve instead of ten tail feathers, is perhaps the most common in this district. It is found in pairs or small parties, in bushes and trees all through the district. It is perhaps more arboreal than the ashy wren warbler, and less often seen in reeds and sedge. Its nest is also that of a true tailor bird, and the breeding season the same, but the eggs are pale blue.

The Rufous Grass Warbler or Pinc-Pinc, Cisticola cursitans, (*Frankl. Jerd.* 539), is found here and there throughout the district in long grass, standing

corn, or roods, but is not plentiful. It is probably a permanent resident, but there is no record of its breeding in this district. It has a peculiar little jerking flight, as it flits from place to place among the blades of grass.

The Common Wren Warbler, Drymoeca inornata, (*Sykes. Jerd.* 543 and 544), is found in corn fields, grass, hedgerows, and similar places, and is common in the northern sub-divisions. It appears to be a permanent resident. According to Mr. Fairbank, it breeds in the Deccan in August, in millet (*bajri*) crops, 'weaving its bottled-shaped nests,' and laying greenish blue eggs marked with purple brown.

The Great Rufous Wren Warbler, Drymoeca rufescens, (*Hume. Jerd.* 544 *bis*), a larger race separated by Mr. Hume from the species described by Jerdon as Drymoeca longicaudata, (*Tickell. Jerd.* 544), was found common by the writer in the brambles on the slopes of Fort Victoria, or Bankot, and is probably common in similar localities in other parts of the district.

The Allied Wren Warbler, Drymoeca neglecta, (*Jerd.* 546). A single specimen obtained by the writer at Khed has been identified by Mr. Hume as referable to the above species, which is now believed to be identical with the species described by Jerdon as the Jungle Wren Warbler, Drymoeca sylvatica (*Jerd.* 545). These warblers are seen in parties of five or six birds, flying from bush to bush, very much after the manner of the Yelloweyed Babblers, Pyctorhis sinensis, whom they resemble in size and colouring. Doubtless other Drymoipi, not included in this list, occur in the district. They are a very puzzling family, and, as Mr. Hume remarks, "terribly want reviewing." [Major Lloyd includes in his Konkan list the Longtailed Wren Warbler, Drymceca longicaudata (*Tick. Jerd.* 544), as well as the Common Wren Warbler' Drymceca inornata (*Sykes. Jerd.* 543). These two species are now believed to be identical, *inornata* boing the summer plumage of *longicaudata*. Stray Feathers, VII, 468.]

Phylloscopinae.

Sub-Fam.—PHYLLOSCOPINAE.—Hypolais caligata, (Licht. Jerd. 553 lis). A single specimen of this Brown Tree Warbler has been obtained by the writer at Khed. Probably it will be found, in other localities within the district.

The Bright Green Tree Warbler, Phylloscopus nitidus, (*Lath. Jerd.* 559), is plentiful throughout the district in the cold weather coming early in October. But the bright colours seen on first arrival soon fade, not to return till after the next moult.

The Greenish Tree Warbler, Phylloscopus ' viridanus, (*Bly. Jerd.* 560), has also been obtained by the writer at Khed. It is very like the last species, but has at all times a greyer tint.

The Large Crowned Warbler, Reguloides occipitalis, (*Jerd.* 563) has been procured at Ratnagiri in the cold weather, but appears rare.

Other Tree Warblers, such as Sykes' Warbler, Hypolais rama, (*Sykes. Jerd.* 553), and the Brown Tree Warbler, Phylloscopus brevirostris (*Strickl. Jerd.* 554), both of which are included in the general Konkan list, probably visit this district in the cold weather. Frequenting high trees, they are easily

overlooked, and when obtained are difficult to identify. Of the Grey Warblers, Sylviinae, no representative has yet been recorded in the district, though it is probable that the Lesser White Throat, Sylvia curruca, (*Gmel. Jerd.* 583) visits the district in the winter.

Motacillinae.

Sub-Fam.—MOTACILLINAE.—The Pied Wagtail, Motacilla maderaspatensis, (Gmel. Jerd. 589), is the common wagtail of the district and a permanent resident. It is found on the banks of rivers and creeks, and in rice fields, either alone or in pairs. The plumage varies little at different seasons of the year, but the black is deeper and purer on the chin, throat, and breast during the summer months. This wagtail is said to breed on river banks during the hot weather.

The Blackfaced Wagtail, Motacilla dakhanensis, (*Syes. Jerd.* 591 *bis*), is also plentiful in the cold weather, and is found in small parties in rice fields. It is seen only in its winter dress with grey head and white throat. It appears to be generally distributed, but is found more plentifully inland than near the coast.

The Grey and Yellow Wagtail, Calobates melanope, (*Pallas. Jerd*, 592), is also plentiful from September to May. It is found in the same situations as the pied wagtail, in rice fields, on banks of rivers and ponds, near the coast as well as inland.

The Ashyheaded Field Wagtail, Budytes cincreocapilla, (Savi. Jerd. 593), appears in small flocks in the cold weather, and feeds in open fields and bare plains. The plumage of this and other allied forms is very variable. It is distinguishable from the two preceding species by its' elongated hind toe and claw.

The Blackbreasted Wagtail, Limonidromus indicus, (*Gmel. Jerd.* 595), has been found only at Rajapur to the south of Ratnagiri and must be a rare species. No other wagtails have been observed in this district, but others probably occur during the cold season. The Yellowheaded Wagtail, Budytes calcarata, (*Hodgs. Jerd.* 594), is included in the general Konkan list and may hereafter be discovered.

The Tree. Pipit, Anthus trivialis, (*Lin. Jerd.* 597). The species of Tree Pipit found throughout this district is Anthus trivialis, which corresponds with the Anthus arboreus of Jerdon (597), and the bird which Sykes called agilis. The much greener Indian Pipit, Anthus maculatus, (*Hodgs. Jerd.* 596), which Jerdon erroneously, it appears, called agilis, has hitherto either not been found in this district or not discriminated, although it is very possible that both of these closely allied species may occur. The tree pipits come in small flocks in October, and frequent gardens and corn fields, feeding on the ground, but often perching on trees. They are common everywhere both on the coast line and inland, and stay till April.

The Indian Titlark, Corydalla rufula, (*Vieill. Jerd.* 600), is also common throughout the district, frequenting rice fields, stubble, and open cultivated ground. It is probably a permanent resident, but no nests have been recorded in this district.

Ampilidiae.

Fam.—AMPELIDAE. — The White-eyed Tit, Zosterops palpebrosa, (*Tern. Jerd.* 631). This lovely species has been obtained by Dr. Armstrong in the south of the district, and also by the writer at Khed. It appears to be rare.

The Southern Yellow Tit, Machlolophus aplonotus, (*Bly. Jerd*, 648), This handsome little bird is common at Ratnagiri and generally throughout the district in well wooded country, and is a permanent resident. Like all other members of the family, these tits are gregarious, associating in small flocks, and hunting for fruit and insects on the high trees with great activity. Major Lloyd also gives the Indian Grey Tit, Parus nipalensis, (*Hodgsn. Jerd.* 645) as a Konkan species. There is no record of it in Ratnagiri.

Tribe—CONIROSTRES.

Corvinae.

Sub-Fam.—CORVINAE.— The Indian or Bowbilled Corby, Corvus macrorhynchus (Wagl. Jerd. 660), is abundant in this district in almost every village, and is usually associated with the Common Crow, Corvus splendens. In some towns and villages both species are equally common, and this is the case at Ratnagiri. But some villages are colonized more or less exclusively by one or the other species. In the town of Khed, for instance, the bow-billed corbys have a monopoly, and common crows are seldom seen. In others again the common crows greatly preponderate. The bowbilled corbys breed in this district from February to the end of May. They make rough stick nests lined with hair, fibre, or similar material. The eggs, usually four in number, are greenish blue with dusky spots, and occasionally, though rarely, pure unspotted blue. This crow is by the natives called the dom kavla.

The Common or Ashynecked Indian Crow, Corvus splendens (Vieill. Jerd. 663), is equally abundant. This species nests in this district in April and May, and again in November and December, and it would thus seem as if they had two broods. They make similar nests to the corby's, and their eggs resemble the latter's in colour and marking, but are smaller and, as a rule, perhaps less elongated. Both the common crow and the corby roost in large companies, sometimes in clumps of trees near villages, but quite as often in isolated groves far from human habitations. They may always be seen congregating soon after sunset, and in straggling parties flying off with much clatter to their chosen roosts, often some miles distant from the scene of their daily depredations. Mangrove swamps in large tidal creeks, far removed from all habitations, are often patronized by crows. There is one such roost in a mud island at the meeting of the Vashishti and Jagbudi rivers. Here nightly, thousands of crows, cormorants, snake birds, egrets, herons, ibises, and other birds meet, and hold high revels till long after dark, making night hideous with their screams. The stunted mangroves literally groan under the weight of myriads of occupants. The settling down for the night is a work of time, and is only accomplished after incessant squabbles and a tedious and long continued process of summary ejectments and hard-won recoveries. A moonlight visit and the report of a gun produce the wildest confusion. Rising in one vast serried mass, flapping their wings, and screaming with all their

might and main, the birds darken the sky, and raise a very babel round the head and ears of the adventurous intruder, refusing to be pacified at any price. Many minutes elapse before the least excitable members of the community resettle themselves; while the inevitable process of ousting and retaliation is repeated after each real or imaginary disturbance.

The ashynecked crow is by the Marathas distinguished from its congener by the name of *son-kavla*.

The Indian Magpie, Dendrocitta rufa, (*Scop, Jerd.* 674), is distributed in small numbers throughout the district in well wooded tracts, both inland and near the coast. Its peculiar and inimitable whistle always betrays its presence in a grove or forest. During the cold season it wanders about the country in small parties in search of food, fruit, and insects. It breeds in trees in April and May, making loose thick twig nests, and laying four or five eggs of pale salmon colour blotched and speckled with red. The natives call this bird the *Paritin* or washerwoman.

Sturninae

Sub-Fam.—STURNINAE. — The Gammon Myna, Acridotheres tristis (Lin. Jerd. 684), is, as remarked in the introduction, comparatively scarce in this district, and is to a great extent replaced by the next species, the Dusky Myna. A few may be found here and there in the neighbourhood of large towns and villages, but in some localities they are entirely absent. This myna breeds in the rainy months in holes of trees, haystacks, and similar places, laying four or five glossy blue eggs.

The Dusky Myna, Acridotheres fuscus, (Wagler. Jerd. 686), is abundant throughout the district, and more especially in the well wooded tracts. Like the common myna it nests in the hot' weather, April and May, in holes of trees. The eggs are usually five in number, and differ from those of the common myna only by being a trifle smaller. The blue colour is also perhaps a shade deeper. These birds line their nests by stuffing the holes of the trees indiscriminately with a large loose mass of grass, fine, sticks, and feathers, all jumbled together without any arrangement, and containing sufficient material to construct at least six proper cup nests for birds of their size. Both this myna and the common myna gather towards dusk, and roost in large flocks, and both feed on insects, fruit, and grain. The native name for both is salunki.

The Pagoda or Blackheaded Brahmani Myna, Sturnia pagodarum (*Gruel. Jerd.* 687), is distributed partially, being somewhat common in the southern sub-divisions and at Ratnagiri during the rains, and rare in the north. In young birds the long pendent silky black crest is wanting. This species may also often be seen feeding in company with the dusky mynas, both on the ground and in fruit trees.

The Greyheaded Myna, Sturnia malabarica (*Gmel. Jerd.* 688), is like the last very partially distributed, and is nowhere plentiful. A few birds may always be seen at Ratnagiri at the close of the rains, and most probably it is only a cold weather visitant. It is more arboreal in its habits than other mynas.

The Rosecoloured Starling, or Javari Bird, Pastor roseus (*Lin. Jerd.* 690), though not seen in such vast flocks as in the Deccan, comes in the cold weather in considerable numbers. When all the winter crops are cut, they repair to well wooded tracts, and during March and April feed largely on the insects that infest the blossom of the silk-cotton tree, Bombax malabaricum. They leave for their summer quarters late in April or early in May. The local Maratha name for this species is *kalpi*.

Major Lloyd included in the general Konkan list the Southern Hill Myna, Eulabes religiosa, (*Lin. Jerd.* 692), as found in the Sahyadri forests to the extreme south. Probably this species does not extend so far north as Ratnagiri.

Fringillidae.

Fam.—FRINGILLIDAE. Sub-Fam.—PLOCEINAE.—The Common Weaver Bird or Little Baya, Ploceus philippinus, (Lin. Jerd. 694), is abundant everywhere. In the cold weather vast flocks may be seen scouring the country in search of grain. They are gregarious in roosting, and usually frequent the same trees night after night. The mangrove swamps in tidal creeks are frequently used for this purpose. They breed in August and September. The long tubular retort-shaped nests are too well known to need description. In the neighbourhood of the coast, cocoanut palms are usually chosen for building sites. Inland, where palms are scarce, the bor, Zizyphus jujuba, the khair, Acacia catechu, and the tamarind are favourite trees. Several nests are usually found in the same tree, and a few of the unfinished nests, wanting the tubular entrance, which the cocks are fancifully said to build solely for their own use and edification, are always to be seen. Where coir fibre is to be had, it seems exclusively used in building the nests. Where there is no coir the birds use strong grass. As Dr. Jerdon pointed out, the nests made of coir are always less bulky than those made of grass. The eggs, usually two, are dead white ovals. The natives call this species the bhorade, a term applied in the Deccan to the rosy pastor.

Estreldinae.

Sub-Fam. — ESTRELDINAE.—The Blackheaded Munia or Amadavad, Amadina malacca, (Lin. Jerd. G97), is rather rare in this district, although Jerdon says it is abundant on the Malabar coast. A few specimens have been obtained at Ratnagiri, where they were found in the bushes growing in the salt marshes fringing one of the tidal backwaters. The crops of those examined were found full of grass seeds. As only a few birds were seen, and there is no record of their occurrence elsewhere in the district, these individuals were probably stragglers.

The Spotted Munia, Amadina punctulata, (*Lin. Jerd.* 699), is abundant in certain localities, but partially distributed. At Khed it is very common in the cold weather associating in considerable flocks, and frequenting corn fields, threshing floors, and rick yards. If appears to keep to well wooded country, and to avoid the immediate neighbourhood of the coast. It is probably a permanent resident.

The Whitebacked Munia; Amadina striata, (L. Jerd. 701), is common

everywhere in gardens, orchards, and thin bush, from the coast to the Sahyadris, Like other munias, except in the breeding season, it is social in its habits. Its nests are found at various times of the year. In Dapoli eggs have been found in October, and young birds in January. A nest was also found to be occupied by a pair of these munias in April, but apparently only as a roosting place, as although this nest was twice revisited, no eggs were discovered. The nests are globular balls of grass, loosely put together with a small side entrance, and covered outside with dry blades of *nachni*, Bleusine coracana, or some similar cereal. The eggs are small white ovals.

The Pintail Munia, Amadina malabarica, (*Lin. Jerd.* 703), is found here and there throughout the district, but is not common. The eggs of this species have been found in January. Both nests and eggs closely resemble those of the preceding species. In the general Konkan list Major Lloyd includes the Green Waxbill, Estrelda formosa, (*Lath. Jerd.* 705). No specimens of this bird have yet been obtained in Ratnagiri.

Passerinae.

Sub-Fam.— PASSERINAE.—The House Sparrow, Passer domesticus, (Lin. Jerd. 706), is fortunately comparatively a scarce bird in this district. It is only met with in some of the larger towns and villages, and is nowhere unpleasantly plentiful or confiding. In Ratnagiri itself it is scarcely ever seen. They build in the hot weather in thatched roofs and in holes of walls, and the eggs are not distinguishable from those of its familiar English relative.

The Yellownecked Sparrow, Gymnoris flavicollis, (Frarikl.Jerd. 711), is also scarce, but appears to be generally distributed throughout the district.

Emberizinae.

Sub-Fam. — EMBERIZINAE. — The Blackheaded Bunting, Euspiza melanocephala, (Scop. Jerd. 721), is the only bunting that has been found in the district. The writer obtained a single specimen at Khed in March from a small flock that were found feeding in a field threshing floor. It has not yet been observed elsewhere.

Fringillinae.

Sub-Fam. — FEINGILLINAE.— The Common Rose Finch, Carpodacus erythrinus, (*Pal, Jerd.* 738), has been found in Chiplun in the cold weather, but appears to be rare. Major Lloyd includes in the general Konkan list the Pinkbrowed Rose Finch, Propasser rhodocrous, (*Vig. Jerd.* 742), from Matheran. It has not been found in Ratnagiri.

Alandinae.

Sub-Fam.—ALAUDINAE.—The Rufous-tailed Finch Lark. Ammomanesv phcenicura, (Frankl.Jerd. 758), abundant in the Deccan is rare below the Sahyadris. According to Jerdon, it is unknown on the Malabar coast. Specimens have been found at Dapoli, and it is probably sparingly distributed in other localities.

The Blackbellied Finch Lark, Pyrrhulauda grisea, (Stop. Jerd. 760). This little lark, called by the natives bhatko, is abundant throughout the district. It is especially plentiful on the bare laterite plateau which lies immediately

above the station of Ratnagiri, and numbers of nests may be found here in October and November. These nests are invariably placed on the bare ground under the partial shelter of a stone. No hollow appears to be scooped out in the ground itself, but a few chips of crumbling laterite are usually scraped up to form a tiny wall all round the ill-concealed nest. The nest itself is a soft little pad of fine grass, usually containing as a lining a few pieces of wool, often shreds stolen from native blankets, camblis. Two eggs only are laid, which are typically greenish white, more or less speckled and blotched with brown. These poor little larks have many enemies. Snakes and cowherds destroy their eggs, and if they are lucky enough to get safely through the dangers of brooding, the unprotected nestlings have small chance of escaping from the clutches of merciless Brahmani kites, and keen-eyed harriers, who at this time regularly beat and square every inch of the bare rocky plains in search of so inviting a feast. This species has probably two broods in the year, and Jerdon states that in the Deccan it breeds from January to March. This finch lark is one of the many species erroneously called ortolans by Europeans in India.

The Southern Crown Crest, Spizalauda malabarica, (*Scop. Jerd.* 765 *bis*), is common throughout the district in open plains, rocky plateaus, and grassy table-lands. It is a good songster, and sings loudly on the wing. It breeds in September, October, and November, at the same time and in very similar situations as the little Finch Lark, and has a second brood in February. Sometimes a little more attempt is made to hide the nest, which is now and then placed under cover of grass. At other times nests are found on the bare rock, sheltered by a stone or a clod of earth. These nests are always placed in a slight hollow of the ground, either natural or artificial, and are made entirely of grass, coarse grass being used outside and a finer grass inside. Two or three eggs are laid. The ground colour is greyish white, and the eggs are speckled with various shades of brown and inky purple. It is not uncommon to find single eggs of this species laid prematurely on the bare rock without any nest having been prepared. The Marathas call this species *chendul* and *ghorpi*.

The Indian Skylark, Alauda gulgula, (*Frankl. Jerd. 767*), is found in similar situations to the crown crest, whom it resembles in its general appearance and crested head, but from which it may easily be known by its much longer hind claw. This species appears to be rare and has been observed only in the south of the district. Two races of skylark were separated by Jerdon as Alauda gulgula (767) and Alauda malabarica (768). Both have been separately enumerated in the general list of Konkan species. But it is now generally held that Alauda malabarica is not entitled to rank as a distinct species.

Order — **GEMITORES.**

GEMITORES.

The pigeons and doves found in this district comprise two species of green pigeon, one wood pigeon, the blue rock pigeon, five turtle doves, and one ground dove. Of these only the southern green pigeon and the spotted dove are at all common or abundant, though the common ringdove, Turtur risoria,

occasionally visits the more open parts of the district in large flocks during the cold weather. The blue rock pigeon, and the little greyfronted green pigeon, Osmotreron malabarica, are more or less scarce, while the remaining species are all rare.

Treronidae.

Fam.—TRERONIDAE. _ The Southern Green Pigeon, Crocopus chlorigaster, (Blyth. Jerd. 773), is found abundantly, both inland and near the coast, in all well wooded tracts. They associate in flocks throughout the greater part of the year, wandering far in search of fruiting trees. A banyan or a pipal, or a large bor, Zizyphus jujuba, with ripe fruit is sure to draw them, and if undisturbed they will spend hours feeding in company with numerous perchers. They roost in large parties in thick groves and temple forests. As a rule they are very shy and easily disturbed. Their flesh is good eating, but perhaps inferior to that of the blue rock pigeon. The native name is phusava.

The Malabar or Greyfronted Green Pigeon, Osmotreron malabarica, (*Jerd.* 775), is found both north and south in the inland well wooded tracts, but is never seen near the coast. It associates in considerable flocks in groves and forests, but is by no means common. The eyes both of this and the last species are exceedingly beautiful, an inner ring of crimson enclosed in an outer circle of blue, which, when blended, give a violet hue to the whole iris. [The Green Imperial Pigeon, Carpophaga aenea, (*L. Jerd.* 786), is also included in the general Konkan list, but has not been observed hi the Ratnagiri district.]

Columbidae.

Fam.—COLUMBIDAE. Sub-Fam. — PALUMBINAE.—The Nilgiri Wood Pigeon, Palumbus clphinstonii, (Sykes. Jerd. 786), has been obtained in the Chiplun sub-division in the Sahyadri forests and no doubt occurs all along the range. It is well known at Mahableshvar.

Sub-Fam.—COLUMBINAE.—The Blue Rock Pigeon, Columba intermedia, (Strickl. Jerd. 788), is comparatively scarce in this district, as are several other grain-feeding birds. The land is too poor for them, and the inferior hill grown grain, which is the staple produce of the rugged barren soil, is ill suited to its taste and voracious appetite. Wisely therefore the blue rock prefers the Deccan with its rich millet crops and the snug holes in its numerous wells and temples. Here and there a few small colonies have been established. At the island fort of Suvarndurg a few pigeons are always to be found living in holes of the massive old sea walls, and wilder than the wildest of English wood pigeons. At Chiplun there is a small settlement, and at several places in the Sahyadri range they may be seen in the holes and crevices of perpendicular scarps, where there is a perennial fall of water. There is also a large colony of pigeons inhabiting the rocks off Vengurla, twelve miles or so from the mainland. During the height of the south-west monsoon, the strong wind makes it difficult for the birds to return to their island home after a flight to the mainland, and it is said that during the fair season they hoard grain in their homes for use during the stormy weather.

The fact requires to be verified. If true, it gives a good illustration of the development of a special instinct to meet exceptional needs.

Turturinae.

Sub-Fam.—TURTUEINAE.—The Rufous Turtle Dove, Turtur meena, (Sykes. Jerd. 793), is common at Mahableshvar, and all along the crest of the Sahyadri range. It can hardly be called a Ratnagiri species, as it has been found only at Gotna in Sangameshvar, the one Ratnagiri village that lies east of the Sahyadri water-shed.

The Little Brown Dove, Turtur senegalensis, (*L. Gl. Jerd.* 794), has also been obtained only at Gotna, and must therefore be considered a mere straggler. Throughout the rest of the district it is entirely replaced by the next species. It has, however, been found at Savantvadi.

The Spotted or Speckled Dove, Turtur suratensis, (*Gmel. Jerd.* 795), is the common dove of this district, and is abundant everywhere, almost entirely replacing the little brown dove. The spotted dove's nests are found at all times. Like all the family, it lays two glossy white eggs. The nests are thin flat stick platforms, so thin at the bottom that it is always a wonder that the eggs do not tumble through, and so flat that the eggs seem always in danger of being rolled over the sides. Cactus bushes and low trees are the favourite sites for their nests. The spotted dove is called *kavda* by the Konkani as well as the Deccani Marathas.

The Common Ring Dove, Turtur risorius, (*Lin. Jerd.* 796), occasionally in large flocks visits the plains and low lands in the cold months, disappearing entirely at the approach of the hot weather, and in all probability returning to the Deccan plains to breed. They feed in large parties on the bare stubble, keeping to the open cultivated plains, and avoiding thick forests.

The Red Ring Dove, Turtur tranquebaricus, (*Herm. Jerd. 797*). A pair of this pretty species was seen by the writer at Khed at the end of March, out of which one was secured as a specimen. There appears to be no other record of its occurrence in any part of the Konkan.

Gouridae.

Fam.—GOURIDAE.—The Emerald Dove, Chalcophaps indica, (*Lin. Jerd.* 798), has been found on the north bank of the Shastri river, about twelve miles from the coast. It has not been found elsewhere; but as it usually affects thick forests it may perhaps have been overlooked.

Order—RASORES.

RASORES.—The district is poorly supplied with gallinaceous birds. Sand grouse, Painted francolins, and Grey partridges are entirely wanting, and Grey and Rain quail are so scarce that they are hardly worth the trouble of beating for. The only game bird that is at all plentiful or common, is the pretty little jungle bush quail or dwarf partridge, found on all the bushy hill sides that overhang the deep valleys and ravines intersecting the rugged country. Jungle Fowl and Spur Fowl are rarely seen away from the Sahyadri forests, while Pea Fowl are, though more widely distributed, nowhere plentiful. The following species are known to occur:

Phasianidae.

Fam.—PHASIANIDAE. Sub-Fam.—PAVONINAE.—The Common Peacock, mor, Pavo cristatus, (Lin. Jerd. 803), is found sparingly throughout the district in suitable localities. The steep slopes that overhang the large tidal creeks, if well clad with trees and bushy undergrowth, usually contain peafowl, and any evening about sunset the birds may be seen and heard as they come down to the banks to feed. Inland they resort to largo temple groves with luxuriant undergrowth, hillside forests, and well wooded ravines. In no part of the district are they tamed or in any way encouraged by the natives, and consequently wherever found they are wild and difficult to approach. They breed during the rainy months, and the males begin to assume their splendid trains in May.

Gallinae.

Sub-Fam.—GALLINAE.— The Grey Jungle Fowl, Gallus sonnerati, (*Tern. Jerd.* 813), the *ran kombda* of the Marathas, is plentiful throughout the Sahyadri range in the tract known as the Konkan rango crest, *Konkan-ghat-mahta*, but is scarcer on the western slopes, which alone fall within Ratnagiri limits. A few stragglers are sometimes seen or heard in the larger and higher hills, which, though detached from the main rango by steep valleys, are yet united by unbroken belts of forest. No jungle fowls are found in any of the isolated forests between the base of the Sahyadris and the sea. In the Sahyadris the eggs of this species are found usually in April or May. Eggs are occasionally set under domestic hens, but the chicks are exceedingly difficult to rear in confinement. The peculiar broken crow of the grey jungle cock is well known. To the traveller climbing the Sahyadri hills, and passing step by step from the enervating heat of the plains to the cool bracing mountain air, the crowing of the cocks and the note of the green barbet are among the most welcome sounds that fall on his ear.

The Red Spur Fowl, Galloperdix epadiceus, (*Gmel. Jerd.* 814), is abundant in all the thick forests of the Sahyadri range, but like the grey jungle fowl, more so on the summit of the range than in the western slopes. A few of these birds are also to be found here and there in large temple forests in the *Thal Konkan*, or country below the *Ghats*; but they are rare in such localities, and, as a rule, are seldom found beyond the evergreen forests of the main Sahyadri range. Keeping to thick cover and running at the slightest alarm, they are difficult birds to shoot, except in the grey of the morning before they leave their roosts on the trees, or unless with the aid of dogs to flush and tree them. Spur fowls are by the natives called *shakatri*.

Tetraonidae.

Fam.—TETRAONIDAE. Sub-Fam.—PERDICINAE.—The Jungle Bush Quail, or Dwarf Partridge, Perdicula asiatica, (Lath. Jerd. 826, or Perdicula cambayensis apud Jerdon), is plentiful on all the scrub-clad hillsides of the district from the coast to the Sahyadris, and is a permanent resident. Small coveys are constantly flushed in walking through thin brushwood and patches of tillage on the borders of open forest. When first flushed, they rise together and fly to the thickest cover they can find, whence they are difficult to

dislodge. When separated, they call eagerly and incessantly to their companions, and if not disturbed, will very quickly reunite. They feed chiefly in the mornings and evenings in forest glades, hill paths, and stubble, and may often be seen taking dust-baths on the roads that cut through the forest. The plumage of the males, females, and young birds differs considerably, and the former with their pencilled black and white breasts are very handsome. Numbers of these bush quail, lava, are caught by natives on dark nights with the aid of torches. Huddled together in a compact little bunch, and completely dazed by the strange light, the birds make little or no attempt to escape and fall an easy prey to those who are lucky enough to find them. The eggs of this species have been found in January. They are of a pale cafe-au-lait colour. In the general Konkan list the following species of Perdicinae are included. The Painted Partridge, Francolinus pictus, (Jard. and Selb. Jerd. 819); the Rock Bush Quail, Perdicula argoonda (Perdicula asiatica apud Jerdon, Jerd. 827); and the Painted Bush Quail, Microperdix erythrorhynca, (Sykes. Jerd. 828). None of these species are known with certainty to occur in this district. Probably the Painted Bush Quail is to be found in the Sahyadri forests; but the Painted Francolin is not met with in any part of the district. The Rock Bush Quail also appears to be entirely replaced both to the north and south of the district by the Jungle Bush Quail. The specimens of the latter sent to Mr. Hume for examination were pronounced to be so dark a race as to be almost a distinct species.

Coturnicinae.

Sub-Fam.—COTURNICINAE.—The Large GreyQuail, Coturnix communis, (Bonn. Jerd. 829), is very scarce in this district. A few stragglers are met here and there, and at one or two localities, as at Chiplun and Khed, a few brace may be flushed in the cold weather in the fields of *tur*, Cajanus indicus, and hemp and other winter crops grown in the alluvial soil near, the town; hut a large bag of quail is at no time possible.

The Blackbreasted or Rain Quail, Coturnix coromandclica, (*Gmel. Jerd.* 830), is equally scarce, but is occasionally flushed when beating for grey quail. It is not known whether the few individuals found remain to breed in the district or not, but it is probable that they do so.

Tinamidae,

Fam. — TINAMIDAE.—The Blackbreasted Bustard Quail, Turnix taigoor, (Sykes. Jerd. 832), has been obtained at Khed in the tur crops, by the banks of the Jagbudi river, and is probably to be found in similar places throughout the district. The absence of the bind toes in this and the following species distinguishes them at once from all other quail. The females of this species are larger and more boldly marked than the males.

The Button Quail, Turnix dussumieri, *durva*, (*Tern. Jerd.* 835), is widely distributed, but is nowhere common or abundant. It is found in groves, thin brushwood, and tilled land. It is almost always flushed singly, rarely in pairs, and never in coveys. It is probably a permanent resident.

Order—GRALLATORES.

GRALLATORES.—The numerous tidal creeks and backwaters, whose soft

mud banks harbour myriads of molluscs, crabs, aquatic insects, and other slimy but inviting morsels, and the rice fields, mangrove swamps, and salt marshes with which the coast portion of the district abounds, attract a large and motley company of waders or shore birds. The only shooting worth the name throughout the district is furnished by representatives of this order. The more exclusively aquatic waders are naturally more numerous, while those species which delight in more or less dry open plains are comparatively scarce. Thus amongst the tribe of Pressirostres, the fiorikin, the stone plover, the courier plover, and the blacksided and yellowwattled lapwings are all rare birds, while the Indian bustard, the Saras, the common and the demoiselle crane and other birds of this order, who prefer land to water, are unknown. Again golden plover and the pretty little ringed plover, who divide their attentions equally between river sides and grassy plains, are not uncommon; while the little sand plovers and the redwattled lapwings, who are never seen far from water, are abundant in all suitable places. Amongst the Longirostres, snipe, sandpipers, and curlews are numerous, while the godwits and stints are either rare or entirely absent. The tribe of Latitores including the jacanas, water-hens, coots and rails, is hardly so well represented as might be expected in a district whose humid climate and considerable area of swampy land seem to afford exceptionally favourable conditions for the existence of most of the species of the tribe. One species of jacana, two water-hens or gallinules, the bald coot and three rails are all that are with certainty known to occur, and most of these are rare. But the gallinules and rails are inveterate skulkers and difficult to find, and probably two or three other species of the latter occur and have been overlooked. Amongst the Cultirostres only one species of stork occurs. The herons and egrets are numerously represented, the European bittern being the most notable exception. The pelican ibis, the shell ibis, and the black ibis or king curlew so common in the Deccan, are, though their occurrence might be fairly expected, not found in the district.

Tribe - PRESSIROSTRES.

Otitidae.

Fam.—OTITIDAE.—The Lesser Florikin, Sypheotides aurita, (Lath, Jerd. 839), is exceedingly rare in this district, A straggler is now and then, perhaps once in two or three years, flushed and bagged when beating for quail in the fields of *tur* and *pavta* near Chiplun. A florikin has also been shot in a nursery belonging to the forest department at Dapoli.

Cursoridae.

Fam.—CURSORIDAE.—The Indian Courser, Cursorius coromandelicus, (Gmel. Jerd. 840), so plentiful in the Deccan plains and uplands, is also very rare below the Sahyadris. A few are to be found on the laterite plateau above the station of Ratnagiri, and individuals are occasionally seen in the dry table-lands in the Dapoli and Chiplun sub-divisions.

Glareolidae.

Fam.—GLAEEOLIDAE.—The Large Swallow Plover, Glareola orientalis, (Leach. Jerd. 842), has been procured at Ratnagiri in August. Only two birds

were seen and the species is rare.

Charadridae.

Fam.—CHARADRIDAE. Sub-Fam.—CHARADRINAE.—The Grey Plover, Squatarola helvetica, (Gmel. Jerd. 844), is also rare. In the cold season, a flock is now and then seen near the coast, or on the banks of the large tidal creeks.

The Golden Plover, Charadrins fulvus, (*Gmel. Jerd.* 845), is, throughout the district, found in moderate sized flocks on the muddy banks of tidal rivers. At high tide they resort to rice fields and open plains in the neighbourhood of the rivers, returning to their favorite banks of mud and slimy sedge with the receding tide. According to Jerdon, "many of this species breed in this country even towards the south." This statement has never been positively verified. If they do not breed in this district, it is at least certain that many birds arrive very early and leave very late. Golden plovers are constantly seen in this district in their handsome nuptial plumage late in May, and they reappear at Ratnagiri and Dapoli early in September, if not sooner.

The Large Sand Plover, Ægialitis geoffroyi, (Wagler. Jerd. 846), has been found by the writer at Guhagar in March in company with small flocks of the lesser sand plover and the Kentish ringed plover.

The Lesser Sand Plover, Ægialitis mongola, (Pallas. Jerd. 847), is very abundant in the cold weather on the sea shore and up the tidal creeks, but never extending far inland. It associates in large flocks and is exceedingly confiding in its nature. It is seen only in its plain winter plumage.

The Kentish Ringed Plover, Ægialitis cantiana (*Lath. Jerd.* 848). A flock of these birds was seen by the writer in March on the sea shore at Guhagar, and one specimen was obtained. They have not been recorded from any other locality, but probably frequent other parts of the coast, both north and south.

The Indian or Small Ringed Plover, Ægialitis curonicus, (*Gmel. Jerd.* 849), the Ring Dottrel, as it is often called, is also common, frequenting river banks and rice fields. Its neat and conspicuous black and white collar at once distinguishes it from the lesser sand plover. As a rule, also, it is found on drier land and in smaller flocks than the sand plover. This species is probably a permanent resident.

Vanellnae.

Suh-Fam.—VANELLINAE.— Of the Blacksided Lapwing, Cheltusia gregaria, (Pallas. Jerd. 852), two individuals were in October 1878, seen on the bare laterite plateau above Ratnagiri. One specimen was secured. There appears, to be no other record of its occurrence in the Konkan.

The Redwattled Lapwing, Lobivanellus indicus, (*Bodd. Jerd.* 855), the well known "Did-you-do-it" is abundant everywhere by rivers, streams, tanks and rice fields, and is a permanent resident, breeding in the bare stubbles in April and May, and laying typical plovers' eggs. This and all other lapwings are called *titvi* by the Marathas. The Yellowwattled Lapwing, Lobipluia

malabarica, (*Bodd. Jerd.* 856), is comparatively scarce. A pair may now and then be found on the drier uplands and the laterite plateaus near the coast, but the climate of the district is too damp to attract them. The few that are seen appear to be permanent residents.

Esacinae.

Sub-Fam.—ESACINAE.—The Indian Stone Plover, CEdicnemus scolopax, (S. G. Gm. Jerd,. 859), the Common Thickknee, or Stone Curlew, or Norfolk Plover, or Bastard Florikin, is a very rare bird in this district. A straggler has now and again been obtained at Chiplun, and one or two are usually to be found on the laterite plateau above the Ratnagiri station, keeping under cover of the thin stunted bushes and coarse grass. Throughout, the adjoining district of Satara it is a common bird.

Hcematodidae.

Fam.—HCEMATODIDAE.—The Oyster Catcher or Sea Pie, Hcematopus ostralegus, (Lin. Jerd. 802), visits the coast and large tidal creeks in small flocks in the cold season. It comes in September and leaves in March. At low tide it feeds on the mud banks, picking up molluscs and shell fish, frequently standing in the water up to its knees, probing with its long bill in the mud. It is a very shy bird, and specimens are difficult to procure.

Tribe - LONGIROSTRES.

Scolopacinae.

Fam.—SCOLOPACIDAE. Sub-Fam.—SCOLOPACINAE.—The Pintailed Snipe, Gallinago sthenura, (Kuhl. Jerd. 870), conies in great number in the cold weather towards the end of October or the beginning of November. The habits and haunts of this species are exactly similar to those of the common snipe, from which but few snipe shooters distinguish it. It appears to be equally, if not more common, throughout the district, and a moderate bag of snipe is usually found to contain about an equal proportion of each species. In the early months of the regular snipe season, November and December, the district, after an average rainfall, contains innumerable snipe grounds; for, in addition to the salt marshes and sedgy banks of the tidal creeks, there are, at this period of the year, thousands of acres of flooded rice fields. The snipe with so many choice feeding grounds are consequently much scattered, and a great deal of laborious walking through sticky morasses is necessary to secure even a moderate bag. By slow degrees the flooded area contracts, and in January and February the few large grounds that still hold water are literally full of snipe. Both the pintail and common snipe remain in the district till the middle or end of March, a few stragglers delaying their departure till the middle of April.

The Common Snipe, Gallinago gallinaria, (*Gm. Jerd.* 871), comes at the same time as the last species, and is equally abundant.

The Jack Snipe, Gallinago gallinula, (*Lin. Jerd.* 872), is found sparingly, in company with other snipe, on all the larger snipe grounds in the distnict. They come earlier and have later than their congeners.

The Painted Snipe or Rail, Rhynchaea bengalensis, (bin. Jerd. 873), is

occasionally flushed in swampy grass, rush, and sedge, when beating for common snipe, but they are nowhere abundant. The female is larger than the male, and more conspicuously marked. Its slow heavy flight, as it rises almost at the feet of the beaters, at once distinguishes this bird from the common and pintailed snipe. The local Maratha names for all species of snipe is *tibud*; but the ordinary Kunbi usually distinguishes them by the term *pan lava*, water quail.

Numeninae.

Sub-Fam.—NUMENINAE.— The Curlew, Nnmenius lineatas, (Guv. Jerd. 877), is found in the cold weather on all large tidal creeks. On their first arrival, towards the end of September, many are seen feeding on open grassy plains and dry uplands, as at the station of Dapoli.

The Little Curlew or Whimbrel, Nnmenius phoeopus, (*Lin. Jerd.* 878), is also common in the cold weather, and feeds in small parties of three to six birds on the sand banks of the tidal estuaries. The Maratha name for both species is *hurt*.

Tringinae.

Sub-Fam.—TRINGINAE.—The Ruff, Machetes pugnax, (Lin. Jerd. 880), has been found in winter plumage at Ratnagiri in September, A single specimen only was seen and secured.

The Curlew Stint, Tringa subarquata, (*Giild. Jerd.* 882), visits Ratnagiri in small numbers in the cold weather.

The Little Stint, Tringa minuta, (*Leisl. Jerd.* 884), is also a cold weather visitant to Ratnagiri.

Totaninae.

Sub-Fam.—TOTANINAE.—The Spotted Sandpiper, Rhyacophilaglareola, (Lin. Jerd. 891), is by no means common, but one or two are occasionally found in the cold season by the edges of reedy ponds and in flooded rice fields. It is seldom if ever seen on the banks of tidal creeks.

The Green Sandpiper, Totanus ochropus, (*Lin. Jerd.* 892), is more plentiful in the district than the last, but is nowhere abundant. It frequents river banks, marshes, and rice fields It is usually solitary.

Of the Common Sandpiper, Tringoides hypoleucus, (*Lin. Jerd.* 893), Jerdon remarks that in India it is perhaps the least common of the three sandpipers. As regards the Ratnagiri district, this is incorrect, for the little 'snippet' is one of its most common and widely distributed birds. In the cold weather, throughout the length and breadth of the district, on the sandy beach, on rocks jutting into the sea, in the tidal estuaries, on sand and mud banks, in mangrove swamps and salt marshes, in rice fields and on margins of ponds, by mountain streams and rivulets, in short wherever there is water from a puddle to the ocean, this industrious and familiar little bird is found. On the other hand the spotted and green sandpipers are comparatively uncommon. These birds come early in the cold weather and stay till the beginning of May. The native name for all the sandpipers is *tivala*.

The Greenshanks, Totanus glottis, (*Lin. Jerd.* 894), is plentiful during the cold season on all the large rivers and tidal estuaries. It is usually alone, but occasionally congregates in moderate sized flocks.

The Redshanks, Totanus calidris, (*L. Jerd.* 897), is also plentiful in the winter on the muddy banks and lagoons of the tidal creeks. It is more gregarious in its habits than the preceding.

Himntopodidae.

Fam. — HIMANTOPODIDAE. — The Stilt or Longlegs, Himantopus candidus, (Bonnat. Jerd. 898), is rather a rare bird in this district. One or two stragglers arc occasionally seen during the cold season on the larger creeks, but they seldom make any stay, and are never in large flocks.

Tribe—LATITORES.

Parridae.

Fam. — PARRIDAE. — The Pheasant-tailed Jacana, Hydrophasianus chirurgus, (SCOP. Jerd. 901), is during the cold season found in small flocks throughout ' the district in large ponds overgrown with weeds and lilies, amongst which by means of its long toes, it picks its way with ease and rapidity. The jacanas are shy and restless, always on the alert, rising with a loud plaintive cry, and circling round the pond several times before again alighting. They leave the district in the hot weather, before they assume their summer garb and lengthened tails. The Bronzewinged Jacana, Parra indica, (Lath. Jerd. 900), included in the general Konkan list, has not hitherto been observed by the writer anywhere within the limits of the Ratnagiri district.

Rallidae.

Fam.—RALLIDAE. Sah-Fam.—GALLINULINAE.—The Raid or Common Coot, pantomhdi, Fulicaatra, (Liu. Jerd. 903), is said to have been very plentiful some years ago in the lagoons at the meeting of the Vashishti and Jagbudi rivers. Of late years the coots have forsaken their old haunts, and saving an occasional straggler, none are now seen. It is also noticeable that with the desertion of the coots, who are usually considered good decoys, the number of ducks that visit the same locality has also conspicuously decreased. A solitary individual is seen now and then in large reedy ponds in the cold season, but the species is now decidedly rare.

The Water Hen, Gallinula chloropus (*Lin. Jerd.* 905). A pair or more of water hens may be found in almost any little frequented reedy pond. They arc great skulkers, and are flushed with difficulty. Wherever found they arc probably permanent residents. Their native name is *gajra*, a term which, according to Jerdon, is ill Sind also applied to its smaller congener Gallinula burnetii, if the latter be a distinct species, which is now doubted.

The Whitebreasted Water Hen, Erythra phœnicura, (*Pennant. Jerd.* 907), is distributed sparingly throughout the district, being more plentiful near the coast than inland. It is found chiefly in mangrove swamps and bushes by the banks of tidal creeks. It breeds during the rainy months in hedges and thickets far from water. A pair of these birds have bred regularly for years in the hedge enclosing the garden of one of the Dapoli houses. The eggs are

reddish white blotched all over with light red and inky grey.

Rallinae.

Sub-Fam.—RALLINAE.—The Pigmy Rail or Baillon's Crake, Zapornis pygmsea (Naum), or Porzana Bailloni (Vieill. Jerd 910), seems common throughout the district. It is found by the edges of reedy ponds in mangrove swamps and flooded rice fields. One or two are usually flushed in a day's snipe shooting.

The Ruddy Rail, Rallina fusca, (*Lin. Jerd.* 911), has been seen in a mangrove swamp on one of the small tidal creeks in the Dapoli sub-division, but so far as the writer knows not elsewhere in the district.

The Bluebreasted Rail, Hypotœnidia striata, (*Lin. Jerd.* 913), has been found in a mangrove swamp in the Vashishti river, and no doubt occurs'elsewhere in the district.

Tribe—CULTIROSTRES.

Ciconidae.

Fam. — CICONIDAE. — The Whitenecked Stork, Jcand>'sar or leaner, Dissura episcopa, (Bodd. Jerd. 920), is not uncommon in many parts of the district. It is sometimes seen by the banks of the rivers and sometimes inland far from water. It is more rare in the neighbourhood of the coast than inland. No other stork has yet been observed in the district, though it is possible that the White Stork, Ciconia alba, (Bechst. Jerd. 919), which Major Lloyd mentions as having been once seen by him in the Mahad sub-division of Kolaba, sometimes visits the Ratnagiri district. The Black Stork, Ciconia nigra, (Lin. Jerd. 918), has been observed by the writer on the Nira in Satara, but never on any of the Ratnagiri rivers.

Ardeidae.

Fam. — ARDEIDAE. The Common or Blue Heron, Ardea cinerea, (Lin. Jerd. 923), is plentiful during the cold season on the Savitri, Vashishti, and other large tidal rivers. It feeds on the mud banks and in mangrove swamps, as a rule, unlike the next species, with no attempt at concealment. The native name for this and the purple heron is dok. The Purple Heron, Ardea purpurea, (Lin. Jerd. 924), is also found during the cold months, but is either not so plentiful or not so-often seen as the common heron. It keeps more to the thick cover of the high reeds and thorny bushes, which grow luxuriantly in the swamps that fringe the course of the tidal rivers.

The Smaller White Heron or Egret, Herodias torra, (*Buch. Ham. Jerd.* 925), as distinguished from the white heron of Europe, Ardea alba, (*Lin.*), is abundant on all the large rivers of the district from October to the end of May. 'Shortly after their bills have turned from yellow to black, and they have assumed their splendid dorsal trains, they disappear to breed. A few of these birds may possibly remain in the district to breed, but no breeding haunts have ever been discovered by the writer. Like most of their tribe, these egrets, lonely during the daytime, towards sunset gather in vast numbers to wend their way to clumps of mangrove trees, which form common roosting places for them, as well as for countless cormorants,

crows, ibis, and snake birds. The native name for all the white egrets, large and small, is *bali*.

The Little Egret, Herodias garzetta, (*Lin. Jerd.* 927), is still more plentiful than the last throughout the cold and hot weather, disappears at the first burst of the rainy season. Its habits are in every way similar to those of the last, but while its larger congener affects only broad tidal rivers and their swamps, lagoons, and mud banks, the familiar little egret strays further inland, and during the daytime is found by every rustic stream and watercourse. The bill is black all the year round, and in its breeding plumage in addition to the dorsal train, which it wears in common with all other herons and egrets, it has a crest of two elongated white feathers and marked breast plumes, both of which are wanting in the preceding species. The train also lasts longer than in other members of the family. It is not unusual to find the last year's train preserved in a more or less ragged state up to March, when not a vestige of this ornament remains on the person of Herodias torra.

The Ashy Egret, Demiegretta gularis, (*Bosc. Jerd.* 028), is found sparingly on the large creeks during the fair season, and usually in company with the white egrets, whom it resembles in its habits, being lonely by day and gregarious by night.

The Cattle Egret, Bubulcus coromandus, (Bndd. Jerd. 929), though less plentiful than the little egret, is spread throughout the district. It roosts in company with the other members of its family, but keeps in flocks during the daytime and is never alone. Its habits of following cattle wherever grazing is well known, but like other egrets it feeds also on fish and tadpoles. Rice fields are its favourite feeding grounds, and it is this species and not, as stated by Jerdon, the Pond Heron, Ardeola grayii, (Jerd. 930), that in Western India is usually called the Paddy Bird, The cattle egret is during the greater part of the year white all over. In May the head, neck, and breast are bright orange buff, and a dorsal train of the same hue is developed. During the rainy season this bird disappears from the district presumably to breed elsewhere. If wounded or caught alive it is very easily tamed and is an amusing pet, being especially active, after lamps are lighted, in gobbling up the innumerable insects attracted by the lights. These birds would appear to have a horror of thunder and lightning; for one evening, at Harnai, during a very severe storm, a terrified egret took refuge in one of the bath-rooms of the house in which the writer was staying. On being discovered and politely shown the door, it evinced a decided objection to again braving the elements, and although it had suffered no injury, was with difficulty expelled on the following morning, long after the storm had ceased.

The Indian Pond Heron, *bagla* or *koka*, Ardeola grayii, (*Sykes. Jerd.* 930), is very abundant throughout the district in swamps and rice fields, ponds and rivers. Its habits are too well known to need description. It dons its full breeding plumage, long white crest and dark maroon train about the end of May, and is almost completely transformed by the process. It probably breeds in the district.

The Little Green Bittern, Butorides javanica, (*Horsf. Jerd.* 931), found throughout the district on all the creeks and rivers, is especially plentiful in the mangrove swamps of the Savitri. It is a permanent resident and breeds in April and May. The nests are small flat stick platforms placed in trees or bushes overhanging water, and arc well hid from view. The eggs are of a pure pale sea green, or *cnu de Nil* colour. This species is chiefly nocturnal in its habits, seldom coming out of its thick cover before sunset. The natives call this bird the *khajan kombda*, or swamp hen.

A single specimen of the Chestnut Bittern, Ardetta cinnamomea, (*Gmel. Jerd.* 933), was, when beating for snipe, procured by the writer in a reedy swamp in the Dapoli sub-division. It is very skulking in its habits, and is flushed with difficulty from the dense cover it affects. Probably it occurs sparingly in suitable localities.

The Night Heron, Nycticorax griseus, (*Lin. Jerd.* 937), has been obtained at Dhamapur in the Malwan sub-division. It probably occurs elsewhere in the district, but is rare, and owing to its nocturnal habits, is difficult to find.

Tantaliae.

Fam.—TANTALIDAE. Sub-Fam.—PLATALEINAE.—The Spoonbill, Platalea leucorodia, (L. Jerd. 939), very rarely visits the district. One or two stragglers have been shot on the Vashishti river.

Ibisinae.

Sub-Fam.—IBISINAE.—The White Ibis, Ibis melanocephala, (Lath.Jerd. 941), is found in small parties during the cold season, feeding on the mud banks of the large tidal rivers. It is gregarious by day and roosts by night with the herons, egrets, and cormorants of the neighbourhood. No other species of ibis has yet been found in the district. The Black or Wartyheaded Ibis, Inocotis papillosus, (Tem. Jerd. 942), which is included in the general Konkan list, and is so common about the Deccan villages, does not appear to visit this district. This species, as well as the curlew and whimbrel, is called kuri by the natives.

Order-NATATORES.

NATATORES.—The first great tribe of this order, the Lamellirostres, comprising flamingos, geese, and duck, is somewhat poorly represented both in species and individuals. Of true geese there are none. The spurwinged blackbacked goose, common in other parts of the Presidency, does not visit the district. The ruddy shieldrake or Brahmani duck is also an absentee, and the sole members of the family of Anseridae are the whistling teal and the little goslet or cotton teal, and both of them are uncommon. Flamingos are found but rarely. Six species of true ducks and two of diving ducks or pochards have been recorded; but of these, only two, the wigeon and the common teal, are at all plentiful. Of the Mergidae or Mergansers no representatives occur. The tidal rivers fringed throughout their course with belts of mangroves, which conceal from view countless little inlets and secluded backwaters, are well suited for duck grounds, and might be expected to attract vast numbers of wild duck. In such localities with the help of a canoe, and by stalking or driving according to the nature of the ground,

good shooting may in some years be had. In other years so few ducks visit the district, and these are so scattered in out-of-the-way places, that their pursuit does not repay the trouble. Few ducks are found at any great distance from the coast. Here and there an old disused pond attracts a small party of gadwalls, teals, or pochards, but the banks of the rivers in their freshwater section are so frequented by men and cattle that they afford no sufficient shelter. Of the Mergitores, the little grebe or dabchick is the sole representative. The next tribe, the Vagatores, contributes four kinds of gulls and five of terns; the other family of this tribe, the Procellaridae, consisting of albatrosses and petrels, being umepresented. Lastly, the large tribe of Piscatores has but two (?) entatives, the little cormorant and the snake bird.

Tribe-LAMELLIROSTRES.

Phaenicopteridae.

Fam.—PHCENICOPTERIDAE.—The Flamingo, Phaenicopterus antiquornm (Pallas. Jerd. 944), in small numbers visits the large tidal backwater to the north of Ratnagiri fort during the cold weather, and specimens have been obtained by Dr. Armstrong. They have not been observed elsewhere in the district.

Anseridae.

Fam.— ANSERIDAE. Sub-Fam.—NETTAPODINAE.—The Whitebodied Goose Teal or Cotton Teal, Nettapus coromandelianus, (Gmel. Jerd. 951), is found here and there during the cold weather in suitable places, but is comparatively scarce. It is often alone and does not appear to be a permanent resident.

Tadorninae.

Sub-Fam.—TADORNINAE.—The Whistling Teal, Dendrocygna javanica, (Horsf, Jerd. 952), is very rare in the district. The writer once in February came upon a flock of whistling teal feeding in a flooded rice field on the banks of the Vashishti river, and knows of no other instance of their occurrence in the district. The ducks in question were exceedingly thin and proved execrable eating.

Anatidae.

Fam.—ANATIDAE. Sub-Fam.—ANATINAE. The Shoveller, Spatula clypeata, (Lin. Jerd. 957), is also a rare species in this district. In five seasons the writer has only seen one flock. This was found on a small river in the Dapoli sub-division far inland.

The Gadwall, Chaulelasmus streperus, (*Lin: Jerd.* 961), is found in small parties here and there throughout the district during the cold weather, in reedy ponds and in the larger rivers, but is by no means abundant. It is excellent eating.

The Pintail Duck, Dafila acuta, (*Lin. Jerd.* 962), is almost as uncommon as the shoveller. A few are occasionally shot in the large duck ground at the meeting of the Vashishti and Jagbudi.

The Wigeon, Mareca penelope, (Lin. Jerd. 963), is the only species of duck

at all abundant in the district; but it is very locally distributed. Every year very large flocks of five hundred or more visit the lagoons on the Vashishti river and afford good sport. They are late in coming, but fatten very rapidly, and are excellent birds for the table. They feed by day in the swamps and lagoons, and generally about sunset gather on the open water. Passing up or down the river in a boat on a moonlight night, their low soft whistle may be heard in all directions.

The Common Teal, Querquedula crecca, (*Lin. Jerd.* 964), comes early in the cold weather in small flocks, and though nowhere very plentiful, is widely distributed throughout the district, frequenting alike open rivers, reedy ponds, and flooded rice fields.

The Bluewinged or Garganey Teal, Querquedula circia, (*Lin. Jerd.* 965), is more rare, and, preferring lonely ponds, is not often seen on the larger rivers.

Fuliqulinae.

Sub-Fam.—FULIGULINAE.—The White-eyed Duck, Fuligula nyroca, (Quld. Jerd. 969), differing from the true ducks by its short neck and more massive head, has been only once obtained by the writer in a large weedy pond in the Khed sub-division, and is a rare bird in the district. The Golden-eye or Tufted Duck, Fuligula cristata, (L. Jerd. 971), has also been found at Chiplun. The general Konkan list includes the Redheaded Pochard, Fuligula ferina, (Lin. Jerd. 968), a species which has not yet been recorded from Ratnagiri. The local vernacular name for all the species of Anatidae is adla. The name badak is also occasionally applied, but chiefly by Musalmans.

Tribe—MERGITORES.

Podicipidae. Fam.—PODICIPIDAE.—The Little Grebe or Dabchick, Podiceps

minor, (*Lin. Jerd.* 975), is found throughout the district in pools and reservoirs, wherever there are rushes and floating aquatic weeds to afford cover. It is probably a cold weather visitant only. The native name for this, and indeed all other diving birds is *pan bud*.

Tribe—**VAGATORES.**

Laridae.

Fam.—LARIDAE. Sub-Fam,—LARINAE.—The Slaty Herring Gull, Larns affinis, (Jerd. 978, ter) has been obtained at Ratnagiri by Dr. Armstrong of the Marine Survey, and probably occurs at other places on the coast.

The Great Blackheaded Gull, Larus ichthyaetus, (*Pallas. Jerd.* 979), has been found on the coast at Guhagar in Chiplun. Several were seen at the same time.

The Brownheaded Gull, Larus brunneicephalus, (*Jerd.* 980), is abundant throughout the cold season on the coast and main tidal estuaries, and for some miles up the larger rivers. It associates in large flocks, and numbers may always be seen perched on the fishing stakes in the Savitri river, where it is especially plentiful. In winter the brown plumage of the head and neck is replaced almost entirely by white.

The Laughing Gull, Larus ridibundus, (*Lin. Jerd.* 981), has been obtained by Dr. Armstrong at Ratnagiri, but appears to be much rarer than the preceding species. The vernacular name for all the gulls is *kira*.

Sterninae.

Sub-Fam.—sterninae.—The Gullbilled Tern, Sterna anglica (Mont. Jerd. 983), is found, for the greater part of the year, on all the tidal rivers, both near the coast and far inland, either alone or in small parties.

The Whitecheeked Tern, Sterna albigena, (*Licht. Jerd.* 986), arrives on the Ratnagiri coast in considerable numbers towards the end of September. One year towards the close of the south-west monsoon, after very stormy weather, numbers of this or a similar species alighted, utterly exhausted on the sea shore at Harnai or Suvarndurg. Hundreds were caught by the fishermen and hawked about for food. Numbers of their skeletons may still be seen on the sea shore high and dry above the tide level, and in the old island fort of Suvarndurg. The sea eagles, who frequent this spot, also seem to have taken advantage of the helpless state of these terns, and to have shared in the general feast; for several skeletons were found both in and immediately below their gigantic nest.

The Little Tern, Sterna saundersi, (*Hume. Jerd.* 988), also visits the coast and tidal rivers in the cold weather, arriving with the last species in September.

The Large Sea Tern, Sterna bergii, (*Lichst. Jerd.* 989), has been obtained at Vijaydurg on the coast.

The Smaller Sea Tern, Sterna media, (*Horsf. Jerd.* 990), has been obtained by Dr. Armstrong at Ratnagiri. The general Konkan list includes the Small Marsh Tern, Hydrochelidon hybrida, (*Pall. Jerd.* 984), which also in all probability occurs in this district, though no specimen has been obtained. The vernacular word for terns is *kira*, the same as for gull.

Tribe—PISCATORES.

Fam. — GRACULIDAE. Sub-Fam.—GRACULINAE. — The Little Cormo-Graculidae. rant or Shag, Phalacracorax pygmaeus, (Pall. Jerd. 1007), is exceedingly common throughout the district on all the large rivers, and especially so on the Vashisti. It appears on the approach of the rainy season to leave the district, and go elsewhere to breed. By day it is sometimes alone and sometimes in small parties. These industrious fishers travel many miles up the rivers in search of choice hunting grounds, returning to a common roost at night. Standing on the banks of any of the large rivers about sundown, one may see thousands wending their way to their chosen roost, skimming over the surface of the water in a continuous succession of small parties. They are called by the natives pan kavla, water crows. The Large Cormorant, Phalacracorax carbo (Lin. Jerd. 1005), included in the general Konkan list, is, if it occurs at all, very rare in this district. Probably it does not extend so far south.

Plotinae .

Sub-Fam.—PLOTINAE.—The Indian Snake Bird or Anhinga, pan buda,

Plotus melanogaster, (*Gmel. Jerd.* 1008), is also very plentiful throughout the district, frequenting alike large and small rivers. It is probably a permanent resident, but its nests have not been discovered. Like the heron and cormorant, it is usually solitary by day and gregarious at night.

SECTION VII.-FISH.

Fish

The district is well supplied with salt water, and in a less degree with freshwater, fish. In the rivers, particularly in the Jog near Dapoli, and far up the tidal creeks and inlets, freshwater fishing is carried on. In June, July, and August, when the fishermen do not venture to sea, they fish in canoes in the rivers and creeks. Ratnagiri rivers are too short, too small in volume, and too brackish to have any great variety or store of freshwater fish. Still, as almost the whole of the large population are fish-eaters, fish is much sought after, the rivers all the year round but especially in June, July, and August, being from their sources constantly swept by close nets. Besides netting, by damming streams, blinding, and stupefying the fish with hura [Milk hedge or Indian Tree Spurge, Euphorbia tirucalli (Linn.)] juice, or setting at a hole in the dam a basket trap or small-meshed bag-like net, large numbers are caught.

Sea-fishing goes on all along the coast, but chiefly off the mouths of creeks and rivers a few miles from the shore. Except during the stormy months of the south-west monsoon fishers are busy all the year round, their chief takes being in October and November at the close of the rains when surma, kurti, moa, kokar, karel, jambosa, latar, valvas, valshingti, kane, gobra, kanta, bukaul, kavli, dandotar, gubir, bata, bombil, birja, joki, patoldi, baskal, chandgo, sataro, shevan and others are caught and salted in great quantities. Later on fish are much less plentiful but salting and curing continue on a smaller scale till the break of the rains. The fish are caught both in nets and with long lines, but chiefly in nets. The local names of the commonest kinds of sea fish besides the above are mushi, vaghli, ghol, dagol, large jiva or isval, sarma, karli, shingala, ravas, gedar, palo, bing, sarge, palu, kotva, shingti, dori, bata, large boi, renvi, kanat, small jharti, cherbot, moa, karkaro, mechni, lep, sivu, bangda, shitak, murdu, kara, javas, kari, mech, kavti, golim, kanchek, kaja, bokera, maja, dori, kumbaru, and chingal. Those chiefly fished for by long lines are besides some of the above, the revni, karkara, shitak, shingti, dori, jambora, gobra, palu, karel, jiva, dagol, moa, ghol, shingala, kokar, gobra, kondecha, mara, and mushi of several kinds. The boi, lep, mech, and vaghli are also caught by spearing. Hed, when dried called kuti, is used for manure. Accidents and deaths sometimes occur from the bite of the shark, konde, or the sea snake, malida. In October, November, and December, whales are sometimes seen along the coast, but are not molested, and porpoise, gada, are at times caught in the nets. Besides curing and salting, the fishermen of all classes do a brisk trade during the fair season, from November to June, in collecting and drying the fins and maws of different kinds of fish. The trade is in the hands of a few Khojas, who buy from the fishermen and send the goods to the Bombay market, whence they are eventually exported to China for isinglass or gelatine. The fins are obtained from the mushi or konde, a species of shark, and from two kinds of saw-fish geni and nali, while the maws or sounds are got from the *ghol* and the *shingti*. The dorsal, pectoral, and caudal fins are cut off, the anal and ventral fins alone being rejected. Thus each shark yields four fins, one dorsal, two pectoral and one caudal, while the saw-fish yields three only, two dorsal and one caudal. The fins and maws are merely dried in the sun, and sprinkled with lime, chunam, or wood ashes to assist the process and prevent, it is said, attacks of insects. The geni attains a length of from 15 to 20 feet and more, of which the saw is about one-third. The nali is considerably smaller. Both these fish are caught in the dilvar net moored to heavy anchors in from fifteen to fifty fathoms water. On the net being hauled up, should a saw-fish be caught, a noose is dexterously thrown over the saw and pulled tight., The fish is then carefully drawn up to the side of the boat, and the head severed from the body at the neck with a large knife. If the fish is too large to be hauled on board, it is cut into two or more pieces. Should the take have been made close to shore, the fish is towed to shore and despatched there. In handling the saw-fish great care is taken by the fishermen to stand well in front of the fish to avoid a lateral blow from the formidable weapon with which it is armed. Accidents are consequently rare. Harpoons are never used by the Ratnagiri fishermen. In addition to their fins saw-fish yield a large quantity of oil. A large geni produces, it is said, from five to ten mans, twenty to forty gallons. Oil is also extracted from shark's livers, which after cleaning are placed in cauldrons, and slowly heated. The fish oil is used locally for preserving the timbers of native craft, and is not exported. Oysters, kalav, are found on the rocks at Harni, Redi, Ratnagiri, Jaitapur, Vijaydurg, and other places on the coast, those from Jaitapur being considered the best. No attempt has been made to farm or preserve oysters in artificial beds. Cockles and other bivalves, mula, are abundant. Besides forming a staple article of food to the poorer classes they supply the whole district with lime for building purposes. Large quantities of shells are calcined for this purpose at Juva on the Ratnagiri river, where the manufacture is of long standing. Two or more species of cuttle fish, makul, are found on the coast, but it is said not in sufficient numbers to make the collection of the bone remunerative. Turtles are occasionally caught, and fetch from 2s. to 3s. (Rs. 1-11/2). The whale, devmasa or godfish is, as before mentioned, never pursued. The fishmen are aware of their commercial value, but think it unlucky to kill them. They also believe that if bad language is used to a whale, it will inevitably charge and upset the boat containing the offender. So the fishman gives the whale as wide a berth as he can. Porpoises are not intentionally caught, and, if netted, by accident, are usually released. As they are plentiful, a trade in porpoise hides would probably be very remunerative.

Fishermen.

Though freshwater fishing is carried on by almost all of the lower classes, Bhois are perhaps the only caste with whom fishing is the chief business of life. Of sea-fishers some are Musalmans and others Hindus. The Musalmans, Sunnis known as Daldis, claim an Arab descent. This their look supports, and there seems no reason to doubt that they have a strain of Arab blood though from intermarriage with the women of the country their home tongue is now Marathi. The Hindu sea-fishers are, in the north as far as the Dabhol river; Kolis, then Gabits, Bhois, Kutis, and Sonkutis, and in the south near Malvan, Vengurla, and Redi, Karvis or Goa native Christians. The language of all these fishermen does not, except for seafaring terms and slight peculiarities of accent and pronunciation, differ much from that of the cultivators and other low classes. Their houses, except in a few cases, are thatched with grass. Their dress, like that of low caste Hindus, consists of a waistband, langoti, a waistcloth, dhotar, a jacket, bandi, and a cap, rumal. They own the fishing boats and themselves prepare the ropes and sails. In fishing they never go far from the coast. But some who own good boats engage in the coasting trade. Their busiest time is in the months of November and December when the deep-sea fishing begins.

Stakes.

The depth and rockiness of the coast prevent the use of stakenets. Their place is supplied by two pairs of pangara [Erythrina indica.] wood buoys moored by coir ropes to anchors, pirga. They are set in about fifty fathoms water far offshore, but not out of sight of the Sahyadri hills. In the rivers and creeks stakes are used, driven into the river beds by fastening to each of them two boats on opposite sides at high water; as the water ebbs the weight of the two boats and their crews bear downward perpendicularly on the pointed end of the stakes which sink deep into the mud or sand. The stakes are generally taken away during the rainy months.

Boats.

Small boats, machvas, of from 4 to 91/2 tons (11 - 26 khandis) burden and with one or two masts are used for deep-sea fishing; though a smaller class of boat, an outrigger canoe, called *ulandi*, [The *ulandi* is called from the piece of wood that, floating at some distance from the windward side of the boat and at its ends fastened to the boat by two spars, keeps the canoe from upsetting.] sometimes stays out for a day or two. These and the river canoes, dons, are made by local carpenters. The favourite wood is for fishing boats light dhup wood and for canoes mango or undi. [Calophyllum inophyllum.] All masts and yards, parban, are of teak from the Malabar coast. The fishermen do their own repairs. As a rule profits are equally divided among the crew. But whenever there is a good take the owner of the boat claims a larger share. The fishermen make ready their own ropes, sails, and nets. Nets are made of coir, hemp tag, or kevan [Terminalia tomentosa.] tree fibre. The stems of the hemp plant steeped in water for eight or nine days, are dried, beaten with a stick, and separated. For sails the produce of the Bombay mills has taken the place of Deccan made cloth.

Nets.

The nets vary in length from 10 to 200 feet and from 5 to 30 feet in breadth. The meshes are from 1/8 of an inch to 1/2 inches wide. The nets

are generally made ready in the rainy season, the fishermen's easy time. The names of the nets are dilvar, vaghul, maud, ghan, vavri, pala, palupag, karabpag or shingtapag, kandal, hog, dorpag, ghanpagla, bangripag, kankanipag, donbovtipag, kavlepag, golam ind, tharlipag, kanchek pagla, aut, kadpapag, and dandi ind. Before using them nets are boiled in water mixed with cement and finely burnt and powdered shells, and stretched between two poles or trees to dry. When dry they are dyed by being several times smeared with a wash of ain [Hellcteres ixora.] bark. A net generally lasts for a year.

Long linos are seldom used. They vary in length from 35 to 40 fathoms and the hooks are baited with *mula-or cingal*.

Torch-light is used only to catch crabs, which are also caught by the hand or by the small net called *hath ind*.

Markets.

The fishermen often stay for several days at sea, but the usual custom is to start in the afternoon about four and to return next morning about ten. Women and old men carry the fish to the market, or hawk them from door to door. A system of bartering is common, fish being exchanged for grain or firewood. Some of the better class of fishermen make large purchases for curing and salting.

Curing.

The curing is simple. The fish is cut open, cleaned, washed in salt water, rubbed with salt, and laid on a bamboo stand and covered over with matting to drain for three days, fresh salt being applied daily. The large and small varieties of *surme* and *karli* are the fish best suited for curing. Small fish are simply dried in the sun, being neither salted nor cleaned.

POPULATION

Introductory

RATNA'GIRI is remarkable for the number of its people, their freedom from crime, and their readiness to leave their homes for military and other service.

Of its early population, in the absence of any separate hill tribes, almost no distinct traces remain. [The only traces are a few wandering Kathkaris in the north and some begging Thakurs in the south.] Among the present people the early element is probably strongest in the Mhars and coast Kolis, less marked in the Bhandaris, and weaker in the Kunbis and Marathas. The later arrivals, with some of whom almost every class of the present people is more or less closely connected, came both from above the Sahyadri hills and from beyond the sea. According to the legendary account of the first Brahman peopling of the district Parashuram entered it from the Deccan. The early Deccan and Karnatak rulers, with their own district officers, introduced Deccan settlers; in the sixteenth century the Bijapur kings and their village renters, khots, brought fresh bands of colonists; and in the seventeenth century Shivaji's uplanders garrisoned many of its new forts. Neither under Peshwa nor British rule has there been any movement from the east into Ratnagiri.

From the earliest times their fame as sea robbers no doubt tempted foreign adventurers, Rajputs from the north, Arabs and Africans from the west, and men of the Malabar coast from the south, to join the settlements of the Ratnagiri pirates. To this mixture of foreign blood is probably due the vigour, and till lately the love of war and plunder, that marked its coast tribes, Bhandaris, Gabits, Kharvis, and Kolis. The legendary history of the Javals and Chitpavans seems to show that these classes entered Ratnagiri by sea. Later on (about 699), driven by cruel persecutions, numbers of families fled from Kufa and Basra, and, sailing from the Persian Gulf, settled along the west coast of India. The descendants of these settlers, now known as Konkani Musalmans, and found chiefly on the shores of the navigable Ratnagiri rivers, in spite of intermarriage with the people of the country, keep much of the fairness and special features of the original settlers. In more modern times (1347-1660) under the Bahmani and Bijapur kings, the attractions of trade and of military service drew numbers of Arabs and Persians, and to a less degree of Gujarat Hindus and Musalmans to the Ratnagiri centres of traffic and power. In the eighteenth century the disordered state of their native country drove many Gujarat traders to the Konkan, and during the last sixty years the Bhatias, moving south from Cutch and Bombay, have drawn to themselves much of the trade and wealth of the district.

Under the British two great changes have passed over the district; the 'Pirate Coast' has become more orderly and freer from crime than any part of the Presidency, and the number of its people has more than doubled. Since piracy has been put down, the only trace of the old warlike spirit is in the large body of recruits the district still supplies to the Bombay army. According to the returns there were, in 1879, 5579 men in military service receiving about £58,000 (Rs. 5,80,000), and 7009 pensioners in receipt of £45,452 (Rs. 4,54,520) a year. [The details are:

Ratnagiri Soldiers and Pensioners, 1879.

CACTE AND	SUBHE	DA'RS.	JAMA'-	DA'RS.	HAVA'L	DA'RS.	NA'	IKS.
CASTE AND RACE.	In serv- ice.	Pensi- oners.						
Brahmans	1	2		2	4	4	3	5
Vanis	1	4	1	2	7	6	2	10
Kunbis	1	15	3	9	12	100	12	113
Marathas	29	66	41	44	163	391	210	472
Mochis		5		2	17	9	27	16
Mhars	4	12	4	10	32	67	41	100
Other Hindus	3	17	3	5	10	51	5	74
Christians	1	6			2	12	1	13
Musalmans	2	7	1	5	14	15	11	16
Total	42	134	53	79	261	655	312	819

continued..

CACTE AND DACE	PRIV	ATES.	DRUM	IMERS.	то	TAL
CASTE AND RACE.	In service.	Pensioners.	In service.	Pensioners.	In service.	Pensioners.
Brahmans	16	23			24	36
Vanis	61	94			72	116
Kunbis	366	534	tate	2	394	773
Marathas	2951	3063	6	9	3400	4045
Mochis	211	88	17	2	272	122
Mhars	884	936	65	25	1030	1150
Other Hindus	124	445	2	2	147	594
Christians	51	25	5	5	60	61
Musalmans	171	65	1	4	200	112
Total	4835	5273	96	49	5599	7009

]

During the last sixty years, for so poor and crowded a country, the population of Ratnagiri has amazingly increased. Very soon after the British conquest (1820), the district was surprisingly tilled and full of people. So great were their numbers that the bulk of the husbandmen were at the mercy of the middlemen and upper classes. The 1820 census returns showed, during the rainy season, a total population of 462,651 souls. [The total returns, 640,867 souls, included, besides Ratnagiri, four-fifths of Kolaba. The number given in the text has been calculated by taking from the total returns the proportion which in 1872 four-fifths of Kolaba bore to Ratnagiri.] Ratnagiri was at that time a grain exporting country, and in the fair season when traders thronged

its ports, the population was considerably more. Twenty-five years later, though this number is said to have been far from complete, the returns showed a total of 625,782 souls or an increase of 163,132 or 35.2 per cent. Five years later (1851) the district is described as much, overcrowded; tillage had spread to the very hill tops, every available spot was worked by the plough or the hoe; exports of grain had ceased; the district paid its way from the savings of those who had taken service in the army or police, or who went for work to the districts found; many of the people suffered from want of food. In spite of this over-crowding, since 1851 the population has greatly increased. In 1872 it was returned at 1,019,136 souls, and since then, as it passed easily through the famine years, the number has probably steadily and considerably risen. Though some fresh land has been brought under tillage, the demand for food has outrun the supply, and, in ordinary years, grain is brought into the district both by land and sea. No new local industry has been started. But, by land, better and safer roads, and, by sea, the sure and rapid passage of steamers, have made it easy for the people to leave their homes in search of work. Wages have risen more than the cost of living, and the district is enriched by the large stores of money brought to it by the crowds of its officials and clerks, its soldiers and constables, its factory hands, and its carriers spread over the Presidency making and saving money. Though their great numbers keep the bulk of the people very poor, the teeming population of Ratnagiri has been one of the chief factors in the development of the city of Bombay. Connected with it by a short and easy land journey and by a safe and cheap sea voyage, Ratnagiri is, much more than the districts round Bombay, the supplier of its labour market. It is estimated that in addition to many thousands partly settled in Bombay, over one hundred thousand workers pass every fair season from Ratnagiri to Bombay, returning at the beginning of the. rains to till their fields. To Ratnagiri's clever pushing upper classes, to its frugal teachable middle classes, and to its sober sturdy and orderly lower classes, Bombay owes many of it's ablest officials and lawyers, its earliest and cleverest factory workers, its most useful soldiers and constables, and its cheapest and most trusty supply of unskilled labour.

Maharashira Census — Gazetteers

1820.

Since the beginning of British rule the people of Ratnagiri have thrice been numbered, in 1820, in 1846, and in 1872. In 1820, with no opposition on the part of the people and probably with less than five per cent of error, [Collector in Gov. Rev. Rec. 16 of 1821, 336-338.] the census, including besides the present Ratnagiri four-fifths of Kolaba, showed a total population of 610,857 souls living in 131,428 houses. Of the whole people 334,191 were males and 306,666 females; children under twelve numbered 211,717, of whom 131,933 were boys and 79,784 girls. For the thirteen sub-divisions included in the 1820 census, the 1872 returns showed a total of 1,302,594 souls or an increase of 103.25 per cent.

1846.

According to the 1846 census, which would seem to have been far from complete, [Collector 71, 9th January 1880.] the total population of the district was 625,782 souls, or 165.15 to the square mile. Hindus numbered 577,984 or 92.36 per cent, and Musalmans 45,822 or 7.32 per cent; that is at the rate of twelve Hindus to one Musalman. There were, besides.

1856 Christians, 83 Jews, and 37 Parsis. The 1872 census, to some extent because the numbering was more correct than in 1846, showed a startling increase of 62.85 per cent in population, the total returns amounting to 1,019,136 souls or 268.97 to the square mile. Of the whole number, 941,049 or 92.33 per cent were Hindus, 74,834 or 7.34 per cent Musalmans, 3244 Christians, and 9 Parsis. The following statement shows that in the twenty-six years ending 1872, population advanced 62.85 per cent, and houses increased 92.44 per cent.

Ratnagiri Population, 1846 and 1872.

VEAD		POPULATION.								
YEAR.	Hindus.	Musalmans.		Christians.	Others.	Total.	Houses.			
1846	577,984		45,822	1856	120	625,782	116,807			
1872	941,049		74,834	3244		1,019,136	224,790			
Increase per cent.	62.81		63.31	74.78		62.85	92.44			

Distribution.

The following tabular statement gives, for the year 1872, details of the population of each sub-division of the district according to religion, age, and sex:

Ratnagiri Population, 1872. Sub-divisional Details. [Since 1872 transfers of villages from one sub-division to another have been made in all the sub-divisions except Dapoli, and the number of sub-divisions increased from eight to nine.]

	HINDUS.									
SUB-DIVISION.	Up to 1	2 years.	From 1	2 to 30.	Above 30 years.		. Total.			
	Males.	Females	Males.	Females.	Males.	Females	Males.	Females.	Grand Total.	
Dapoli	24,501	22,279	17,187	20,508	19,381	20,524	61,069	63,311	124,380	
Guhagar	14,646	13,829	9923	12,861	9949	11,073	34,518	37,763	72,281	
Chiplun	33,819	31,166	23,506	29,579	21,863	23,381	79,188	84,126	163,314	
Sangameshvar	17,662	16,277	12,145	15,220	11,640	13,174	41,447	44,671	86,118	
Ratnagiri	20,971	19,234	14,951	18,729	14,592	15,212	50,514	53,175	103,689	
Rajapur	31,030	30,115	21,231	26,468	22,745	25,146	75,006	81,729	156,735	
Devgad	22,079	21,537	17,058	20,180	15,939	18,099	55,076	59,816	114,892	

		HINDUS.									
SUB- DIVISION.	Up to 12	2 years.	From 1	2 to 30.	Above 3	0 years.	То	tal.	Grand		
	Males.	Females	Males.	Females.	Males.	Females	Males.	Females.	Total.		
Malvan	22,953	22,070	18,023	21,602	15,925	19,067	56,901	62,739	119,640		
Total	187,661	176,507	134,024	165,147	132,034	145,676	453,719	487,330	941,049		
		MUSALMA'NS.									
Dapoli	3335	2957	2669	3450	2639	3495	8643	9902	18,545		
Guhagar	1101	1068	678	928	681	714	2460	2710	5170		
Chiplun	3039	2666	16 <mark>87</mark>	2698	1782	1946	6508	7310	13,818		
Sangameshvar	1046	1038	580	856	592	733	2218	2627	4845		
Ratnagiri	3544	3222	19 <mark>7</mark> 8	2 992	2134	2063	7656	8277	15,933		
Rajapur	2616	2475	15 <mark>13</mark>	1965	1599	1448	5728	5888	11,616		
Devgad	701	683	428	565	410	379	1539	1627	3166		
Malvan	347	313	326	301	235	219	908	833	1741		
Total	15,729	14,422	9859	13,755	10,072	10,997	35,660	39,174	74,834		
			C	HRISTIA	NS AND	PA'RSIS.	*				
Dapoli	27	41	35	34	37	34	99	109	208		
			2		2		4		4		
Guhagar	ara	1shi	7	2	5	1	12	3	15		
Chiplun			2				2		2		
Sangameshrar	2		1				3		3		
Ratnagiri	12	7	42	16	38	4	92	27	119		
Rajapur	24	28	27	21	32	14	83	63	146		
					1		1		1		
Devgad	144	139	214	135	132	99	490	373	863		
Malvan	396	370	333	334	219	236	948	940	1888		
			2		1	1	3	1	4		
Total	605	585	661	542	463	388	1729	1515	3244		
			4		4	1	8	1	9		

 $[\]ensuremath{^{*}}$ The separate figures represent the number of Parsis.

Ratnagiri Population, 1872. Sub-divisional Details — (continued).

		TOTAL.									
SUB- DIVISION.	Up to 12	2 years.	From 1	2 to 30.	Above 3	0 years.	Tot	al.	Consus d		
	Males.	Femal- es	Males.	Femal- es.	Males.	Femal- es.	Males.	Femal- es.	Grand Total.		
Dapoli	27,863	25,277	19,893	23,992	22,059	24,053	69,815	73,322	143,137		
Guhagar	15,747	14,897	10,608	13,791	10,635	11,788	36,990	40,476	77,466		
Chiplun	36,858	33,832	25,195	32,277	23,645	25,327	85,698	91,436	177,134		
Sangameshvar	18,710	17,315	12,726	16,076	12,232	13,907	43,668	47,298	90,966		
Ratnagiri	24,527	22,463	16,971	21,737	16,764	17,279	58,262	61,479	119,741		
Rajapur	33,670	32,618	22,771	28,454	24,3771	26,608	80,818	87,680	168,498		
Devgad	22,924	22,359	17,7 <mark>00</mark>	20,880	16,481	18,577	57,105	61,816	118,921		
Malvan	28,696	22,753	18,684	22,237	16,380	19,523	58,760	64,513	123,273		
Total	203,995	191,514	144,5 <mark>4</mark> 8	179,444	142,573	157,062	491,116	528,020	1,019,136		

From the, above statement it appears that the percentage of males on the total population was 48.18, and of females 51.82. Hindu males numbered 453,719, or 4822 and Hindu females numbered 487,330, or 51.78 percent of the total Hindu population; Musalman males numbered 35,660 or 47.65 per cent, and Musalman females 39,174 or 52.35 per cent of the total Musalman population. Christian males numbered 1729 or 53.29 per cent, and Christian females numbered 1515 or 46.71 per cent of the total Christian population. Parsi. males numbered 8 or 88.88 per cent, and Parsi females numbered 1 or 11.12 per cent of the total Parsi population.

Health.

The total number of infirm persons was returned at 4467 (males 2766, females 1701), or forty-three per ten thousand of the total population. Of these 608 (males 415, females 193), or six per ten thousand were insane; 196 (males 125, females 71), or two per ten thousand, idiots; 871 (males 508, females 363), or nine per ten thousand, deaf and dumb; 1555 (males 746, females 809), or fifteen per ten thousand, blind; and 1237 (males 972, females 265), or twelve per ten thousand, lepers.

Age.

The following tabular statement gives the number of the members of each religious class of the inhabitants according to sex at different ages, with, at each stage, the percentage on the total population of the same sex and religion. The columns referring to the total population omit religious distinctions, but show the difference of sex:

Ratnagiri Population by Age, 1872.

		HIN	DUS.			MUSA	LMA'NS.	
AGE.	Males.	Percentage on total males.	Females	Percentage on total females.	Males.	Percentage on total males.	Females.	Percentage on total females.
1 year	19 679	4.33	20,142	4.13	1724	4.83	1716	4.38
1 to 6	85,723	18.89	86,360	17.72	7373	20.67	7243	18.48
6 " 12	82,259	18.13	70,005	14.36	6632	18.59	5463	13.94
12 " 20	62,751	13.83	72,470	14.87	4334	12.15	5534	14.12
20 " 30	71,273	15.70	92,677	19.01	5525	15.49	8221	20.98
30 " 40	52,957	11.67	59,590	12.22	4306	12.07	4712	12.03
40 " 50	39,379	8.67	39,956	8.20	2704	7.58	2975	7.59
50 " 60	24,697	5.44	27,418	5.62	1789	5.01	2016	5.14
Above 60	15,001	3.30	18,712	3.84	1273	3.57	1294	3.30
Total	453,719		48	7,330	3	5,660	39	,174

Ratnagiri Population by Age, 1872—(continued)

		_										
	CHR	ISTIANS	S AND PA	'RSIS.		ТО	TAL.	IAL.				
AGE.		Percen- tage on total males.	Females.	Percen- tage on total females.	Males.	Percen- tage.	Females	Percen- tage.				
1 year	67	3.87	74	4.88	21,470	4.37	21,932	4.15				
1 to 6	274	15.84	290	19.14	93,370	19.01	93,893	17.78				
6 " 12	264	15. 26	221	14.59	89,155	18.15	75,689	14.33				
12,, 20	266	15.38	277	18.28	67,352	13.71	78,281	14.82				
	1	12.50										
20 ,, 30	395	22.84	265	17.49	77,196	15.72	101,163	19.15				
	3	37.50										
30 ,, 40	213	12.32	160	10.56	57,476	11.70	64,462	12.20				
40,, 50	139	8.01	112	7.39	42,225	8.59	43,044	8.15				
	3	37.50		1.00								
50 ,, 60	77	4.45	1	4.49	26,564	5.40	29,502	5.58				
	1	12.50	68									
Above 60	34	1.96	48	3.17	16,308	3.32	20,054	3.79				
Total	1729		1515		491,116		528,020					
		8	1									

Religion.

The Hindu population of the district belongs, according to the 1872 census, to the following sects:

VAISHNAVS.								LINICECTA		
Rama- nuj.	Valla- bhachari.			Svami- nara- yan.	LINGA'- YAT.	SHAIVS.	ASCETICS.	UNSECTA- RIAN Hindus.	SHRA'- VAKS.	TOTAL.
26	660	1	506	1	6340	931,509	517	12	1477	941,049

From this statement it would seem that, of the total Hindu population, the Shaivs numbered 937,849, or 99.66 per cent; the Shravaks or Jains, 1477, or 0.15 per cent; the Vaishnavs, 1194, or 0.12 per cent; and the unsectarian classes 529, or 0.05 per cent. The Musalman population belonged to two sects, Sunni and Shia; the Sunnis numbered 74,729 souls, or 99.86 per cent of the total Musalman population; and the Shias. 105 souls or 0.14 per cent. The nine Parsis were Shahanshais. In the total of 3244 Christians there were one Baptist, 532 Catholics, and 2711 Protestants including 17 Episcopalians, 28 Presbyterians, and 2666 native Christians.

Occupation.

According to occupation the 1872 returns divide the population into seven classes:

- I,—Employed under Government or local authorities, numbering in all 4491 souls or 0.44 per cent of the entire population.
 - II.—Professional persons, 5554 or 0.54 per cent.
 - III.—In service or performing personal offices, 9501 or 0.93 per cent.
 - IV.—Engaged in agriculture and with animals, 450,760 or 44.23 per cent.
 - V.—Engaged in commerce and trade, 18,626 or 1.82 per cent.
- VI.—Employed in mechanical arts, manufactures and engineering operations, and engaged in the sale of articles manufactured or otherwise prepared for consumption, 65,783 or 6.45 per cent.
- VII.—Miscellaneous persons not classed otherwise, (a) wives 102,735 and children 351,516, in all 454,251 or 44.57 per cent; and (b) miscellaneous persons 10,170 or 100 per cent; total 464,421 or 45.57 per cent.

Dress.

As regards the style of living of the people of Ratnagiri, the dress does not differ from that worn in other Marathi-speaking districts. In the rainy season men of the richer classes wear a long armless cloak of thick red baize or flannel, somewhat peaked at the top, and drawn over the head like a cowl or hood. Of the poorer classes both men and

women wear a thickly-folded blanket drawn over the head and falling to about the waist. Stout umbrellas of oil cloth and cane work, or of palm leaves are also used, and when at work in the fields, husbandmen hang on their heads a peaked and rounded teak or palm leaf shield. Almost all classes prefer sandals to the red Deccan slippers. A peculiar custom in Malvan and Vengurla is that all Hindu and native Christian women who can afford it, constantly wear chaplets or wreaths of red and yellow flowers. This custom is said to hare been brought from Goa. The flowers used are the Calysaccion longifolium surangi, the Amaranthus globosus gend or buntar, the Pandanus odoratissimus kevda, the Calatropis gigantea mandar, the Chrysanthemum indicum shevanti, and the Ruellia infundibuliformis aboli. They are grown in every village, and numbers of flower strings are daily brought to market. Shevanti, kevda, and aboli wreaths wither rapidly in two days at the outside. The others keep their colour and freshness for nearly a month. The shevanti and kevda are costly and are used only by the rich.] With few exceptions all sleep on cots strung with coir rope. Some houses have chairs and stools, but of most the chief furniture are chests, boxes, and brass vessels. Of the brass articles perhaps the most striking is a large lamp and pedestal standing often two feet from the ground. Coarse China bowls are not uncommon.

Food.

The meals are taken at noon and after sunset. Among the well-to-do rice is the staple food. With the rice clarified butter, a curry of buttermilk or onions with a tamarind or kokam dressing, and vegetables fried in sweet oil and spiced are taken. Buttermilk, tak, is so indispensable that almost every house, except the poorest, keeps a cow or buffalo. On festive days, balls of wheat flour, with molasses and clarified butter, are eaten, and most families have a store of yams. The lower classes eat nachni instead of rice, and the poorest vari and harik, an unwholesome grain unless soaked in hot water, and urid, a pulse cheaper than gram or tur. Fish, chiefly dried, is used by all Musalmans and low class Hindus as a daily article of food, and goat mutton and poultry are eaten on festive days. Except the very poorest, the people of Malvan are specially careful not to expose themselves to the sun. Every day before going out Shenvis and all classes, except strict Brahmans, take a draught of weak rice water, pej, and with it a small quantity of fresh cocoanut kernel. The midday meal is then eaten at about 1 P.M. Brahmans, who cannot break their fast before washing, take their morning meal at a much earlier hour than is usual elsewhere. The object of the early draught of rice water is said to be to guard against the heat of the sun and to keep, off attacks of biliousness. In the evening all classes anoint their heads with cocoanut oil, in the belief that it preserves the eyesight and cools the head. All keep early hours. Late dinners and night work are carefully avoided. In the south of the district the fear of biliousness and the heat of the sun seems to guide every action of the people's life.

POPULATION

Brahmans.

Under Brahmans come eight divisions with a strength of 66,046 souls (males 32,223, females 33,823) or seven per cent of the total Hindu population. Of these 30,053 (males 14,527, females 15,526) were Ghitpavans or Konkanasths; 14,367 (males 7146, females 7221) Karhadas; 777 (males 423, females 354) Deshasths; 5727 (males 2776, females 2951) Devrukhas; 70 (males 46, females 24) Kirvants; 40 (males 28, females 12) Kanojas; 1277 (males 648, females 629) Javals; 13,669 (males 6579, females 7090) Shenvis and 66 'Other Brahmans'.

Chitpavans.

CHITPAVANS, [According to Molesworth, the Konkanasths were, in allusion to the story of their being sprung from corpses brought to life by Parshuram, nicknamed Chitpavans or pure from the pyre, chita. Turning this from a nickname into a title of honour, the Konkanasths say that it means pure of heart, chitta.] also known as Konkanasths or the chief Konkan Brahmans, have a total strength of about 30,000 souls or 45.42 per cent of the Ratnagiri Brahman population. Parshuram hill, near Chiplun, is the head-quarters of the caste whose original limits are said to be the Savitri in the north and the Devgad river in the south. They have no sub-divisions, all eating together, and intermarrying. [The fourteen Konkanasths gotras are: kashyap, vasishtha, vishnu-vardhan, kaundinya, bharadvaj, gargya, kapi, jamdagnya, vatsa, babhravya, kaushik, and atri. Their sixty ancient surnames are: of the kashyaps, Lele, Ganu, Jog, Lavate, Gokhale; of the shandilyas, Soman, Gangal, Bhate, Ganpule, Damle, Joshi, Parchure; of the vasishthas, Sathe, Bodas, Ok, Bapat, Bugul, Dharu, Gogte, Bhabhe, Pongshe, Vinjhe, Sathaya, Kidmide, Goundye; of the *vishnuvardhans*, Nene, Paranipe, Menhadale; of the *kaundinyas*, Patvardhan, Phanse; nityundans, Vaishampayan, Bhadbhoke; of the bharadvajs, Achavla, Tene, Darve, Gandhare, Ghanghurade, Ranade; of the gargyas, Karve, Gadgil, Londhe, Mathe, Dabke; of the kapis, Limaye, Khambete; of the jamdagnyas, Pendse, Kunte; of the vatsas, Malse: of the babhravyas, Bal, Behere; of the kaushiks, Gadre, Bama, Bhave, Vad, Apte; of the atris, Chitale, Athavle, Bhadbhoke. Besides the sixty ancient surnames named above, there are 244 modern surnames current among them, making a total of 304. Of the ancient surnames 37 belong to the ashvalayans and 23 to the taitiriyas; while of the modern, including that of Bhat, by which the family of the Peshwa was denominated, 178 belong to the ashvalayans and 66 to the taitiriyas. Dr. Wilson's Indian Caste, 19, 20.] Of their early history or settlement in Ratnagiri no record remains. The local legend makes them strangers descended from fourteen shipwrecked corpses who were restored to life by Parshuram. In former times, little thought of and known chiefly as

messengers or spies, harkaras, the success of their patrons, the Maratha chiefs, brought out their keen cleverness, good sense, tact, and power of management, and their caste supplied not only the ruling family, but most of the leading men who during the eighteenth century held together the loose Maratha confederacy. Fair and pale with, in most cases, light eyes, Their colour is greenish-grey rather than blue. They are known in Marathi as cat-eyes, ghare or manjare dole. they are a well-made, vigorous class, the men handsome with a look of strength and intelligence; the women small, graceful, and refined, but many of them delicate and weak-eyed. In their homes they use a peculiar dialect, [The following are some of its peculiarities: ched, girl; hay, a respectable expression used amongst women in addressing their elders; ke(n), where, kita(n), what; sa(n), am; me(n), I; vincha(n), just before sunset; te nin, he; tyahaati, thence; nay, river: phal, shut; pahanpati, early in the morning ;theyala(n), put; hara(n), want; ghevni. taking; gecha(n). coming: had. bring: okhad, medicine; matha(n), with me: gota. near; kai, when; haday, to force downwards; chakhot, good; bakara, for a while; pekh, stop; atvar, kitchen room; kinla, for what; nanka (n), don't want; yatha, here; kedla, when; bolche, speaks.] in many respects not easily followed by Marathi-speaking Deccan Hindus. Out of doors they speak pure Marathi differing from that spoken in the Deccan only by the more marked pronunciation of the nasal sound, anusvar. Many of the best coast villages, owned and field by Chitpavans, are for cleanliness and arrangement a pleasing contrast to the ordinary Indian village. The houses, built of stone, stand in cocoanut gardens or in separate enclosures, shaded with mango and jack trees, and the village roads, too narrow for carts, are paved with blocks of laterite and well shaded. Ponds, wells, and temples add to the general appearance of comfort. The Chitpavans are very clean and tidy. The men wear a turban, pagote, [School boys wear a piece of cloth rumal or pheta instead of a turban.] a sleeved waistcoat, bandi, a coat, angarkha, the shoulder cloth, angvastra, the waistcloth, dhotar, and country made shoes, joda, in the fair season, and during the rains sandals, vahanas. Very few Ratnagiri Chitpavans have taken to the broadcloth coats, trousers, and polished leather shoes so common among the younger of their Bombay caste fellows. The women wear the long full robe, lugde, and shortsleeved bodice, choli, covering both the back and chest. They wear no shoes, and none, except the very rich, wear woollen shawls. Very neat in their dress and way of wearing the hair, their clothes are generally of cotton, white, or dyed some single bright colour, pink, scarlet, black, green, or primrose. Of ornaments, the men sometimes wear in their right ear a gold pearl-ornamented ring, bhikbali, and gold finger rings, angthya or jodvi, and the women a pearl-studded nosering, nath, and earrings, bugdya, gold hair ornaments, rakhdi, ketah, chandrakor, and keuda, gold neck ornaments, thushi, putlyachimal, sari, patlya, kantha, laffa, and tik, and gold bracelets, goth, tode, patlyas, and bangdyas. Young women and girls generally wear silver anklets, sakhlyas, and a, few women wear gold finger

rings, angthyas. Girl widows, though they no longer have the red forehead mark, kunku, are allowed to wear a bodice and a robe of any colour and ornaments. When she comes of age the girl widow has her head shaved, her glass bracelets broken and her bodice taken off, and is allowed to wear no robes except white or red and no ornaments except gold finger-rings. Like Karhadas, Deshasths, and other Maharashtra Brahmans who eat together, except on Vedic sacrificial occasions, Chitpavans are forbidden animal food and spirituous liquors. Like other Konkan people they take large quantities of buttermilk, tak. Though not superior to Deshasths and Karhadas in rank, they are held in much respect by most Ratnagiri Hindus, who believe that the sacred texts, mantras, repeated by a Chitpavan have special worth. A very frugal, pushing, active, intelligent, well-taught, astute, self-confident, and overbearing class, they follow almost all callings and generally with success. Many Chitpavans live by begging. Some trust altogether to charity, others add to their profits as husbandmen by starting from their homes in July, after the crop has come up, and, begging through the rich coast villages as far as Pen and Panvel, come back in time for harvest. [Some Chitpavan, as well as other Ratnagiri Brahman beggars, pass several months every year in Bombay, Baroda, and other places taking charity gifts, dan dakshina, or earning some reward for performing religious services to the lay, grahasth, members of their caste.] Others are very skilled husbandmen owning and tilling the richest garden lands in the district, as the local proverb says 'give waste land to a Chitpavan and he will turn it to gold.' Among cultivating Chitpavans many in good positions as khots or upper landholders act as moneylenders, and some trade chiefly in grain and other field produce. Others have succeeded well as pleaders, generally increasing their gains by lending them in usury. They have over all India a good name for their knowledge of Hindu lore, and in Bombay and Poona, some of the most distinguished native scholars in Sanskrit, mathematics, medicine, and law, are Ratnagiri Chitpavans. Their scruples about serving under the British have long passed away, and now their favourite occupation is Government service, in which they hold places from the humblest village accountant, schoolmaster, and clerk, to very high and responsible posts. For some years after the transfer of Ratnagiri to the British, the Chitpavans were a discontented class. Though every effort was made to give them places, many of the best families, 'from a feeling which deserved respect', refused to take service under the British. Mr. Dunlop, 15th August 1824, Rev. Rec. 121 of 1825, 76-78.]

Ever ready to push their fortunes in other British districts or in native states, as a class they are successful and well-to-do. All are Smarts, that is followers of Shankaracharya the high priest of the doctrine that God and the soul are one, advait vedant mat, and with equal readiness worship Vishnu, Shiv, and other gods. Their chief places of pilgrimage are Parshuram in Chiplun, Ganpatipule in Ratnagiri, Hareshvar in Janjira, and other places held sacred by all

Hindus, as Benares, Allahabad, Gaya, Pandharpur, Nasik, and Mahabaleshvar. Like other Brahmans their chief household gods are Ganpati, Annapnrna, Gopal Krishna, Shaligram, and Suryakant. Their family priests belong to their own caste. They are divided into religious, bhikshuks, and lay, grahasths. The religious class can take to other occupations besides acting as priests. A layman may perform ceremonies, but, unless forced to do so, he does not act as a priest, or receive charity gifts, dan dakshina. Caste disputes come before a meeting of the local community of Brahmans, including Chitpavans, Karhadas, Deshasths, Yajurvedis, and Devrukhas, that is all the local Brahman sub-divisions who eat together. When a difficult religious question is the Subject of dispute, the caste refer the point to some learned divines, shastris, at places like Benares and Nasik, or to the themselves. Shankaracharya. The Chitpavans marry among [Marriages between Chitpavan and Karhada families are not unknown. ' Though condemned by the more aristocratic, families, they are contracted without scruple, and involve no pains and forfeitures, either social or religious.' Rav Saheb Vishvanath narayan Mandlik, C.S I. jour. Br. Ro. As. Soc. VIII. 9.]

Karhadas.

The KARHADAS, The great Marathi poet Moropant (1750) belonged to this caste.] with a strength of 14,367 souls, are supposed to take their name from Karhad in the Satara district near the meeting of the Krishna and Koyna. They are found in small numbers over the whole district especially in Rajapur and Devgad. They are probably the descendants of one of the Rishis or Tapasis who fixed on the holy meeting of the Krishna and Koyna rivers as his settlement. The slander in the Sahyadri Khand, that the Karhadas sprang from asses' or camels' bones, is probably a pun on the word karhad, as if khargad, ass-bone. Tradition has a reproach against their name that in former times they occasionally poisoned their sons-in-law, visitors, and strangers as sacrifices to their goddess in the hope of securing offspring, vanshvriddhi. They have many family stocks, gotras, whose exact number is not known. Their original country is said to stretch along the Krishna from its meeting with the Koyna on the north to the Vedavati (Varna) on the south, but they are now nearly as widely scatteredas other Maharashtra, Brahmans. They have nosub-divisions, all eating together and intermarrying. Though some are fair, as a class they are darker than the Chitpavans, none of them having grey eyes. Except some local dialectic difference, their Marathi is the same as that of Deccan Brahmans. In house, dress, and food, they do not differ from Chitpavans. They are clean, neat, intelligent, hardworking, hospitable, and well-behaved. At the same time they are more formal, and less thrift yand enterprising than the Chitpavans. Many of the Karhada village priests and astrologers are cultivators, some as ordinary husbandmen, and others, over the whole district except Malvan and Devgad in the south, as superior landholders, khots. They also engage in moneylending and trade in grain. The leading bankers

of Kharepatan in Devgad are Karhadas.] But, their chief occupation is Government service.. On the whole their condition is middling; few of them are rich, still fewer poor, and almost none beggars. Their religion does not differ from that of the Chitpavans. All Karhadas are Rigvedis. Their chief household goddesses are, besides those worshipped by the Chitpavans, Mahalakshmi and Durga. As among Chitpavans, caste disputes are settled at a meeting of all the local Brahmans who eat together. Unlike the Chitpavans the marriage of a brother's daughter and of a sister's son is not, unusual. They sometimes marry with Deshasths. Strong, temperate, hardworking, and not less anxious than the Chitpavans to educate their children, the Karhadas are a rising class.

Devrukhas.

DEVRUKHAS, Devrukha comes from the Sanskrit Dev-Rishi or Devarshi. The Devarshis were a shakha the Atharva-Ved. The Devrukhas may be remnants of this shakha. Dr. Wilson's Indian Caste, 25.] with a strength of 5727 souls and their head-quarters at Devrukha in Sangameshvar, are found in considerable numbers all over the Ratnagiri sub-division, and occasionally in all parts of the district except Malvan and Devgad. They are said to have originally come, to these parts as revenue farmers. Their only division is into family stocks, gotras. They are generally strong and healthy like the Karhadas, but somewhat darker. Their women are strong, dark, and healthy. Except for some local peculiarities their home tongue is the ordinary Marathi. Their houses, dress, and food do not differ from those of the Karhadas. The Devrukhas are hardworking, hospitable, sober, thrifty, and hot tempered. As a class they are rather poor, many of them being employed as cooks by other Brahmans. Moat are cultivators, both small and large proprietors. They are much given to irrigation, most of their villages standing in places where good supplies of river water are available. Only a few engage in trade or enter Government service. Among Brahmans they hold rather a low position. Several Chitpavans, Karhadas, and Deshasths object to dine with them, rather because they are thought poor and unlucky, than from the idea that they are of lower origin. Their religion does not differ from that of the Chitpavans. They marry among themselves. Their caste disputes are decided at a meeting of all the local Brahmans who eat together. They send their children to school, but on the whols are not a rising class.

Deshasths.

DESHASTHS, with a strength of 777 souls, originally from the Deccan, are found all over the district, but chiefly in Khed, Chiplun, and Ratnagiri. Of their arrival in the Konkan no special story is told. They would seem to have come in small numbers at different times. Except family stocks, *gotras*, of which the exact number is not known, they have no sub-divisions. [Deshasths are generally Rig-Vedis, but some of them read the Sama-Ved and also the Atharva-Veda. Dr.

Wilson's Indian Caste, 18.] Most of them are darker, coarser looking, and more vigprous than Chitpavans or Karhadas. They speak pure and correct Marathi. Except that they are less neat and clean, their houses and dress do not differ from those of Chitpavans. They marry as a rule among themselves and sometimes with Karhadas. In Khed they are hereditary district officers. Some are khots and some are underlandholders; others are traders and shopkeepers, and a few are in Government service. Though not so clever or frugal as the Chitpavans, they are more lively and hospitable. Besides the gods worshipped by the Chitpavans the Deshasths worship Khandoba. In the Sahyadri Khand, their original country is said to extend from the Narbada to the Krishna and the Tungbhadra rivers excluding the Konkan. In religion they do not differ from Chitpavans or Karhadas. As among Chitpavans and Karhadas, caste disputes are settled at a meeting of the whole local community of Brahmans who eat together. They send their children to school, and on the whole are a rising class.

Kirvants.

KIRVANTS, with a strength of 70 souls, are found only in a few Malvan villages. According to the Sahyadri Khand they are sprung from twelve Brahmans, whose original seat was near the Gomanchal (region of the Gomant mountain). As a class they are badly off, some of them cultivating but most living as beggars. They sometimes marry with Chitpavans. But these Chitpavans are then considered Kirvants, and other Chitpavans do not intermarry with them. Their name, kirvant, is generally said to mean insect, kide, killers, because in working their betel gardens they destroy much insect life. [Ind. Ant. III. (1874), 45.] Another explanation is that the proper form of the name is Kriyavant, and that they were so called because they conducted funeral services, kriya, an occupation which degraded them in the eyes of other Brahmans. [Mr. Ganpat Venkatesh Limaye, B.A., Dep. Ed. Inspector, Ratnagiri.]

Shenvis.

SHENVIS, with a strength of 13,669 souls, are found all over the district, but chiefly in Malvan and Vengurla. Goa was their original Konkan settlement, where, according to the Sahyadri Khand, they are said to have come at Parshuram's request from Trihotra or Tirhut in northern India. This legend is probably confirmed by the fact that especially in Goa, Shenvis, like Bengalis, freely rub their heads with oil, and also like them are fond of rice gruel, *pej*, and fish. The honorific *Bab*, as in Purushottam *Bab*, is perhaps a corruption of *Babu* in Bengali. [Rav Bahadur Shankar Paudurang Pandit, Oriental Translator to Government.] Their broad pronunciation of vowel sounds is also like that of the Bengalis. [Professor R. G. Bhandarkar, M.A., Hon.M.R.A.S.] Though they fled from Goa. to escape conversion by the Portuguese, every family has still a private idol there. They claim to be Sarasvat Brahmans of the Panch Gaud order. Besides Shenvis proper, who are of two sects Smarts and Vaishnavs, there are seven

local divisions, [They belong to ten gotras, Bharadvaj, Kaushik, Vatsa, Kaundinya, Kashyap, Vasishtha, Jamdagnya, Vishvamitra, Bardeskars, Kudal-deskars, Bhalavalkars, Gautam.] Pednekars, Lotlikars, Divadkars, and Khadpe-kajules, each claiming superiority over the other, dining together in some cases, but not intermarrying. Of the local divisions, except Bardeskars, none seem to have come from Goa. Though some are fair, as a class they are darker than the Chitpavans. Their women are well made, fair, and graceful. They speak Marathi, but at home with many Konkan peculiarities. [Among the peculiar words used by Ratnagiri Shenvis are: Jhil, son; chedu, girl; bapus, father; aus, mother; daji, an honorific; ghov, husband; bhitur, within; kha(n)y, where; asa(n)y, am; tena, by him; tha(n)y, there; nhay, river; dhak, shut; phatphati, early in the morning; vhaya(n), want; yeta(n)y, I come; okhad, medicine; bakra, for a while; rav, stop; randap ghur, kitchen room; kityak, for what; ha(n)y, here. In masculine nouns the Marathi final a, is generally changed to o as ghodo, horse; ambo, mango; and dolo, eye. The plural of feminine nouns in i also ends in o as nadyo, rivers; kathyo, sticks. The third person singular of verbs ends in a instead of o and e in the present, and in o instead. of a in the past, as, he or she goes, jata; he went, gelo. Their houses are strong and well built, but not so clean as those of the Chitpavans. Their dress is like that of the Chitpavans. The women are fond of decorating their hair with flowers. All Shenvis eat fish and some eat mutton. Other Brahmans assert that the Shenvis are inferior, trikarmi, Brahmans. That is, of the six Brahman functions, karmas, sacred study, sacred teaching, alms-giving, almsreceiving, sacrificing for one's self, and sacrificing for another, a Trikarmi is vested only with three, sacred study, alms-giving, and sacrificing for one's self.] But among the Hindus of the district, they hold a higher position than the Javal Brahmans. As a class they are well-to-do. Most of them are superior landholders and hereditary officers, kulkarnis and others, and only a few are cultivators. Others engage in cotton and grain trade; some are shopkeepers and bankers, and a good many enter Government service. Fond of show and somewhat extravagant, in intellect and energy Shenvis can hold their own even with Chitpa-vans. They rose to high office under Sindia, and now, in Bombay and elsewhere, hold high posts as barristers, professors, pleaders, physicians, and merchants. Most of them are well-to-do. Their chief household gods and goddesses are Mangirish Mahalakshmi, Mhalasa, Shanta-Durga, (Mangesh), BinduMadhav, and Saptakotishvar. They have two head priests, svamis, one Smart living in Sonavda in Kanara, and the other Vaishnav living in Goa. They have rich monasteries, maths, in Khanapur, Karwar, Bombay, Nasik, and Benares. Their family priests are either Shenvis or Karhada Brahmaus. They have no peculiar customs. Caste disputes are settled by a caste meeting of the members, and finally referred to the head priests, svamis. Eager to educate their children, and ready to follow any promising calling or profession, Shenvis seem likely to keep their high place as one of the

most intelligent and prosperous classes of west India Hindus.

Javals.

JAVAL Brahmans, with a strength of 1277 souls, have their headquarter at Burundi in Dapoli, and are found in small numbers over almost the whole of that sub-division. According to the ordinary story, the Javals take their name from being shipwrecked in a storm, javal. They probably always claimed to be Brahmans. But their position was not recognised till (1767) Parshuram Bhau Patvardhan, a relation of the Peshwa's, in return for some service, established them in the rank of Brahmans. They have no divisions. Sturdier and much darker than Chitpavans, their home tongue is a rough Marat hi like that spoken by Kunbis. Their bouses, seldom large or well built, do not differ from those of the better class of cultivators. Except that they are less careful of their appearance, the dress, both of men and women, does not differ from that of Chitpavans. Their rules about food come between those of the Brahman and other classes. They eat fish but no other kind of animal food, and refrain from liquor. Though they rank as Brahmans they hold a low social position, other Brahmans neither marrying nor dining with them. Some of them are employed by other Brahmans as water carriers, but almost all are cultivators. They are frugal, hardworking, and skilful husbandmen. As domestic servants they are honest, good tempered, and well-behaved. They worship Vishnu and Shiv, and have almost the same household gods as Chitpavans. Caste disputes are settled at a general meeting of the members. They do not send their children to school, and show no sign of rising above their present state as cultivators.

Kanojas.

KANOJAS, numbering 40 souls, originally came, as their name shows, from Kanauj in north India. They seem to have come into Ratnagiri in small numbers at different times, either as beggars or as pensioned soldiers. Though not so fair as the Chitpavans, they are larger and bettor made. Their home tongue is Hindustani, but they also speak Marathi. Their houses are small but clean. In their dress and food they do not differ from the Chitpavans. They neither dine nor intermarry with Konkanasth Brahmans. Except some of the pensioners who are well-to-do, they are poor, working either as water carriers or earning their living by begging. They are found only in towns, and none engage in cultivation or trade. They are clean, neat, hardworking, and honest, but hot tempered. Most of them worship Vishnu and are religious. They marry among themselves.

Writers.

The only class of Writers are Kayasth Prabhus with a strength of 664 souls (males 341, females 323). They are found in very small numbers all over the district, but chiefly in the north, in Dapoli, Chiplun, and Khed. Among Kayasth Prabhus there are no subdivisions. Except that none have light eyes, they do not, in appearance or dress,

differ from Brahmans. They speak Marathi correctly and have no separate dialect. They eat fish, mutton, and game, but not domestic fowls. They are clean, neat, and hard- working, and in former disturbed times had a name for faithfulness and bravery. Though frugal in straitened circumstances, when prosperous they are hospitable and fond of show and pleasure. Some are in Government service, some are cultivators, and a few are hereditary officers or the holders of land grants. In religion they do not differ from Brahmans. Their chief household god and goddess are Khandoba and Bhavani. Their family priests are Brahmans. They do not intermarry with other castes. Caste disputes are settled by a mass meeting of the castemen. They send their children to school, and are on the whole prosperous.

Traders.

Under the head of Mercantile, Trading, and Shopkeeping classes come six castes with a strength of 36,299 souls (males 18,142, females 18,157), or 3.85 per cent of the. whole Hindu population. Of these 32,569 (males 15,936, females 16,633) are Vanis; 1216 (males 798, females 418) Lingayats; 1051 (males 553, females 498) Jains; 927 (males 507, females 420) Gujars; 507 (males 325, females 182) Bhatias; and 29 (males 23, females 6) Marvadis.

Vanis.

The VANIS, found all over the district and said to have come from north India, are known by the names of the towns where they first settled, Sangameshvari, Patane, The Patane Vanis are said to take their name from Patan in Satara.] and Kudali. These sub-divisions do not marry or eat together. Among them the Kudalis claim superiority wearing the sacred thread and forbidding widow marriage. They all speak Marathi, but those who live in Malvan and Vengurla have many Konkan peculiarities. Most of them live in good houses. They are active, intelligent, sober, thrifty, and in fair condition. They allow widow marriage, eat animal food, and drink liquor. Most Vanis are shopkeepers, some are husbandmen, and a few are Government servants. Their family priests are Brahmans, and they do not differ from Marathas and Kunbis in religion. They eat with no other caste. They show special respect to members of certain families called Shetias, who have the hereditary right to preside at caste meetings. Other families known as Mahajans, inferior to Shetias, hold a position of special honour. They send their children to school and on the whole are a rising class.

Lingayats.

LINGAYATS, 1216 souls, are found chiefly in Rajapur and Sangameshvar. They are said to be partly immigrants from the Deccan, and partly local converts especially from the neighbourhood of Sangameshvar. [Basav (1150), the founder of the Lingayat sect, is said to have settled for some time at Sangameshvar. Wilson's Mackenzie Collection, 11. 4 and 10.] Rather dark in colour, most of

them live in houses of the better class, and take neither animal food nor liquor. They are in middling circumstances, some of them husbandmen, others retail dealers and pedlars who buy stocks of cloth and spices in the towns, and carrying them to villages sell or barter them for grain. They have separate temples and priests of their own known as jangams. The Lingayats worship the ling, and always carry an image of it in a small box, either tied to the left arm or hanging round the neck. Their religion widely differs from that of other Hindus by holding that a true worshipper cannot be made impure, and so setting the members of the sect free from the need of purification after a family birth or death. Originally doing away with caste differences, after the first spread of the new faith, the old social distinctions regained their influence, and the sect is now broken into several sub-divisions who neither eat together nor intermarry. Not a very vigorous or pushing class, the Lingayats take little trouble to have their children taught, and show no signs of rising above their present position.

Jains.

JAINS, 1051 souls, are found chiefly in the south. They are believed to have come from the Karnatak and in appearance resemble Lingayats. Most of them live in good houses. They are strict in matters of diet, using no animal food and taking no liquor. Among Vanis they hold a good but isolated position. Traders, most of them well-to-do, they are frugal and thrifty and have a good name for fair dealing. They are religious, worshipping the saints called Tirthankars. They have their over priests, Gorjis and Jatis. Their only temple at Kharepatan is dedicated to Parasnath the twenty-third saint. They are educating their children and show signs of improvement. Besides those Jain Vanis who are more or less late comers, and openly and carefully observe the rules of their faith, there are, in certain classes, traces of a time when the Jain was the ruling form of faith. [A king of Savantvadi, a very learned jain, is mentioned in an old Belgaum legend Ind. Ant. IV. 140]

Traces of Jainism.

These traces are chiefly found among Guravs, or temple servants, and Kasars, or coppersmiths. The members of both of these classes hold aloof from Brahmans and Brahmanic Hindus, refusing, however high their caste, to take water from their hands, and the Kasars have as priests, gurus, Jains from the south Deccan. The Guravs, servants in village temples, like the Kasars, in matters of eating and drinking, hold aloof from Brahmanic Hindus. Though the village temples are now dedicated to some Brahman god, there are near many of them the broken remains of Jain images, and most temple land grants seem to date from a time when Jainism was the state religion. A curious survival of Jainism occurs at Dasara, Shimga, and other leading festivals when the village deity is taken out of the temple and carried in procession. On these occasions, in front of the village god's

palanquin, three, five, or seven of the villagers, among whom the *gurav* is always the leader, carry each a gaily painted long wooden pole resting against their right shoulder. At the top of the pole is fastened a silver mask or hand, and round it is draped a rich silk robe. Of these poles the chief one, carried by the *gurav*, is called the Jain's pillar *Jainacha Khamb*. [Contributed by Rao Bahadur Shankar Pandurang Pandit, Oriental Translator to Government.]

Gujars.

GUJARS of the Porvad, Nema, Umad, Khadayata, and Shrimali subdivisions are found all over the district, especially in Dapoli, Khed, and Chiplun. They are settlers from Gujarat and occasionally visit their own country. Though they understand and speak Marathi, their home tongue and the language in which they keep their accounts is Gujarati. They are fair and most of them strong and healthy. They generally live in good brick-built houses, and dress like Brahmans, except that the end of the women's robe, lugda, is drawn over the left instead of the right shoulder, and that they do not pass the robe between the legs. They are strict vegetarians, and for their evening meals never take rice, but eat bread, pulse, and milk. All are traders dealing in grain, spices, and cloth, and lending money. Most of them live in towns, occasionally moving about the country either as pedlars or to recover their outstandings. As a class they are well-to-do. Except Porvads, Nemas, and Umads, who are Shravaks or Jains, the Gujars are Vaishnavs of the Vallabhachari sect. They have their own family priests, Gujarati Brahmans. They marry only among their own subdivisions and often form connections with families in Gujarat. The Vaishnavs pay great respect to their head priest, Maharaj, who occasionally visits the large towns. Though they have settled in Ratnagiri for more than a century, Gujar Vanis have kept their own customs and do not mix with the other Vanis of the district. They are bound together as a body, and refer caste disputes to arbitrators chosen at a meeting of all the male members. Anxious to have their children taught, they are as a whole a pushing and prosperous class.

Bhatias.

BHATIAS, with a strength of 339 souls, are found at Chiplun, Rajapur, Malvan, and Vengurla. Coming through Bombay from Catch and north Gujarat, almost all the Bhatias have settled in Ratnagiri within the last fifty years. Most of them can speak Hindustani and a broken Marathi, and even Konkani in Malvan and Vengurla, but their home tongue is Gujarati. They are a strong sturdy class inclined to stoutness, some of them fair with handsome regular features. Almost all live in towns in large well-built houses. They keep to their Gujarati dress. They are strict vegetarians and take no intoxicating drinks. Large merchants and shipowners, their chief dealings are with Bombay, Cochin, and Kalikat. They mostly deal in cotton, grain, cocoanuts, betelnuts, dates, cocoa kernels, molasses, sugar, groundnuts, butter, and oil. A pushing active class, though settled in

Ratnagiri, they occasionally move to Bombay and Cochin. They are prosperous and well-to-do. Careful to teach their children, strong, unscrupulous, and ready to take advantage of any new opening or industry, the Bhatias seem likely to hold the place they have gained as the leading district traders. In 1877 they took the chief part in managing the immense imports of grain for the Deccan and southern Maratha famine districts. Lohanas, twenty in number, are like the Bhatias traders from Cutch and north Gujarat.

Marvadis.

MARVADIS, numbering 29 souls, are found in some of the chief towns of the district. Most of them are late arrivals, coming through Bombay from Marwar. They all know Marathi, but among themselves speak Marvadi. Strong pushing men, they wear the hair long and most of them have long scanty beards. They generally keep to the dress of their own country, the small tightly-wound red and yellow or pink turban, the tight full coat, and the waistcloth The women wear a robe and open-backed bodice and a piece of red or pink cloth thrown over the head and shoulders. They are strict vegetarians and very temperate, allowing few luxuries but tobacco. As their favourite occupation of moneylending is almost entirely in the hands of the superior landholders, Marvadis make little way in Ratnagiri. Besides the few families settled as shopkeepers and traders dealing in spices and cloth, some come yearly in the fair season from Bombay as travelling jewellers. They are Jains by religion with Balaji as their household god. They have no temples in the district. As their number is very small, they generally go to their own country to marry.

Husbandmen.

Under the head of Husbandmen come nine classes with a total strength of 583,730 souls (males 277,868, females 305,862) [The excess of females over males is probably due to the fact that when the census wan taken more men than women were away at work in Bombay and other places.] or 62.02 per cent of the whole Hindu population. Of these 284,267 (males 135,273, females 148,994) were Kunbis; 203,406 (males 97,467, females 105,939) Marathas; 70,796 (males 33,671, females 37,125) Bhandaris; 12,772 (males 5753, females 7019) Shindes; 622 (males 307, females 315) Malis; 488 (males 256, females 232) Pharjans; 319 (males 156, females 163) Ghadis; 4025 (males 1805, females 2220) Mit-gavdas; and 7035 (males 3180, females 3855) Gavdas.

Kunbis.

KUNBIS, with a strength of 284,267 souls, are found all over the district, but chiefly in the northern sub-divisions. According to Hindu books, Kunbis are the descendants of pure Shudras Of their former settlements or the date of their arrival in Ratnagiri nothing has been traced. Their home tongue is Marathi spoken more roughly and less clearly than by Brahmans, but differing little in words or grammar.

They are smaller, darker, and more slightly made than the Deccan Kunbi. The men shave the head except the top knot, and wear the mustache and sometimes whiskers, but never the beard. The women are small, and as a class rather plain and hard featured. Few of them have good houses. Most live in small thatched huts with few signs of cleanliness or order. The men generally work in the fields bareheaded, and with no body clothes except a piece of cloth, langoti, worn between the legs. A few of them, in the cold season, we are woollen waist-coat or blanket thrown over the head, and in the rains a blanket or a rain shield, irle, of plaited palas or kumbha leaves. On holidays, and at weddings and other great occasions, the men wear small turbans generally white, rolled something in the form of the Maratha head-dress, but more loosely and with less care. In the fields the women wear the Marathi robe, *lugde*, Their way of wearing the *lugde* differs from that of the Deccan women. All lower class Konkan women wear it pulled above the knee, the end passed between the legs and tucked into the waistband. In the Deccan it falls below the knees and is not passed through the legs.] sometimes with a bodice, and in the rainy season on their heads a leaf shield. For great occasions they have generally a new robe and bodice. Their staple food is nagli and vari cakes. They do not object to animal food, eating dried fish and chickens, and when they can afford it killing a male goat or sheep. Beef, either of buffalo or cow, they never touch. They eat deer and wild hog and allow animal food at their caste feasts. They rear fowls, and have nothing of the Rajput feeling against eating them. All smoke and a few chew tobacco. They are allowed to drink liquor, and among coast Kunbis drunkenness is not uncommon. Their usual drink is cocoa-palm juice, generally fermented, but sometimes distilled. All are cultivators, steady and hardworking; but from their numbers and the poorness of the soil they are scarcely supported by what their fields yield. Many make up the balance, and earn enough to meet marriage and other special expenses by seeking employment in Bombay, working as carriers, labourers, or garden or house servants, or in the steam spinning and weaving factories where whole families find well paid employment. A very quiet, easy tempered, and orderly class, singularly free from crime, they have much respect for the gods, believing chiefly in such village gods and goddesses as Bahiri, Bhavani, Somai, and Salubai. They believe in witchcraft and evil spirits, and to avert the anger of the gods offer cocoanuts, cocks, sheep, and goats, when any of their family are sick. When a child is to be named, the father goes to a village Brahman and tells him that his wife gave birth to a daughter or son on such and such day at sunrise or sunset as the case may be. The Brahman, referring to his almanac, tells that the child should be named so and so according to the position of the stars, the first letter of the star and of the name being the same. For this the Brahman gets a' pice. Caste disputes are settled by a mass meeting.

Marathas.

MARATHAS, with a strength of 203,406 souls, found all over the district, are specially numerous near the Sahyadri hills. The Marathas claim to be the descendants of Rajput families, some of whom came to serve under the Bijapur government. The class forms two great divisions, those with and those without surnames. Families with surnames. hold themselves to be the only pure Marathas, asserting that the others are the offspring of mixed or unlawful marriages. At the same time some of the Kunbis have the same surnames as Marathas. The home tongue of all is Marathi, but especially to the south, different from Brahman Marathi, and in many points much more like the Konkani dialect. Stronger, more active, and better made than the Kunbi, many of them, even among the poorer classes, have an air of refinement. The men share the head except the top knot, and wear a mustache, and sometimes whiskers, but never the beard. Most of them live in ordinary second class village houses. The pure Marathas wear a flat four-cornered turban of twisted cloth. In other respects their every day and show dress do not differ from those of the Kunbis. Of most the staple food is cheap rice or nachni, the wellto-do always, and all of them on high days, adding some pulse. They eat fish, fowls, and mutton, and of game, deer and wild hog, and generally use animal food at their marriage dinners, often getting the animal's throat cut by some temple servant and offering the blood to the god. At Dusara in some villages a buffalo is shin. The flesh is not eaten by the Marathas, but generally scattered round a temple as food for spirits, bhuts. Though seldom to excess, they drink toddy and other liquors, and freely use tobacco. Though Marathas and Kunbis eat food cooked by each other, they will not dine from the same dish, and, at big feasts, sit in separate rows. Intermarriage is not allowed.

As a rule all the Ratnagiri vatandar Marathas of a village have the same surname and when one dies the rest go into mourning. Their surnames such as Kadam, More (Maurya), Shellke (Chalukya), Palav, Dalvi, Kander, and others show their connection with old ruling tribes. [Besides these, the Marathas bear many surnames such as Jadav, Chohan, Shinde, Dabekar, Pavar, Medekar, Thamre, Gogvale, Jamie, Khetle, and Savant.] Though most of them are cultivators, a large number are soldiers, no caste supplying the Bombay army with so many recruits as the Batnagiri Marathas. Others go into the police or find employment as messengers. A few are becoming clerks and schoolmasters. As it has been to the Kunbis, the opening of Bombay spinning and weaving factories has been a great gain to Batnagiri Marathas, whole families finding work and earning high rates of pay. [A clever weaver earns from 40s, to 60s, a month, his wife 16s, to £1, and each child of six years and over 10s. to 12s. Weaving jobbers get from £4 to £5 and head jobbers from £8 to £10.] Like the Kunbis, orderly, well-behaved, and good-tempered, the Marathas surpass them in courage and generosity. Very frugal, unassumina, respectable, and temperate most of them bring back to their homes considerable sums of money. They are a very religious class, ready to consult the village god or his attendant in any matter of difficulty. Their family priests and astrologers, generally Chitpavan Brahmans, are treated with much respect. Some among them wear the sacred thread, *janve*, renewing it yearly in *Shravan* (August). Their practice in the matter seems very loose. All claim the right to wear the thread, but as it has to be renewed every year and the ceremony seldom costs less than 6d. to 1s. (4-8 annas), they do not all wear it. It often happens that only one brother of a family adopts the practice. Caste disputes are Settled by a mass meeting of the caste. On the whole they are a prosperous class, hardworking, active and pushing, and as education spreads a, larger number will probably rise to high positions.

Bhandaris.

BHANDARIS, numbering 70,796 souls, are found in most parts of the district, but chiefly in the coast villages. They supplied the former pirate chiefs with most of their fighting men, and the name seems to show that they were originally used as treasury guards. [Two hundred years ago (1673) among the Bombay guard were 300 Bhandarins armed with clubs and other weapons, Eryer's New Account, 66.] They have four sub-divisions, Kite, More, Gaud, and Shinde, who neither intermarry nor eat together. Of these the Kite is the highest, claiming as their own the coast from Goa to Bankot Their home tongue is a rough Marathi. A strong, healthy, and fine-looking set of men, they are generally well housed, and in dress are extravagant, very fond of bright colours, and when well-to-do, dressing in Brahman fashion. The women dress like Kunbis and Marathas. Their rules about animal food are almost the same as those of the Marathas, but unlike them they refrain from intoxicating drinks. In social position they are below the Marathas, who do not eat with them, nor do Brahmans employ them as house servants. Some of them are cultivators and others sailors, soldiers, and police. A few are moneylenders and most own cocoanut trees or are engaged in the liquor trade. A strong, pushing tribe, they are fond of athletic exercises especially of wrestling. They employ Brahman family priests and pay them great respect. In other points they do not differ from the Marathas and Kunbis. They are not bound together as a body. Caste disputes are settled by a mass meeting of adult men. Though ready to take to new callings, few of them send their children to school, or have risen to any high position.

Shindes.

SHINDES, numbering 12,772 souls, found in small numbers all over the district, are the descendants of female slaves. In their language and appearance, and in their rules about food and dress, they do not differ from Marathas. Pure Marathas and Kunbis look down on them. But if a Shinde succeeds, after a generation or two, his children pass as Marathas, and are allowed to marry into lower class families. As a class they are intelligent and well-to-do, living as cultivators and entering Government service in which some have risen to high offices.

Malis.

MALIS, numbering 622 souls, are scattered over the district. They probably found their way to Ratnagiri from the Deccan where their caste is strong and widespread. They dress and eat like Marathas, and differ little from them in look or dialect. A hardworking, quiet, and sober class, most of them are husbandmen, gardeners, and some are day labourers.

Pharjans.

PHARJANS, literally children, numbering 188 souls, are found only in the south of the district. In former times it was, and still to a less extent is, the practice for the rich to keep female servants, *kunbins*, to attend on the women of the family and as concubines. The children of these maidservants form the class of Pharjans. They are almost all husbandmen, and except that they hold a lower position, marrying only in their own class, differ little from Marathas and Kunbis.

Ghadis.

GHADIS, numbering 319 souls, are found in Rajapur, Devgad, and Malvan. Originally the lower temple servants, whose chief duty is to cut the throat of animals offered to the gods, many of them now live as husbandmen and field labourers.

Gavdas.

GAVDAS, numbering 11,379 souls, are found in the south of the district chiefly in Malvan and Vengurla. They seem to be a class of Marathas who formerly held the position of village headmen. [From gav a village; In the Kanarese districts, the village headman is still known as gavda. In Malvan there are a few Bhandaris whose surname in Gayda, but they are distinct from this class.] They have two divisions, Gavdas husbandmen and cart-men, and Mit-Gavdas salt makers. The latter, who work on the salt pans of Mitbav, Achra, Malvan, Kochra, Vengurla, and Shiravda, hold a degraded position. No Hindus but Mhars will eat from them.

Craftsmen.

Of Manufacturers there were four classes with a strength of 20,602 souls (males 10,177, females 10,425) or 2.18 per cent of the whole Hindu population. Of these 16,879 (males 8278, females 8601) were Telis, oil pressers; 1694 (males 829, females 865) Koshtis, weavers; 1591 (males 822, females 769) Salis, weavers; and 438 (males 248, females 190) Sangars, weavers of coarse woollen cloth and blankets. TELIS, or oil pressers, are found all over the district but chiefly in Malvan. They are of two divisions Lingayat Telis and Somvare Telis. The Lingayat Telis are vegetarians and make cocoanut, sesamum, and *undi* tree oil and are husbandmen and labourers. The Somvare Telis, in addition to the above occupations, enter Government service as messengers. The Telis are hardworking, sober, and thrifty. KOSHTIS, SALIS, and SANGARS, though of different castes, all follow the craft of

weaving. They are found all over the district in small numbers. The Sangars, properly sankars or workers in hemp, make blankets, kamblis; and the Koshtis and Salis work cotton and silk. Owing to the competition of European goods, the condition of the Koshtis and the Salis is somewhat depressed. Of Artisans there were twelve classes with a strength of 46,998 souls (males 23,506, females 23,492) or 4.99 per cent of the whole Hindu population. Of these 15,377 (males 7602, female 7775) were Sutars, carpenters; 11,442 (males 5714, females 5728) Kumbhars, potters; 12,733 (males 6320, females 6413) Sonars, goldsmiths; 1828 (males 992, females 836) Lohars, blacksmiths; 3058 (males 1530, females 1528) Kasars, brass and (males females209) coppersmiths: 462 253, coppersmiths;41 (males 23, females 18) Otaris, casters'; 33 (males 16, females 17) Ghisadis, blacksmiths; 10 (males 7, females 3) Patharvats, stone hewers; 4 (males 3, female 1) Rangaris, dyers; 2 (male 1, female 1) Gaundis, masons; 2008 (males 1045, females 963) Shimpis, tailors. Of these classes, the most important found all over the district are the carpenters, Sutars, the goldsmiths, Sonars, and the blacksmiths, Lohars. SUTARS, working both as carpenters and blacksmiths, and LOHARS, working only as blacksmiths, are very useful to husbandmen. They make and mend their field tools, and are paid in grain at harvest time. Most of them cultivate in addition to their calling as carpenters. SONARS make and renew gold and silver ornaments. As a class they are better off than the Sutars and Lohars, but have a bad name for dishonesty. KUMBHARS are found in large numbers especially in Malvan, making earthen pots, tiles, and bricks. They are hardworking and mostly poor. KAsars and TAMBATS are generally found in large towns. They work in copper and brass, and are mostly well-to-do. SHIMPIS are found in large villages and towns. They are tailors by profession and live by making clothes.

Players.

Of Actors there were five classes with a strength of 20,108 souls (males 9698, females 10,410) or 21.3 per cent of the whole Hindu population. Of these 17,990 (males 8796, females 9194) were Guravs; 1321 (males 752, females 569) Devlis; 418 (all females) Bhavins, prostitutes, some of whom are skilled singers and dancers; 69 Kalavantins, professional dancing and singing girls; and 310 (males 150, females 160) Bhorpis. GURAVS are of two classes Lingayats and Bhaviks; the Bhaviks found throughout the, district and the Lingayats only in a few villages. Bhavik, or faithful Guravs, besides drumming and at marriages playing on the clarion, *sanai*, have generally charge of the village gods; and, as *pujaris*, being believed to influence the gods, are much respected by the lower classes. Some by cultivation add to their gains as musicians, drummers, and players. The Lingayat Guravs, worshippers of *shivling*, are all temple servants.

Bhavins.

The BHAVINS and DEVLIS, [Contributed by Mr. Ganpat V. Limaye,

Dy. Ed. Inspector.] found only in the south divisions of Vengurla, Malvan, and Devgad, are said to be descended from the female servants of some of the Savantvadi or Malvan chiefs, who were presented with lands and dedicated to the service of the village gods. Of these people the Bhavins are the female and the Devlis the male offspring. Among her daughters a Bhavin chooses one to succeed her as a temple servant, and when the girl comes of age, she is dedicated by pouring over her head oil from the god's lamp. The Bhavin practises prostitution and differs from a common prostitute, kasbin, only in being dedicated to the god. Much lower in position than a professional singer or dancer, she is not allowed to sing or dance in public and no regular musician ever accompanies her. Except the one chosen to succeed her mother, the daughters of a Bhavin are married to the sons of some other Bhavin. These sons, called Devlis, weak but sharp and good-looking and in their dress neat and clean, earn their living as drummers or strolling players, and a few as husbandmen or village temple servants. According to their rules, the sons and daughters of Bhavins and the sons and daughters of Devlis cannot intermarry. BHORPIS, or rope dancers, a dark well-made class, generally come from the Deccan in gangs of about twenty with a few donkeys, goats, pigs, and dogs. They generally stop near some large village in their temporary huts, which they carry with them, both men and women performing jumping and rope dancing tricks. The women, prostitutes in their youth, generally settle down in later life to marry one of their own tribe. As a class they are badly off and show no signs of improving.

Personal Servants.

Of Personal Servants there were three classes with a strength of 12,669 souls (males 6080, females 6589) or 1.34 per cent of the whole Hindu population. Of these 8683 (males 4169, females 4524) were Nhavis, barbers; 3985 (males 1910, females 2075) Parits, washermen; and one Bhisti, water-drawer. The barbers as a class are badly off. Some going to Bombay improve their condition, but most are poor, forced to cultivate to eke out a living There is generally one barber for' one or more villages which he visits every fortnight and shaves as many persons as he can in the course of the day. The barber is paid in kind. At harvest time he gets a bundle, bhara, of each of the crops. The barber generally attends on well-to-do persons in the Divali festival (October) to rub cocoanut oil on the bodies of the male members of the house before they bathe. On the next day his wife comes with a burning lamp, arti, and waves it before the chief person of the house who generally gives her 3d. (2 annas) or a piece of coloured cloth, than, for a bodice. The barber gets a meal on festivals and holidays, and on thread ceremonies and marriages, a turban. When a boy is shaved for the first time the barber gets a new square piece of cloth, rumal, worth from 2d. to 9d. (11/4-6 annas), a cocoanut, one pound of rice, and a betelnut. The barber holds the flag, nishan, of the village god when the palanquin, palkhi, is taken round the

temple.] The washermen as a rule live close to towns, and most of them are well off. Those of Ratnagiri, Dapoli, and Bankot are considered the best in the district. Some of them add to their earnings by tilling land.

Shepherds.

Of Herdsmen and Shepherds there were two classes with a strength of 18,505 souls (males 9234, females 9271) or 1.96 per cent of the whole Hindu population. Of these 14,396 (males 7095, females 7301) were Gavlis, and 4109 (males 2139, females 1970) Dhangars. GAVLIS are cattle keepers, settled in towns and large villages mostly in wellbuilt houses. Some cultivate and are employed as day labourers and servants, and at Ratnagiri some keep carts for hire, but their chief means of living is by selling milk and butter, in. which, as. almost all classes compete, the profit is small. The men look after and milk the cattle, leaving to the women the work of selling the milk and butter. DHANGARS are an inferior class of shepherds who generally live among the hills wandering from place to place with their flocks. A few own cows and buffaloes as well as goats, and cultivate some small fields. The men are very strong, sturdy, ignorant, simple, and rough; the women, brave and hardworking, take the milk and butter to market for sale.

Fishers.

Of Fishers and Sailors there were four classes with a strength of 30,994 souls (males 15,222, females 15,772) or 3.29 per cent of the whole Hindu population. Of these 14,703 (males 7004, females 7699) were Gabits; 8928 (males 4456, females 4472) Kharvis; 3949 (males 2191, females 1758) Kolis; and 3414 (males 1571, females 1843) Bhois. GABITS, found from Devgad down to the Goa frontier, are some of them cultivators and labourers, but most are sea-fishers and sailors. The women sell fish on the spot or take them dried for sale in other parts of the district. Though not so important as to the north of Bombay, the curing of fish is carried on to a considerable extent, and the Gabits have some local importance from managing the native craft that still carry the bulk of the coasting goods and passenger traffic. KHARVIS are a small class with, besides some about Harnai and Bankot, three villages in the Ratnagiri sub-division, one on the Jaygad river, one on the Purangad creek, and one near Ratnagiri. Sailors and fishers by calling, they also trade and a few cultivate. They are sober, intelligent, trustworthy, and good seamen. Boats manned by Kharvis are always in demand. KOLIS are found on the north coast. The aborigines of the country, they formerly possessed many strongholds, the principal being Kardu near the Devghat, whose Koli chief, styled Raja, held lands both in the Konkan and in the Maval above the Sahyadris. They are a strong hardy race, the men sturdy, thick-set, and many of them very fat, the women well-made and healthy. They live in thatched huts, in villages very dirty, untidy, and full of smells. The men wear a rather high skull cap of red flannel scalloped in front

over the nose; generally a waistcoat of flannel or broadcloth, and a very tightly-wound waistband. Except for the cap their full dress does not differ from that of the Kunbis. The women dress like the Kunbis, but more, neatly. They eat the cheapest sort of rice and vegetables, but to a great extent live on fish, on their great days killing fowls or a goat or sheep. They are excessively fond of liquor, generally taking a large draught before their evening meal. From the nature of their work they hold a low place among Hindus. Except a few traders and husbandmen all are seamen and fishers, very bold, pushing and skilful, owning their own boats, preparing their own nets, and on the whole independent and well-to-do. They believe strongly in ghosts and spirits, and if they think that the spirits are displeased they kill sheep, goats, or fowls, and scatter pieces of their flesh that the spirits may feed on them. They believe in omens and watch them carefully in starting, fishing or going on a voyage. Meeting on the road or path to their vessel a woman whose husband is alive, two Brahmans, or a man with grain or fish are good omens. It is bad to meet a widow a cat, or a bareheaded Brahman.] BHOIS, numbering 3400 souls, are found all over the district. Freshwater fishers, palanquin bearers, melon growers, cultivators, and labourers, they are a quiet, orderly, and hardworking class. In food and dress they do not differ from Marathas and Kunbis.

Miscellaneous.

Of Labourers and Miscellaneous Workers there were seven classes with a strength of 721 souls (males 374, females 347), or 0.07 per cent of the whole Hindu population. Of these 464 (males 222, females 242) were BURUDS, bamboo and ratan basket and mat makers; 42 (males 22, females 20) BHADBHUNJAS, parchers and sellera of parched grainl and pulse; two males, TAMBOLIS, betelnut and leaf sellers; 32 (males 23, females 9) RAJPUTS, locally called Deccani Pardeshis, some of them husbandmen, the rest messengers and constables; 18 (males 11, females 7) VADARS, a wild tribe of wandering cutters, hardworking but dissipated, inclined to steal and fond of all animal food especially of field rats. BELDARS, numbering 99 souls (males 54, females 45), come in bands of ten to fifteen from the Deccan in the fair season and go back for the rains. Sturdy, dark, and very hardworking, they are, like the Vadars, stone cutters, and like them have very few scruples as to what they eat. RAMOSHIS, numbering 64 souls (males 40, females 24), are found only in Chiplun, where they are employed as village watchmen. VAIDUS, a tribe of wandering doctors, occasionally come from the Deccan and hawk medicinal herbs, which they are said to collect on the Mirya hill near Ratnagiri. Tall, swarthy, and strong, the men, with hair and beard unshaven, generally move about in small bands of two or more couples. They speak a corrupt Marathi, and among themselves are said to use a Telugu-like dialect. On reaching a village they put up in some temporary sheds, and dressed in red ochre head-cloths, loose coats, and trousers, move fram house to house calling out the names

of their medicines. [Their chief medicines are *kant mandur* and *ras-shindur* a factitious cinnabar made of zinc, mercury, blue vitriol, and nitre'fused together.] They are also skilled in drawing out guinea worms for which they are paid 6*d.* to 1*s.* (4-8 *annas*).

Leather Workers.

Of Leather Workers there were two classes, with a strength of 10,694 souls (males 5468, females 5226), or 1.13 per cent of the whole Hindu population. Of these 10,572 (males 5400, females 5172) were Chambhars, shoemakers, and 122 (males 68, females 54) Jingars, saddlers. CHAMBHARS, found throughout the district, are a hardworking orderly class, rather badly off. Those of Lanja in Rajapur have a local name for their skill in making the sandals, *vahanas*, generally worn by natives in the rainy season. They are one of the castes reckoned impure by other Hindus. Their family priest is a Jangam or Lingayat. In social estimation the priest does not suffer degradation by ministering to the Chambhars. JINGARS make cloth scabbards, saddles, and harness, and also work in wood. They are skilled workers, but of intemperate habits.

Depressed Castes.

Besides Chambhars there were three Depressed Castes with a strength of 85,528 souls (males 41,756, females 43,772) or 9.08 per cent of the whole Hindu population. Of these 85,513 (males 41,750, females 43,763) were Mhars; 12 (males 5, females 7) Manga; and 3 (male 1, females 2) Bhangis or sweepers. MHARS are found all over the district, but are specially common in Dapoli where they own much land. They are of two divisions, Mhar-bele and Mhar-pale. They are a strong and thick-set race, and all over the district affect the name of landholder, mirasi, as more respectable than Mhar or Dhed. They have no scruples about food and drink, eating all animals, even carcasses, and drinking liquor to excess. Their touch is considered to pollute Hindus, and so strong is the feeling about them, that when a Mhar meets a high caste man the Mhar is expected to leave the road and step to one side, in case his shadow should fall on the man of high caste. Some of them who have risen to high positions in the army are, as pensioners, treated with respect. But as their pension dies with them, none of the families have been permanently raised to any higher position. Most of those who remain in Ratnagiri are Tillage servants and field labourers. Very few of them hold or till land of their own. Of those who leave the district in search of work the bulk come to Bombay as carriers and labourers. Large numbers enter the army and have always proved obedient, hardy, and brave soldiers. From a statement supplied by the Military Authorities it would seem that there are at present 2180 Ratnagiri Mhars on the rolls of the Bombay army, of whom 1030 are in active service and 1150 pensioners. Except the pensionerswho are well-to-do, the Mhars are poor, many of them in debt to the village headmen and the large landholders. They are a quiet, orderly class, with a good character as soldiers, and, except in

Dapoli where their increase has begun to burden the cultivators, they are contented and liked. The Mhars are a religious class, with a priest of their own whom they call Mare Joshi. Their household gods are Vithoba, Rakhumabai, and others, and they go on pilgrimages to Vithoba's shrine at Pandharpur. MANGS are scarcely found in the district. One of them was a cultivator and the rest beggars.

Unsettled Tribes.

Of Unsettled Tribes there were five, with a strength of 938 souls (males 444, females 494), or 0.09 per cent of the whole Hindu population. Of these 863 (males 171, females 192) were Katkaris; 485 (males 226, females 259) Thakurs; 57 (males 27, females 30) Dongri Kolis; 31 (males 18, females 13) Lamans; and 2 Bhils. (males). KATKARIS, or makers of catechu, kat, are a wandering tribe, occasionally passing through the district and travelling as far north as Khandesh. They claim to be of the same stock as the Khandesh Bhils, and are one of the most degraded of hill tribes. They know Marathi, but are said among themselves to use an unintelligible jargon. They are small, active, and very dark, and dirty in their habits, the men wearing the beard and hair long. For clothes the men have seldom more than two pieces of coarse cloth, one wound round the head, the other round the waist; the women wear a ragged robe almost always without a bodice. They have no scruples in the matter of food, eating animals of all kinds, even monkeys. They hold the very lowest social position. They travel about in gangs of ten to fifteen, armed with formidable bows and arrows, with donkeys, goats, and hunting dogs, generally offering monkeys and parrots for sale, or working as day labourers. If they find no employment they stay only a few days at one place. During the rains they live in the forests, but sometimes work for hire in the fields. They have a bad name for thieving and are generally watched by the police. They reverence the ordinary Hindu gods and believe in ghosts and witchcraft. Low as they are, they arc said to be better off, and less utterly savage, than they were fifty years ago. THAKURS are a wandering tribe found in different parts of the district. They are stouter, fairer, and much less savage-looking than the Katkaris, and the women, though fat and ungainly, have frank kindly faces. They live in small portable huts. The, men wear a cloth wound round the head, a. waistcoat, and a small waistcloth; the women a tight-fitting bodice and a robe closely girded round the waist. Some are hunters, labourers, cultivators, and herdsmen, but most are beggars generally going about with bullocks, nandis, trained to dance and nod the head. DONGRI or hill KOLIS wander from place to place. They know Marathi, but are said among themselves to use a strange dialect. They till, fish in rivers, and bring firewood for sale. They are a simple and harmless class. LAMANS or VANJARIS pass through the district along the trade routes between the coast and the Deccan. Carriers of grain and salt on pack bullocks, they generally pass the rains in the Deccan, and after the early harvest is over, come to the coast. They generally make two trips each fair season. Formerly they

were a very large class, but since the opening of hill-passes fit for carts, the demand for their services has in great part ceased.

Beggars.

Devotees and religious beggars of various names, Gosavis, Jogis, Gondhalis, Bhutes, Bhats, Saravdes, Gopals, and Jangams numbered 6553 (males. 3186, females 3367), or 0.69 per cent of the whole Hindu population. The fame of Ganpatipule in the Ratnagiri subdivision, Parshuram in Chiplun, and the intermitting spring, Ganga, at Unhale in Rajapur attract many religious beggars. GOSAVIS (3343) till land, work as private servants, and when at leisure, go begging, but seldom to any distance from their homes. Recruited from almost all castes, and worshippers of Vishnu and Shiv, they wander in every direction begging and visiting places of pilgrimage. JOGIS are of many kinds. Some foretell events, others act as showmen to curiously formed animals, and a third class are the Kanphates; or slit-eared Jogis, who wear large circular pieces of wood and ivory in their ears. Some marry and others remain single. GONDHALIS, at Maratha, Bhandari, and Kunbi marriages, are always, on the last night of the festival, called to perform a gondhal dance and repeat verses. All the performers are men. They have two musical instruments, a tuntuna and a gamel. At the time of the performance, they wear long white coats and their ordinary turbans. They are generally three, one actor and two musicians. BHUTES, followers of the goddess Bhavani, go about begging with a lighted torch and a tuntuna in their hands. They have their bodies covered with strings of kavdi shells. BHATS and Brahman beggars go begging during the fair season, and generally gather enough to last them the whole year. SARAVDES, a healthy strong-looking class, are found in almost every sub-division. They generally travel in November, buying and selling cows and shebuffaloes. Some of them go begging with their whole families, and return home in April or May. GOPALS sing, dance, leap, and wrestle; their women beg. They keep and deal in cows and buffaloes. JANGAMS act as priests to Lingayats and cultivate land.

Musalmans.

In the proportion of Musalmans, Ratnagiri, with 74,833 souls or about 7.34 per cent of the whole population, stands first of the three Konkan districts. Musalmans are found in large numbers in the northern coast districts, 18,545 in Dapoli and 13,818 in Chiplun; in considerable strength at the old trade centres of Kajapur (11,616), and Sangameshvar (4845); and in very small numbers in the south, 3166 in Devgad and 1741 in Malvan.

Arabs and Parsians.

As in the other coast districts of Western India, the Ratnagiri Musalman population has a strong strain of foreign blood, both Arab and Persian. A foreign element probably existed before the time of the prophet Muhammad (570 -632). [A trace of the early Arab sailors is

found in Jazira, or the island, the latter part of the name Melizeigara, apparently applied by Ptolemy (150) and the Periplus (247) to the town and island of Malvan or Melundi.] And in the spread of Musalman power, between the seventh and tenth centuries, as sailors, merchants, and soldiers of fortune, Arabs came to the west coast of India in great numbers. [Many high Ratnagiri families, though at present following different professions, are distinguished by Arabic surnames, Kazi, judge; Fakih, lawyer; Muallam, professor; Khatib, preacher; Mukri, elegy singer; and Hafiz, Kuran reciter. From the accounts of Suliman, the earliest Arab traveller, it would seem that about the middle of the ninth century, the Balharas who ruled the Konkan were very friendly to the Arabs. The people of the country said that if their kings reigned and lived for a long time it was solely due to the favour shown to the Arabs. Among all the kings there was no one so partial to Arabs as the Balhara, and his subjects followed his example. [Elliot's History, I. 4. The Balharas were the Rajputs of Malkhet near Haidarabad. Compare Mas'udi's Prairies d'Or, I. 382.] Early in the tenth century, Arabs are mentioned as settled in large numbers in the Konkan towns, married to the women of the country, and living under their own laws and religion. [Mas'udi (913), Prairies d'Or, II. 86.] During the fourteenth, fifteenth, and sixteenth centuries, when the lands of Ratnagiri formed part of the possessions of the Bahmani and Bijapur kings, a fresh impulse was given to immigration, both from the increased importance of Dabhol and other places of trade, and from the demand for Arab and Persian soldiers. Even under the Marathas the services of Arab seamen were still in demand. [In 1683 the Company's merchantman President was, off Sangameshvar, attacked by two ships and four grabs. The crew were Arabs who said they were in Shambhaji s pay. Orme's Hiat. Frag. 120.] No record has been traced of any attempt to force Islam on the people of the district, and from the tolerant character of the Bijapur kings, During the reigns of Yusuf Adilshah (1489-1510) and of Ibrahim Adilshih II. (1590-1626) no man's religion was interfered with. Ferishta, II. 128.] it seems probable that, except a few who yielded to the persuasion of missionaries, to the temptation of grants of land, or to the oppression of Aurangzeb, Ratnagiri Musalmans are not descended from purely Hindu converts.

Konkanis.

Besides the Arabs and Persians who from time to time came as soldiers, traders, and sailors, the character of many Musalman villages near Chiplun and along the shores of the Bankot creek, point to some more general Arab settlement. These people, the fair Arab-featured Konkani Musalmans of Bombay, generally known among Musalmans by the term Kufis, seem, as the name shows, to have come to India from the Euphrates valley, and to belong to the same wave of Arab settlers who in Gujarat are known as Naiatas, and in Kanara as Navaits. The traditions of the people and the accounts of many Musalman historians agree that the bulk of them fled to India from the

Euphrates valley about the year 700 (82 A.H.) to escape massacre at the hand of the fierce governor Hajjaj bin Yusuf. [Details of Hajjaj the 'terror and scourge' of his country are given in Mas' udi's Prairies d'Or, V. 193-400. (See also Khulasat-ul-Akhbar, and Tarikh-i-Tabari in Price's' Muhammadan History, 455-460) According to the general story these men were at first natives of Madina from which they were driven by the persecution of Hajjaj. In addition to the original body of settlers, it seems probable that fresh immigrants arrived in the tenth century (923-926) to escape the ravages of the Karmatian insurgents who destroyed Basra and Kufa and enslaved part of the people (D'Herbelot's Bibliotheque Orientale, I. 509; Dabistan, II. 421), and in the thirteenth century (1258) when Halaku Khan the Tartar captured all the cities ofthe Euphrates valley, put the reigning Khalifah to death, and massacred 160,000 of the inhabitants.]

Besides the regular classification into the four main tribes, Syeds, Shaikhs, Moghals, and Pathans, [About 1/16 are Syeds, 12/16 Shaikhs, and 3/16 Moghals and Pathans.] Ratnagiri Musalmans are locally divided into two classes, Jamatis or members of the community, and Daldis coast fishers, with whom the Jamatis do not intermarry. [Perhaps *daldi* or thrown, in the sense of ontcaste.]

Jamatis.

Though JAMATIS have much sameness in appearance and manners, there is among them a special class whose head quarters are along the Bankot creek and on the Dapoli coast. The Bankot Musalmans are rather a slim but well made, fair, and good-featured class, the men shaving the head and wearing short rather scanty beards. Their home tongue is Marathi, but most of them know Urdu. Except a few well-todo landholders they live in second class houses. Some of the villagers wear a white Brahman-like turban and the Hindu coat and waistcloth. But as a rule the men wear a high stiff turban of dark cloth, taken, like the Parsi hat, from the head-dress of Surat Vanias, a coat, trousers, and Gujarat shoes. [All Konkan Musalmans are said formerly to have dressed like Hindus, and, marrying Hindu wives, to have adopted many Hindu practices. In time under the influence of Musalman teachers many town families have become more strict in their practice. Villagers still in many cases dress like Hindus, even worshipping Shitala-Devi, if their children are attacked by small-pox. Maulvi Syed Ahmad Sahib Gulshanabadi.] The women wear the Hindu dress, and when they travel, a large white sheet-like over-robe. Widows dress in white. Landholders, sailors, and some of them servants to Europeans, they are on the whole well-to-do. The calling of boatmen in Bombay harbour has of late greatly suffered from the competition of steam launches; but many find good employment as engineers and workers in machinery. Sunnis of the Shafai school few know the Kuran or are careful to say their prayers. On every Thursday, either in a mosque, or in a house built for the purpose, the Konkanis meet together, and sing hymns to the praise of God and the Prophet. This done tea is drunk, and sweetmeats distributed. Except that at marriages a dough lamp, filled with clarified butter, is, by the women, lit, carried to a river, pond or well, and left there, and that for five Thursdays after, a death, dinners are given to relations and friends, their customs do not differ from those of other Musalmans. [Maulvi Syed Ahmad Sahib Gulshanabadi.] They many only among themselves, marriage with any other caste being considered a disgrace. Of late one or two families have given their daughters to Bombay Arabs. A few of them, some in Bombay and a very small number in Ratnagiri, know English, and teach their children Marathi and a few English.

Daldis.

DALDIS, found chiefly in the Ratnagiri sub-division, have the tradition that their forefathers came in ships from across the seas. Their appearance and position among the Musalmans of the district would seem to make it probable that they are partly converted Hindus, probably Kolis, and partly the descendants of immigrant Musalmans and slave girls. [According to Major Jervis (Statistics of Western India, 14,15) they are a race of people descended from the first Arabian colonists who settled on the western coast in the seventh or eighth century and correspond with the Maplas of Malabar. The men are tall, strong, and stoutly built with pleasant but irregular faces; most of the women are swarthy, but a few are fair and well featured. They speak Marathi in their homes and many understand and speak Hindustani. Their houses are almost all thatched huts of the second class. Except that a few of the men wear tight trousers, they dress, both men and women, in Hindu fashion. Some are sailors and cultivators, and some go. to Bombay in search of work; others make and sell nets and rope of all sorts, and most are fishermen differing little from Hindus in their way of fishing. They hold a low position among the Musalmans of the district. They are hardworking, and though many are in debt, as a class they are fairly well-to-do. Sunnis in religion they marry only among themselves and obey the Kazi. Very few of them send their children to school.

Most of the rest of the Musalmans are in appearance somewhat less sturdy and rough-featured than the Daldis, and darker and not so foreign-looking as the Bankot men. The home tongue of all is Marathi, but most of the well-to-do know Urdu. The bulk of them are townspeople living in second class houses, generally on rice and pulse. Most of them are able to afford dry fish, but few; except on holidays, eat animal food. The men generally wear a skull cap, the Musalman coat, and the waist-cloth, only the well-to-do wearing trousers. Their women all dress in Hindu fashion, in the large Marathi robe and bodice. Neither hardworking nor thrifty, they are orderly, clean, and hospitable. Living chiefly as grain-dealers, cultivators, sailors, constables, and messengers, they are not as a class well-to-do. In religion almost all are Sunnis following the Kazi. Few of them send their children to school; but many children go to the Maulvi to learn the Kuran. Few have risen to high positions.

Parsis.

There are only three families of Parsis, one settled at Dapoli and two at Vengurla. They are Europe shopkeepers and traders with their head quarters in Bombay.

Christians.

Of the 3244 Christians, all, except the European residents, are found in the south of the district. Calling themselves Christis, and known by the people of the district as Feringis or Portuguese, some of them may have a strain of Portuguese blood, but the bulk are natives converted in mass to Christianity during the time of Portuguese rule. They speak the dialect known as Konkani with more Portuguese words than Others use. They are generally dark, healthy, and stout, living in tiled houses with walls stained with some coloured wash. There are few solely Christian settlements, but Malvan, Vengurla, Redi, and other large villages have each a considerable Christian quarter. They differ from the other people of the country in eating rice and wheat instead of nagli, and from Musalmans in eating pork. Both men and women smoke tobacco, and the men are great toddy drinkers, though perhaps not more so than middle class Hindus. Among the men, the well-to-do dress like Europeans, and the poor generally in a jacket and short trousers of coloured cotton and a red cloth cap like that worn by Kolis. The women dress like Hindus, except that they wear a peculiar neck amulet of red stone beads Strang together and joined in front by a green coloured stone edged with gold, called fora. They are fond of the red and blue checked Belgaum cloth, and, at church, wear a large white robe drawn over the head. They are a quiet, orderly class, hardworking, and, except for their fondness for drink, frugal. Most of them are husbandmen showing great skill in growing vegetables and in breeding pigs, ducks, turkeys, and hens. Some also guarry red stones and sell them to masons who work them into small household vessels. The upper classes are employed in Bombay as clerks and shopmen. Unlike Goa Christians, none take household service with Europeans. As a class they are fairly well-to-do. As was shown by their remaining true to it after the fall of Portuguese. power, they are attached to their religion, supporting their priests, keeping their churches [The Christian churches are almost all plain oblong buildings with a small chancel at the east end, but rarely with aisles. The larger churches have generally a low square tower at the north-west or south-west corner and the smaller ones a bell turret. All are whitewashed outside and tiled, and inside many of them are gaudy with colour, gilding, pictures, and glass chandeliers. The priest's house is generally attached to the church and outside of it. At the west, there is always a stone cross raised on steps and carved with the symbols of the passion and with the date of the building or restoration of the church. On the greater festivals, during service, the church bells are kept ringing almost without stopping.] in good repair, attending the services, and carefully observing the high days. Though they have all Christian names and surnames they still keep the old distinction of

caste, calling themselves Christian Kunbis, Bhandaris, or Kolis, and marrying only among members of their own caste.

Soon after the establishment of British rule (1822), the Scottish Missionary Society resolved on establishing a mission in western India. The first missionary, the Reverend Donald Mitchell, as Bombay was occupied and as he was not allowed to settle at Poona, chose Bankot as the first station, and soon after added Haraai. In the first year there were, under mission superintendence, ten schools in ten villages with an attendance of 435 pupils. This, in 1828, had increased to seventynine schools and 3219 pupils, forty schools and 1484 pupils in Bankot and thirty-nine schools and 1735 pupils in Harnai. Of the whole number of pupils 300 were girls. In 1829, as the work of superintending them was found to interfere with vernacular preaching, the schools in the Bankot district were closed. In 1830 the mission head-quarters were moved to Poona, and in 1834 the Ratnagiri mission was given up. During the ten years of work few converts were made. And when the mission was withdrawn these few went to Bombay. [Contributed by the Rev. D. Mackichan, M. A. of the Free Church Mission, Bombay.] For many years after the Scotch mission was withdrawn no fresh efforts were made to spread Christianity. In 1873 the American Presbyterian Board took up Ratnagiri as a station of the Kolhapur mission. The missionaries teach two schools, one for boys with 134 pupils, the other for girls with fifty-two. Besides those brought as helpers from other districts, there are six native Christians who have been received to Church membership. Of these one was a Roman Catholic, two were Muhammadans, two Marathas, and one a Mhar. The mission church, built in 1878 at a cost of £321 (Rs. 3210) and called the Hunter Memorial Chapel, is a stone edifice with an audience hall fifty feet by thirty-five. [Contributed by the Rev. J. P. Graham of Ratnagiri.]

POPULATION

Villages

None of the villages are walled or fenced. Those on the coast are densely shaded by belts of cocoanut gardens, and the roads between the long lines of houses are usually paved with cut laterite stones. These raised causeways are called *pakhadis*. The village sites of the inland parts are well, though less densely, shaded with mango, jack, and tamarind trees, each house standing in its own yard. Chambhars, Mhars, and other people of low caste live in quarters apart from the main village site. These hamlets, *vadas*, are always as well shaded as the main village. In this district there is one village or town to about every three square miles, each village containing an average of 79.0 people and about 174 houses.

Except the people of seven towns numbering 64,505 souls, or 6.32 per cent of the entire inhabitants, the population of the' Ratnagiri district, according to the 1872 census, lived in 1242 villages, with an average of 768.62 souls to each village. Three towns had more than 10,000, and four more than 5000 inhabitants. Excluding the seven towns and 5114 hamlets, there were 1242 inhabited state and alienated villages, giving an average of 0.32 villages to each square mile. Of the whole number of villages, 104 had less than 200 people; 413 from 200 to 500; 460 from 500 to 1000; 200 from 1000 to 2000; 46 from 2000 to 3000; and 19 from 3000 to 5000.

Houses

As regards the number of houses, there was, in 1872, a total of 224,790, or on an average 59.32 houses to the square mile, showing, compared with 110,807 in 1843, an increase of 92.44 per cent. Of the total number, 3318 houses, lodging 27,699 persons or 2.72 per cent of the entire population at the rate of 4.15 souls to each house, were buildings with walls of stone or fire-baked bricks and roofs of tile. The remaining 221,472 houses, accommodating 991,437 persons or 97.28 per cent, with a population of 8.35 souls to each house, included all buildings covered with thatch or leaves, or whose outer walls were of mud or sun-dried brick. In 1829, though some houses were large and comfortable, each village had, on an average, not more than one brick or stone house. The walls of the better houses were mud, and of the poorer, reed. The roofs were thatched, the better with rice straw and the rest with grass. [Lieut. Dowell, 1829. Bom. Rev. Rec. 225 of 1851, 273.] This state of things is now (1880) found only in the smaller villages and hamlets. All large trading towns and villages have a good number of substantial stone tile-roofed buildings, housing nearly three per cent of the population. The better sort of house, square built, with an open central or front courtyard, has, round the courtyard, an eight feet deep verandah-like dais or platform, raised about three feet from the ground; its walls covered with grotesque bright colonred figures of gods and animals, and its cornices hung with Bombay or China

pictures. From this verandah, the common family resort, doors lead into back rooms, mostly dark and windowless, or out into a cattle-yard with offices in the rear. Shopkeepers live in dark rooms behind their stalls, with a backyard for cattle, and offices in the rear entered through a back door. The hovels of the poor, a few feet square with one doorway, generally the sole opening for light or smoke, are divided by bamboo or palm leaf partitions into three or four small rooms into which a family of eight or ten are often crowded.

Communities

It [Contributed by Mr. G. W. Vidal, C. S.] is probable that in early times there was a more or less complete village system. Certain, Maratha and Kunbi families were, as appears from ancient deeds, styled patels, and ranked as the headmen of their villages. The revenue system was then kularg or rayatvar, each cultivator being an independent hereditary holder, who stood assessed at a fixed rental in the public accounts, beyond which nothing could be levied from him. The creation of village renters, khots, introduced a new element. The khots in course of time acquired hereditary rights by grant or prescription. In a small proportion of the villages, less than a tenth of the whole district, the older holders have succeeded in keeping their rights intact. These are the pure peasant-held, nival dharekari, villages of the north of the district, and the peasant-held, kulargi, villages of the south. In another class of villages, while some of the old peasant-holders continue to keep their lands, the khots. either by lapses, or spread of tillage, gained rights in the land. These are the mixed, khichdi, half rented half peasant-held villages. In many instances the original holders have entirely disappeared, and all the lands are either in the hands of the *khots* themselves, or of tenants who cultivate under them. These are called *nival* or pure *khoti* villages. In all these villages, by their superior power and authority, the *khots* have gradually and entirely replaced the ancient patels as headmen of villages. There are in fact at the present time no hereditary patels in the district, and were it not for the modern appointments of police patels, nominated by Government from among the most intelligent villagers, for life or shorter periods, the very name of *patel* would have been forgotten. Though the khots have never been recognised as Government servants, in villages where the survey settlement has been introduced, they are paid a percentage of the assessment collected by them on behalf of Government from the peasant-holders, dharekaris. Elsewhere they receive no direct remuneration either in cash or in land. Except in a very few villages, where there are still hereditary officers styled mahajans and vartaks, appointed or recognized by former Governments, the khots are invariably the headmen of their respective villages. Where there are *mahajans* or vartaks, the khots yield precedence to them, and the former are entitled to preside at meetings of the villagers. Khots are found of many castes, but a large majority are Brahmans. The earliest khots were chosen from a few old influential Maratha families, who peopled

the villages at the foot of the Sahyadri range in the Khed and Chiplun sub-divisions. These Maratha khots are distinguished by the title of mokasa khots, [Mokasa was a part' of the chauth granted to Maratha officers by Shivaji in payment for military service. which would seem to imply that they originally held their villages on condition of some military service. The powerful sub-division of Chitpavan Brahmans holds most villages in Khed, Chiplun, and Dapoli. Further south, in Sangameshvar and Ratnagiri, the Devrukha Brahmans take the place of the Chitpavans. A few villages in Dapoli are held by the Javal Brahmans. Here and there Shenvi, Prabhu, and Musalman khots are found, and there are also cases of Kunbi, Gavli, and even Mhar khots. In the south the *khot* is usually called the Gavkar. The village headman is always the first to receive the betel leaf, pan supari, at the celebration of any public religious ceremony, and until this formality has been observed, the ceremony cannot proceed. His leave has also to be formally asked and granted before, on festive days, the palanguin of the village god can be carried in procession through the village. The precedence granted to the headman on all public and religious occasions does not necessarily extend to social gatherings, although, as a matter of courtesy, the headman when invited to a wedding or feast will be the first to receive the pan supari. When an event of any importance, such as a wedding, happens in his own family, the headman is expected to entertain the village. On such occasions he gives cooked food to quests of his own and lower castes, and the guests of each caste eat separately. When the host is of low caste, he can either employ a cook of the highest caste, from whose hands all the guests will eat, or else he can give the raw materials for the feast to all the guests of higher caste than himself. When his circumstances allow, the khot secures the monopoly of the village moneylending and grain-dealing business. His position gives him a great advantage over professional usurers such as Marvadis who, as a consequence, have little inducement to settle in the district. Though some are rich, a great many of the hereditary khots are more or less involved in debt, and have been compelled to mortgage their estates to capitalists, who in turn act as moneylenders. As might be expected, the hereditary khots are, as moneylenders, more lenient than the mortgagees, who, having no permanent interest in the villagers, strive to make as much as possible out of them during their temporary management. Still the opposition of cultivators to unpopular moneylenders seldom takes the form of active resentment.

Village Servants.

Compared with the Deccan, the number of village servants that hold service land, or receive cash from the state, is very small. The village establishments are more or less complete; but the remuneration of the office bearers is for the most part left to the community. This is probably the result of the introduction of the *khoti* system., The Government having interposed a middleman between itself and the cultivators, as a rule, saw no necessity for dealing directly with the

inferior village servants. The chief exception to this rule is the case of the village accountants, kulkarnis, who, being hereditary holders, vatandars, with grants for the most part older than the introduction of the khots, have been allowed to keep their cash allowances in the few villages where the vatans exist. The Mhars or village watchmen were also, in consideration of their useful and necessary services, granted small cash allowances in a few villages in the Rajapur, Malvan, and Devgad sub-divisions. A few instances also occur of lands or allowances being paid to special village officers, such as the mahajan, the vartak, the mukadam,, and the desdi. It frequently happens that these offices, the number of which is very small indeed, are united to the khotship. In some villages also, where there are no Mhars, the temple attendant, ghadi or gurav, receives an allowance for performing menial services in the village. In the Sangameshvar subdivision, there are two instances of service lands being held by shetias, and there is a solitary instance in the Malvan sub-division of an allowance being granted to the village astrologer, joshi. In some cases too, allowances would seem to have been granted to certain servants on the representations of *khots*, and as a mark of favour to the latter. Such are the appointments of the messengers, sipais, of the Malvan sub-division. The organization of the village establishments differs little in different parts of the district; but the full staff of office bearers is found only in the more populous villages.

Village servants may be divided into three classes: those rendering service to the state; those useful to the villagers; and those whose services are not required either by Government or by the villagers. In the first class are the headman, khot ox gavkar; the police head, patel; the accountant, kulkarni; the watchman, mhar; the messenger, sipai; and, where he performs other than, temple service, the temple ministrant, *qurav* or *qhadi*. In the absence of an independent *mahajan* or vartak the khot, as already stated, is the headman of the village. Frequently these latter offices are united to that of the khot, as also are those of the desai and mukadam. The khot from his position enjoys many privileges. In former times he was allowed by eustom, as part of their rental, to exact without payment one day's labour in eight from all cultivators in his village, except hereditary holders, dharekaris. When this forced labour was agricultural, it was styled plough service, nangar vet. When the labour exacted was of any other description, such as carrying grain to market, or carrying the khot's palanquin, it was called labour service, vet bigar. Forced labour of this description has now been abolished, but so patient and submissive are the villagers, that it may be doubted whether the system is entirely dead. The police patels, not being hereditary officers, are selected for life or shorter periods from the most eligible candidates. Influential Marathas are usually chosen in preference to members of the khot families. In the settled sub- divisions, the police patels are paid by cash allowances fixed according to the population and importance of the villages. These allowances vary from 8s. to £4 8s. (Rs. 4-44) a year. Where the survey settlement has not been introduced, the post is purely honorary. Hereditary village accountants, *kulkarnis*, are found only in a few villages in the Dapoli, Chiplun, Sangameshvar, Ratnagiri, Rajapur, Devgad, and Malvan sub-divisions. The creation of *khots* has, in nearly every instance, rendered their services superfluous. The *kulkarnis* belong mostly to the Brahman, Prabhu, and Shenvi castes. They are paid by cash allowances, the only exception being Achra in the Malvan sub-division, where lands have been assigned for this service.

Except in a few of the coast villages, Mhars are found throughout the district. They perform various useful services, acting as village messengers and scavengers, and except in Chiplun, where alone there are Ramosis, as village watchmen. They help both the khot and the police patel, and attend to the wants of travellers. The Mhar families are usually of very old standing, and are not without some influence. If of longer standing in the village than the khot, they are called vatandars and mirasis. In Malvi in the Dapoli sub-division, the Mhars have a Persian copper plate grant of considerable age. The vatandar Mhars were all originally independent landholders, and being exceedingly jealous of their rights, have systematically and, in many cases, successfully withstood the khots' attempts to rackrent them. For their services to the state they receive, in the surveyed subdivisions, cash allowances varying from 4s. to £2 4s. (Rs. 2-22) according to a scale fixed in proportion to the population of the village. In the unsurveyed sub-divisions, except in fifteen villages in Rajapur, sixteen in Devgad, and fourteen in Malvan, they receive no state remuneration. Nowhere, except in the Chiplun sub-division, have any service lands been assigned to Mhars. The 'village messenger, sipai, is found only in the Malvan sub-division. The gurav, as he is called in the north, and *ghadi*, in the south, is usually a Maratha or Kunbi, whose chief duty is connected with the village temple. In a few villages in the south, he performs general village service like that performed elsewhere by Mhars, and in these cases is considered a useful servant to Government and paid by the state. In some cases the allowances for this office are paid to the *khot* himself.

The second class of village servants, who, though they render no service to the state, are useful to the villagers, includes (1) the priest, joshi, upadhia, or bhat; (2) the temple minister, gurav or ghadi; (3) the Lingayat priest, jangam; (4) the carpenter, sutar; (5) the blacksmith, lohar; (6) the shoemaker, chambhar; (7) the potter, kumbhar; and where there is a Musalman population, (8) the judge, kazi; (9) the priest, mulla; (10) the beadle, mujavar; and (11) the preacher, khatib. The priest, joshi, upadhia, or bhat, also sometimes styled the Sanskrit scholar, shastri, or the religious head, dharmadhikari, is the chief Hindu religious officer. He officiates at thread, janvn, investments, and at marriage and death ceremonies. It is also his business to name lucky days, and, if required, to cast nativities. The village priest has no vested right to perform any

particular ceremony, and the parties are free to employ any eligible person, resident either in or out of the village. The *joshis* are paid by fees, varying according to, the wealth of their employers; they usually supplement their incomes by begging. Only one man of this class, a Malvan joshi, who, exclusive of quit-rent, judi, receives £3 6s. (Rs. 33) a year, is paid by the state. The business of the temple ministrant, qurav or qhadi, found in almost every village, is to attend at the village temple, to clean the ornaments and minister to the wants of the idol. He also prepares the leaves, patravalis, used on feast days as plates, and at stated intervals plays the trumpet in front of the village temple. The Lingayat priest, jangam, is found only in a very few villages, where are settlements of Lingayat Vanis. There is no instance of jangam receiving state remuneration. The carpenter, sutar, and blacksmith, lohar, are of the same caste, eating together and intermarrying. The carpenter, found in all but the very smallest villages, holds neither land nor allowances, and is supported entirely by fees for work perfurmed for the villagers. Except that he is found only in the more populous villages, the position of the blacksmith is the same as that of the carpenter. The potter, kumbhar, and the shoemaker, chambhar, sometimes paid in grain and sometimes in cash, suffer little from competition. If they can get their work done at home, villagers seldom employ outside workmen. In villages with a Muhammadan population, the establishment usually includes a kazi, who is the religious and temporal head of the Musalman community, settling all disputes, and exercising a general superintendence over his followers. He also solemnizes marriages and keeps the registers. The kazi is not necessarily a village officer. He is usually appointed to a large district, and may reside anywhere within the limits of his authority. Next in importance to the kazi is the mulla, who acts as a deputy of the kazi, and has charge of the mosques and burial grounds. The mujavar is the servant who cleans and sweeps the mosques and shrines, and the khatib is the public preacher. None of these Muhammadan officials are paid by the state, nor is it, as in the Deccan, the custom for Hindus to employ Musalman office-bearers to slaughter their sacrificial sheep and goats. This work is in Ratnagiri performed by the qurav.

The third class of village servants includes all not directly useful either to Government or to the villagers. These are: (1) the trade superintendent, mahajan; (2) the overman, vartak; (3) the headman, mukadam; (4) the revenue superintendent, desai; (5) the goldsmith, sonar; (6) the washerman, parit; (7) the barber, nhavi; (8) the tailor, shimpi; (9) the oilman, teli; (10) the assayer, potdar; (11) the superintendent of weights and measures, shetia; (12) the coppersmith, kasar; (13) the cotton cleaner, pinjari; and (14) the betel leaf dealer, tamboli. Of the above, the mahajans, vartaks, mukadams, desais, potdars, and shetias are usually hereditary holders, vatandars, under regular deeds. The summary settlement has been applied to their allowances and lands, except where they are

held by village *khots*. Although included in the village staff, none of the remaining servants hold service lands or receive allowances. All are paid by customary fees.

Villagers.

The village population usually includes families of more than one caste. A few Rajapur villages are all of one caste, peopled some by Marathas, others by Kunbis, and others by Musalmans. No distinct and separate settlements of aboriginal tribes are found. The whole body of villagers hold few rights in common. There are no common pasture lands, except in one or twovillages held directly by the state where lands have been set apart for grazing. In such cases no restriction is laid on the number of cattle any individual may graze. Everywhere else the people graze their cattle in their own fields. There are no common forests. Here and there beautiful temple groves are carefully preserved, and save for the temple, no cutting of timber or branches is allowed. The people obtain what fuel they consume from trees standing in their own fields. The water of the village ponds and wells is free to all, except Mhars, Chambhars, and other low castes. But many villages have separate wells and ponds for low caste people. The villagers have no fixed system of distributing the cost of any charitable or usefulworks undertaken by the community. Heads of families are expected to contribute according to their means, paying so much in cash, or supplying so many days' labour. Large landholders and influential personsare expected to entertain the whole village on the celebration of marriages and other important domestic events. Guests are also invited from neighbouring villages; but on such occasions, ordinary cultivators, artisans, and petty shopkeepers are not expected to do more than entertain a few of their own relations and caste fellows. At death ceremonies it is not usual to entertain guests of a different caste to the master of the house. As distinguished from old cultivators, vatandars, new settlers are called badhekaris, cultivators of waste-land, badhen. The same name, though for this the correct term is dulandis, is also applied to persons living in one village and cultivating land in another. Settlements of badhekaris are found in nearly every khoti village. In former times movements of cultivators from one village to another were very frequent, and the competition amongst the khots to attract settlers was very keen. If satisfied with the terms offered them, the new comers became permanent settlers, and intermarried with the older cultivators. If dissatisfied, they moved to other villages in guest of more favourable terms. In some villages all the cultivators belong to this class, and through many generations keep the name of badhekaris, even where they have acquired permanent occupancy rights. In all communal matters, the badhekaris enjoy equal rights and privileges with the older cultivators, and are not now liable to pay any special fees for the privilege of belonging to the village. The changes that have taken place under British rule have left their mark on the village communities. Disputes are now rarely referred to the village councils, and the headman is seldom called on

to give his advice on doubtful questions. The gradual spread of education, their better knowledge of law and procedure, improved communications, and new markets, have made the cultivators more self-reliant and independent.

Movements of the People

The pressure of population is relieved by the readiness with which the people leave their homes in search of work. The better class of Christians and Brahmans find openings as clerks, and in the civil branches of Government service; Musalmans, Marathas, and Mhars are such favourite and willing recruits, that Ratnagiri is the nursery of the Bombay army, and to a large extent of its police, and from Ratnagiri the labour market of the city of Bombay is in great measure supplied. Three large classes of workers go to Bombay from Ratnagiri. Yearly, when the rice harvest is over, bands of husbandmen and field labourers, numbering altogether not less than 100,000 souls, find their way, some on foot, others by sea, to Bombay, and working there during the fair season, return to their fields in time for the rice sowing. The second class, almost all Mhars, take service as municipal street sweepers, keeping their places for years, but every season arranging for a short holiday to carry their savings to their Ratnagiri homes. The third and most important class are the mill-workers who belong to two divisions, Bankotis from the north and Malvanis from the south. These people settle in Bombay, the northerners and southerners generally keeping separate, working in different mills. Though wages have by competition and dull trade greatly fallen, as all the members can find work, every family still earns a large sum. With little comfort in their crowded houses, they are well fed and well clothed, and save large sums which they generally take to Ratnagiri, spending much on their marriages and other family events, but investing a part in ornaments and in buying land. Besides these movements to Bombay, a considerable, and with improved communications, an increasing number of Musalmans, Kunbis, and Mhars go for work to Aden and the Mauritius. Sometimes whole families emigrate, but as a rule the greater number are young men. All of them leave, meaning to come back when they have made some money, and except those who die abroad, all come back after serving from five to twenty years. Men never settle abroad or bring home foreign wives. When away most of them keep up a correspondence with their families. In Aden they work as labourers and in the Mauritius in the sugarcane and potato fields. Their savings, sometimes as much as £50 (Rs. 500) and generally about £20 (Rs. 200), are brought back in cash or in ornaments. Though their health does not seem to suffer from the change of climate, men never pay a second visit to Aden or the Mauritius.

AGRICULTURE

Soil

AGRICULTURE, the most important industry of the district, supports 743,217 persons or 72.92 per cent of the population. [This total 743,217 is made up of the following items: (1) adult males engaged in agriculture as per census of 1872, 226,254; (2) their wives calculated on the basis of the proportion of the female to the male population, 260,616; (3) their children calculated on a similar basis, 256,347; total 743,217. This calculation is necessary, as the census returns show a total of 224,468 under the special head adult agricultural females, and contain no separate figures for the children of agriculturists.]

Rice.

There are four chief soils: rice; garden; alluvial, rabi; and upland, varkans. [Varkas. strictly refers to the crops grown on hill lands and means coarse inferiorgrains. Each of these main classes includes several varieties. Of rice land the chief sorts are: mail, panthal, kudyat, pulanvat, baul or khari, and kharvat. Mali lands are the open tracts in the bottoms of valleys. Where the surrounding rocks are laterite, the *mali*, soil containing much iron clay is stiff and hard to plough. The colour varies from yellowish red to dark brown. Inland, near the trap of the Sahyadri hills, the mali is much softer, deeper, and darker. This is the richest soil in the district, and generally holds moisture enough for a second unwatered crop. Panthal soil is found in low-lying lands, where during the rainy season water lies deep. Its rainy weather rice crop is coarse, and often harmed by too much wet. Fields of this soil yield a second crop without watering. Kudyat, or terraced land, the rice soil on the slopes and at the foot of hills, with more gravel and less clay, is poorer than mali. Pulanvat, or sandy soil, is found only on the coast and along estuaries. It has always more sand than earth and in many places is almost pure sand. Barren in ordinary or irregular seasons, with a heavy and steady rainfall, it yields good crops. Baul, or khari, is the name given to the soil in the hollows on the tops of the flat laterite hills near the coast. It is found in small patches of seldom more than a few acres, and is generally surrounded by bare sheet rock. Extremely fine, crumbling to dust on being ploughed, it is seldom more than a few inches deep. Kharvat, or salt, is rice land near the coast and on the banks of tidal creeks. Most of it is reclaimed from the sea by earth or masonry dams. Always more or less charged with salt, it grows only a coarse red rice.

Garden.

Garden, bagayat, lands are chiefly plantations of cocoanut and betelnut. There are two sorts of garden land, the one known as dgri or astagri, or salt, the other as dongri. or hill bagayat. Agri bagayat is always found on the coast or on the banks of tidal rivers, where the soil is sandy. The cocoa palm flourishes in this soil, bearing in eight or

ten years and not requiring water after the fifth. The lauds usually chosen for *dongri*, or hill, *bagayat* are well watered spots on the lower slopes of valleys. *Rabi*, the alluvial soil near the banks of rivers, is usually very deep and fine. It yields crops of pulse *tur*, sugarcane, and hemp, and in the south, with the help of water, an additional hot weather crop of *nachni*, Eleusine coracana.

Hill.

Varkas soils are the uplands, generally light and poor, where the cheaper and coarser grains, nachni, vari, and harik are grown. The rotation of crops in varkas lands is harik, Paspalum scrobiculatum, in the first year; vari, Panicum miliare, in the second; and til, Sesamum indicutn, in the third. After the third crop the land is allowed to lie fallow for seven years. [Collector to Government, 31st December 1822.] There are two sorts of varkas land, one known as bhatli or mal, level parts where the plough can be used, the other dongri or hill land, the steeper slopes tilled by the hand. In coast villages, where fish manure is used, much of the bhatli land bears for five or six years in succession, and then only requires a fallow of one or two years. Hill, dongri, land is usually cultivated for three or four years, and then, according to the situation and quality of the soil, lies fallow from three to twelve years. The untilled land yields grass and brushwood which is burnt for manure.

Arable Area.

As the revenue survey has been introduced into 774 of the 1337 Ratnagiri villages, there are no available details of the area of the different classes of soil.

Irrigation

Irrigation is chiefly from wells and water courses, *pats*. The tidal wave passes so far inland that the large rivers are useless for irrigation. There are no canals, and, except in Malvan, no ponds [Details of the chief Malvan ponds are given above. p. 11.] or reservoirs large enough to be used in watering the fields. The chief irrigated crops are rice, sugarcane, and garden produce. In 1877-78, of 1,020,836 acres the total area under tillage, 11,975 acres or 1.17 per cent were irrigated. Of the irrigated land 5793 acres were under rice.

A Plough of Land.

The plough is small and light, easily drawn by one pair of bullocks or buffaloes, well suited to the tiny patches of rice land so common all over the district. The area an average pair of bullocks can plough is, in rice land about two, and in both alluvial, *rabi*, and hill, *varkas*, lands about four acres. Betel and cocoanut gardens are not ploughed.

Holdings

The 1878-79 returns show 101,276 distinct holdings, *khatat*, with an average area of ton acres. Of the whole number 57,914 were

holdings of not more than five acres; 16,030 of not more than ten acres; 14,989 of not more than twenty acres; 9327 of not more than fifty acres; 2069 of not more than 100 acres; 680 of not more than 200 acres; 143 of not more than 300 acres; 52 of not more than 400 acres; 27 of not more than 500 acres; 28 of not more than 750 acres; 6 of not more than 1000 acres; 6 of not more than 1500 acres; 3 of not more than 2000 acres; and 2 above 2000 acres.

Stock

The agricultural stock in Government, *khalsa*, villages amounted, according to the 1878-79 returns, to 93,690 ploughs, 753 carts, 187,466 bullocks, 133,215 cows, 67,379 buffaloes, 403 horses, 46,841 sheep and goats, and 5 asses.

Crops

As the details of processes, crops, and cost of tillage, given in the general chapter on the agriculture of the Konkan, apply to Ratnagiri, only a few points of local importance are noticed in this place. Of 1,110,280 acres [As the whole district has not been surveyed, these figures are little more than estimates. The total area of arable land, 1,020,836 acres, or 91.94 per cent, were in the year 1877-78 under tillage. Of the 1,020,836 [Of 1,020,836 acres, 16,308 acres were twice cropped.] acres under tillage, grain crops occupied 949,142, or 92.97 per cent, of which 143,797 were under rice, bhat, Oryza sativa; 15 under Italian millet, rala, Panicum italicum; 273,673 under thickspiked eleusine, nagli or nachni, Eleusine coracana; 167,950 under chenna, vari, Panicum miliare; 352,927 under harik, Paspalum scrobiculatum; and 10,780 under miscellaneous cereals. Pulses occupied 25,721 acres or 2.52 per cent, of which 1579 were under gram, chana, Cicer arietinum; 5379 under tur, Cajanus indicus; 6251 under horse gram, kulith, Dolichos uniflorus; 3040 under green gram, mug, Phaseolus radiatus; 5240 under black gram, udid, Phaseolus mungo; and 4232 under miscellaneous pulses-, comprising pavta Dolichos lablab, kaava Dolichos spicatus, and chavli Dolichos catjang. Oil seeds occupied 25,360 acres, or 2.48 per cent, of which 25,337 were under gingelly seed, til, Sesamum indicum; and 23 under other oil seeds details of which are not available. Fibres occupied 5696 acres, or 0.55 per cent, of which 683 were under hemp, ambadi, Hibiscus cannabinus; and 5013 under san, or Bombay hemp, tag, Crotalaria juncea. Miscellaneous crops occupied 14,917 acres or 1.40 per cent, of which 1574 were under sugarcane, us, Saccharum officinarum; 962 under chillies, mirchi, Capsicum annuum; and 11,774 under miscellaneous vegetables and fruits.

Harik.

The following are the chief details of the more important crops. *Harik*, Paspalum scrobiculatum, holds the first place, with, in 1877-78, 352,927 acres or 34.57 per cent of the total area under tillage. One of the coarser grains, *harik* grows in uplands, either flat or on steep hill-

slopes, where, according to the general practice, harik follows vari and is followed by til. In growing harik, about a fortnight after the rains set in (June 20-30), the ground is four times ploughed, and the seed sown broadcast. The crop, after one hand weeding, ripens about the end of October or the beginning of November. The cheapest grain in the district, though never touched by the well-to-do, harik forms the common food of the poorest classes. It has an unpleasant narcotic property which, though to some extent neutralized by steeping in cowdung and water, causes sickness in those not used to it. So unwholesome, even deadly is it, Some Vagher convicts who broke out of the Ratnagiri district jail in 1868 were overtaken and recaptured by the police when in a state of semi-insensibility brought on by eating raw harik.] in large quantities, that great care is taken to keep cattle from straying into a harik field. Naekni, Eleusine coracana, holds the second place with, in 1877-78, 273,246 acres or 26.76 per cent of the whole area under tillage.

Tillage Details

Nachni.

The head-quarters of *nachni* tillage are the sub-divisions of Ratnagiri, Chiplun, Khed, and Dapoli. The chief produce of poor uplands, it is always grown as the first crop after the land has been refreshed by three or more seasons of fallow, and strengthened by a dressing of burnt cowdung and wood ashes. It is also, by the help of Water, grown as a dry weather crop in alluvial, *rabi*, land when it is called *gimvas*. There are about twelve sorts of *nachni*, half of them early, *halva*, ripening in September; the rest late, *garva*, ripening about the end of October. Dearer than *harik* and cheaper than rice or millet, *nachni* is the common food of the poor.

Vari.

Vari, Panicum miliare, holds the third place with, in 1877-78, 167,950 acres or 16.45 per cent of the total area under tillage. Vari, of which there are two kinds, is always grown in the rainy season on level soils, after and in the same way as nachni. Commonly eaten by the poorer classes, it is dearer than harik and cheaper than nachni.

Rice.

Rice, *bhat*, Oryza saliva, holds the fourth place with, in 1877-78, 143,797 acres or 14.08 per cent of the whole area under tillage. There are three modes of growing rice as a rainy season crop. The first and commonest by transplanting seedlings, the second by sowing sprouted seed, and the third by sowing dry seed broadcast. Dry weather rice crops, called *vaingan*, are grown by watering fields which have yielded a rainy weather crop. The places chosen for a dry weather rice crop are generally hill side terraces well supplied with water. Land tilled in this way often yields a large outturn, but as it is already exhausted by the rainy season crop, before the rice is sown it wants heavy manuring and careful ploughing. The *vaingan* rice crop ripens about the end of

March. Of fifty varieties of rice, [Their names are: patni, panvel, valya, varngal, chimansal, bambsal, kalisal vanksal, lavsal, jiresal, rajesal, lavesal, sal, patni, ambemohar, nirpunj, manjarval kudya, kothabir, divalivarngul, gajvel, mndhane, bhadas, bela, mundga pandra, damga, dodak, avchite, harkul, ghudya; kolambya, kinjala, eklombya, sorti, kushale or karngute, sonphal, sarvati, khochari, navan, sutyal, takla, turya, halvipatni, kudalpatni, kharl, motiyal, mundga-tambada, kamod, ghotval, and valchi.] about forty, ripening in September, are called early, halva; the rest, ripening towards the end of October, are called late, mahan or garva. These varieties of rice differ much in value, the late sorts being generally the best. Their prices, in ordinary seasons, vary from ?d. to 1¼d. a pound (Rs. 35 - 48) a khandi. Rice is the common food of the well-to-do, and is eaten by the poor on marriage and other special occasions. It is used in the manufacture of ink and by washermen in making starch. Rice spirits are sometimes distilled, but from the cheapness of palm liquor are in little demand.

Pulses.

Of Pulses known collectively as kaddan the chief kinds are horse gram, kulith, Dolichos uniflorus, grown in all parts of the district except, Khed and especially Common in Malvan and Devgad. In 1877-78, 6251 acres or 0.61 per cent of the tilled area was under kulith. Sown in November, after the rice crops are housed, it ripens early in March. Kulith flour is used as dal, and the, seeds, when boiled and mixed with gram, make very good food for horses. Its stalks are used as fodder. Tur, Cajanus indicus, largely grown in the north of the district on the banks of the Chiplun and Khed rivers, is not found in any quantity south of Ratnagiri. In 1877-78, 5379 acres or 0.52 per cent of the tilled area were under tur. It grows both as a rainy weather, and in the better class of rice fields as a dry weather crop. The rainy weather tur is sown in July and ripens in November; the dry weather tur is sown in September and ripens in February. The green pods are used as a vegetable, and the dried beans are split and eaten with rice. The dried stalks yield excellent charcoal for gunpowder. Black gram, udid, Phaseolus mungo, is grown all over the district. In 1877-78, 5240 acres or 0.51 per cent of the tilled area were under udid. It is sometimes sown among standing rice and left to grow after the rice-crop has been reaped. It ripens about March. Green gram, mug, Phaseolus radiatus, grown all over the district, is most common in Chiplun. In 1.877-78, 3040 acres or 0.29 per cent of the tilled area were under mug. There are two crops of green gram in the year, an early or rainy weather crop sown in July and ripening in September, and a late or cold weather crop sown in December and ripening in the beginning of March. As a cold weather crop, it is grown in damp fields and as a rainy weather crop in sandy soils. Gram, harbhare, Cicer arietinum, with 1579 acres, is grown chiefly in Chiplun. It is sown in November and ripens in March. Pavta, Dolichos lablab, is also an important crop.

Oil seeds.

Til, Sesamum indicnm, chiefly grown in Dapoli, had, in 1877-78, 25,337 acres or 2.48 per cent of the tilled area. It is of two kinds, black-seeded and white-seeded. Black-seeded til, which generally follows harik, and sometimes, though with a smaller return, nachni or vari, grows best on tolerably flat land. No manure is used, but after two ploughings, from the middle to the end of June, it is sown broadcast. The seed yields gingelly oil used both in cooking and as a medicine. The white-seeded til is grown in the same way. The seed forms part of many sweetmeats, and yields an oil used in cooking. The percentage of oil in the seeds is not so large as in the black-seeded variety.

Sugarcane.

Sugarcane, 1574 acres, is grown in all parts of the district except in Khed. It is planted in February and March and is ready to cut in January. Mauritius sugarcane, introduced many years ago, is still cultivated in some places, but a small red variety is preferred. [In 1834 about 5000 Mauritius canes were brought to Ratnagiri but from their indifference and dislike of anything new, the people refused to plant them. (Collector to the Rev. Com. 4th September 1634). About 4000 given free of charge in the village of Mirya two miles from Ratnagiri, produced 14,000 superior canes. A large number of these were again distributed. (Collector to the Rev. Com. 7th September 1835). As they yielded thrice as much juice as the ordinary cane they soon rose in public esteem, and Government to further its cultivation granted remissions of rents on fields destroyed by jackals, ants, or blights. (Government to the Rev. Com. 25th October 1835). In 1837 the sowers of cane in Mirya refused to use the Mauritius variety. In 1839 the sugarcane crop was destroyed by ants and jackals, except in Mirya whence others obtained large supplies. (Collector to the Rev. Com. 29th February 1840). In 1856 its cultivation was confined to a few coast villages.] The sugar-making process is simple. Some men out the cane, others feed a coarse mill that squeezes out the juice, and others boil the juice in a large caldron, in which, without refining, it is allowed to harden. The raw sugar is much used by the people of the district.

Chillies.

Chillies are, by the help of water, grown in considerable quantities as a dry weather crop. Sown in November or December, the pods begin to ripen about the end of February and the plants, if well watered, yield for several months.

Hemp.

Tag, hemp, Crotalaria juncea, is grown to a considerable extent; [In 1835 the cultivators, fearing a rise in the assessment on hemp grown on unassessed lands, discouraged its cultivation. (Collector to the Revenue Commissioner, 7th September 1835). Government accordingly granted twenty-five year leases and promised remissions.

(Government to the Revenue Commissioner, 21st April 1836). In 1836 Ratnagiri ropes were in much demand for the Bombay shipping. (Revenue Commissioner to Government, 1st April 1836). The highest assessment was reduced from £1 2s. to 10s. (Rs. 11 - 5) a bigha. (Government Resolution, 29th September 1836). In 1839 the precarious nature of the crop, the dislike of the people to hemp because it was used in fishing nets, the poverty of the cultivators and the opposition of the *khots* were the chief checks to hemp being generally grown. (Assistant Collector to Collector, 8th August 1839).] the rainy weather crop is sown in July and ripens about the end of October. The dry weather crop is sown in rice soils about November and ripens about March. It is used chiefly for making fishing nets, twine, ropes, gunny bags, and paper.

Cotton.

Cotton, kapus, Gossypium herbaceum, is not grown in the district. The soil, a poor stiff clay, is ill suited to its growth. Up to 1818, when some experiments were begun with exotic cotton, except a few plants of the Konkani or naturalized Bourbon, for domestic use, no cotton was grown in Ratnagiri. [Dr. Hove (December 1788) found up the Bankot creek cotton of the yellow sort growing very freely. It had just begun to bud and promised a plentiful harvest. It was planted both with rice and pulse and with wheat. Tours, 191,192. On the other hand Forbes writing about the same time makes no mention of cotton. Or. Mem. I. 107, 122. It. seems possible that Dr. Hove mistook the hemp plant, ambadi. Hibiscus cannabinus, for cotton.] The 1818 experiments, though at first hopeful, were in the end disappointing. In 1838 the high price paid for Sea Island cotton led the Revenue Commissioner Mr. Williamson, to try to grow it in the flats near the Malvan salt pans. The experiments were renewed soon after by the Collector Mr. Elphinston in his own garden with the Sea Island, New Orleans, and Konkani varieties. The land was richly manured, and the plants grew freely. Samples were sent to the Bombay Chamber or Commerce and to London brokers. Favourable opinions expressed by both encouraged Mr. Elphinston to continue in 1840-41 the cultivation of the Sea Island and Bourbon varieties. The samples sent were said to be equal to those of the previous year, and experiments on a larger scale were advised. But as Mr. Elphinston had supplied no details of the cost of cultivation, and as he admitted that it far exceeded the price realized, Government did not think it advisable to undertake experiments on a large scale. In 1841 they placed twelve barrels of New Orleans seed at Mr. Elphinston's disposal, but failing to induce the people to take the seed, he sent back eleven barrels and kept one for his own use. The plants sprang up, but rain destroyed most of them and the rest yielded a very scanty crop. In 1840-41 he still further extended the cultivation of these exotic varieties. Konkani, or Bourbon, cotton was pronounced to be more useful than the Sea Island, as the Sea Island was used only for the finer yams, and its consumption was comparatively limited. Returns of the cost of cultivation in 1840-41 and 1841-42 showed a loss in the first year more than covered by the profit in the second. The acre yield was thrice as much as at Broach and Kaira. On the recommendation of the. Bombay Chamber of Commerce, Government placed a sum of £1000 (Rs. 10,000) at Mr. Elphinston's disposal. In 1843-44, 275 acres and in the next year 842 acres were cultivated, but the experiment was a decided failure, most of the seed planted never coming to maturity. The kinds sown were Bourbon, hybrid Bourbon obtained by artificial impregnation with the best American varieties, and Sea Island. In 1845, Mr. Elphinston reported to Government that the chief obstacles to success were the cost of tillage, the barrenness of the red soil, and the highness of the rents owing to the difficulty of procuring good land, the inhabitants depending on their fields for their subsistence. He was of opinion that the climate suited the plants well, even those of foreign origin. In 1845-46 the produce of the gardens amounted only to $^{1}/16$ ton (4? khandis) of uncleaned and $^{11}/560$ ton (1? khandis) of clean cotton. The Collector, Mr. Liddell, who succeeded Mr. Elphinston, recommended that the experiments should be given up. The farms were closed in. April 1846, and since then no fresh experiments have been made.

The district does not yield grain enough for the wants of its people. Large quantities are brought in from above the Sahyadri hills and from the Kolaba district. Much of the soil is so poor that, after yielding two or three crops in succession, it requires several years' fallow.

Cultivators

In all parts of the district not only the agricultural classes, Kunbis, Marathas, Bhandaris, Musalmans, and Mhars, but almost the whole population, including some Brahmans, are engaged in tillage. Washermen, tailors, blacksmiths, and other artisans, unable to support themselves by their callings, are often forced to eke out their gains by cultivation. Prabhus, Bhats, and Gujars are the only classes who never directly engage in field work.

The six chief classes [Contributed by Mr. J. R. Gibson, Dy. Supt, Rev. Survey.] of cultivators are, Kunbis, Marathas, Bhandaris,. Musalmans, Mhars, and Brahmans. No materials are available from which even an approximate estimate of the strength of these classes can be made. Of Brahmans very few actually engage in field work. They hold land both as proprietors and tenants, and either employ labourers or sub-let to persons who pay them a fixed share of the produce.

Except in a few coast villages entirely occupied by Musalmans and Bhandaris, Kunbis and Mhars are found in almost every part of the district. Marathas are chiefly found in the *valati*, or upland, villages of the centre of the district, and close under the Sanyadri hills. Bhandaris and Musalmans are always found in the lowland, *khalati*, coast villages. [In the Konkan the inner uplands are called *valdti* (*varthaya*, uplands) and the coast lands *khalati* (*khalithaya*, low lands).]

Brahmans live in the coast villages and in the centre of the district. They are seldom found near the Sahyadri hills.

The Kunbi generally lives in a small house with mud and gravel walls, and a thatched roof held up by wooden posts let in at the corners and gables. The rafters are generally bamboos, and the thatch bundles of rice straw and coarse grass. A rough wooden frame let into the wall supports a small door, made as often of split bamboos as of wood, and one or two small holes in the wall serve to let in a little air and light and to let out smoke. The inside is generally divided into two rooms, a larger where the family cook and live in the day time, and a smaller the sleeping and store room. At the gable end is usually a lean-to shed in which cattle and field tools are kept, and grass and wood stored. A Maratha's house is generally better and much neater than a Kunbi's, with sun-dried brick walls, a tiled roof, a front verandah, and in the fair season an outer booth of palm-leaf matting, the floor every day carefully smoothed and cowdunged. Most Brahmans, Bhandaris, and Musalmans live in well-built houses raised on stone plinths. The walls are of masonry or burnt brick work and the roofs are tiled. The wood work in the roof is generally substantial and well built, and the door and window frames neatly put together. Wooden shutters are generally used, though glazed windows are sometimes seen in Ratnagiri, Malvan, Vengurla, and other towns. The village Mhar usually lives in a small shapeless roughly-built thatched mud hut. But pensioners and other high class Mhars generally, like the Marathas, build a better style of house.

The Kunbi owns a pair of bullocks, a cow or buffalo, and a few goats. His field tools are, one plough, three harrows, one with short wooden teeth, one a log for crushing clods, and one a flat smoothing board; two or three picks, *kudals*, for digging hill lands; two or three billhooks, *koitas*; two or three hoes, *pavdas*; two or three sickles; and half a dozen mallets, *mogris*, for hand crushing clods. His house gear is a few copper and brass eating and drinking dishes and cups, and two or three small cooking pots. His water is always carried, and his food very often cooked, in earthen pots. None have large stores of grain, though a few of the better class keep small stocks of *nachni* or *harik* enough to support their families for a few months after harvest and to supply Seed grain. Except that in the matter of household goods they are better off than the Kunbis, this account applies equally to most Maratha husbandmen.

The Kunbi is an orderly, hardworking and excellent cultivator, very skilful and clever in damming streams and cutting water-courses for rice fields. Whenever the soil suits, and there is water, he grows garden crops and uses manure freely. The Maratha is orderly and steady but in a less degree than the Kunbi, and his style of tillage shows that he has not the same patient endurance of hard work. The Bhandari is not so good a cultivator either as the Maratha or the Kunbi. Most of them follow the more gainful calling of toddy-drawing and the lands they till, in the sandy tracts on the sea coast are, from

the nature of the soil, easily worked. The Musalman is a still worse cultivator than the Bhandari. They have less energy and perseverance, and many of them, fishers or sailors in the fair season, are less dependent than others on the success of their tillage. They use manure freely but are less careful about ploughing and weeding, and seldom cultivate fields of poor soil. Mhars are rarely good husbandmen. Holding it in return for service, under the khoti system, they seldom pay for their land or only pay a nominal rent. Skilled in cutting stones suited for roof props, and much employed in building stone embankments for reclamations and temple causeways, Mhars have not the same inducement to become good cultivators as Kunbis and others who entirely depend on the outturn of their fields.

Many Marathas and some few Kunbis are proprietors with tenants. But the bulk of the cultivating classes are small landholders, many of them also working as field labourers. So dense is the population that nearly all are forced, in some way or other, to add to the store supplied by their fields. Every year, soon after harvest, Kunbis and Mhars migrate in thousands to Bombay and other labour markets, and return to their homes at the beginning of the next cultivating season, with money enough to buy seed grain and keep their families during the rainy months. In their absence the women and children live on the small store of grain they may have been able to keep over from the previous harvest, and eke out a subsistence by the sale of firewood, grass, and fowls. Marathas and Brahmans do not migrate to the same extent as Kunbis. But many of them enter the army, police, and other branches of Government service, and remit money to their relations who remain in Ratnagiri to look after the land. Musalmans engage in trade or in shipping and add the profits to what their lands yield them.

Not from high rents, but chiefly because the land fails to yield enough food to support the people, there is considerable indebtedness among cultivators. This is especially the case with Kunbis who depend so much on labour for their support. If sick or unable to find work during the fair season, the Kunbi can hardly fail to run into debt. Among Brahmans, Marathas, Bhandaris, and Musalmans, whose sources of extra income are more certain; law suits, family ceremonies, and rich living are the chief causes of indebtedness.

Bad Seasons

Since the beginning of British rule, there has been no year of distress so severe and general as to amount to famine. Of only two of the older famines, those of 1790 and 1802-03, does any information remain. Both of them seem to have been felt all over the district. In the three northern sub-divisions, Dapoli, Chiplun, and Ratnagiri, the famine of 1790 lasted from eight to ten months, and that of 1802 from twelve to fourteen. On both occasions the Khed sub-division suffered severely. In 1802 rice is said to have risen to about four pounds for a shilling, and in 1792 the price was even higher. In Rajapur there was in 1792 scarcity of food for four months, and in

1802 for two or three months. Rice was sold at three pounds for a shilling. In Malvan, in 1802, the distress was great, and lasted for more than a year. Almost all the people of eight villages were carried off by hunger and disease. The survivors fled to Goa. To relieve the distress private food houses, annachhatras, were opened, and grain distributed daily. But these houses were too few, and the gifts of grain too small to do much to stay the general distress. In a few places, particularly in the Dapoli sub-division, the Peshwa's officers opened public relief houses. At Khed, the building now used as the Mamlatdar's office, was till very lately known as the relief-house, annachhatra. In 1802 in the south of the district the revenue was remitted. And for three years to tempt back those who had left, much less than the former rents were levied, and creditors were prevented from recovering their debts. In 1824 a very light rainfall was followed by a complete failure of crops in high grounds and a partial failure in low rice-lands. The very high price of grain in some degree made up for the scanty harvest, but the general loss was very great, and as the year before (1823) had also been unfavourable, large remissions of rent had to-be granted. [Colonel Etheridge's Famine Report (1868), 148-121.]

In 1876 an insufficient rainfall, 81 inches against an average of 104, caused much loss of crops. Public health was bad, and there was considerable distress. The first fall of rain in the second week of June was followed by a break so long as to do serious injury to the young plants. The latter rains entirely failed, and nearly the whole of the liarik, from one-half to three-fourths of the nagli and vari, and a quarter of the rice crop were lost. The failure told very seriously on the lower classes whose staple food, nagli, harik, and vari, rose from about forty-two to twenty-six pounds. To relieve distress, besides those begun by the Local Funds Committee, four public works, repairs to the Vijaydurg, Vaghotan, and Phonda pass road, making a road from Chiplun to Guhagar by Ibhrampur, improvements to the Phonda, Rajapur, and Lanja road, and a strengthening dam for the Pendur lake, were undertaken by Provincial Funds. Of a total of £7736 (Rs. 77,360) spent on relief works £3495 (Rs. 34,950) were debited to Local Funds and £4241 (Rs. 42,410) to Provincial Funds. Happily, an unusual demand for labour sprang up in and near Bombay, and it was estimated that double the usual number or at least 150,000 of the poorer workers moved to Bombay for part of the fair season, and returned with savings enough to last them till the next harvest (1877-78). This was very favourable as harik, the staple food of the poorer classes, was a bumper crop.

CAPITAL

[Contributed by Mr. G. W. Vidal, C.S.]

Capitalists

THE 1872 census returns showed twenty-four bankers and money changers, and 5337 merchants and traders. Most of the latter were probably capitalists only in name, trading on borrowed money. Under the head capitalists and traders, the 1878 license tax assessment papers show 3310 persons. Of 2290 assessed on yearly incomes of more' than £10, 340 had from £10 to £15, 998 from £15 to £25, 380 from £25 to £35, 168 from £35 to £50, 133 from £50 to £75, 96 from £75 to £100, 51 from £100 to £125, 17 from £125 to £150, 32 from £150 to £200,39 from £200 to £300, 16 from £300 to £400, 9 from £400 to £500, 6 from £500 to £750, one from £750 to £1000, and one over £1000.

Currency

The imperial currency is at present the sole circulating medium. Up to 1835, the chief coin was the Surat rupee, supplemented by various older rupees known as Chandvad, Doulatabad, Hukeri, Chikodi, and the Emperor Akbar's interesting old chavkoni or square rupee. The south Konkan has never had a local mint. None of the adventurers who, from time to time, rose like the Angrias to half independence, affected a private mint or a special superscription. The currency was mixed, the brisk sea trade bringing into the district every sort of Indian coin. Since 1835, the Company's rupee has gradually superseded this heterogeneous currency. Till lately a few Surat and other coins continued to find their way into the Government treasuries. But their circulation has entirely ceased. The few that remain are kept as relics and curiosities by rich traders. The square Akbari rupees now very rare, are held in great veneration, and much prized as 'luck pennies.' According to the 1872 census returns, there were four money changers, sarafs, and twenty who were bankers as well as money changers.

Bankers.

There are strictly speaking no banks in the district. The most important moneylenders are called *Savkars*; but they do not, as a rule, open deposit accounts.

Insurance.

None of the local merchants or traders carry on insurance business. Cotton cargoes from Vengurla, Rajapur, and Chiplun, are insured in Bombay.

Exchange Bills.

p class="p_text"> The leading Ratnagiri traders grant exchange bills,

hundis, payable at the following towns; Poona, Baroda, Belgau in, Bombay, Satara, Shahapur, Gokak, Ramdurg, Vengurla, Rajapur, Chiplun, Sangameshvar, Malkapur, Mahad, Rohe, Revdanda, Goregaon, Karhad, Dharwar, Hubli, Sangli, Miraj, and Kurundvad. On bills granted at sight a premium of from ½ to 1 per cent (8 as. -1 rupee) is charged and on bills payable at from five to forty-one days after sight the premium ranges from ½ to ¾ per cent (8-12 as.). No bills are drawn for periods of more than forty-one days' sight.

Classes who Save

Of townspeople, the only classes who save habitually are traders, moneylenders, pleaders, Government officials, and occasionally skilled artisans. In the rural parts, usurers and shopkeepers alone, as a rule, put by money. The cultivating classes are rarely in a position to save. Most cultivators, who are registered occupants, have to borrow on the security of the coming crop, while the wages earned by field labourers during the agricultural season, from May to November, enable them to tide over only a portion of the year. For the rest of the year both classes are compelled to seek work in Bombay. Muhammadans as a class make little, and save less. In the coast villages, the most influential Bhandaris, owning large palm gardens, engage in the liquor trade, and often acquire moderate wealth, and here and there a thrifty husbandman by lending his savings scrapes together a little money. But with cultivators as a class, the possession of capital is the exception, the want of it, the rule. Any surplus cash which may find its way into a cultivator's hands is generally hoarded and buried underground. Very few of the lower classes attempt to increase their store by the profitable investment of their savings. The seafaring and fishing population, in all about 80,000 souls, chiefly Musalmans of the Daldi class, Gabits, Kolis, Kharvis, and here and there a few Bhandaris, are, as a rule, very independent and in fairly comfortable circumstances. As a class they are more improvident and less frugal than the cultivators. The most prosperous among them seldom save more than enough, after many years of labour, to build a small fishing smack, and to keep up their stock of nets and fishing tackle. A cultivator, labourer, or fisherman, whose yearly income falls short of £5 (Rs. 50), can lay by nothing. If he has more than £5 (Rs. 50), he may, if frugal and with a small family, save. But such savings are usually absorbed in marriages and other family expenses. A Government clerk drawing less than £3 (Rs. 30) a month, cannot, as a rule, lay by money. On the general question of expenditure no exact calculation can be made, as expenses very largely depend on the number of persons whom the head of the family supports. Marriages, caste feasts, and other special expenses vary greatly according to the position and wealth of the entertainer. But on the whole the poorer classes in Ratnagiri are in this respect far less extravagant than the Deccan cultivators. It is also worthy of note that the necessary expenditure on these religious and festive occasions is said to be considerably less now than it was forty years ago. Whether this reform

is due to greater enlightenment, or, as some would say, to stern necessity, is open to argument. Whatever may be the cause, the result is that to provide the funds for their daughters' weddings, the poor classes have to stint themselves and live below their fair standard of comfort.

Investments

State Securities. Savings Bank.

Savings are very rarely invested either in Government securities or in joint stock shares. In 1879 the amount paid as interest to holders, of Government paper was £111 (Rs. 1110). The Government Savings Bank is used almost exclusively by Government servants and pleaders, who find it the safest and least troublesome way of disposing of their surplus cash. The institution attracts very few deposits from other classes. In 1879 the Savings Bank's deposits amounted to £3140 (Rs. 31,400).

Land.

Building sites are not much sought after as an investment. Except in the larger towns, such as Chiplun, Rajapur, and Vengurla, where there is a considerable trade, building plots have little value, and yield little return. Arable land is everywhere in great demand. The district is thickly peopled, and nearly the whole available arable area has long since been taken up. The produce of the land is never enough for the people's food. Every year grain has to be brought from Bombay, the Deccan, and southern Maratha country, so that in spite of the ruggedness of the district and the poverty of the soil, land is valuable and much sought after. The holdings of peasant proprietors, dharekaris [The dharekari holds his land direct from the state and pays iris assessment in Cash. Subject to the state demand he has a full right in his holding, and may inherit, sell, and mortgage, and, within certain limits, re-enter after relinquishment. In villages where there are khots, or hereditary village farmers, the dharekari pays his rent through the khots. The khot can claim no profit from the dhara kari. The khot's only claim over peasant-held, dhara, land is a reversionary interest when it has finally lapsed. Details are given below, p. 205.] are most in demand. The average sale value of rice land held on this tenure is about £10 (Rs. 100) an acre, and near the large coast towns as much as £40 to £50 (Rs. 400-500) is often realised. The average acre value of dry crop, varkas, land yielding only coarse lull grains, [The chief hill grains are nachni Eleusine coracana, vari, Panicum miliare, and harik Paspalum scrobiculatum.] is from £1 10s. to £5 (Rs. 15-50) the acre. The lands of the quasi-dharekaris, who, under the name of daspatkaris or dupatkaris, are found in the Dapoli sub-division, are also transferable by sale and mortgage: but as they are all burdened by the liability to pay the khot some fixed profit over and above the state demand, they do not much commend themselves to investors. Next to peasant holdings the best form of land investment is the purchase of the estates of the superior holders

known as khots. The khot is the superior holder, or a coparcenary of superior holders, who have the hereditary right of settling with Government for the whole village rental. The khot, or the members of the khot coparcenary, usually hold and farm a small portion of the village lands themselves. The rest of the lands are sub-let to husbandmen most of whom are privileged tenants, or tenants by prescriptive right, who cannot be ousted so long as they pay the khot the customary, or if agreed on, a fixed proportion of the. crop. Standing crops are annually inspected and the outturn appraised by the khot. Only about five per cent of the tenants are now tenants-atwill paying rack-rents. Details are given below, p. 208.] In former years the acquisition of a khoti estate, with the power position and influence it brought, was an object of ambition to many arising family. Within the last ten or twenty years the popularity of these investments has declined. The minute sub-division of shares and consentient disputes and litigation, the tenants' growing independence, and the increasing difficulty in collecting rents, the uncertainty regarding rights and privileges claimed by the khots and disputed by the state, have all more or less contributed to this effect. [Mr. Crawford's reply to the Famine Commission, 1879.]

Land.

Still they yield fair profits, and a yearly return of from six to twelve per cent is usually expected and realised. The occupancy rights of tenants in khoti lands are heritable but not ordinarily transferable by sale or mortgage. The purchase of such rights, even could it be effected, would yield little or no return, as after paying the khot's demand, only a margin sufficient for the bare subsistence of the cultivator usually remains. Occasionally khoti tenants who. have money to invest, purchase or become mortgagees of their occupancies from the khots, or in other words redeem, either for ever or for a time, the rent levied by the khot over and above the Government assessment. When this is done the khot levies the state demand only, and the tenant becomes virtually a peasant holder, dharekari. [The following instances occurred, in the Guhagar petty division of Chiplun. In 1845, a khot sold for £12 10s. (Rs. 125) to the occupany tenant 1 12/40 acres of rice land and 2 1/5 acres of dry crop, 3 30/40 acres in all assessed at 13s. 4d. (Rs. 6-11-6). In 1869 the buyer mortgaged the same land to a third party for £90 (Rs. 200). In another case 1 33/40 acres of rice land assessed at 8s. (Rs. 4) were mortgaged by the khot to the occupancy tenant for £7 4s. (Rs. 72). In another 1 34/40 acres of rice land assessed at 3s. 4d. (Rs. 2-10-9) were mortgaged for £5 (Rs. 50). In another about a third (15/40ths) of an acre of rice land assessed at 1s. 101/2d, (15 as.) was mortgaged for £2 10s. (Rs. 25). In another rice and dry crop land measuring together 11 11/40 acres and assessed at 9s. 2d. (Rs. 4-9-6) were mortgaged for £5 8s. (Rs. 54). In another rice and dry crop land measuring together $4^{25}/40$ acres, assessed at 16s. $9^{3}/40$. (Rs. 8-6-6), were mortgaged for £6 (Rs. 60). These cases, which vary much as to the

proportion borne by the Government assessment to the sale or mortgage value of the dues redeemed, are not common and are found only in certain parts of the district.] But such cases are unusual as few *khot* tenants are in a position to redeem by a lump payment the customary dues of their superior holders.

In addition to *dhara* and *khoti* estates, here and there salt wastes and tidal swamps require capital to bring them under tillage. The state has always reserved its right of letting such lands for cultivation. Improvement leases, *istawa kauls*, were granted by the Maratha government, and by this means a large area of swamp has from time to time been converted into valuable rice land and cocoanut gardens. In such cases a nominal rent is levied for a term of years, and then the full assessment is charged. These *haul* lands, when brought under full cultivation, command a high price, but are not often in the market. Reclamations usually require a considerable outlay, but where an investor can afford to let his money lie idle for a few years, and has not to borrow at ruinous interest, they eventually yield a good return.

Houses.

Except in the larger towns, houses are very seldom built as a speculation. Well-to-do traders, retired Government servants, and pleaders, build for their own use substantial and comfortable dwellings, but seldom let them to tenants. Ornaments are almost a necessity to all classes, and a considerable amount of capital is thus unproductively locked up either in the owner's or the pawn broker's hands. The very poorest women of the Maratha and Kunbi castes have, at least, a gold or silver-gilt nose ring, nath, a necklace of gold and glass beads strung on silk cord, galsari, and a pair of gold or gilt earrings, bugdi; while the men almost without exception have a single gold earring, bhikbdli, worn on the upper lobe of the right ear, and a silver waistbelt, kargota.

Ornaments.

Other ornaments are added as funds admit, such as silver toe rings, jodvi, silver armlets, vaki, strings of old Venetian coins, putlis, and gold hair ornaments, ketak, for the women, and finger rings for the men. Amongst the higher castes such as Brahmans and Shenvis, no woman's dress is complete without, in' addition to the nose ring, earrings bugdi, and necklace galsari, a gold neck chain sari, a pair of gold bracelets patli, a pair of gold earrings with pearl pendants kap, worn lower on the ear than the bugdi, and another neck ornament called thushi. The younger women also wear heavy silver anklets, todas. Men of the same class wear gold and gem finger rings, a gold necklace of a pattern called kanthi, and occasionally, though not always, the single earring bhikbali. To these the rich add various other ornaments and trinkets. It is difficult to estimate the capital represented by the people's ornaments. The license tax returns of 1878 give a total of 2008 working Sonars or gold and silversmiths, or one for every five hundred of the population, all of whom, it is to be

presumed, find employment in making new or re-making old ornaments. Numbers of the inhabitants also who visit Bombay buy ornaments there, and Ratnagiri sepoys, while on service in other parts of the Presidency, invest their savings in ornaments. The value of a family's ornaments may be said to range from about 10s. to £100 (Rs. 5-1000).

Shipping.

Occasionally the leading merchants invest in native craft, *patimars* or *phatemaris*, *kotids*, *machvas* and *padavs*, generally buying them ready made and equipped. Native craft are also often mortgaged by their needy owners to moneylenders. But most of the vessels employed in the carrying trade are the property of the seafaring classes, Daldis, Kolis, Bhandaris, Kharvis, and Gabits. Eight per cent is considered a fair rate of interest on capital invested in shipping, and the average cost of a new vessel is about £28 the ton (Rs. 10 the *khandi*).

Money Lending.

No class has a monopoly in usury. All who are able to Have, from the wealthiest Gujar to the poorest Brahman beggar, occasionally lend money. Besides Brahmans and Gujars, though few of them are professional moneylenders, Shenvis, Prabhus, Vanis, Marathas, Kunbis, Bhandaris, Musalmans, Dhangars, and, inrare instances, even Mhars, advance money on bonds. In khoti villages the hereditary or vatandar khots, who receive most of their dues in kind, are the chief grain dealers and moneylenders. Their position corresponds to that of the Deccan Savkars, with this difference, that having a direct hereditary interest in the prosperity of their villages and the welfare of their tenants, they are more liberal in their dealings with their debtors. On the other hand, mortgagee khots, unfortunately rather common in Ratnagiri, who hold estates for a limited time, are almost always unpopular, having no permanent interest, and being naturally anxious to get in a short time the largest possible return. No Marvadis have as yet established themselves in this district. Only the more important moneylenders, Gujars and Brahmans, keep a regular day book, kird, and ledger, khatavni. The usual practice among Brahmans and other educated creditors is to have Lending their accounts written on loose balance sheets, shilakband. Petty lenders, and those unable to read and write, keep no accounts and rely solely on their bonds. Gujars, Brahmans, and most educated moneylenders advance money to ail classes of borrowers, while Marathas, Kunbis, and Musalmans deal with the poorer cultivators. The same rates of interest are charged by both. Combinations among different creditors against a common debtor are rare. Each creditor acts independently and does the best for himself. As a last resource the civil courts are always resorted to for the recovery of debts, but decrees are not always executed. The judgment creditor prefers to got a mortgage from the debtor of property equivalent in value to the amount of the

decree, or of his whole estate if less in value than the claim. If he succeeds in this, he is content to let the decree stand over; if he fails, he obtains execution, and at the auction usually buys the debtors' property at a nominal price. The judgment creditor is generally the only bidder. Prior encumbrances and uncertainty as to the precise interest of the debtor in the property choke off competition. The judgment creditor obtains formal possession, but frequently, either of his own free will or to avoid further trouble, on his executing an agreement to pay rent, allows the debtor to remain as his tenant. Imprisonment is not often resorted to, and cases of claims being written off as bad debts are unknown. Complaints by debtors that bonds have been forged or passed without consideration, or that part payments have not been credited, or that excessive rent has been charged, are occasionally made, but seldom proved. Instances in which debtors have been collusively kept in ignorance of suits filed against them are either unknown or very rare.

Interest

The Government rupee is the standard in all moneylending transactions. Except in Malvan, and by the Gujars who use the samvat year, and in rare cases when the Christian year is employed, interest is charged for the shak year. If the term exceeds three years no charge is made for the intercalary month. When adequate security is offered, there is no marked difference in the rates of interest levied from different classes of borrowers. But advances on personal security depend for their terms solely on the credit of the individual borrower. The rate charged on petty loans, secured by pledging ornaments or other movable property, varies from twelve to twenty-four per cent. In very extreme cases as much as thirty-six per cent is said to be exacted. In towns the ruling rate is somewhat less than in villages. Advances on personal security are made at from twenty-five to thirtysix per cent according to the credit of the borrower. Money advances with a lien on crops are seldom made. Grain both for seed and subsistence is habitually borrowed by the poorer cultivators to be repaid at harvest time with an additional fourth of the quantity lent. This is called the savai, or one and a quarter system, and as these loans are usually repaid in about six months, the charge is equivalent to a yearly rate of fifty per cent. Provided the title is undisputed, valuable effects can be mortgaged at from nine to twelve per cent interest, and lands and houses at from six to nine per cent.

CAPITAL

Borrowers.

Husbandmen.

agricultural classes, though frugal and given to few extravagances, are forced to borrow. Few cultivators reap a sufficient harvest to satisfy their own needs and repay their creditors. Field labourers can subsist only for a few months on the wages of tillage. The local demand for other labour is small and uncertain, and the villagers own neither carts nor pack bullocks wherewith to earn carriers' wage. Unpromising as their condition seems, the poorer classes manage to live, and are probably less encumbered with debt than the Deccan cultivators. The chief causes which restore equilibrium and avert destitution are emigration and military service. In November soon after the early harvest is over, the able-bodied husbandman leaving a scanty store of coarse grain for the support of the young, the sick, and the aged of his, family, marches to Bombay. There for six months or more he usually succeeds in getting good wages, and saving a few rupees, returns to his home in May, in time to prepare his fields for the yearly crop. About 100,000 persons, or ten per cent of the population, are believed to perform this yearly pilgrimage to Bombay. Others, getting permanent and lucrative employment, remain absent from their villages for long periods, remitting their savings to their families. The native army, largely recruited from the Ratnagiri district, gives employment to numbers of the agricultural and labouring classes. Besides the remittances poured into the district by men on service, no less than £45,000 (Rs. 4,50,000) are yearly paid by the state to military pensioners. Thus the revenue collected by Government is in great part returned to the district, and the cultivators enabled to maintain themselves despite the deficient produce of their land. The time of greatest pressure throughout the district, and more especially in the wild country on the slopes and spurs of the Sahyadri range, is from May to November, when the cultivators, having exhausted their stores of food and money, are anxiously waiting for the coming harvest. As no part of the district yields grain enough for the population, large imports by sea and land are a yearly necessity. During the rainy months the imports cease and prices rise. It is at all times difficult to carry grain to the tract at the foot of the Sahvadri hills, and this is more especially the case during the rainy months. In the best of seasons some scarcity is inevitable, and for some weeks before harvest, the hill peasantry are compelled to live on esculent roots and leaves and wild plantains. These privations are expected and endured with characteristic patience. Any failure of the coarse hill grains which are to the Konkanis what millets are to the Deccanis, causes severe distress. In the coast districts the inhabitants are less dependent on the harvest, and whether the rice crop is large or scanty makes little difference to the poorer classes, to whom such food is an unattainable luxury. Here,

as in the inland villages, it is in the rainy months that the pinch is felt. Very few cultivators can tide over this time without obtaining advances of grain or money on the Security of the coming crop. The grain dealers and moneylenders have become a necessary part of the system. Probably half the entire cultivation depends mainly on the capital thus utilized. As is natural, complaints of unfair dealings are now and then made, but on the whole the borrowers admit the usefulness of the lenders and are satisfied with the terms they obtain. Agrarian crime is almost unknown. Creditors are not as a rule greedy. They are often forbearing and will help a cultivator with seed and food, when his credit is so low that a Deccan Marvadi would not advance him an anna. [Famine Commission Replies, 1878, Mr. A. T. Crawford, C. S.] Artisans in the larger towns, doing regular and lucrative work, obtain better terms than ordinary cultivators, and Marathas and Kunbis as a rule borrow on easier terms than village Mhars. The credit of the Mhars, as a class, stands low, not so much because of their poverty or of their social inferiority, as that they too often prove incorrigible. Equal in intelligence to the Kunbi or the Chambhar, the Mhar is less subservient, and as a debtor less easily managed. Performing numerous useful services to the community, for which he receives little or no remuneration, the Mhar is prone to treat all money lent to him 8s his lawfully earned reward. When dunned he repudiates; when sued, if he condescends to appear, he denies execution of the bond. When the creditor enforces the decree and the Mhar's land is sold by auction, no one is bold enough to bid, and the decree holder becomes the purchaser. Subsequently when all legal processes have been duly gone through, and the creditor has obtained formal possession of the land, the Mhar obstinately declines to be ousted. Backed by his fraternity, a powerful and united body, he persistently deias the creditor, and effectually deters any peaceable cultivator from undertaking the land as a sub-tenant of the lawful, proprietor, till the latter gives up the attempt in disgust, and resolves to avoid future dealings with Mhars. Opinions are somewhat divided as to whether the general indebtedness of the cultivators has or has not increased within the past ten years. On the one hand, it is urged that while the population is larger, production has either remained stationary, or owing to over-cultivation and want of manure has fallen off. The number of suits on bonds, as far as this forms a guide, also shows a progressive increase. On the other hand, it is certain that prevailing high prices, better communications, and more open markets for labour and produce have greatly benefited the district. Although the country is poor, populous, and rugged; there has been much material progress. The cultivators everywhere, especially in the villages near the coast, show greater independence, and are no longer the Khots' obedient serfs and bondsmen. In short, the general condition of the country and people has steadily improved, since the city of Bombay suddenly increased in prosperity eighteen or twenty years ago. [Famine Commission Replies, 1878. Mr. A. T. Crawford, C.

Artisans.

The number of skilled town artisans, whose work commands high wages, is very small. The few that are found are prosperous, intelligent, and usually free from debt. But neither in intelligence nor in worldly means is there any practical difference between such village artisans as shoemakers, curriers, and carpenters, and the general mass of cultivators. As a class they are equally indebted and equally liable to be imposed upon, while they are less provident and more given to drink than the Maratha and Kunbi cultivators.

Transfers of Land.

Sales of land in execution of decrees have increased within the last ten years. The chief cause of this was the registration of Khots' tenants as survey occupants in the villages where the survey settlement was first introduced, in the Dapoli, Khed, and Chiplun subdivisions. Numbers of such occupancies were sold in execution of decrees during the few years after the introduction of the survey, but the transfers were for the most part nominal, inasmuch as the occupancy right of the tenants, where it existed, was transferable by inheritance only, and not by sale or mortgage, and the auction purchasers of the tenants' interest could not acquire thereby the privileges of permanent occupants. The number of sales on account of failure to pay assessment has not been large, but many holdings of khoti land have for this cause been transferred from the tenants in whose names they stood to the *Khots'* own occupancy. From the same causes, namely, the registration of khhoti tenants as survey occupants and an uncertainty as to their legal position, there has been an increase in the amount of land mortgaged, but the title of the mortgagees in such cases is usually bad. In mortgages there is no fixed custom as regards possession. In each case it is a matter of agreement between the parties.

Labour Mortgage.

The poorest villagers occasionally serve their creditors for a term of years to pay debts contracted by themselves, or more often, by their fathers. Service of this description never precedes a loan. An ablebodied labourer would be credited with about £1 (Rs. 10) a year in liquidation of a debt. He would receive in addition his necessary food and clothing, and by custom a pair of sandals once a year. He would be bound to devote himself exclusively to the service of his creditor, but the latter would have no claim to the services of the bondsman's wife and children. Interest on the original debt does not run during the performance of the service. The debtor is allowed no money for any incidental expenses, nor can he work on his own account. He is entirely dependent on the creditor who cannot, however, transfer his services to any other person. Should the bondsman fail in his contract, the creditor would proceed to exact service or enforce payment of the debt from the surety, without whom such bonds are seldom accepted. A bond which was produced in a criminal trial revealed the following

facts. [The bond ran as follows: Chaitra and 9th Shut 1798, creditor A. B. of X; debtor C.D. of the same place. My father E.F. in Shak 1788 borrowed £1 12s. (Rs. 16) to pay a debt to G.H. for which he passed a bond, which has not been paid cither principal or interest. Therefore as you claimed the money at my father s death, and I was not able to pay it, 1 entered your seruety, and serve you for. five years. Afterwards your account amounted in all to £2 (Rs. 20) which remained unpaid. From this day, without paying interest, I will serve you for seven years. Should I fail I will pay interest at twelve per cent. I will serve you without making objections and will behave well I, K.L. of the same place guarantee the fulfilment of the above contract. If the contracting party fail, I will myself serve you until the debt is liquidated. If I do not serve you, I will pay the interest at twelve per cent until the debt is liquidated. We have executed this deed willingly. Witnesses M.N., O.P. (Signed) C.D., K.L.] A villager borrowed £1 12s. (Rs. 16) from- a moneylender in 1866. He died a few years afterwards leaving the debt unpaid, and amounting then to £2 (Rs. 20) as a legacy to his son, then a child. The son, who had no means, entered the creditor's service. After serving for five years he executed a bond with a surety, to serve for seven years more in satisfaction of the debt. Thus twelve years' service was exacted from the boy, from his eighth to his twentieth year, for a debt of £2 (Rs. 20) incurred by his father. Hereditary bondage in the strict sense of the term does not exist. Children of concubines and descendants of women formerly purchased as slaves are found in a few families. Performing the same duties as the hired servants of the household, they are treated with greater kindness and consideration, and are seldom tempted by higher wages to leave their homes.

Wages.

A labourer [The paras about prices, wages, and weights and measures have been compiled by Mr. Rangrao Bhimaji, Huzur Deputy Collector.] was, before 1863, paid from $1\frac{1}{2}d$. to 3d. (1-2 annas) a day; the rate has now risen to from $4\frac{1}{2}d$. to 6d. (3 -4 annas). A field labourer earns rather less than a town labourer. Masons, carpenters, and other skilled workmen were, before 1863, paid from $4\frac{1}{2}d$. to 9d. (3-6 annas) a day, now the rate is 1s. (8 annas) and upwards. The rise in wages is due to improved communications and to the increased cost of living.

Prices.

During the last fifty years the rupee price of rice of the second quality, the food of the upper classes, has varied from fifteen pounds in 1866 to fifty-nine in 1853, and of *nachni*, Eleusine coracana, the food of the lower classes, from twenty-one pounds in 1864 to seventy-eight in 1843. The returns show, for such years as are available before 1855, on the whole cheap grain, the rupee price of rice varying from fifty-nine to thirty-two pounds and averaging forty-seven pounds; from 1856 to 1866 a steady rise of prices from thirty-six to fifteen

pounds and averaging twenty-five pounds; from 1867 to 1876 cheaper prices varying from eighteen to thirty-two and averaging twenty-three pounds; during the famine of 1877 and 1878 a rise to seventeen; and in 1879, a fall to twenty-three pounds. The changes in the price of *nachni* always considerably cheaper correspond closely to those of rice.

Ratnagiri Grain Rupee Prices, 1828-1878.

YEAR.	Rice, second sort.	Nac- hni.	YEAR.	Rice, second sort.	Nac- hni.	YEAR.	Rice, second sort.	Nac- hni.	YEAR.	Rice, second sort.	Nac- hni.
1828- 31	53	68	1856	36		1864	18	21	1872	20	27
1832- 33	32	75	1857	31		1865	17	29	1873	32	37
1838	48	69	1858	31		1866	15	26	1874	27	50
1843	54	78	1859	24	40	1867	22	40	1875	25	45
1848	54		1860	27	52	1868	18	43	1876	23	33
1853	59		1861	31	57	1869	20	28	1877	17	24
1854	43	56	1862	24	36	1870	23	40	1878	17	25
1855	39		1863	21	35	1871	21	39	1879	23	28

Weights and Measures.

Pearls and precious stones are valued by their purity. Gold and silver are weighed according to the following scale: four grains of udid, Phaseolus mungo, one gunj, Abrus precatorius, seed; eight gunjs, one masa; twelve masas, one tola; twenty-four tolas, one sher. in weighing these metals the current rupee is generally used. The rupee is four *qunjs* less than a tola. Goldsmiths' weights are generally broken pieces of china, lead, brass, or bell-metal, in a variety of shapes. Copper, brass, lead, and other cheaper metals are sold by weight, one sher weighing in Ratnagiri eighty rupees and in some other places seventy-two. Iron, cotton, butter, oil, groceries, and other articles of every day use are sold by weight shers, the local shers varying greatly in size. The Ratnagiri Sher of 2834 to 29 rupees weight, the Chiplun sher of 30, the Vengurla sher of 271/2, the Malvan and Dapoli sher of 28 and the Rajapur sher of 26. The table runs as follows: one chhatak (4½ taks), 1/16 of a sher; one navtak or adhpav, ? of a sher; one pavsher, ¼ of a sher; one achher, ½ of a sher; two achhers, one after; $2\frac{1}{2}$ shers, $\frac{1}{16}$ of a man; live shers, ? of a man; ten shers or one dhada, ¼ of a man; two dhadas, ½ of a man; four dhadas or two adhmans, one man. All kinds of grain are sold by capacity measures; The weight in rupees of the different grains contained in a sher of capacity, is rice 57, nachni, tur 541/2, harik 41, van 40, and wheat 5234. In different parts of the district these measures vary by one or two tolas. Those given above are for the town of Ratnagiri.] two adhpav, one parsher; two pavsher, one achher; two achhers, one sher; four shers, one payali; in the petty divisions of Mandangad and Salshi twelve, in Khed, Dapoli, Ratnagiri, Sangameshvar, Vengurla, and parts of Malvan and Devgad sixteen, and in Rajapur twenty-four payalis make one man; twenty mans make one khandi. The heaviness or lightness of grain, its exposure to dryness or damp, or any want of care in heaping the grain in the wooden measure, causes a difference [At Vengurla from Rs. 55 to Rs... 63½, at Ratnagiri from Rs. 49 to Re. 57¼, and at Chiplun from Rs. 50³/₄ to Rs. 65¹/₄, the pound.] in the rupee weight of a sher. Grass, hay, and firewood are sold by head-loads and cowdung cakes by quantity. Milk and oil are sold by capacity shers, the milk sher weighing thirty and the oil sher twenty-nine rupees. For measuring them brass half-sher cups are generally used. Cotton and woollen cloth is generally sold by the yard, var; silks and brocades by the gaj of 2.3 feet to 2.11 feet; and coarse country cotton cloth, dangri, by the cubit, hath. Waistcloths dhotars, robes sadis, and blankets kamblis, are sold in pairs or singly. Bamboo matting is measured by the surface and sold by the cubit, and matted cocoanut leaves by the hundred. Cut stones are sold singly or by the hundred, and uncut stones by the cart-load. In house-building the owner generally buys the wood, brick, cement, and other materials, and for the building engages masons, carpenters, and other artisans by the day or month. A bigha measuring about 4014 square yards was formerly the unit of land measure; it was sub-divided into twenty pands, each pand containing twenty poles kathis, and each kathi 10.0347 square yards. Under the revenue survey, the acre has taken the place of the bigha. It contains forty gunthas of thirty-three square feet, each guntha being divided into sixteen annas. At present as thirty-four gunthas make one bigha and 1029 square feet constitute one guntha, the modern bigha contains about 37,021 square feet. Jack fruits, plantains, cocoanuts, limes, sugarcane, water melons and mangoes are generally sold by the quantity. A few of them such as limes, mangoes, and cocoanuts are also sold by the hundred. Almonds, cardamoms, cloves, betelnuts, and other spices and drugs are sold by weight, and betel leaves by the quantity or the hundred. Fresh coriander plants, fcenugreek grass, and other vegetables are sold by the quantity. Fish is also sold by the quantity, and mutton by the pound, sher. Standard weights and measures are kept in every Mamlatdar's office. In spite of several attempts, it has been found impossible to introduce a uniform system, and with the present great local variations convictions for the use of false measures are almost unknown.

TRADE

Communications

IN so rugged and broken a belt of coastland, the safe deep tidal creeks are the natural trade highways. On their banks, rich in rice fields and palm gardens, are the chief trade centres, some as Bankot, Dabhol, Ratnagiri, Malvan, and Vengurla at the creek mouths; others as Khed, Chiplun, Sangameshvar, Rajapur, and Kharepatan, as far inland as trading craft can easily pass. Landwards the through traffic with the Deccan and the Karnatak moves along lines that gather to the chief breaks in the wall of the Sahyadri hills.

Hill Passes.

Of passes within or close to Ratnagiri limits, the four most important now furnished with well made cart-roads are KUMBHARLI in the north for Dabhol and Chiplun; AMBA for Sangameshvar, Ratnagiri, and Rajapur; PHONDA for Kharepatan and Malvan; and PARPOLI or AMBOLI for Malvan and Vengurla. Besides these four main openings there are sixteen smaller passes. [Of the twenty passes, the Amba, Vishalgad, Anaskura, Kajirda, Bivda and Shevgad are within Kolhapur, and the Nardva, Ghotga, Hanumant, Rangna, Amboli or Parpoli, and Ram are within Savantvadi limits.] Three, north of the Kumbharli or Chiplun pass are, the HATLOT pass in the extreme north near Mahipatgad, practicable only, for ponies and little used, one of the lines of trade that centre in Khed; the AMBAVLI pass, about nine miles south of Hatlot, a fair bullock track, east of Khed, and the chief line of trade between Khed and Satara; and the NORTH TIVRA pass, about 13½ miles north of Kumbharli, a mere foot-path with ladder-like steps cut into the scarp, little used except by hillmen and robbers. Between the Kumbharli and the Amba routes are three smaller passes; the MALA, nine miles south of Kumbharli and about nineteen miles northeast of Sangameshvar, an easy track, which, probably more than the Amba pass, helped to centre trade at Sangameshvar; the SOUTH TIVRA, six miles south of the Mala, a mere foot-path; and five miles further south and eleven north of the Amba, the KUNDI, a bad pass. Between the Amba and the Phonda are five passes: the VISHALGAD, an insignificant pass; nine miles south of the Amba, the ANASKURA, an easy pass, the straight and main line of through trade with Rajapur; the KAJIRDA, a bullock pass between Kolhapur and Kharepatan; and the BAVDA and SHEVGAD passes of consequence. Between the Phonda and the Parpoli or Amboli are four passes, the NARDVA, GHOTGA, HANUMANT, and RANGNA; and south of the Parpoli there is the RAM pass, all six useful for the Malvan and Vengurla trade. Of the Ratnagiri Sahyadri passes, soon after the beginning of British rule (1826), Captain Clunes (Itinerary, 147) has left the following details:—HATLOT, seven miles south of Par and leading from Makrangad fort to Khed, was little used; neither the pass nor its approach was practicable for carnages. AMBAVLI, nine miles south of Hatlot, the line of route from Satara to Khed and Dapoli, was passable but hard for cattle which in places had to be unladen; from the west month of the pass, the whole way to Khed was extremely bad and still worse to Dapoli. NORTH TIVRA, about half way (23 miles) between Satara and Chiplun, though used by Vanjaris and others, was hardly practicable for loaded cattle; the fourteen miles from Tivra and Chiplun were very bad. KUMBHARLI, about 134 miles south of Tivra, winding, long, and of easy ascent, though generally rocky and bad, was the best in that part of the range; it had lately been repaired and was the high road from the coast to Karhad, Satara, Sholapur, and other places. MALA, about nine miles south of Kumbharli, was about three miles long, leading from Karhad in Satara to Makhjan. SOUTH TIVRA, six miles south of Mala, was exceedingly steep for two miles, the road running up a river bed; this was a route between Sangameshvar and Miraj. KUNDI, five and a half miles south of Tivra, was a bad pass. AMBA, eleven miles south of Kundi, led from Devrukh to Kolhnpur and Miraj; Vishalgad fort at the mouth of this pass divided it into two, Devara on the north, unpracticable for cattle, and Prabhavali on the south, little used except, by people going to Vishalgad. ANASKURA or ANSKURA, nine miles south of Amba, was the direct road from Karhad to Malvan, and the usual route from Miraj to Rajapur and Kharepatan; though in no part passable to wheel carriages, the road was good and in steep places paved with large rough stones; it was much used by Vanjaris; the approach from the Konkan side was very bad, but a little labour might make it practicable for guns. KAJIRDA, the straight road between Kolhapur and Rajapur, formerly passable to laden cattle, was stopped. BAVDA, about seven miles north of Shevgad, also a route from Kolhapur to Rajapur, a road for foot passengers, was frequented by laden cattle. SHEVGAD, about six miles north of Phonda, from Kolhapur to Malvan, frequented by cuttle, was out of repair; formerly guns had been brought up it. PHONDA, the direct line from Kolhapur to Malvan, one of the easiest passes to the Deccan, had a few years before been made practicable for ordnance; with little labour it might be put in good repair; it was not much used. GHOTGA the route from Kolhapur and Miraj to Malvan, though bad near the top, was much used by cattle. RANGNA, or PRACHITGAD, was frequented by laden cattle from Kolhapur to Malvan. HANUMANT, or TALKAT, was a very bad cattle road; the Konkan mouth was four miles from Banda. AMBOLI, or PAKPOLI, stony and in no part very steep, was from zigzags difficult for heavy ordnance; it had been used by Colonel Dowse when going to invest Redi (1818); in three days the pioneers made it passable for small guns; merchants from Goa to the Deccan went along this road. RAM was the great pass fo the upper country from Vadi, Malvan, Vengurla, and Goa. The approach to the pass, both above and below, was a made road, the ascent easy and passable for every sort of carriage. The general breadth of the new road, finished in March 1821. was thirty feet. Before this time, in 1790, two detachments of troops on their way from Sangameshvar to Dharwar passed through the steep

Amba pass, on which some trouble had been taken. Light baggage and good weather enabled them without much difficulty to go up the pass in a day. Operations, Little's Detachments, 2 & 11.]

Roads.

At the beginning of British rule (1818-1820) carriage was almost entirely by water. The Government grain stores, the chief centres of local traffic, were all hear the banks of crooks, and from no part of the district, except where water carriage was at hand, was forest produce gathered and exported. [Mr. Dunlop (1824), Rev. Rec. 121 of 1825, 79-81. The chief forest products were firewood, gallnuts, and red ahayti, Grislea toment sa, flowers.] In rugged parts near the coast private charity had fn places hewn rough flights of red stone steps; but they were much damaged and out of repair. In the Parashram pass between Chiplun and Dabhol, there had once been a good made road paved where the ascent required it. But the pavement was (1824) in so bad repair, that cattle chose a winding pathway to the right. [Mr. Pelly (1820), Bom. Rev. Rec, 16 of 1821, 340.] Besides the steps in the rugged places near the coast, the only trace of roadmaking was, after the rains, the yearly repair of the Kumbharli or Chiplun pass, [Bom. Rev. Rec. 16 of 1821, 621. A few years later (1826), Capt. Chines Bays (Itinerary, 147): ' From Vengurla to the Savitri there are cattle tracks or pathways usually running straight over dry rocky uplands and across tilled valleys, which, as a rule, are ploughed in the rains. Except close to Malvan, Ratnagiri, and other leading places, there are neither carts nor cart roads.'] There were no wheeled carriages, no horses, no camels, and few pack bullocks. All field and other produce was carried to market on men's heads, and during the first years of British rule, the people suffered much from being forced to carry the baggage of military and other travellers. [Captain Clunes' Itinerary, 63.]

For forty years, except the military road from Vengurla through the Ram pass south to Belgaum, and four miles from the Dapoli camp to the Harnai sands, little was done to better the roads. In 1851, [Capt. Wingate in Bom. Gov. Sel. II. 21.] no attempt had been made to improve even the most frequented lines of traffic. The wear of ages had smoothed them in places, but parts were dangerous to man and beast. Laden animals were jammed between rocks, forced to slide down steep slopes of sheet rock, and, footsore, to pick their way among thickly strewn rolling stones. Carts were unknown, and between many villages and their market towns were not even bullock paths. Their whole produce went to market on men's heads. [Capt. Wingate in Bom. Gov. Sel. II 22. The hill passes were uncared for, and no heavy weights could pass up or down unless slung on poles, navghans, carried on men's heads. Rough roadmaking was easy. The three main lines of local traffic, running north and south, along the coast, in the centre, and near the Sahyadri hills, might be cleared at a very small cost. But for twelve years more no money was available. In 1864 the whole length of the district roads was 171 miles, and of this,

except eight bridged and drained miles between Dapoli and Harnai, the whole was either unbridged, partly drained, second class roads, or cleared tracks. With the introduction of local funds, the work of roadmaking was pressed on. Since then, partly from general and local funds and partly with the help of the Kolhapur and Savantvadi states, roadless Ratnagiri has been covered with a network of good communications including 507 miles of cart-road and several hundred miles of bullock tracks. Such is the carrying power of these roads that in the year (1876-77) of the late Deccan famine, 90,000 tons of food grains passed inland from the coast.

The main district road runs north and south, passing through the chief inland trade centres and crossing the different rivers above the limit of navigation. Starting in the north from Poladpur in Kolaba, and by Kashedi passing through the towns of Khed, Chiplun, and Savarda, it comes as far south as Hatkhamba. From this, where it is joined by a main line from Ratnagiri, the road stretches south through Pali to Lanja, Rajapur, Kharepatan, and Kasarda. South of Kasarda, the main line has, from local funds, been continued to Vengurla, forming altogether a line of 160 miles of road. In the south, from this main road, local feeders have been carried west to Malvan and Achra, and cross lines taken through Kudal in Savantvadi to the Parpoli pass road; from Kudal by Dhamapur to Malvan; from Kasarda near the Phonda pass, by Vaghotan to Vijaydurg, thoroughly opening that fine stormy weather port; from Kasarda to Janoli, a short cut; from Ratnagiri to the fine stormy season port of Kalbadevi; and further north, from Chiplun west to Ibhrampur; from Khed to Dapoli and Harnai on the coast; from Khed to the foot of the Ambavli pass; from Khed by Palgad to Dapoli; and from Mahapral on the Savitri to Poladpur, connecting the Varanda and Fitzgerald pass roads with an excellent port near the mouth of the Savitri. All these are good fair weather cart roads.

At the same time, besides many cross roads along the coast, a good bullock track, nine to twelve feet wide, has been made from end to end of the district.

Besides these roads connecting most district towns with the sea, first class bridged cart roads have been carried through the Kumbharli, Amba, Phonda, and Parpoli passes, and the others have been made easier for foot passengers and pack bullocks. Those carried through the Kumbharli and Parpoli passes are open all the year round, and the rest only in the fair season.

Tolls

There are seven toll bars in the district, five of them on provincial roads at Vengurla, Charveli, Vadgaon, Dajipur, and Pophli, and two on local fund roads, at Vengurla and Gimhavna. All are annually sold by auction to contractors. The amount realized in 1878-79 was £5487 (Rs. 54,370) on provincial, and £143 (Rs. 1430) on local fund roads.

Bridges.

Of the few masonry bridges, including an old one in the town of Rajapur, the largest is 114 feet in length, with three spans of thirty feet each, built on the Kutivri river on the Chiplun-Ibhrampur road at a cost of £1545 (Rs. 15,450).

Rest Houses

Besides three district officers' bungalows at Harnai, Vaghotan, and Malvan, and nine travellers' bungalows for Europeans, one each at Bankot, Mahapral (under construction), Harnai, Ratnagiri, Vijaydurg, Vaghotan, and Vengurla, and two in the fort of Jaygad, there are in all seventy-five rest-houses, dharmashalas, for the accommodation of native travellers. Of these, nine, one each at Dapoli, Vakavli, Burondi, Mahapral, Anjarla, Dabhil, and Bankot, and two, one at the wharf and one in the town of Harnai, are in the Dapoli sub-division; three, at Khed, Dabhol, and Kashedi, are in the Khed sub-division; fourteen, one each at Savarda, Chiplun, Shirgaon, Ibhrampur, Khershet, Govalkot, Anjanvel, Adur, Tavsal, Guhagar, Hedvi, and Kudavli, and two at Palshet are in the Chiplun sab-division; seven at Navdi, Mabhala, Murshi, Aravli, Asurda, Dabhol, and Phungas, are in the Sangameshvar sub-division; six-. teen, one each at Pali, Naniz, Nivli, Hatkhamba, Anjanari, Varavda, Vetoshi, Purangad, Vijay, Malgund, Harcheri, and Jaygad (fort), and four, two at the wharf and two in the town of Ratnagiri, are in the Ratnagiri sub-division; ten, one each at Vaked, Lania, Veral, Karavli, Barsu, Oni, Jaytapur, and Bhalavli, and two in the town of Rajapur are in the Rajapur sub-division; eight, at Phonda Talera, Phanasgaon, Kharepatan, Patgaon, Kankavli, Karul, and Devgad, are in the Devgad sub-division; six, one each at Tarkarli, Masda, Pendur, and Sukalvad, and two, one at the wharf and one in the town of Malvan, are in the Malvan sub-division; and two, one at the Vengurla wharf and one at Parula, between Malvan and Vengurla, are in the Vengurla sub-division.

Ferries

Some of the creeks are fordable at low water, while on others and on some of the rivers, public ferries are kept for the conveyance of goods and passengers. Of the forty-three district ferries, three work during the rainy season, and the rest throughout the year. Five of them are maintained by local funds. Of the whole number, four are in Malvan, five in Devgad, six in Rajapur, ten in Ratnagiri, seven in Sangameshvar, three in Chiplun, and eight in Dapoli. The total revenue in 1878-79 amounted to £874 16s. (Rs. 8748).

Steamers

The sea traffic is carried on partly by steamers and partly by sailing vessels. Coasting steamers are of two kinds, a small class of passenger vessels known as the Shepherd Company steamers, varying in size from 160 to 199 tons, and the larger ships of the British India Steam Navigation Company of from 1941 to 2661 tons.

Of the Shepherd steamers, some belonging to the Bombay ferry service, and known as the Dharamtar steamers, come only as far south as the Bankot river, taking from eight to nine hours in their passage from and to Bombay. The others, new vessels of light draught, go as far south as Goa and call at almost all Ratnagiri ports. Including stoppages, they generally take from twenty-four to thirty-six hours between Vengurla and Bombay. None of these vessels ply between the end of May and the middle of August. The larger class of steam-ships, belonging to the British India Steam Navigation Company and carrying the mails, are coasting traders going as far as Madras and Calcutta. They sail once a week, and calling only at Ratnagiri and Vengurla, generally make the passage between Bombay and Vengurla in twenty-four to thirty hours. During the stormy season they call at the sheltered creek of Kalbadevi, the harbour for the town of Ratnagiri. Taking piece-goods and storesfrom Bombay, they bring by the return voyage large quantities of cotton from Vengurla and Ratnagiri. Their passenger traffic is very limited.

Sailing Vessels.

Of sailing vessels there are two classes, foreign and local. The foreign ships are Arab daus, belonging to Gwadar, Huma, and Chaba, vessels of from seventy-five to 150 tons burden, with two masts and two or three sails, and a crew of a captain, sarang or tandel, a nakhoda, a carpenter, and twenty seamen. Besides meals, the seamen get from 16s. to £1 (Rs. 8-10), and the others from £1 to £1 10s. (Rs. 10 - 15) a month. Of late years, few vessels of this class have visited the Ratnagiri ports. Their owners, generally also their commanders, are mostly Arabs and Indian Musalmans. They generally come from Arabia to Jaytapur about the end of October, bringing dates, raisins, almonds, pistachios, and mats, stay in some Ratnagiri port for about two weeks, load with gallnuts, hemp, turmeric, and groundnuts, and then sail to Malabar or Bombay to fill there. The captains are generally good sailors and men of much intelligence, guiding their ships by the help of the compass and the quadrant. Though they avoid the roughest season, they often weather very heavy storms.

Of local sailing craft the chief varieties are, besides canoes and fishing boats, the *shibadi*, the *phatemari*, the *mhangiri*, the *machva*, and the *padav* or *balav*.

Besides a few English jolly boats in Vengurla the small boats in use are three, the *ulandi*, the *pagar*, and the *don*. During the stormy months small boats of more than a quarter of a ton (one *khandi*) burden are drawn up the beach and thatched; the rest are used in rivers for fishing and other purposes. The boat in commonest use is the *ulandi*, so called from the balance float that, joined to the boat by two spars, lies on the water from six to ten feet, from the boat's side. *Ulandis*, varying in length from ten to eighteen feet, have one mast and one lateen, *parbhan*, sail. The *pagar* and the *don* are *phatemari* and *machva* row boats. The *pagar*, a hollowed mango trunk, is used

either with or without the balance spar, ulandi. The long flat-bottomed don, made of undi, Calophyllum inophyllum, wood, with, instead of nails, well oiled and dammered hemp and coir yarn fastenings, is seen only in Vengurla. It is the best boat for landing horses. Fishing boats are generally provided with two pairs of wooden buoys and their moorings. The shibadi is a large vessel from 100 to 300 tons, generally found in the Ratnagiri sub-division ports. The phatemari, a deep narrow vessel of great speed and an excellent sailer, is from twenty-five to forty-five feet long and from 25 to 100 tons burden. It has two masts and three sails, two yard sails, parbhan, and a jib. The mhangiri or suvala is like the phatemari, but smaller and from ten to twenty-five tons burden. The machvas and padavs or balavs of a broader and flatter build are from twelve to twenty-five feet long and from 2 ½ to ten tons burden. All have two masts and three sails. Except that only phatemaris carry unpressed cotton bales, all take both cargo and passengers. [The fare by sailing boat from the Ratnigiri coast to Bombay is from 6d. to 1s. (4-8 annas).] Besides for coast trading, the smaller machyas are often used for deep sea fishing.

These vessels are owned by Bhatias, Gujars, Lohanas, Musalmans, Parsis, and fishermen either Hindus, Gabits, Kolis, and Kharvis, or Musalmans of the Konkani and Daldi classes, and sometimes by Brahmans.. Fishermen anxious to own a boat, generally join two or three together to form a fishing or trading partnership and borrow capital from some Brahman or Musalman moneylender. The strength of a shibadi's crew is, besides the captain, tandel, from twenty to twenty-five, of a phatemari's from fourteen to eighteen, of a mhangiri's from eight to ten, and of a machva's from five to seven hands. Kolis, Bhandaris, Gabits, Bhois, Kharvis, and Musalmans, the seamen, mostly natives of Harnai and Vengurla, generally belong to the caste of the owner or captain. These vessels work only during the fair season, and are entirely laid up during the south-west monsoon. A large machva, complete with sails and one boat, costs from £100 to £150 (Rs. 1000 - 1500), and a phatemari from £120 to £200 (Rs. 1200 - 2000). The shipbuilders are generally Hindu carpenters, Sutars and Pachkalsis, helped by Gabit fishermen; others are Musalmans and native Christians. The chief boatbuilding towns are Ratnagiri, Jaytapur, Malvan, and Vengurla, and to a less extent Bankot, Jaygad, and Anjanvel. In 1830, when the teak forests were made over to the Khots, shipbuilding became an important industry. This did not last long. The stores of timber were most wastefully spent, and the district left stripped of trees. At present the timber most used in shipbuilding is, besides Malabar teak, the local bantek or nana, jack, mango, and the light dhup tree. A lucky day is chosen for beginning to build and for launching a vessel. At the time of launching, the vessel is worshipped, decorated with flags and flowers and among Musalmans sabja leaves, and named [The commonest names Lakshmiprasad, Gangaprasad, and Daryadaulat according to the

position of the stars. With music and a company of friends the vessel starts for some miles on a trial trip, the guests being treated to toddy and betelnut. Brahmans get gifts and the shipbuilder a turban. Repairs are generally done by one of the sailors, who is a carpenter and keeps a set of tools. The vessels last from forty to fifty years. Besides his meals, each sailor gets from 1s. to 16s. (Rs. ½ - 8) a voyage, or an average monthly pay of from 4s. to 8s. (Rs. 2 - 4). The captain, when not the owner, gets twice as much as the seamen. Liquor is not generally allowed on board, but some tobacco is always taken. Presents, inams, of waistcloths, turbans, or money are sometimes, though not often, made. The smaller craft generally anchor at night, and do not go out of sight of the Sahyadri hills. But the better class of shibadis and phatemaris go about twenty-five miles from the coast, sailing out of sight of land from ten to fifteen days at a time. Some of the captains understand the compass, though in their coasting voyages they trust almost entirely to their own and their crew's local knowledge. Out of sight of land, they steer by the sun, moon, and stars.

Trade is chiefly carried on with Malabar, Bombay, Cutch, Kathiawar, and Arabia. Of late years, steamer competition has forced sailing vessels to lower their rates. Shipowners' profits have declined, and few new vessels are now built.

Light Houses

There are four light-houses, one each at Ratnagiri and Jaytapur, and two, the port and the rock light-houses, at Vengurla. The Ratnagiri light-house, north latitude 16° 59' and east longitude 73° 15' 47", in the Ratnagiri harbour, is a masonry tower of thirty-seven feet on a headland about 210 feet high. Diopteric, of order three, it is a single fixed red light, visible from the deck of a ship eighteen miles off, and lightening an area of 108 square miles. The Jaytapur lighthouse, north latitude 16° 36' 10" and east longitude 73° 18' 30", on the south point of the Rajapur hill, is a masonry tower of twenty-one feet on ground about fifty feet above high water level. Diopteric, of order six, it is a single fixed white light visible from the deck of a ship 7½ miles off, and lightening an area of 56½ square miles. The Vengurla port light-house, on the north point of the bay, is a masonry tower of twenty-four feet on a headland 186 feet above high water level. Diopteric, of order six, it is a double (one above the other) fixed white light visible from the deck of a ship nine miles off, and lightening an area of fifty-four square miles. The Vengurla rock light-house, north latitude 15° 53' 17" and east longitude 73° 26' 43", on an isolated rock, one of the Burnt Islands, about five miles south of Malvan, is a thirty feet masonry tower on a hill about eighty feet above high water level. Diopteric, of order four, it is a single fixed white light, visible from the deck of a ship twelve miles off, and lightening an area of seventy-two square miles. The swell makes it at all seasons difficult to land on the light-house rock, and in the southwest monsoon communication with the mainland is entirely cut off.

Provisions and stores have to be laid in before the close of the fair weather.

Post Offices

The Ratnagiri district, forming part of the Konkan postal division, contains, besides the receiving house in the town of Ratnagiri, thirtynine post offices. One of these at Ratnagiri, the chief disbursing office of the district, is in charge of a postmaster drawing a yearly salary rising from £90 to £114 (Rs. 900 -1140); three head offices at Chiplun, Dapoli, and Rajapur are in charge of deputy postmasters, each drawing £48 (Rs. 480) a year; fourteen sub-offices at Anjanvel, Devgad, Devrukh, Guhagar, Jaytapur, Kankavli, Khed, Lanja, Malgund, Malvan, Masura, Sangameshvar, Shiroda, and Vengurla are in charge of sub-deputy postmasters, each drawing from £18 to £48 (Rs. 180-480) a year; and twenty-one branch offices at Achra, Adivra, Anjarla, Bankot, Dabhol, Dhamapur, Harnai, Kelshi, Kharepatan, Makhjan, Mandangad, Murud, Nevra, Palghar, Palshet, Pavas, Pendur, Savarda, Sukalvadi, Vaghotan, and Vijaydurg are, except the Harnai office which is entrusted to the village schoolmaster, in charge of branch postmasters, each drawing from £12 to £14 (Rs. 120-140) a year. In the chief towns letters are delivered by twenty-one postmen, each drawing a yearly salary of £12 (Rs. 120). In some places postal runners do the work, getting besides their salaries from £1 4s. to £2 8s. (Rs. 12 - 24). Fifty-four village postmen, drawing from £9 12s. to £12 (Rs. 96 -120) a year, deliver the letters in the surrounding villages. The post offices in the Konkan division are supervised by an inspector with a yearly salary rising from £480 to £600 (Rs. 4800 -6000), assisted by a sub-inspector drawing a yearly salary of £114 (Rs. 1140). The Dharamtar ferry steamers carry the mails from some of the seaport towns. The Southern Maratha Country and the Deccan mails pass by foot runners along three different routes from Vengurla through Kudal to Belgaum, from Rajapur to Kolhapur, and from Chiplun to Karhad. During the fair season, letters are sometimes and heavy parcels are always sent by the weekly steamer to Ratnagiri and Vengurla.

Telegraph

Hitherto there has been but one telegraph station, Vengurla, which, at the extreme south and many days distant by post from the more important towns, has been of little use. The question of extending a telegraphic line into the north part of the district and especially to Ratnagiri, Rajapur, and Chiplun, after many years' discussion, has at last been solved by the enterprise of the district local fund committee and the municipalities of the three towns named, which have jointly guaranteed to the Government of India the requisite five per cent on the cost of a main line from Kolhapur to Ratnagiri through the Amba pass, with two branches from Ratnagiri to Chiplun on the north and to Rajapur on the south. The total number of messages at Vengurla in 1878-79 was 2390, 229 of them Government and 2161 private.

TRADE

Early

As has been noticed under the head of "History," the Greek and Roman writers in the early centuries of the Christian era, though they knew the names of marts on the Ratnagiri coast, had no direct dealings with them. The writer of the Periplus (247) calls them local trade centres, [?. Vincent's Commerce of the Ancients, II. 428.] and mentions that corn, rice, butter, sesamum oil, coarse and fine cotton goods, and sugarcane were sent from them sometimes to Africa and sometimes to Arabia. [Vincent's Commerce of the Ancients, II. 282,423.] No further notice of the trade of the Ratnagiri ports has been traced, till in the fifteenth century, under the Bahmani, and afterwards under the Bijapur kings, mention is made of a great trade through the Ratnagiri ports, the import of horses being specially noticed. [A. Nikitin (1468-1474). Major's India, XVth Century, 20-30. Marco Polo's (1290) account of the Konkan probably refers to Thana rather than Ratnagiri. He says there is no pepper or other spices, but plenty of brown incense, much traffic and many ships with exports of leather, bukram, and cotton, and imports of gold, silver, copper, and many horses, no ship going without them. Yule's Marco Polo, II. 330.]

Sixteenth Century

In the sixteenth century the Ratnagiri ports were frequented by three sets of merchants, Moors, probably including Arab and Persian as well as Indian Musalmans; Gentus, probably Malabar, Konkan, and Deccan Hindus; and Gujaratis, Hindus from Gujarat. The sea trade was carried by two classes of vessels, large ships from Mecca, Aden, and Ormuz, and smaller coasting craft from Cambay and Diu in the north and Malabar in the south. [Stanley's Barbosa(1514), 71,72.] Inland, the chief trade routes were up the Bankot river, by the town of Mahad and from Dabhol, Chiplun, and Khed through the Ambavli pass to Bedar. [Nairne in Ind. Ant. II. 282.] Late in the century, the change of capital to Bijapur transferred much of the trade to another route up the Muchkundi river by Satavli through the Amba or Vishalgad pass, by Kolhapur or Panhala to Bijapur and Golkonda. [Nairne in Ind. Ant. III. 318.] A third route from the coast to Bijapur lay from Jaytapur and Rajapur through Bavda and Kolhapur. [Nairne in Ind, Ant. III. 320.] Of imports, there were, from the Red Sea and Persian Gulf, copper, quicksilver, vermilion, and horses; from the Malabar coast, cocoanuts, betelnuts, spices, copper, and quicksilver; from places along the Konkan coast, salt; and from the Deccan and Karnatak, wheat and fine cotton cloth. The exports were, to Gujarat, the copper and quicksilver brought from Arabia and the Malabar coast; to Malabar, wheat and

cotton cloth brought from the Deccan, and vegetables grown in Ratnagiri; and to the Red Sea and Persian Gulf, great quantities of cloth and cocoanuts, pepper, and other spices and drugs brought from the Malabar coast. Besides these, honey is mentioned as exported from the Bankot river; [Dom Joao de Castro, Primeiro Roteiro da Costa da India (1540), 41. He also says wheat and many kinds of food were loaded at Bankot. pepper as produced in small quantities [Dom Joao] de Castro, 136.] (1540) near Dabhol, and as an export from Sangameshvar; [De Coutto, XII. 30; Barbosa, 74.] and cheap rice and vegetables as an export from Kharepatan. Betel was grown in great quantities. The Muchkundi river was so famous for its betel gardens that it was known as the Betel river. [Dom Joao de Castro (1540), 33. Barbosa (1514), 73, says, 'Here in gardens and orchards they grow a great quantity of betel and put it on board small vessels and carry it for sale to other towns and seaports. It is one of the chief revenues of the country;' The only local manufacture that seems to have been exported was iron from Sangameshvar. [De Coutto, XII. 30.] This trade, which centering in Dabhol had risen to great importance in the early part of the sixteenth century, was, from the refusal of the Bijapur kings to acknowledge their supremacy at sea, greatly harassed by the Portuguese.

Seventeenth Century

In the beginning of the seventeenth century, with the decline of Portuguese power and the increase of trade by the competition of the English, Dutch, and French, Dabhol, Rajapur, and Vengurla again became important centres of traffic. In 1611, when the English first visited Dabhol, they found the merchants almost all Musalmans, carrying on trade with the Red Sea in ships some as much as 1200 tons burden. [Orme's Hist. Frag. 325.] The Dabhol people ' made a noise of fine cloth, indigo, and pepper, but showed none. They bought some broadcloth, kersies, lead bars, iron, ivory, and indigo. [Middleton in Harris, I. 107, and Saris in Harris, I. 119. In 1639, salt and pepper are mentioned as the chief articles of trade at Dabhol. [Mandelslo's Voyages, 222. The salt came from Oranubammara, perhaps Uran-Mambai. In 1649, its pepper and cardamom trade was the chief attraction that brought the English company's factory to Rajapur. [Brace's Annals, I. 344, 357 -368.] In 1660, Vengurla is spoken of as a great place of call for ships from Batavia, Japan, and Ceylon on the one side, and the Persian Gulf and Red Sea on the other. It is said to have been famous for its pepper and cardamoms, and it and other Ratnagiri ports had much trade in calicoes, silks, grain, and coarse lacque. [Tavernier in Harris, II. 360, and Thevenot, V. 249. Hamilton (1700) states (New Account, I. 246) that the country round Rajapur formerly produced the finest muslins and botellas in India. This seems to be a mistake, as the fine cloth with gold borders that was shipped from the Konkan ports to Persia is specially mentioned (1634) as

brought from the Deccan. O. Chronista de Tissuario, III. 221.]

Of the condition of the Ratnagiri district in the seventeenth century (1670), Ogilby writes: 'The rustics maintain themselves with sowing of rice and fishing, on which they live very poorly, inhabiting near the sea shore and the banks of rivers for the convenience of the cocoa trees which grow along the same. People of more ability traffic in pepper, in which the chiefest trade of the country consists, which coming out of Kanara is sent by sea to Persia, Surat, and Europe. They deal likewise in all sorts of provisions; for, this country is the storehouse for all its neighbours. The inhabitants also drive a great trade in calico and another sort of cloth called beirames which being brought by land from Hindustan, Golkonda, and Coromandel is sold to great advantage; for, in most towns are kept weekly markets to which merchants carry their commodities but especially corn and provisions, which are generally brought by a valiant sort of people called Venefars and transported through the whole country of Hindustan which they penetrate with cafilas consisting of three, four, and sometimes eight or ten thousand beasts of burden, accompanied with women and children which follow them like an army."

Eighteenth Century

During the disorders that followed the death of Shivaji (1680) and continued through almost the whole of the eighteenth century, the trade of the district greatly declined. Except the mention of cattle, timber, and hemp, exported from. Bankot, no notice of the eighteenth century trade has been traced.

Nineteenth Century

At the time of the transfer of the district to the British (1819) there was very little trade. The staples were an import of salt and an export of grain. Probably no part of India produced so little in excess of the people's wants. Except Rajapur there was almost no permanent place of trade. Along the coast line there was no fixed trade centre, and up the creeks such towns as Chiplun and Sangameshvar had a very small settled population. Merchants, Vanis, Vanjaris, and a few Parsis, came in the fair season and put up light booths very apt to suffer from fire. The great traders were the Vanjaris with their strings of bullocks. But transit dues were high and the hill passes very difficult and in bad order. The chief import trade was in salt. On this the commerce and agriculture of the district depended, because vessels earning good freights for salt were able to take away grain at low rates. Of exports, hemp, inferior to none in the world, had lately been almost stopped by a crushing duty. Hemp fastenings for cotton bales had formerly been one of the chief exports of Fort Victoria now called Bankot.

The chief exports were rice, wheat, millet, pulse of all sorts, seeds, castor-oil and oil of different kinds, cotton, hemp, yarn, piece-goods, hemp fastenings, tobacco, coffee, betelnuts, cardamoms, gallnuts, turmeric, tamarind, molasses, chillies, onions, garlic, honey, bees'wax, candles of the same, dried rinds of kakam Garcinia purpurea, and ratamba Garcinia gambogea, shark fins, fish maws, bark, sandalwood, timber, planks, bamboos, rafters, baskets, charcoal, and saltpetre. The chief imports were, husked and cleaned rice, wheat, cocoannts, coir, cocoa kernels, betelnuts, cashewnuts, pistachios, almonds, dates, pepper, ginger, methi seed Trigonella foenumgraecum, cumin seed, coriander seed, raisins, nutmegs, gallnuts, saffron, mace, cloves, catechu, assafoetida, opium, sugar, sngarcandy, clarified butter, oil of different sorts, arrack, cotton, China paper and umbrellas, piecegoods, hides, red powder gulal, dammer, gum, wax, iron, steel, red lead, brimstone, salt, carbonate of soda sajjikhar, sulphate of iron hirakas, and ammonia navsagar.

The average yearly value of the trade could not be estimated. The duties varied at almost all the ports and the system was most complicated. Under the Marathas, the revenue had been farmed and yielded about £20,000 (Rs. 2,00,000). It was not likely that until the country had somewhat developed, the receipts would much increase. [Collector, 15th July 1819. Bom. Rev. Diaries, 142, 2567-2589. Under the Marathas a class of officers called Dangis and Patkis, in return for grants of land, were expected to help the Government in collecting the customs and in keeping the accounts.]

Rajapur, the only place of consequence, had a large body of merchants and was very prosperous with, in 1818, a total trade valued at £75,905 6s. (Rs. 7,59,058) of which £52,688 4s. (Rs. 5,26,882) were imports, and £23,217 2s. (Rs. 2,32,171) exports. [The chief details were: under imports, husked rice, Rs. 42,375; grain of other sorts. Re. 25,050; betelnuts, Rs. 34,960; brimstone, Rs. 10,896; cocoanuts, Rs. 29,289; cocoa kernels, Rs. 1,66,894; dates, Rs. 86,128; ginger, Rs. 10,113; and incense, Rs. 14,663; and under exports, cotton, Rs. 12,107; hemp, Rs. 61.015; molasses, Ra. 14,262; piece-goods, Rs. 51,470; salt, Rs. 10,867; and turmeric, Rs. 27,077.] Except Kharepatan, which had a large salt traffic, none of the other towns were of any trading consequence. At Kharepatan, the 1818 trade was valued at £25,170 (Rs. 2,51,700), £9070 (Rs. 90,700) of them exports and £16,100 (Rs. 1,61,000) imports. At Devgad, including a very small return for Achra, the imports, chiefly salt, were returned at £2614 4s. (Rs. 26,142), and the exports, almost entirely local produce, at £1249 6s. (Rs. 12,493), or a total value of £3863 10s. (Rs. 38,635). At Malvan, the returns represented a total value of £28,579 4s. (Rs. 2,85,792), £23,295 16s. (Rs. 2,32,958) of them imports and £5283 8s. (Rs. 52,834) exports. Of imports the chief items were: unhusked rice, Rs. 16,520; cleaned rice, Rs. 1,28,553; piece-goods, Rs. 22,690; grain, Rs. 16,452; and cocoa kernels, Rs. 8377. Of exports the chief items were: hemp, Rs. 17,494; piecegoods, Rs. 7929; clarified butter, Rs. 5537; and coriander seed, Rs. 5017.] These figures included a very small amount from Vengurla. Its trade as well as the trade of Nivti and Redi was unimportant. The customs rates had been nominally low, four per cent, and at Rajapur, and to some favoured classes, 3 or 3½ per cent. But in addition to this there were many customary charges, and in the Resident's opinion a single *ad valorem* duty of five per cent would be felt by merchants as a relief. [Resident to Government, 31st May 1819. Bom. Rev. Diary, 141,2311.]

1819-1879.

Since 1819, the great increase in population, the abolition of transit duties and miscellaneous cesses, [Transit dues were abolished in 1837 and miscellaneous cesses in 1844.] the opening of four of the Sahyadri passes for cart traffic, and the change from small fairweather coasting craft to large steam ships plying all the year round, have greatly developed trade. The chief trading centres on the coast are Bankot (3763), Harnai (6193), Anjanvel (3285), Jaygad (2442), Ratnagiri (10,614), Yashvantgad (433), Vijaydurg (2331), Devgad (894), Malvan (13,955), and Vengurla (14,996), and inland, Dapoli (2593), Khed (3817), Chiplun (6071), Sangameshvar (3172), Rajapur (5368), and Kharepatan (2900).

The extension of telegraphic communication to Vengurla has revolutionised the trade of that town. When Rajapur and Chiplun hare been similarly connected with Bombay and the principal trade centres of the Deccan and Southern Maratha Country, a like change must also occur in them. The construction during the last twenty-five years of the three main cart roads connecting Chiplun, Rajapur, and Vengurla by the Kumbharli, Phonda, and Parpoli passes with the Deccan and Karnatak, has concentrated the traffic and enormously increased the through trade of these ports. At the same time the trade of towns like Sangameshvar, Khed, Kharepatan, and others similarly situated and connected with the Deccan only by difficult bullock tracks has fallen off. The precipitous hill passes by which in old days all the trade was carried on pack bullocks are indeed still open, and to this day a goodly number of Vanis with their strings of bullocks with musically-ringing bells, may be seen slowly toiling up and down the Ambavli, the Mala, the Amba, the Anaskura, and the Kajirda passes to and from Khed, Sangameshvar, Ratnagiri Rajapur, and Kharepatan. The goods thus carried are now almost solely for the use of the more or less isolated towns and villages at the foot of the Sahyadri range. The through traffic between Bombay and the Deccan is no longer entrusted to pack bullocks. Partly also from the same causes the trade of Dabhol, Bankot, and other once large and important coast towns has almost entirely disappeared.

Traders

The leading traders are Brahmans including in Malvan and Vengurla a large number of Shenvis, Parbhus, Marathas, Bhandaris, Vanis, Gujars, Bhatias, Shimpis, Kharvis, Gabits, and Musalmans. Many of them are strangers from Belgaum, Shahapur, Bombay, Cutch, and Jamnagar or Nawanagar in Kathiawar. Some are capitalists, some trade on borrowed capital, and some are merely agents of up-country or Bombay merchants. The most pushing and prosperous classes who undertake most of the large trading ventures are the Bhatias and Gujars.

The chief trade by sea is along the western coast of India, south to Malabar and north to Bombay, Kathiawar, Cutch, and Kurrachee. The bulk of the sea trade centres in Bombay.

Exports.

Besides salt fish, shell lime, cocoanuts, and matted palm leaves, very little local produce is exported either by sea or land. The district, which nowhere grows enough grain for the support of its people, has ordinarily no surplus food produce. The fish is imperfectly cured, often merely soaked in a briny mud and dried in the sun. It finds its way inland and up the passes into the Deccan and Karnatak. Dried shark fins and tails are also sent to Bombay for the China market.

The principal imports far local use are food grains, molasses *gul*, tobacco, chillies, groundnuts, turmeric, clarified butter *tup*, blankets, piece goods, and iron. The staple imported food grains are rice, *nachni*, and *vari*. Coarse rice is imported in large quantities from Bombay and from the Thana and Kolaba districts, any surplus after supplying local demands being re-exported to Zanzibar or the Malabar coast.

Imports.

The coarse hill grains, *nachni* and *vari*, are chiefly imported from the upland, *ghatmatha*, Konkan, the strip of rugged country along the crest of the Sahyadri range. Through the hill passes, sugar, tobacco, chillies, groundnuts and turmeric find their way from the Deccan, and small consignments of piece-goods and iron come from Bombay. Besides these necessary articles used by all classes, there has been during the last twenty-five years a marked increase in the amount of articles of comfort and ornament brought into and used in the district. Of these the chief are candles, chemicals, clocks and watches, pearls, dyes, fireworks, Chinese and Japanese earthenware, coral, fruit, glass and glassware, hardware, cutlery, jewelry, leather, liquors, matches, metals, oils, stationery, perfumes, silk, soap, spices, sugar, tea, umbrellas, and woollen goods.

Through Trade.

Though the exports of local produce and the imports for local use are comparatively small, there is a brisk through trade by which the produce of the Deccan, carried over the Sahyadri range by good made roads, is shipped at the Ratnagiri ports for Bombay, Zanzibar, Cochin, and other markets. The principal depots of this through trade are at Vengurla, Rajapur, and Chiplun. The produce thus carried consists of cotton, molasses, food grains, groundnuts, turmeric, chillies, gallnuts, clarified butter, hemp, tobacco, country blankets, oil seeds, and other miscellaneous goods. Very little of the food grains, nrillet, wheat, gram, and pulse, which thus pass through the district, are consumed locally. Gallnuts, hardas, gathered in the Southern Maratha forests are sent to England by Bombay. None are used in the district. Of the remaining articles a small proportion is locally consumed. But the bulk is shipped to Bombay. Reversing the route, the chief articles imported by sea and carried through Ratnagiri to the Deccan and Southern Maratha districts are cotton yarn and piece-goods, silk, glass bangles, sugarcandy, dates, cloves and other spices, cocoanut oil, matches, paper, and metals. In ordinary years, little grain is sent through Ratnagiri to the Deccan and Southern Maratha districts. But in extraordinary seasons, as in the famine of 1876-77, supplies from Bombay, Kathiawar, and even Sind, were poured into the Deccan districts through all the mountain passes. In the same year, it is said, for the first time large quantities of Ratnagiri grain travelled over the Sahyadri range. Between the 1st December 1876 and the 30th November 1877, about 150,000 tons of grain left Bombay for the Southern Maratha ports. Of this, during the fair season (December-June), 88,791 tons passed to the famine districts through the ten large Ratnagiri ports, Bankot, Harnai, Anjanvel, Jaygad, Ratnagiri, Yashvantgad, Vijaydurg, Devgad, Malvan, and Vengurla. Vengurla alone took 51,885 tons. [Report by Mr. A. T. Crawford, Collector of Ratnagiri, on the improvement of communications from the seaboard to the Deccan. No. 4430 of 12th Decr. 1877.]

Course of Trade

The system of trade varies considerably according to the circumstances of the principal commercial towns. The modern system of trade is well represented by Venguria, while Chiplun and Rajapur are good types of the old fashioned commerce. Venguria [The following sketch is taken from a report by Mr. A. T. Crawford, Collector of Ratnagiri, on municipal octroi duties, dated 7th September 1878.] has for many years had a telegraph station connecting the town with Bombay and all the large Southern Maratha marts. A magnificent road has lately been made to Belgaum. The town itself is situated on the sea coast, and for at least fifteen years has been a regular place of call for all coasting steamers.

The submarine telegraph made a great change in the system of trade at Bombay. In former days Bombay firms were obliged to order and to keep on hand large stocks of the staples of commerce. The

heads of the large commercial firms lived in Bombay, where their experience and judgment were most wanted. Now no stocks are kept by merchants, and all important business is transacted by wire. The heads of the firms are usually in England, and the operations are directed, as the case may be, from London, Liverpool, or Manchester. Much the same change, on a smaller scale, has been gradually brought about in Venguria. The trade of this town is now mostly carried on by Bombay merchants and traders in the Southern Maratha Country by means of their commission agents, dalals, in Vengurla. These agents are responsible for clearing and despatching consignments as fast as they are received. They are warned by wire of the despatch of the goods, and beforehand provide land or water carriage as required. They keep their clients informed of the ruling market prices, and act on their instructions as to local purchases or sales. It is no longer necessary for the Kanarese trader in Belgaum or Hubli, or Bhatia firms in Bombay, to keep a branch and partners at Venguria. Even should a visit to Venguria be occasionally necessary, the regular steamer takes the Bhatia down from Bombay, or the Kanarese trader easily makes the journey by road. Usually the agent, dalal, is summoned once or twice a year to Bombay to make up his accounts, and except in the case of a few old established firms whose names are as household words in Southern India, no principals reside at Venguria.

In Rajapur and Chiplun, at the heads of creeks inaccessible to steamers, with no telegraph, and by post two or three days from Bombay and from two to fifteen days from some of the outlying Deccan marts, trade is carried on in the old fashioned style. Nearly all consignments, whether by land or sea, are made to resident traders, in accordance with 'their orders. When the consignments arrive, bulk is immediately broken, and the trader sells in lots of any size to any customer or petty traders or to a few paid agents of Bombay firms, who come there simply for the fair season. Thus while in Venguria a consignment arrives at one end of the town, and within a week passes out unbroken at the other, a consignment to Rajapur or Chiplun is at once broken up and distributed, and the part eventually sent to Bombay, does not, from the want of carriage, get clear of the town for two or three months. The merchants, mostly very conservative Brahmans with a small mixture of Bhatias, dealing largely in nothing, dabble in everything from cotton to iron nails. At the opening of the fair season, for during the rainy months the sites of the trading camps are often under water, they run up bamboo and matting booths, and pile them full of their heterogeneous wares. Here, like one long fair, they sit and traffic till the next rains break.

Village Shopkeepers.

Very many villages have no shops. The people go to the nearest local trade centre or market town. The better class of villages, especially those on some line of traffic, have their shopkeeper, generally a Vani, who deals in grain, chillies, molasses, sugar, spices,

oil, cocoanuts, betelnuts, and salt. The village Vani buys his stock in trade from wholesale town traders in Vengurla, Malvan, Rajapur, Sangameshvar, Chiplun, and Khed, and sometimes from the men who have brought the articles from the Deccan. Except a few Bombay Bohoras and petty Deccan cloth-dealers, who sometimes go from house to house in villages along the main lines of traffic, hawkers are seldom seen. Local religious gatherings do not, to any great extent, affect the trade of the district. Of 103 fairs and markets, the five most important had in 1879 an estimated attendance of 20,600 and an estimated traffic of £19,300 (Rs. 1,93,000). [The details are: Chindar, attendance 3000, trade £4000 (Rs. 40,000); Kunkeshvar, attendance 4000, trade £4000 (Rs. 40,000); Mitgavane, attendance 1100, trade £800 (Ra. 8000); Kelavli, attendance 900, trade £500 (Rs. 5000); and Velneshvar, attendance 11,600 and trade £10,000 (Rs. 1,00,000).]

Sea Trade

No materials are available to trace the development of Ratnagiri sea trade under British management. The few details that have been obtained show an increase from £104,484 (Rs. 10,44,810) in 1818-19 to £1,811,411 (Rs. 1,84,14,110) in 1878-79. Between 1860 and 1866, the wealth poured into Bombay by the American war greatly raised the Ratnagiri sea trade. In 1870-71, the returns were still as high as £1,931,787. Then as the reaction and fall in prices told, they fell to £1,455,691 in 1874-75. The returns for the next years were unduly swelled by the special grain imports for the famine districts. In 1878-79, trade had again settled to its normal State. The returns show a total of £1,841,411, or nearly £400,000 in excess of the trade of 1874-75. To the total of £1,841,411, imports contributed £793,849 and exports £1,047,562. Under imports the chief items were grain £270,410, cotton yarn £109,090, and piece-goods £104,302; and under exports, cotton £331,738, sugar £257,977, and grain £121,411.

For three years, 1870-71, 1874-75, and 1878-79, comparative figures are available. Comparing the returns of 1870-71 with those of 1878-79, the details show, in imports, a rise in betelnuts from £5798 to £8367, in coir from £2732 to £3162, in cotton yarn from £105,014 to £109,090, in grain from £126,495 to £204,170, and in sugar from £27,861 to £29,791. On the other hand, there is a fall in fish from £28,269 to £6173, in gunny bags from £12,557 to £5029, in liquor from £12,747 to £7665, in metal from £60,896 to £27,080, in piecegoods from £254,535 to £104,302, in salt from £95,938 to £17,153, and in silk from £74,961 to £50,534. Contrasting the exports for the same years there is a rise in grain from £46,769 to £121,411, in betelnuts from £2651 to £8578, in cocoanuts from £5717 to £14,968, in cotton from £249,112 to £331,738, in dyes from £13,078 to £54,169, in clarified butter from £29,583 to £42,794, in oil from £11,078 to £34,172, in seeds from £26,310 to £41,509, in spices from

£11,722 to £18,515, in sugar from £223,098 to £257,977, and in tobacco from £5656 to £8861. The chief items of decline are in fish from £11,660 to £2699, in hemp from £44,787 to £731, in salt from £4251 to £1067, and in wood from £16,175 to £1469.

Again, comparing 1874-75 with 1878-79, the returns show in imports a rise in grain from £84,185 to £204,170, in betelnuts from £4078 to £8367, in coir from £2998 to £3162, in cotton yarn from £88,923 to £109,090, in clarified butter from £110 to £549, in hemp from £2727 to £6431, in metal from £22,339 to £27,080, in oil from £36,003 to £42,025, in spices from £8593 to £11,944, and in sugar from £17,522 to £29,791. The chief items of decline are, cotton from £2572 to £137, fish from £14,791 to £6173, gunny bags from £13,137 to £5029, liquor from £10,307 to £7665, piece-goods from £105,755 to £104,302, salt from £72,547 to £17,153, silk and silk cloth from £72,201 to £50,534, and wood from £6286 to £4476. Contrasting the exports for the same years, the returns show an increase in grain from £63,760 to £121,411, in seeds from £32,275 to £41,509, in cocoanuts and kernels from £12,499 to £14,968, in cotton from £255,166 to £331,738, in dyes from £21,776 to £54,169, in clarified butter from £12,730 to £42,794, in oil from £11,216 to £34,172, in spices from £5446 to £18,515, in tobacco from £6789 to £8861, and in sugar and molasses from £166,625 to £257,977. The chief items of decline are fish from £3860 to £2699, hemp from £39,513 to £731, salt from £2281 to £1067, and wood from £19,607 to £1469.

The following statement gives the whole available details:

Ratnagiri Sea Trade, 1870-71,1874-75, and 1878-79.

ADTICLE	1870-71.		187	4-75.	1878-79.		
ARTICLE.	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.	
	£	£	£	£	£	£	
Betelnuts	5798	2651	4078	6902	8367	8578	
Cocoanuts	26,924	5717	33,105	6986	35,272	14,968	
Cocoa kernels	26,875	4446	34,073	5513			
Coir	2732	2413	2998	1661	3162	944	
Cotton	1236	249,112	2572	255,166	137	331,738	
Cotton yarn	105,014	1472	88,923	821	109,090	1006	
Dates	16,681	1022	11,939	898			
Dyes	5351	13,078	3836	21,776	3200	54,169	

ARTICLE.	1870-71.		1874-75.		1878-79.	
ARTICLE.	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.
	£	£	£	£	£	£
Fish	28,269	11,660	14,791	3860	6173	2699
Clarified butter	91	29,583	110	12,730	549	42,794
Grain of all sorts	126,495	46,769	84,185	63,760	204,170	121,411
Gunny bags	12,557	1114	13,137	1436	5029	1187
Hemp and hemp cloth	1968	44,787	2727	39,513	6431	731
Hides	77	672	16	4159	111	4956
Horns	59	1745	146	1778	565	2450

Ratnagiri Sea Trade, 187<mark>0-71,1874-75, and</mark> 1878-79.(continued).

ADTICLE	1870	1870-71.		1-75.	1878-79.		
ARTICLE.	Imports.	Exports.	Imports.	Exports-	Imports.	Exports.	
	£	£	£	£	£	£	
Liquor	12,747	26	10,307		7665	109	
Metal	60,896	3108	22,339	2345	27,080	3264	
Oil	48,084	11,078	36,003	11,216	42,025	34,172	
Piece-goods	254,535	10,123	105,755	9438	104,302	9137	
Salt	95,938	4251	72,547	2281	17,153	1067	
Seeds	8478	26,310	8427	32,275	8422	41,509	
Silk and silk cloth	74,961	200	72,201	89	50,534	66	
Spices	7233	11,722	8593	5446	11,944	18,515	
Sugar and molasses	27,861	223,098	17,522	166,625	29,791	257,977	
Tobacco	2737	5656	1687	6789	2073	8861	
Wood	7827	16,17S	6286	19,607	4476	1469	
Miscellaneous	27,341	215,034	82,866	31,455	106,128	83,785	
Total	988,765	943,022	741,166	714,525	793,849	1,047,562	

Customs Division

Suvarndurg.

The fourteen ports of the district are for customs purposes grouped

into six divisions, Suvarndurg, Anjanvel, Ratnagiri, Vijaydurg, Malvan, and Vengurla. The Suvarndurg ports, Bankot, Kelshi, and Harnai, had, in 1878-79, an estimated total trade worth £124,908, of which £44,430 were imports and £80,478 exports. The corresponding totals were, in 1874-75, £53,642, in 1873, £92,614, in 1871, £156,963, and in 1868, £196,371. BANKOT exports, produced mostly in the Dapoli, Mahad, and Mangaon sub-divisions and in some places above the Sahyadris, are husked and cleaned rice, nagli, vari, wheat, gram, pulse, sesamum, coriander seed, hemp, oil, tobacco, sugar, molasses, onions, garlic, chillies, turmeric, potatoes, betelnuts, gallnuts, groundnuts, fuel, and piece-goods, the last to the Habshi's territory. These exports are sent north to Bombay and Bandra, and south to Vengurla; and husked and cleaned rice and nagli to Kalikat. The imports are dried and salted fish, molasses, salt, chillies, earthen pots, sugarcane, cement, oil, clarified butter, palm leaves, coir, and betelnuts from the several Konkan ports; sugar, hardware, copper, piece-goods, and drugs from Bombay; and cocoanuts, cocoa kernels, coir, ginger, pepper, red powder, and wood from Kalikat. These by the Mahad creek find their way to Mahad and thence inland. Of the traders, Brahmans, Parbhus, Vanis, Shimpis, Bhandaris, Kolis, and Musalmans, some belong to the place and some are outsiders living in Bankot only during the trading season (October - May). Butelos of from 80 to 100, and phatemaris of from 50 to 60 tons from Bombay and Malabar, and machvas, bamboats, and steamers from several places, visit the port, anchoring about a quarter mile from the landing place. The KELSHI exports, chiefly local produce, betelnuts, timber, and firewood, go to Bombay. The imports, almost entirely for local consumption, are husked rice, nagli, coriander seed, molasses, turmeric, onions, garlic, chillies, oil, tobacco, and clarified butter from Ratnagiri ports; salt from Mora in Thana; and wheat, gram, sugar, dates, copper, brass, tin, hardware, and piece-goods from Bombay. Padavs, bamboats, and phatemaris of 20 to 30 tons from Bombay and other places visit the port, anchoring at a distance of 225 yards from the landing place. At HARNAI, betelnuts grown in the place and sent to Bombay are the only exports. The imports, almost all for local consumption, are husked and cleaned rice, vagli, vari, harik, molasses, oil, tobacco, chillies; dried and salted fish, and firewood from the several Konkah ports; salt from Uran, Belapur, and Karanja; liquor from Goa; and rice, piece-goods, sugar, copper, and brass from Bombay. Except a few from Ratnagiri and Rajapur most of the traders are natives of the place. Pudavs, phatemaris, and steamers visit the port, anchoring half a mile from the landing place.

Anjanvel.

The chief ports of the Anjanvel division are Anjanvel and Borya. The total trade of the Anjanvel division amounted in 1878-79 to £640,101 of which £222,353 were imports and £417,748 exports. The corresponding totals were, in 1874-75, £339,104, in 1873, £590,843, and in 1871, £573,123. The exports were formerly insignificant,

chiefly of Konkan grain. In 1879, cotton worth £118,363 and sugar and molasses worth £192,958. and other miscellaneous articles, making a total of £417,748 were exported. The imports are salt, dates, sugar, copper, hardware, silk, yarn, and piece-goods from Bombay; cocoanuts, cocoa kernels, pepper, ginger, coir, and salted fish from Malabar and Goa; and husked rice, nagli, and tobacco from Bankot, Revdanda, Pen, and Panvel. Most of these, through, the Kumbharli pass, find their way to Kolhapur, Satara, and Sholapur. The import traders, mostly Brahmans, Bhatias, Gujars, Vanis, and Musalmans, are native capitalists. Machvas and phatemaris from Kalikat in the south, and Bombay and even Kathiawar in the north, visit the Anjanvel port, anchoring about 100 feet from the landing place.

Ratanagiri.

The chief ports in the Ratnagiri division are Jaygad, Ratnagiri, and Purangad. The total trade of the Ratnagiri division amounted, in 1878-79, to £131,805, of which £94,164 were imports and £37,641 exports. The corresponding totals were, in 1874-75,£144,486,in 1873, £126,273, in 1871, £130,605, in 1868, £129,289, in 1857, £15,413, and in 1856, £66,155. The chief JAYGAD exports are husked rice, molasses, and fuel; and the imports, salt, husked rice, cocoanuts, and piece-goods. The RATNAGIRI exports are cement, fish, and shells; and the imports husked rice, nayli, vari, fish, and piece-goods. The PURANGAD exports are husked rice, hemp, and fuel; and the imports husked rice, salt, and fish. The imports are brought from Bombay in the north and as far as Kalikat in the south. The. exports find their way to Bombay, the several district ports, and Karwar. Of the imports, husked rice, nagli, and cloth are consumed in the division; salt, cocoanuts, and fish find their way inland. The Ratnagiri traders belong to Ratnagiri and the villages near. Those of Jaygad and Purangad are outsiders who stay there only for the season (October-May). Bhandaris, Kharvis, and Musalmans, some of them have money of their own, and others trade on borrowed capital. Phatemaris of from 10 to 80 tons, shibadis of from 100 to 250 tons, and steamers visit Ratnagiri and Jaygad, anchoring about a guarter mile from the landing place. At Purangad steamers do not touch, but sailing craft come within a few yards of the shore.

Vijaydurg.

The chief ports in the Vijaydurg division are Jaytapur and Vijaydurg. The total trade of the Vijaydurg division amounted in 1878-79 to £245,415 of which £107,217 were imports and £138,198 exports. The corresponding totals were, in 1874-75, £234,525, in 1873, £251,230, and in 1871, £305,978. The chief JAYTAPUR exports are husked and cleaned rice, *jvari*, *nagli*, coriander seed, anise seed, groundnuts, chillies, turmeric, cocoanuts, cocoa kernels, oil, molasses, tobacco, red powder, clarified butter, salted fish, and hemp to Konkan ports; cotton, hemp *ambadi*, gallnuts, molasses, fuel, bamboos, and *shembi*

and ain tree bark to Bombay; sugarcane and hemp to Goa; husked rice, oil, red powder, chillies, clarified butter, molasses, and hemp to Kumta; husked rice to Beliyapatam; husked and cleaned rice, jvari, bajri, nagli, kulthi, udid, and hemp to Kalikat; rice, wheat, oil, and hemp to Cochin; molasses, leaf dishes, groundnuts, anise seed, turmeric, clarified butter, gallnuts, and hemp to Cutch; molasses, groundnuts, turmeric, and hemp to Maskat; and groundnuts, fishing nets, and hemp to Makran. The imports are husked and cleaned rice, nagli, van, kulthi, udid, salt, earthen pots, dried rinds of kokam Garcinia purpurea, hemp, cocoanuts, cashewnuts, palm leaves, betelnuts, gunny bags, cotton, yarn, and piece-goods from other Konkan ports; rice, jvari, bajri, wheat, methi, mug, tur, gram, mustard seed, sugar, drugs, piece-goods, yarn, gunny bags, tin, copper, hardware, and paper from Bombay; cocoanuts, salted fish, and salt from Goa; fuel, arrowroot, dry fish, pepper, chillies, cocoanuts, and cocoa kernels from Kalikat; ginger, oil, yarn, patang dye, fish, and saffron from Cochin; coir and dry fish from Barkur; and jvari, ochre geru, and palm leaf cases kapate, from Cutch. The chief VIJAYDUEG exports are gallnuts, molasses, hemp ambadi, bamboos, shembi bark, and twine to Bombay; molasses, hemp, and ain bark to other Konkan ports; sugarcane to Goa; husked rice to Cochin; and husked rice, hemp, and pulse to Kalikat. The imports are husked and cleaned rice, nagli, vari, millet, wheat, cocoanuts, cocoa kernels, palm leaves, and piece-goods from Konkan ports; piece-goods from Bombay; salt from Mora; husked rice from Antora and Talabdi; salted fish from Goa; and cocoanuts from Kankon in the Portuguese territory. The exports of the division are partly grown in the Konkan, partly brought from above the Sahyadris. Some of the imports are used locally and some find their way to Kolhapur and other Deccan marts. Except a few who belong to the villages along the creek, most of the traders are natives of Kharepatan and Eajapur. Shipowners from Bombay and Madras also carry on trade to a large extent on their own account; and Cutch, Kathiawar, Maskat, and Makran traders, Hindus, Musalmans, Christians, Arabs, and Beluchis, occasionally visit the ports. The shipping are machvas, kothyas, dangas, bagelos, phatemaris, and steamers.

Malvan.

The chief Malvan ports are Devgad, Achra, and Malvan. The total trade of the Malvan division amounted in 1878-79 to £88,574, of which £46,869 were imports and £41,705 exports. The corresponding totals were, in 1874-75, £77,683, in 1873, £81,639, in 1871,£81,154, in 1867, £99,619, in 1850, £43,274, and in 1840, £10,775. The chief DEVGAD exports are hemp, betel leaves, betelnuts, sugarcane, fuel, and bamboos to Bombay; and hemp, fish, and blankets toother Konkan ports. The imports are husked and cleaned rice, gram, oil, hardware, and English piece-goods from Bombay; and husked and cleaned rice, *nagli*, *vari*, *harik*, groundnuts, tiles, fish, timber, blankets, cocoanuts, oil, molasses, tobacco, chillies, cocoa kernels,

salt, and country piece-goods from the Konkan ports. The ACHRA exports are hemp, coir, sugarcane, earthen pots and fuel to Bombay; and husked and cleaned rice, salted fish, timber, hemp, cocoanuts, coir, cashewnuts, betelnuts, and tiles to the Konkan ports. The imports are husked and cleaned rice and hardware from Bombay; and husked and cleaned rice, jvari, nagli, vari, gram, lentils, peas, groundnuts, coriander seed, oil, tobacco, molasses, timber, salted fish, cocoanuts, betelnuts, salt, and country piece-goods from the Konkan ports. The MALVAN exports are rice, linseed, gallnuts, hemp, cashewnuts, dried rinds of kokam Garcinia purpurea, coir, coir ropes, cocoanuts, chillies, and sugar to Bombay; husked and cleaned rice, wheat, pulse, molasses, cocoanuts, salt, sugar, betelnuts, oil, hemp seed, onions, cashewnuts, palm leaves and tiles to the Konkan ports; cashewnuts and cocoanuts to Honavar; husked rice, clarified butter, and earthen pots to Cochin; onions to Kundapur; husked rice, nagli, sesamum, pulse, and onions to Kananor; husked rice and pulse to Kalikat; and husked rice, molasses, pigs, and oil to Goa. The imports are husked and cleaned rice, millet, nagli, peas, lentils, dates, sugar, cocoanuts, and English piece-goods from Bombay; rice, wheat, pulse, gram, peas, coriander seed, groundnuts, chillies, hemp, tobacco, coir ropes, cocoa kernels, betelnuts, sugar, cashewnuts, oil, clarified butter, dried fish, and dried rinds of kokam Garcinia purpurea from Vengurla; cocoanuts, sweet potatoes, bamboos, candles, and salted fish from Goa; husked and cleaned rice, millet, nagli, tur, pulse, cotton seed, cocoa kernels, sesamum, ajvan, molasses, cashewnuts, salt, and hemp from other Konkan ports; rice and cocoa kernels from Karwar; rice, cocoa kernels, coir ropes, and dates from Kumta; sesamum, cocoanuts, coir ropes, tobacco, and betelnnts from Honavar; oil, cocoanuts, cocoa kernels, and dry fish from Cochin; pepper, betelnuts, cocoa-nuts, cocoa kernels, ginger, pepper, and red powder from Kalikat; rice from Mangalor; and cocoanuts from Beliyapatatm. The exports are partly local, partly brought from the Vadi state and from different parts of Katnagiri. The imports are almost all consumed in the division. Rice sometimes finds its way to Malabar. The traders are local Vanis, Gujars, Shenvis, Bhandaris, and Gabits. Most have some capital, while others borrow money at the opening and return it with interest at the close of the trading season. Machvas, phatemaris, and kothyas, and steamers visit the ports, anchoring 200 yards from Malvan, 500 from Achra, and 300 from Devgad. The local shipping generally ply between Bombay and Karwar, but they sometimes go as far as Kurrachee in the north and Cochin in the south.

Vengurla.

The only port of consequence in the Vengurla division is Vengurla. The total trado amounted in 1878-79 to £655,798, of which £314,561 were imports and £341,237 exports. The corresponding totals were, in 1874-75, £298,460, in 1873, £660,781, and in 1871, £683,962. The chief exports are linseed, cotton, gallnuts, hemp, clarified butter, molasses, cocoanuts, cocoa kernels, coffee, hides, horns, betelnuts,

chillies, brooms, and wooden toys to Bombay; wheat, gram, clarified butter, molasses, tobacco, onions, and garlic to Goa; rice and other grains, tobacco, country piece-goods, oil, chillies, betelnuts, cocoanuts, cocoa kernels, coir, palm leaves, dried kokam rinds Garcinia purpurea, onions and garlic to the several Ratnagiri ports; wheat, gram, and coriander to Karwar; tobacco and molasses to Kumta; hemp and tobacco to Ankola; tobacco, groundnuts, and coriander seed to Dwarka; wheat, gram, and grain to Cochin and Kananor; clarified butter and gram and other pulses to Mangalor; and rice, coir, and clarified butter to Cutch. The imports are rice, wheat, millet, gram and other pulses, tobacco, piece-goods, yarn, silk, China glass bangles, and groceries from Bombay; husked and cleaned rice, pulse, cocoanuts, cocoa kernels, oil, salt, salted fish, cashewnuts, and red powder from the several Ratnagiri ports; pulse, cocoanuts, betelnuts, salt, salted fish, oil, and cement from Goa; rice, cocoanuts, betelnuts, and timber from Karwar; cocoanuts, cocoa kernels, oil, ginger, pepper, saffron, and sappan wood, patang, dye from Cochin; cocoanuts, oil, and coriander seed from Mangalor; cocoanuts from Beliyapatam, and cocoanuts, cocoa kernels, ginger, dried fish, turmeric, and pepper from Kalikat. Of the exports, cotton, linseed, clarified butter, chillies, and gall-nuts come from above the Sahyadris, the others are the products of the Konkan. Of the imports, part are consumed locally and the rest find their way to Belgaum, Dharwar, Shahapur, Hubli, Kolhapur, Sankeshvar and the Nizam's territory. Some of the traders are natives and some are settlers from Belgaum, Shahapur, Malvan, Rajapur, Cutch, and Jamnagar. Shenvis, Bhatias, Gujars, Vanis, and Marathas, most of them are agents of large Bombay and up-country firms. The shipping of the port includes machvas, phatemaris, kothyas, bagelos, batelos, and steamers.

TRADE INDUSTRIES

[Compiled by Mr, G. W. Vidal, C. S., from notes by Mr. Rangrao Bhimaji, Huzur Deputy Collector.]

Ratnagiri has never held an important place as a manufacturing district. The artisans employed in the different industries produce, with but few exceptions, only the coarser and commoner articles required by a poor agricultural population. Ruled in past times as an outlying province, with no luxurious court to attract and encourage skilled craftsmen, the district has never had a reputation for fine workmanship in any branch of industrial art. No trade or craft has any tradition attached to its first introduction. Here and there tools of European pattern have been substituted for native ones, but as a rule, the rude implements of ancient days are, without change or improvement, still used in all the crafts, The raw material, most of it imported from Bombay, is bought by the artisans direct.

The 1878 License Tax returns give a total of 12,003 craftsmen, of whom only 1065 were returned as earning yearly inclines of £10 (Rs. 100) and upwards. The details are:

Ratnagiri Craftsmen, 1	87	8.
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CRAFT.	Workmen.	Incomes of £10 (Rs. 100) and upwards.	CRAFT	Workmen.	Incomes of £10 (Rs. 100) and upwards.	
Smiths	2008	263	Tailors	127	13	
Carpenters	2559	291	Metal pot makers	370	113	
Weavers	901	107	Stone masons	313	62	
Spinners	81	9	Knife grinders	6	1	
Potters	1438	18	Dyers	8		
Barbers	1682	69	Cotton combers	4		
Shoemakers and Curriers	2018	110	Total	12,003	1065	
Washermen	848	9				

Spinning and Weaving.

Cotton yarn spinning gives work to a very limited number in a few villages, The yarn is usually imported ready for weaving. Coarse white cotton cloth, *danyri* or *khadi*, coloured robes, *sadis*, for women, and

waistcloths, *dhotars*, for men, are woven for local use by Hindus of the Koshti and Sali castes. Coarse woollen blankets are also made here and there. In the Ratnagiri jail factory several hand-looms are regularly at work. Various kinds of coarse cotton piece-goods, *sadis* and *dhotars*, are made for local sale. Cotton carpets, towels, napkins, sheets, table cloths, tapes, and similar goods of a serviceable description are also produced in this factory.

Metal Work.

In almost every village gold and silversmiths find employment in making and remaking common ornaments. The workmen show but little skill. Blacksmiths are scarce, forges being found only in the larger towns and villages. There is little demand for their work. Coppersmiths and metal pot makers are also scarce, but judging from the License Tax returns, earn comparatively larger incomes than other workers in metal.

Pottery.

Coarse red pottery for household purposes is made here and there throughout the district. But the trade is not well paid. A rather superior stoneware, chiefly of cups, jugs, and various fancy vessels, is manufactured in the Malvan sub-division, from the porous blue shale found in the villages of Kirlos and Asgani. The owners of the quarries charge those who use them a yearly fee of 2s. 6d. (Rs. 1/4).

Horn Work.

Fancy articles of bison's horn are made by a few carpenter families with considerable skill at Vijaydurg, Malvan, and Rajapur. The industry is said to have been started some 200 years ago at Vijaydurg. The horn is imported in small quantities from Malabar and Cochin, the price varying from 2s. to 4s. (Rs. 1-2) according to size. The horn is heated on a moderate fire, and to make it malleable is softened with cocoanut oil and wax. The articles made, varying in price from 10s. to 16s. (Rs. 5-8), are card trays, inkstands, snuff boxes, cups for idols, decorated with bulls, deer, and cobras, combs, chains, handles for sticks, and different kinds of birds and animals. The demand for the work, perhaps the only specialty in the district, is very limited and the workers few and much indebted.

Cane Work.

Very good cane work, both useful and ornamental, is made at the district jail. Originally confined to a few Chinese convicts, the industry has been continued successfully by Hindu prisoners. Chairs, tables, footstools, tiffin baskets, ladies' work baskets, flower stands, and various other miscellaneous articles are produced.

Steam Saw Mills.

In 1863, Mr. A. T. Crawford, C. S., then Senior Assistant Judge, established a school of industry, which in the following year, with the aid of the Honourable Rastamji Jamsetji Jijibhai and other leading

native gentlemen in Bombay, developed into the Ratnagiri Saw Mills Company Limited. The original cost of the property, including buildings, machinery, and plant, was £12,000 (Rs. 1,20,000). During the share mania time (1863-1864) a large amount of work was executed for railways, reclamations, and other public undertakings, and hundreds of workmen received a regular training. In the crash which followed the share mania, the company was ruined, and the property was sold under a civil court decree for £1200. It was bought in by seven native gentlemen at Ratnagiri, who subscribed a capital of £1700, and until 1877, continued to work it under purely native management. An arrangement was then made with the proprietors by the district local funds committee, to re-establish experimentally a school of industry. After a trial of eighteen months, the school became, on the 1st April 1879, a Government institution, the proprietors parting with their whole interest in the property for £2500 (Rs. 25,000) to be paid without interest, by the district local funds in 12½ years by annual instalments of £200 (Rs. 2000). The school is now governed by a committee consisting of the Collector of the district, the executive engineer, the huzur deputy collector, and the deputy educational inspector. The European manager who lives on the premises is a trained mechanical engineer. He is assisted by a fixed staff of teachers, carpenters, and workmen in charge of the different machines, sufficient to keep the shop going in slack times. Should there be a press of work he engages temporary workmen, to be discharged when no longer needed. The students, about fifty in number, are of all castes and all ages between seven and fifteen. They enter on a month's probation, when, should their work be worth it, they get 2s. (Re. 1) a month, gradually rising, as their work increases in value to 16s. (Rs. 8). A boy entering the school ordinarily passes through the following course. He is first placed under the boys' foreman, mesfri, taught to handle and use the simpler carpenter's tools, and gradually initiated into hand planing, making ordinary mortices and tenons, and the use of the square and foot rule. He then goes under one of the other machine foremen, and is gradually initiated into the use of the different fitting tools, circular saws, tenoning and morticing machines, feet and vertical saws, drilling machines, saw sharpeners, and lathes. During this time he is working in the shop at all kinds of carpentry, and actually using the different machines from time to time in his work. As he advances he is taught practical mensuration by lining out with chalk on the smoothed floor full-sized plans of roofing, scantling door or window frames, or any other work then in hand. He is afterwards taught to take out quantities and make estimates, and last of all he is instructed in designs and in the working of the steam engine. In the mornings from seven to nine, and in the evenings from five to six, the boys attend a class under the head master for reading and writing, arithmetic, mensuration, and when sufficiently advanced, practical geometry. The school undertakes wood and iron work of all descriptions for private persons, for the public works department, the district local funds committee, and the municipalities of the district. [From Mr. A. T. Crawford's Report, 509, 17th February 1879.]

Salt.

Salt [From notes supplied by Mr. R. Thorn, Assistant Collector of Salt Revenue.] had hitherto been manufactured at Ratnagiri, Malvan, and Vengurla. At Ratnagiri there were sixteen salt works, *agars*, at Malvan sixty-nine, and at Vengurla thirty. Except the state works at Shiranda near Vengurla all these have been closed since March 1880. The following table shows for 1878 and 1879, the revenue derived and the quantity manufactured at each station:

Ratnagiri Salt, 1878-79.

CTATION	1	L877-78.		1878-79.			
STATION.	Produce.	Sales.	Duty.	Produce.		Sales.	Duty.
	Tons.	Tons.	£.	Tons.		Tons.	£.
Ratnagiri	233	221	1102		126	141	948
Malvan	2003	897	5294		1510	898	6064
Vengurla	2466	2032	12,055		2635	2886	19,482
Total	4702	3200	18,451		4271	3925	26,494

In Malvan and Vengurla, some of the works belonged to Government, and under certain conditions were every year leased to the highest bidder. The remaining works, including those at Ratnagiri, were owned by private persons, Brahmans, Bhandaris, and Vaais, who held them either by grant, sanad, or lease, kaul.

At the beginning of the fair season the manufacturers prepare their pans, kond, by ramming the earth with a flat plank until the base is hard and apparently water-tight. In March, April, May, and June, the pans are filled with salt water from a channel cut from the nearest creek. The supply of water is regulated by opening or closing the channel. The pans are filled to a depth of from three to five inches of water. The water is left to evaporate from one to ten days. When the salt has formed at the bottom of the pans, it is raked up, piled in low heaps at the edge of the pan, left to dry for twenty-four hours, and afterwards gathered in one large heap on a raised platform to prevent its being washed by the tide. At the beginning of the rainy season, the heaps are thatched with grass and cocoanut leaves, to be again exposed when the fair weather sets in. When sales are made, the salt is, before removal, weighed on the spot by an official of the salt department, and the duty calculated. The chief sales at Ratnagiri and Malvan were for local consumption and for fish-curing. A considerable quantity of salt from Vengurla is exported by land over the passes into the Deccan. Very little salt leaves the district by sea.

Craftsmen.

The bulk of the rural craftsmen hold a position in no way superior to

that of the ordinary cultivators. Few save, many are indebted, and most live from hand to mouth. Their houses range in value from £1 to £20 (Rs. 10-200), their stock in trade of metal pots or ornaments from 10s. to £50 (Rs. 5 - 500), and their tools from 4s. to £10 (Rs. 2 - 100). Weavers, goldsmiths, and coppersmiths are busy during the marriage season, and slack during the rest of the year. The daily earnings of the lower craftsmen vary from 3d. to 6d. (2-4 annas), and of the more skilled workers from 9d. to 2s. (6 annas - Re.1). The craftsman begins at seven in the morning, rests at noon for two hours for the midday meal, begins again at two and goes on till six, or if trade is brisk, putting off the evening meal, he works till nine or even later. Except skilled workmen in the larger towns who hold a better position and. are occasionally able to lay by money, artisans as a class are more improvident and more given to drinking and gambling than cultivators.

Trade Guilds

There are no trade guilds, mahajans, in the district, and consequently little or no trade influence. Some of the larger towns have officers styled shetes, whose duties in past times appear to have corresponded closely to those of the Gujarat trade guilds. These shetes were hereditary officers, enjoying certain rights, privileges, and perquisites, and with respect to the market, peth, held a position similar to that held by the patils in the rural portions of the towns. The position of the shetes has been gradually lost, and their office has become nominal. They are occasionally consulted about prices and measures, but their decisions carry little weight.

Maharashtra State Gazetteers

HISTORY

Early Hindu

THE Chiplun and Kol caves show that, about the beginning of the Christian era (B.C. 200 - A.D. 50), north Ratnagiri had Buddhist settlements of some importance. The Kol caves in the north are given by Mr. Burgess (Rockcut Temples, 13) at between B.C. 200 and A.D. 50, and as the Mahad and Kuda series on the north and those at Karhad on the south-east are said to be of about the same age, the Chiplun caves, which are of much the same character, probably date from about the Christian era. About a century later, it formed part of the territory of Rudradaman, the Mahakshatrap whose dominions included Sind, Marwar, Gujarat, Malwa, and the Konkan as far south as north Kanara. [Rudradaman ruled between 70 and 100. The era is uncertain, but it probably is the Shak era, A.D. 78 Ind. Ant. II. 93. and VII. 257-263. Though shunned as the Pirate Coast, the district contained several places of trade known to the early European writers (A.D. 57 - 247). The places mentioned on the Pirate Coast within present Ratnagiri limits, are, by Pliny (77), Sigerus and Nitrias; by Ptolemy (150), on the coast, Mandagara, Byzantium, Chersonesus, Milizigeris, Annagara, and Nitra, and inland, Olochoera and the metropolis Musopalle (Bertius, 198, 205). Those mentioned by the author of the Periplus (247) are all on the coast, beginning from the Mandagora, Melizeigara, Byzantium, Toparon, Turannosboas (Vincent, II. 427, and McCrindle, 129). Almost none of these names have been identified. Mandagara seems to have been on the Bankot creek, either near the hill fort Mandangad, or at the mouth of the river, where on the right bank, Barbosa (1514) places a Mandabad and where there still are a Kol Mandla and a Bag Mandla. Milizigeris, Melizeigara, or Sigerus, an island in Ptolemy and a town in Pliny and the Periplus, may be the town-island of Mali, Melandi, or Malvan, Zigeris representing the Arabic Jazirah (island), a word still known on the Konkan coast under the corrupt form Janjira; Nitrias or Nitra, a place held by the pirates, may, as suggested by Rennel (Memoir, 31), be Nivti; Turannosboas may possibly be a translation of Rajapur; Armagara may be Harnaigad, or if the reading Brahmagar is taken it may be Guhagar, then, as iu Portuguese times, known as the bay of Brahmans; and Byzantium may be a Greek form of V ijayant, the original of Vijaydurg (see Weber in Ind. Ant. II.. 148). Of the inland towns, Musopalle may possibly be Mhasla on the Rajpuri creek in Janjira; and as the rock-temples at Kuda on the Rajpuri creek and at Bhaja at the foot of Lohgad are probably about the same age as Ptolemy (150), Olochcera may be Lohgad in the Sahyadris about eight miles south-east of Khandala. Other suggestions have no connection with the modern names. They are by Yule, Mandagora at Bankot; by Vincent, Melizeigara at Jaygad; and by McCrindle, Toparon or Togaron at Devgad. Turannosboas is by Muller placed at Achra and by Yule at Banda or Tirakot. (See McCrindle's Periplus, 129).] At the end of the sixth century the south of Ratnagiri was held by the Chalukyas, [Ind. Ant VIII. 25, 45. The village of Kochra, Kochchuraka, near Vengurla, was granted by the queen consort of Chandraditya, the elder brother of Vikramaditya I.] and in the seventh (about 684) they drove out the Mauryas as a wave of the sea drives out the watery stores of pools.' [Ind. Ant. VIII. 244. It was probably about this time that Karna, a Chalukya from Kolhapur, established himself at Saugameshvar and built or repaired the temple of Karneshvar, See below, p. 367, 368.] During the latter part of the ninth and early years of the tenth centuries, Ratnagiri would seem to have been included in the dominion of the Rathod rulers of Malkhet near Haidarabad. [Sulaiman (851) (in Elliot, I. 4) says the kingdom of the Balhara begins at the Konkan. Mas'udi (915), Prairies d'Or, I.177, includes Chaut, Symour, in the Balhara's dominions. It is doubtful if they stretched any further south. The Rashtrakutas of Malkhet or Manyakhet, though an old family (Ind. Ant. VI. 60), did not rise to great power till about 767 (Ind. Ant. I. 209). They spread their sway over the Deccan, Konkan, part of Gujarat, and Central India up to the Vindhyas. They remained supreme till, about 970, they sank under Tailap the Chalukya (Ind. Ant. VI. 60).] Under the Chalukyas, the Konkan was conquered, about 1025, [Elliot in Jour. R. A. S. IV. 15; Ind. Ant. VIII. 18.] by Jay Sinh or Jagadek Malla. For about fifty years it was managed for them by the Silharas of Goa, and then passed to the Kadambas. [Ind. Ant. V. 320.] Early in the twelfth century it was taken by the Yadavs of Devgiri or Daulatabad, one of whom, Sinhdev (1075-1113), is said to have seized Panhala near Kolhapur and conquered the Konkan. [Jour. R. A. S. II. 381, in Nairne's Konkan, 19. It remained with the Yadavs only for a few years as it was re-taken under the Chalukya king Vikramaditya IV. (1077-1128). [Elliot in Jour. R. A. S. IV. 15.] Towards the close of the century, Vijayarkdev restored the power of the Goa chiefs, and his son Bhojdev, a great builder of forts, with his capital at Panhala near Kolhapur, is said to have held the whole south of the Konkan to Karwar. [Grant Duff, 13; Nairne, 19.] According to tradition his country was reduced by a Raja named Singin, who dying before his power was well established, it fell into the hands of Maratha chiefs. [Grant Duff, 13. According to Jervis (Konkan, 81) these chiefs were the Paligars of Chakan and Junnar in Poona, Raygad in Kolaba, Panhala in Kolhapur, Kudal in Savantvadi, and Sonda in North Kanara.] In the thirteenth century, these local chiefs were probably subject to the Hoysala Ballalas of Dvarasamudra in Mysor (1050-1310) [Elphinstone, 218.]

Musalmans, 1312-1660

Early in the fourteenth century (1312), Ratnagiri was overrun by the Musalmans. Dabhol seems to have always been held in strength. But with their head-quarters so far north as Daulatabad, the hold of the early Musalmans was slight.

The Bahmanis, 1347-1500.

When (1347) the Bahmani kings established their independence, the change of the capital south to Kalburga made the south Konkan its natural seaboard. Dabhol became a great port and was carefully kept in Musalman hands. Still the inland parts remained unsubdued. In 1377, it is stated that many of the chiefs owned allegiance to the Viiavnagar kings, who at that time held Goa. [Briggs' Ferishta, II. 338. According to Elphinstone (411), the Vijaynagar dynasty, which dates from about 1340, was a new family. But Ferishta (II, 338) says that Krishna Ray's forefathers had (1377) held the kingdom for 700 years. According to a local tradition Vijaynagar power stretched north to Raygad. Jervis' Konkan, 98. Compare Ind. Ant. III. 194.] During the fifteenth century, the Bahmani kings made three efforts to subdue the south Konkan. In 1429, Malik-ut-Tujjar overran the country and the chiefs agreed to admit Bahmani supremacy. [Briggs' Ferishta, II. 413.] No regular government was established, and only five years later, the chiefs of Raygad and Vishalgad refused obedience. A second expedition (1436) for a time brought those chiefs to order. [Briggs'. Ferishta, II. 424. The fort is called Sonkhed, and under that name cannot be identified. In 1453, it is again spoken of as Sinhgad (Grant Duff, 27). The explanation seems to be that the Vishalgad chief was known as the Shankar Ray. See Fer. II. 484. Khafi Khan (Elliot, VII. 278, 372) calls it Sakhralna. But the country was unsubdued, and before many years tribute was again withheld. In 1453, preparations were made for a complete conquest. The forts above the Sahyadris were reduced, and under the guidance of Shirke, one of the beaten chiefs, the Musalman army marched into the Konkan. For two days they passed along a broad easy road. Then they plunged into valleys 'where the sun never shone, and through passes crookeder than the curly locks of the fair and harder to escape from than the mazes of love'. The commander was struck by dysentery and the wearied troops, unable to form a camp or even to pitch their tonts, threw themselves on the ground wherever they could find room. Leaving them in this plight, Shirke went to the neighbouring fort of Vishalgad, and returning with a large body of troops surprised and routed the Musalmans, slaying, with the general and 500 noble Syeds, about 7000 men. [Briggs' Ferishta, II. 439.] For fifteen years this disgrace was unavenged. At last, in 1469, the minister Mahmud Gavan marched against the Konkan. The leader of the chiefs was the Raja of Vishalgad (Khelna), who, besides the unavenged insult to the Musalman arms, had of late, with his fleet of 300 sail, greatly harassed Musalman trade. Gathering troops from Junnar, Chakan, Kolhar, Dabhol, Chaul, Vai, and Man, Mahmud Gavan forced the passes and entered the Konkan. Finding them useless, he sent back his cavalry, and with the troops of Dabhol and Kolhar, cut his way through the woods to Vishalgad (Khelna). He besieged it till the rains set in. Then leaving the passes in charge of hardy troops, he withdrew to Kolhapur. Returning next fair season, by bribes and stratagems he gained the fort, reduced the country, and from the Ray of Vijaynagar, [Briggs' Ferishta, II. 484.] captured the fort and island of Goa.

The Bahmani kings did not long enjoy this conquest. In 1484, when the great Deccan nobles began to withdraw their allegiance from Mahmud II., Malik Ahmad, the founder of the Nizam Shahi or Ahmednagar dynasty (1484-1637), entering the Konkan from the north-east, took several forts [Among them were Mahuli in Thana, Koari in Poona, and Bharap and Pali in Ratnagiri. Nairne's-Konkan, 27.] and established his power over part of Ratnagiri, The rest of the district was seized by Bahadur Khan Gilani, the governor of Goa, who, aiming at independence, tried to secure the whole Konkan coast. In 1493, by the sack' of Mahim near Bombay, Gilani brought on himself the wrath of Mahmud Begada of Gujarat (1459-1511). Driven to activity by the threats of the Gujarat king, Mahmud Bahmani gathered a great army, and, near Kolhapur, defeated and slew Gilani. He then, with some of his chief nobles, paid a short visit to Dabhol and for some years more the district continued under his officers.

Bijapur Kings, 1500-1600.

About 1500, in a fresh partition of the Bahmani lands, the commander of Goa agreed to acknowledge Yusuf Adil Khan [Briggs' Ferishta, III. 19.] as his sovereign, and the whole of the Konkan south of the Savitri or Bankot river came under Bijapur. On gaining the south Konkan, Yusuf Adil Shah, with Dabhol as the head-quarters of government, took steps to improve the district and bring its waste lands under tillage. [Details are given at p. 225.] Defeated at Goa by the Portuguese, [Goa was taken by Albuquerque in 1508, regained by a Bijapur officer in 1509, and finally conquered by the Portuguese in 1510.] Yusuf Adil Shah, refusing to seek their friendship or acknowledge them as rulers of the sea, brought grievous loss on the trade of Dabliol and other coast towns.' [Dabhol was thrice sacked, in 1508, 1522, and 1661.]

The Marathas, 1660-1818

For fifty years after the decline of the Portuguese (1600-1650), Bijapur power remained unbroken. But about the middle of the seventeenth century, Shivaji (1658) began to conquer the south Konkan, and in a few years, except that Malvan was left to the Savants, he had, by building and repairing forts, spread his power over the whole district. [In 1666, he held the whole coast north of Rajapur; he took Rajapur in 1670, and in 1674 the south up to Goa limits. Orme's Hist. Frag. 22, 26, 40; Bruce's Annals, II. 37, 38, 43, 48, 57. Jervis (Konkan, 92) puts Shivaji's conquest some years earlier. He completed the conquest in 1661, forced the Savants to submit, built the forts of Redi and Siudhudurg in the south, and repaired the old forts of Vijaydurg, Ratnagiri, Jaygad, Anjanvel, and Suvarndurg.] The rise of Shivaji was, to their utmost, resisted by Bijapur and the Janjira Sidi, and the country was the scene of almost unceasing war. Still Shivaji (1674-1680) by introducing a better revenue system and offering the people well paid employment did much to improve the district. After Shivaji's death (1680), Ratnagiri suffcred on the land side by Moghal invasions, [Two large well equipped Musalman forces, in 1681 and 1683, passed through the inland parts of the Konkan. Though both suffered grievously from the country, the climate, and the food, they were unopposed by the Marathas and wrought much havoc and loss of life. Elliot, VII. 311,315. Aurangzeb was enraged with Sambhaji for helping his rebel son Prince Akbar.] and along the coast by struggles among the Portuguese, the Marathas, and the Sidi.

The A'ngrias, 1698-1756.

In 1690, by the capture and execution of Sambhaji their ruler, and by the spread of the Sidi's power over Anjanvel and Suvarndurg, [In 1695, at the mouth of the Rajapur river the Portuguese gained one of their last victories, burning throe Maratha ships, the largest of thirtytwo guns and carrying 300 men. Nairne's Konkan, 78.] the Marathas sustained two heavy reverses. [Kalusha, the minister, and his guest Sambhaji, in a pleasure house near Sangameshvar, were surprised by Mukarrab Khan from Kolhapur. Kalusha was wounded and taken prisoner. Sambhaji escaped but was found in a temple in the garb of a beggar and carried to Aurangzeb near Poona. Here, refusing to become a Musalman and reviling the Prophet, his tongue and eyes were torn out, and his head cut off. Elliot, VII. 339, 341.] Soon after (1698), Kanhoji Angria succeeded to the command of the Maratha fleet. A most daring corsair, he attacked vessels of all nations, ravaging the coasts, and leaving unmolested few trading towns from Travankor to Bombay. At first, Kanhoji's head-quarters were at Kolaba. Afterwards (1713), siding with Shahu Raja, he was confirmed in command of the Maratha fleet, and except the Sidi's territory of Dabhol and Anjanvel, was given the whole coast from Savantvadi to Bombay, and the important inland stations of Palgad, Rasalgad, Kharepatan, and Rajapur. Encouraged by this increase of power, Angria plundered the shipping more fiercely than ever, not even respecting the English flag. In 1717, attacked both by the English and Portuguese, he laughed at their efforts. In 1720 a British attempt on Vijaydurg, in 1722 a joint British and Portuguese attack on Kolaba, and in 1724 a Dutch expedition against Vijaydurg, alike failed. Till his death, in 1728, Kanhoji Angria was master of the Ratnagiri seas. Three years later (1731), the inland districts, formally ceded by the Moghal Emperor in 1720, were divided between Kolhapur and Satara. Except that Angria continued to hold Vijaydurg and the Sidi Dabhol and Anjanvel, all south of Vijaydurg went to Kolhapur and all north to Satara.

Kanhoji (1728) left two legitimate and three illegitimate sons. Sambhaji, one of the legitimate sons, succeeded his father at Suvarndurg, while the other, Sakhoji, remained at Kolaba. Soon after, on Sakhoji's death, in spite of Sambbaji's opposition, Manaji, one of the illegitimate sons, with the Peshwa's help established himself at Kolaba. In 1737, with the Peshwa's help he repulsed Sambhaji and the Portuguese, and three years later another attack on Kolaba was stopped by the English, and Sambbaji's fleet was driven south to

Suvarndurg. Grant Duff, I. 375, 385, 402.

Suvarndurg Taken, 1755.

On Sambhaji's death (about 1745), his half-brother" Tulaji succeeded to the lands between Bankot and Savantvadi. Manaji Angria at Kolaba, obedient to the Peshwa, did not molest the English. But Tulaji, disavowing the Peshwa's authority, seized and plundered all ships he could master, which did not carry his passport. Grant Duff, II. 59. Though the English and Peshwa's Governments had for many years determined to put a stop to Tulaji's robberies, nothing was done till, on the 22nd of March 1755, under Commodore James, a small squadron started from Bombay. Owing to the delay of the Peshwa's fleet, Angria's ships escaped. But after three days' battering (April 6th), the four Suvarndurg forts were taken without the loss of a man. [Grant Duff, II. 61.] Suvarndurg was, according to agreement, made over to the Peshwa, and towards the close of the year (1755), the English obtained possession of the Bankot fort and five neighbouring villages, in the following February, under the command of Admiral Watson and Colonel Clive, a fleet of fourteen sail, with eight hundred European soldiers and one thousand native infantry, was sent from Bombay.

Vijaydurg Taken, 1756.

Meanwhile, the Peshwa's troops had reduced all Angria's forts north of Vijaydurg. [Grant Duff, II. 63.] On the arrival of the English off Vijaydurg, Tulaji began to treat with the Marathas. As this was a breach of the last year's agreement, Admiral Watson (February 12th, 1756) attacked the sea face, while Colonel Clive, landing with the troops, invested the fort on the land side. [Grant Duff, II. 64.] The siege was pressed with vigour, and on the following evening the fort was surrendered and Tulaji made prisoner. During the attack a shell bursting on one of the vessels, set it on fire, and in less than an hour the whole of Angria's fleet was destroyed. As the Peshwa's officers had, contrary to agreement, treated with Angria, and as his troops' had taken no part in its capture, the English were unwilling to give up Vijaydurg. They offered instead to restore Bankot. To this the Peshwa would not agree, and in the end it was settled (October 12th, 1756) that the English should give up Vijaydurg, taking in its stead four more villages on the Bankot creek. [Grant Duff, II. 70.]

' The Malvans'.

Angria's fall was no deathblow to piracy. The 'Malvans', [The English gave them this name from their head-quarters at Malvan fort See ChaptervXIV. (Malvan).'] that is the Kolhapur chief and the Savants, were as troublesome as ever, and under their Admiral Dhulap, the Peshwa's fleets and Raghoji Angria from Kolaba greatly harassed trade.

In 1765, a force under Major Gordon and Captain Watson took the forts of Malvan and Redi, Naming it Port Augustus, the Bombay

Government meant to keep Malvan; but as it did not pay, on his promising not to molest their ships, to give security for future good conduct, and to re-pay losses and charges to the amount of £38,289 12s. (Rs. 3,82,896), Malvan was made over to the Raja of Kolhapur. Similarly, on his promising to keep the peace and pay a sum of £20,000 (Rs. 2,00,000), Redi was, at the close of 1766, restored to Khem Savant, the Vadi Desai. The £20,000 (Rs. 2,00,000) were raised by a thirteen years' mortgage of the Vengurla revenues, and to induce the mortgagee, Vithoji Kumti, to advance the amount, Mr. Mostyn, besides procuring two Vadi hostages, was obliged to promise that a small factory should be established at Vengurla and the English flag hoisted. [Grant Duff, III. 70.] The hostages escaped, and the mortgagee's agents were driven from their revenue stations. At the end of thirteen years, though they, had prevented the mortgagee from recovering the revenue, the Savants demanded the district. This was refused, and Vengurla was attacked and taken (4th June 1780), with a loss to the English of much private and some public property.

Proud of this success and of the marriage of Khem Savant with the niece of Mahadaji Shindia, the Savants renewed their piracies; and joined by the Kolhapur fleet, caused grievous losses to trade. In 1792, finding that an expedition was organised to punish him, the Raja of Kolhapur offered to indemnify all who had suffered from his piracies, and to allow the Company to establish factories at Malvan and Kolhapur. [Grant Duff, III. 72.] These terms were accepted; but next year the complaints of traders were as bitter as ever. Meanwhile, in 1785, war broke out between the Savants and Kolhapur, and with varying success lasted for twenty-three years. In 1793, except Malvan, the whole of the south coast was in possession of the Savants. In 1806, Kolhapur took Bharatgad or Masura and Nivti, and in return the Savants wasted the country, re-took Nivti and Redi, and laid siege to Bharatgad. Coming in strength, the Kolhapur troops raised the siege and carried the war into the Vadi territory. At Chaukal, a pitched battle, ending in favour of Kolhapur, was followed by the siege of Vadi. But Lakshmi Bai, the regent of Vadi, by inducing Siddojirav Nimbalkar of Nipani to enter their territory, forced the Kolhapur troops to retire. Next year (1809), Phond Savant, the new Vadi chief, defeated by Mansing Patankar the Kolhapur general, was pursued and his lands laid waste as far north as Rajapur. In 1810, the Kolhapur troops were again forced to leave the Konkan, and Redi and Nivti fell into the Savants' hands.

Meanwhile the Peshwa's power was waning. His forts were out of order, and when, in 1802, he fled there from Holkar, Suvarn-durg was found unfit for defence, and Bajirav was forced to seek shelter with the English. As one consequence of the treaty of Bassein (31st December 1802), an English fleet in 1803 attacked and, on the Peshwa's behalf, took the fort of Suvarndurg from one of his revolted officers.

Piracy was still unchecked. The Kolhapur chief's promises had proved worthless. It was clear that trade would never be safe until. the British held some forts and harbours near Malvan. With this object, in 1812, as part of the settlement between the Peshwa and the southern Maratha Jaghirdars, the Raja of Kolhapur ceded to the British Government the harbour of Malvan, including the fort and island of Malvan or Sindhudurg and its dependencies. He also agreed to give up piracy, to allow no armed vessels to leave or to enter his ports, to restore wrecks, and to help vessels in distress. At the same time, Phond Savant, the Vadi chief, made over to the British the fort of Vengurla. He bound himself to put down piracy, engaging, if he failed, to cede Nivti and Redi, to pass duty-free all articles required for the British troops, and on their paying customary duties, to allow British merchants a free passage to and from his territory. From this time, British civil and military establishments were maintained at Malvan and Vengurla. Though Kolhapur troubles were at an end, the Savant's quarrels kept the country in confusion for several years. Durga Bai, who soon after succeeded as regent, seized the Kolhapur fort of Bharatgad; and as she refused to give it up, British troops had to be called in. The fort was restored. But her attacks on Kolhapur continued till, in 1819, a British force took Savantvadi and exacted security for good behaviour.

The British, 1818-1880

At the close of the struggle between the British and the Peshwa (September 1816), the transfer of the whole of the Konkan was promised to the British. Thana was handed over, but as it was the native country of the' Peshwa and of almost all the chief Brahman families, the cession of Ratnagiri was delayed. After the battle of Kirkee (1st November 1817), arrangements were made for its conquest. Suvarndurg was without difficulty taken in November 1817 by a force under Col. Kennedy. Early in 1818 he reduced Mandangad and other forts in the present Dapoli sub-division, and shortly after Ramgad, Palgad, and Rasalgad in Khed. Already (January) Col. Pother advancing from the north-east had taken Pali and Bharap, and Col. Imlack from Malvan occupied Salshi and Devgad, and taking Sidgad, Bhagvantgad, and Achra, secured the southern frontier. Anjanvel at the mouth of th6 Vashishti, Govalkot, and other strongholds in Chiplun were taken on May 17th. In June the Ratnagiri Deshmukh's surrender of his forts, and the Dhulap's cession of Vijaydurg, completed the conquest.

Under the last Peshwa the revenue farmers, vested with both civil and criminal powers, had stopped short of no exactions, complaints were unheard, and when the district was taken, except Suvarndurg and Anjanvel, it was impoverished and almost without trade.

Since the district has been under British rule, there have been no attacks from without and no internal disturbances or breaches of the peace. In 1844-45, an outbreak in Savantvadi slightly affected the

very closely connected Malvan villages. But the disorder did not spread and was very soon put down. During the 1857 mutinies peace remained unbroken. At Kolhapur, the 27th Native Infantry Regiment broke into mutiny, and as a wing was at Ratnagiri, there was, some fear that the main body of the regiment would march there from Kolhapur. A steamer sent from Bombay in the height of the stormy season put in at Mirya. A small detachment of English soldiers and blue jackets was landed, and at the same time the ladies and children were taken to Bombay. These precautions were enough and the public peace was unbroken.



Maharashtra State Gazetteers

LAND ADMINISTRATION

[Besides Mr. Vidal's MS. paper on the tenures of the district (pages 203-213), Mr. Gibson's survey details (1853-1878), and Mr. Crawford's account of the final khot settlement, materials for the Administrative History of Ratnagiri include Mr. Pelly's Report, 1820 (Bom. Gov. Rev. Rec. 16 of 1821); Mr. Chaplin's Report, 1821 (ditto); Mr. Dunlop's Report, 1822 (Bom. Gov. Rev. Rec 64 of 1823); Letters to and from the Court of Directors (Bom. Gov. Rev. Rec. Outward 17 of 1823, and 18 of 1824-1826; Inward 5 of 1825-1827, and 6 of 1828-1831); Mr. Dunlop's Report, 1824 (Bom. Gov. Rev. Rec. 121 of 1825); Mr. Reid's Report, August 1828 (Bom. Gov. Rev. Rec. 211 of 1828); Mr. Reid's Report (Lithog.), Dec. 1828; Lieut. Dowell's Survey Report, 1829 (Bom. Gov. Rev. Rec. 225 of 1851); Major T. B. Jervis' Stat. Account of Konkan, 1840; Capt. Wingate's Survey Report, 1851 (Bom. Gov. Sel. Old Series, II. of 1852); Annual Report, 22nd July 1856 (Bom. Gov. Rev. Rec 20, part 4, of 1856); Bom. Gov. Set CXXXIV. New Series, 1873; Mr. Candy's Summary of Khoti Reports. 1873; Mr. Crawford's and the Hon. Mr. Ellis' Memorands, 1873 and 1874, about Khots; Mr. Mandlik's Vatandar Khots, 1874; Mr. Crawford's Report to the Commissioner S. D., November 1878, about Forests; Forest Commission's Report to the Commissioner S. D., February 1879.]

SECTION I.-CHANGES AND STAFF.

1812-1880.

UP to 1812, the British Government had no territory to administer except the fort and factory of Bankot and the nine surrounding villages ceded by the Peshwa in 1755 and 1756. The Chiefs or Residents of Bankot, who were also commandants of the garrison, were at first vested with very limited judicial powers. All offenders were sent for examination and trial to Bombay, and the jurisdiction of the Resident in civil matters was limited to deciding suits of not more than £10 (Rs. 100), an appeal lying to the Circuit Judge of Salsette. When, in 1812, it came under British rule, a Resident was appointed to Malvan and the surrounding district. This officer had jurisdiction in civil suits up to £50 (Rs. 500), an appeal lying, as at Bankot, to the Salsette Judge. Owing to its distance from Salsette the Malvan Resident's powers were increased in 1813. This arrangement was continued till 1810, when the Malvan Residency was abolished and the south Konkan formed into a separate collectorate with Bankot as its head-quarters. In 1820 the headquarters were moved to Ratnagiri the most central and convenient place for the chief civil station of the district. The administration of civil justice continued as before subordinate to Thana. In 1830 the three sub-divisions north of the Bankot creek were transferred to the north Konkan, and Ratnagiri reduced to the rank of a sub-collectorate. See page 856 of MS. Sel. 160 (Northern Konkan. 1818 -1830).] Since 1830 this distribution of sub-divisions has continued, but after two years (31st December

1832) Ratnagiri was again raised to be a collectorate. Collector, 22nd March 1880.] For revenue purposes the district included five subdivisions; Suvarndurg, comprising the present sub-divisions of Dapoli and Khed; Anjanvel, including the present Chiplun and Sangameshvar; Ratnagiri; Vijaydurg, including the present Rajapur and Devgad; and Malvan. Attached to each of these sub-divisions were one or two petty divisions, mahals. In 1868 the district was re-distributed and formed into eight sub divisions and four petty divisions. The sub-divisions were Dapoli, Chiplun, Guhagar, Sangameshvar, Ratnagiri, Rajapur, Devgad, and Malvan; the petty divisions Mandangad, Khed, Lanja, and Vengurla. Subsequently (1st August 1873) the Khed petty division was made a sub-division, and Guhagar made a petty division under Chiplun. From the 1st August 1879 the petty division of Vengurla was made a separate sub-division, and at the same time the petty division of Lanja was abolished and its villages distributed among Rajapur, Sangameshvar, and Ratnagiri.

Staff, 1880.

For fiscal and other administrative purposes the district is formed into nine sub-divisions. Of these the five southern are as a rule entrusted to the first assistant collector, and the four northern to the second assistant collector. The Collector generally keeps one subdivision under his personal control. The supervision of the district treasury is in the hands of an uncovenanted assistant called the headquarter or huzur deputy collector. These officers are also assistants to the Collector as District Magistrate, and those of them who have revenue charges have, nnder the presidency of the Collector, the chief management of the different administrative bodies, local funds, and municipal committees, within the limits of their charges. Under the supervision of the Collector and his assistants, the revenue management of each fiscal sub-division is placed in the hands of an officer styled mamlatdar. These functionaries, who are also entrusted with magisterial powers, have yearly salaries varying from £120 to £240 (Rs. 1200 - 2400). Two of these fiscal sub-divisions, Dapoli and Chiplun, contain each a petty division, peta or mahal, placed under the charge of an officer styled mahalkari on £72 and £84 (Rs. 720 and Rs. 840) a year respectively. Like mamlatdars these mahalkaris exercise revenue and magisterial powers within their charges.

Village Officers.

The revenue management differs from that of the Deccan, on account of the special revenue system known as the *khoti* or village renting tenure. Under this system, besides Government, *khalsa*, and alienated, *inam*, there are three classes of villages, rented, *khoti*, peasant-held, *dharekari*, and mixed, *khichadi*, that is part rented part peasant-held. In *khoti* villages, the *khot* is responsible for the payment of the village assessment, and according to the customary village rates, collects a grain rent from the cultivators realizing as profit all collections in excess of the Government dues. In mixed, *khichadi*,

villages the land revenue is collected by the *khot* who receives a percentage of the collections from peasant-held, *dhara*, land. In peasant held, *dhara*, villages not under the management of *khoti*, and in Government, *khalsa*, villages the land revenue is collected by paid officials styled accountants, *talatis*, whose charges include one to five villages, and whose yearly salaries vary from £8 8s. to £14 8s. (Rs. 84 - 144).

Khots or talatis as such exercise no police functions. Each village has a separate police patil, nominated from among the more influential villagers, and appointed either for life or for a fixed term. In surveyed villages the yearly pay of police patils varies from 8s. to £4 8s. (Rs. 4 - 44). There are comparatively few hereditary village accountants, kulkarnis, and these are mostly in the southern subdivisions. The kulkarnis keep the village accounts under the headmen or gaonkars, and are yearly paid from 8s. to £25 (Rs.4 -250). Under the khots and talatis are village servants called mhars, available both for revenue and police duties. In the settled sub-divisions they are paid by yearly allowances, varying according to the size and importance of the village from 4s. to £2 4s. (Rs. 2 -22).

District officers.

There are fifteen district hereditary officers, raj deshmukh, sar desdi, desdi or deshmukh, sar deshpande, deshpande or nadkarni, karnik, nadgauda, sar potdar, potdar, sar mukadam, mukadam, sar mahajan, adhikari, sar naik; and deshkulkarni. The origin and duties of these officers vary little from those of the corresponding officers in other parts of the Maratha country. [For details see Grant Duff's History of the Marathia; Nairne's Revenue Hand Book (1872), 351 - 352; Molesworth's Dictionary; and Wilson's Glosslary of Indian Revenue Terms.]

The first three, the raj deshmukh, sar desai, and desai are indiscriminately termed deshmukhs or head officers of a sub-division, pargana or taraf. Their chief duty is to make and collect the yearly rent settlement. They hold, in relation to their charges, a place corresponding to that which the headman, patil, holds to his village. The sub-divisional headman, *nadgauda*, [This is Kanarese, *nadu* a village and gauda a headman.] has similar functions. The next three, the Sar deshpande, deshpande or nadkarni, and karnik are all called sub-divisional accountants, deshpandes. Their duties are those of clerks and accountants, and they bear the same relation to subdivisional superintendents, deshmukhs, as village accountants do to village headmen. The sar mukadams, mukadams, adhikaris, and sar naiks, ranking below the deshmukhs, perform similar duties. The deshkulkarni has functions corresponding to those of the deshpande. The sar potdars and potdars officiated as assayers of all coin paid into the public treasuries, white the *mahajans'* business lay superintending the trade of the principal towns, and collecting taxes levied on particular industries. The total number of such district

hereditary offices, vatans, is eighty-two. Their emoluments paid, except in one or two cases, exclusively in cash, are partly fixed and permanent charges, and partly percentages on the revenues of the sub-divisions, parganas or tarafs, to which their offices belong. Their aggregate emoluments, including a sum of £448 18s. (Rs. 4489) attached to the Pant Amatya as sar desai of Bavda, amounted, before any settlements were made, to £2739 4s. (Rs. 27,392), or an average of £33 8s. (Rs. 334) for each office. These offices are so minutely subdivided that the aggregate emoluments of the actual holders of the eighty-two offices were, in 1864, stated, by the president of the vatan commission; to be less than those of one corresponding office in the Southern Maratha country. Mr. S. St. J. Gordon to the Chief Secretary to Government, 100, 31st December 1864. The meaning of the original is not quite clear. The Ratnagiri district officers were at that time (1864) a poor depressed class, men of quite a different stamp from the large, powerful landholders of the Southern Maratha districts. Still, though under the Marathas some of their power was lost by the employment of stipendiary officers, they have always possessed considerable local influence. Under the British the service of hereditary district officers was continued. The average contribution for service was found by the vatan commission (1864) to be about 34.375 per cent (5½ annas in the rupee) of emoluments. A non-service settlement, by which, in consideration of release from duty, the holders should give up 34.375 per cent (5½ annas in the rupee) of their pay, was subsequently offered. Of the eighty-two officers only thirty-five, with yearly emoluments of £138 6s. (Rs. 1383), have hitherto accepted the non-service settlement. The rest continue, either in person or by deputy, to perform such clerical work as is assigned to them by the stipendiary officers, mamlatdars and mahalkaris, of the sub-divisions and petty divisions to which they are attached.

Village Herediary Officers.

There are no hereditary village headmen, patils, their place being in a great measure supplied by the village renters, khots. In 329 villages out of 1337 there are hereditary village accountants, kulkarnis, whose pay, except in a few isolated instances, consists entirely of cash allowances. Of the 1337 villages, 607 or nearly one-half are rented, khoti [These are also known as purely rented, nival khoti.], 210 are peasant-held, dharekari or kulargi, and 397 are mixed, khichadi, that is part rented part peasant-held. The rest are either granted, inam, [Among the granted, inam, villages many are rented, khoti, the renters holding' the same position to the grantees as their brethren in other villages do to Government. Mr. G. W. Vidal, C. S.] or managed by Government, khalsa.

LAND ADMINISTRATION SECTION II.—TENURES.

Tenures

The special institution of village renters, khots, has made the Ratnagiri tenures most complicated and difficult. In villages managed by hereditary farmers, or renters, several classes of tenants have been, developed with rights and interests varying from the free peasant holder, dharekari, who is charged no more than the state demand, to the yearly tenant or shifting labourer, upri, from whom competition rates are levied. There are at present four such grades of tenants. Peasant holders, dharekaris, the representatives of the members of the village community under the original peasant-holding, kulargi, system; reduced peasant holders, known as dupatkaris, didpatkaris, and daspatkaris, probably most of them representatives of such of the original holders as the khot forced to pay something more than the state demand; lower than these the very large class of occupancy tenants, some perhaps the representatives of reduced peasant holders, others to whom, to tempt them to settle in his village, the khot had offered favourable terms, or who from long residence had gained a prescriptive occupancy right. The lowest class, that of shifting labourers or yearly tenants, is small.

Khots

The khot's recognized position is that of a superior holder, under the Surrey Act. Subject to the provisions of that Act he has full rights in all lands unencumbered by tenant rights, and has the reversion of all lapsed tenant lands. His rights have lately been very fully defined in the Khot Act (I. of 1880). He may hold and give out for tillage all waste, assessed or unassessed, and make from it whatever profit, over and above the Government assessment, local custom or special agreement allows. He may also till or sublet all land either temporarily or permanently abandoned by its holders, dharekaris. Until a right of re-entry is asserted and established, such land becomes unoccupied, gayal, and the khot, assuming its management, disposes of it as he thinks best. The *khot's* right to till the village waste does not extend to certain unassessed lands requiring labour and capital to bring them under cultivation, Government having always reserved the right of granting improvement leases, kauls, for reclaiming tidal swamps, khajan, and dunes or sand hills, pulanvat. No such leases have ever been granted by khots, though khots, as well as their tenants, appear as lessees. [Government have recently (Gov. Res. 2476, 26th April 1876) conceded to the *khot* the refusal of improvement leases. Under these orders if any one else asks for a reclamation lease, the khot is first offered it, and if he declines it is given to the original applicant.]

Under the old or customary, *mamul*, system still prevailing in the unsurvey-settled parts of the district, the lump payment, *jama*, due by the *khot* consists of the aggregate of the assessment, *dast*, imposed

on all the village fields. The khot's payment is a grain rental, part commuted into cash at rates, baha nakt, fixed at the last field survey, pahani, and consequently very much below current prices, and part at rates yearly fixed by the Collector before the 31st March at a fraction below the ruling market prices. The Collector fixes the rate a fraction below market prices because he has to take into consideration the cost of carriage of grain to the nearest market or port. These annually fluctuating rates also govern the commutation of grain rentals into cash payments where assistance is sought by the khots in the recovery of their dues from their tenants. The Collector thus fixes rates for the staple grains of the district, rice, nagli, vari, and harik. The share of these grains, usually one-half, commutable at current rates, is called the original crop revenue, ain jirnas vasuli. The rest is commutable at the old fixed rates, baha nakt. [The revised settlement being introduced will render this cumbersome unnecessary. The land revenue will then be constant, not changing With the price of grain.] Payments to hereditary officers, hakdars, and village servants are similarly commuted.

The khot's profit is the difference between the Government assessment and the amount which custom or agreement allows him to realise from the cultivators, together with the produce of all land in his private occupation. This profit, judging from the prices realised by sales of *khoti* estates, may be estimated in pure *khoti* villages at from fifty to seventy five per cent on the Government demand. Soon after the opening of each revenue year (August 1st) the khot, or if there be more than one co-sharer and they have agreed to a system of rotation, the managing khot for the year has hitherto been required to execute an agreement, kabulayat, undertaking to pay the total demand on the village for the year and to furnish adequate security for the fulfilment of his contract. This custom appears to date from the beginning (1818) of British rule. [Bom. Gov. Sel., New Series, CXXXIV. 79. At first the agreements were simple with very few clauses. Afterwards, as occasion required, additional sections were introduced. [The following (Bom. Gov. Sel. CXXXIV. 81,82) is an abridgment of the form in use before the introduction of the revenue survey: "To the Collector of Ratnagiri. Agreement of khot of I have agreed to the management of the whole khoti of the said village for the current year. I. —According to the annual custom I have agreed to the full payment, jamabandi, in cash and grain, I will pay the eight instalments", (in survey-settled sub-divisions the khots' assessment is payable in four instalments, 15th December, 1st February, 15th March, and 1st May), "each before the twentieth day of each month between November and June. Then follow details as to the grain assessment and its valuation. II. —If the assessment is, by leases or by any Government order, more under each head, isam, than that of last year, I will pay the full assessment according to the first clause. III.—Items not entered in the accounts I will duly pay and allow no complaint to arise. IV.—I will manage the village as in past years without extortion, and will give no cause for complaint; should any arise, I will pay any fine up to £10 (Rs. 100) that Government may order. V.—Without making any demur on account of injury by fire or flood, I will pay all the assessment as laid down in clause I. VI.— Should any tenants die, leave the village, or become too poor to till their lands, I will, without any complaint, pay the whole assessment, and keep the lands lit for cultivation. VII.—Relates to payments to alienees, inamdars. VIII.— The agreement is in my name, but should any of my agents commit fraud as regards receipts, I will be responsible. IX.—I will duly enter in the cultivators' receipt books the rents received from them. In default I will pay such fine up to £10 (Rs. 100) as Government may order. X.—I will manage the village according to such orders as have been or may be given and will take and give copies to the next manager. XI.—This and additional sections relate to the joint responsibility of co-sharers. XII.- Whenever Government may summon me I will attend and will give no excuse. Should I fail to attend when summoned I will pay a fine up to £5 (Rs. 50). XIII.—Relates to village expenses, gram kharch. XIV.—Relates to trees."]

If a khot is prevented by family disputes from signing, or if ho declines to sign the agreement, kabulayat, or if he becomes a defaulter, the management of his village has hitherto been assumed by Government, and though as an act of grace they were generally refunded him, the khot was not regarded as having a legal claim to any profits accruing during such management. At the same time he has hitherto been bound to make good any losses incurred by Government before the village was restored. The Government official, called the attachment clerk, japtidar, who is appointed to collect the revenue, performs all the duties of a village accountant. In pure peasant-held, dharekari, villages the khots of which are usually Marathas, a certain varying allowance, mushahira, is paid to the khot on account of the collections made by him from the peasant holders, dharekaris. In survey-settled villages a fixed scale or percentage on the collections is substituted for this allowance. The khots usually have a large share of the best land as their private holdings. In respect of such land they may, according to circumstances, be holders, dharekaris, by inheritance or purchase, or they may be tenants. In many mixed, khichadi, villages the whole of the holding, dhara, land is in the hands of the khot coparcenary, all the other cultivators being their tenants or half-crop payers, ardhelis. The land in the occupancy of a khot is called private, khot khasqi, in distinction to the common, khot nisbat, lands in the occupation of tenants. A khoti sharer cultivating *khoti* land, the profits from which are the common property of the *khot* coparcenary, is strictly liable to pay the customary rent thereon, as if he were an ordinary tenant. But this is a matter of private arrangement among the sharers, and where the land is equally divided, it is not usual for the sharers to pay. the managing *khot* more than the Government assessment, dast. The division of profits according to shares is made at the close of the revenue year (July 31st). In some cases the sharers execute a partition deed, *dhada vantap*, by which the whole *khoti* land in the village, whether in the occupancy of the sharers or of their tenants, is apportioned among the coparcenary. Each sharer manages his own share and collects his rents from his tenants. In such a case, should a tenant throw up his land it reverts, not to the joint estate, but to the individual sharer in whose lot the land lies.

In addition to many privileges incidental to their position as heads of villages where there are no hereditary officers to take precedence of them, the *khots* formerly enjoyed the right of exacting from all their tenants except peasant holders, *dharekaris*, one day's labour in eight, *athveth*; of forcing the peasant to plough for them, *nangur veth*; and of pressing them to carry their palanquins. While thus working for the *khot* the tenant was given a subsistence allowance of grain. Those labour cesses have been stopped.[In defence of the eighth day labour tax, *ath*, *veth*, it is fair to state that by means of this labour a very large area of valuable rice land has been made and many salt marshes and swamps reclaimed, Mr. G. W. Vidal, C.S.]

Peasant Holders

The holding, dhara, similar to the Deccan mirasi tenure is the highest form of tenant right. The tenant holder, dharekari, is assessed at a fixed rental based on the area and the character of the land actually under tillage at the time of the last survey. So long as he pays this assessment he cannot be ousted, and the khot cannot, without his consent, exact any further payment. He has moreover the right to inherit, sell, mortgage, or dispose of his estate in any way he pleases. He has also, subject to making good to the *khot* any loss his absence may have caused him, an unlimited right of re-entry, and is not held to have given up his land unless he has passed a formal and duly recorded deed of abandonment, bedava patra. If a returning tenant holder fails to meet the khot's claim for damages, he is compelled to accept an inferior tenure, the khot reimbursing himself by exacting either additional payments or the customary share of the produce levied from tenants of khoti land. Should the tenant holder, dharekari, leave his land unencumbered by mortgages he will thus, in very few instances, be able to regain his former position. Should he leave a mortgagee in possession, who for his own interest will take care that the value of his security is not lessened, the returning holder will, on redeeming the mortgage, revert to his original position.

A holding, *dhara*, may be of any size, from a single plot of land or even a single tree, to the entire arable land of a village. It consists of all the lands registered in the name of each individual or family at the last survey. These holdings are by mortgage, sale, and inheritance, subject to constant sub-division. The assessment, *dast*, on this class of holding remains unchanged from one settlement to another. It is a grain payment, which, as in the case of the revenue paid by the *khot*

to Government, is divided into two portions, one commutable into cash at the rates fixed yearly at the former survey, the other at the rates fixed yearly by the Collector on the basis of the ruling market prices. In Dapoli and Khed one-fourth of the assessment, dast, is levied on the old fixed rates, baha nakt, and three-fourths are paid as original crop share, ain jinnas, at the current rates. In the remaining sub-divisions One-half is levied at the old rates, baha nakt, and onehalf instead of the original crop share, ain jinnas. If a tenant holder or a khot demurs to the rates fixed by the Collector, he has the option of bringing this portion of his produce to the local revenue office, kacheri, or to some regularly appointed grain store, phad. The grain is then sold by auction, and the proceeds credited as the sum due. In practice this almost never happens. Several extra demands, varying in different places, are, under the names, of cesses, pattis and babs, included in the assessment, dast, levied from the tenant holders, dharekaris. The entry of these charges in a peasant's account is proof that his land comes under the holding, dhara, tenure. Some of these cesses, such as the stable cess, gale patti, and the superintendent's cess, sar deshmukhi, are commuted at fixed rates. Others, such as allowances to hereditary officers, hakdars, [Under hakdars come hereditary sub-divisional officers, deshmukhs and deshpandes, and village accountants, kulkarnis. and payments to village servants, gaon kharch, are commuted at the current market rates. The amount of these dues is included in the village rental, jamabandi, and is recovered rateably from tenant holders, dharekaris, in the proportion that their individual assessment bears to the entire village rental, jama. The rest, in mixed, khichadi villages is paid by the khot, who recovers the amount from his tenants according to his own estimate of their fair share in the expense. The extract given at the foot of next page from the debit side of a tenant holder's, dharekari's, receipt book, illustrates the form in which the assessment appears in the accounts. The amount is divided into two main items, one due to Government the other due to certain officers. The amount due to Government is brought under two main heads, the first head including all the sums paid in cash and the second head showing the estimated value of the grain received under the different cesses and allowances. No charges are included for village expenses, gaon kharch, as none of the village menials were paid by the state.

Extract from the Receipt Book of Vamanji Bapuji of Harnai:

Amount		int	ITEM.	
Rs.	a.	Р.		
0	0	0	Balance.	
11	14	10	Amount due as fixed at the settlement for the current year 1852-53,	
11	8	4	Government.	
1	а	h	Rs. 4-5-9 Cash:- Rs. 7 2-7 Grain:	Extra cesses, patti babti, Rs. 2-1-6. Details are: Stable cess, gale patti, 12 mans grain at Rs. 2-14-½ the khandi, Rs. 1-11-8; Superintendent's cess, sar deshmukhi, 4 paylis and ½ shers at Rs. 14-6-2½ the kandi, calculated on 12 mans at ½ man the khandi, Re. 0-3-6; Commutation cess, tamar, clarified bulter'½ sher and 7 tolas, on 12 mans, at one sher the khandi, price Rs. 0-1-11 at Rs. 7-10-9¼ the man, deduct for labour 9 pies at Rs. 2-14-½ the man, remainder Re. 0-1-2; Assaycr's cess, potdari, on Rs. 4-9-11, at Rs. 19/16 per Rs. 100, Re. 0-1-2; total Rs. 2-1-6. Fixed commutation rates, baha nakt, rice 3 mans at 5 mans the khandi worth Rs. 2-8-10 at Rs. 17 the khandi; deduct for labour 9 paylis and ¾ sher at one man the khandi, value 4 as. 7 p. at Rs. 9-9-5¾ the khandi; remainder Rs. 2-4-3. Total Rs. 4-5-9. Rice, 10 mans 9 paylis and 1¼ shers at Rs. 13-8 the khandi at Harnai market rates.
				Details are: 9 mans for collection after deducting 3 mans for fixed rates, baha nakt, from the original rental, ain jamabandi, of 12 mans; ¾ man measuring cess, mapvartala, of four shers a man; 9 paylis ¾ sher purchase cess at one man the khandi; 4 paylis ½ sher carriage loss, tut, on 10 mans 5 paylis and ¾ sher at ½ a man the khandi.
0	6	6	Sub-divisional officers, jamadars:— Superintendent's cess, deshmukhi, rice 4 paylis 2½ alters at 8 paylis the khandi, at the rate of Rs. 13-8 the khandi, Re. 0-3-3; Accountant's, deshpande's, cess, Re. 0-3-3.	
12	3	5	As by last year's settlement.	
0	4	7	Deduct on account of decrease in rates of grain at market value. Government Re. 0-4-3; sub-divisional officers, jamadars, Re. 0-0-4.	
11	14	10	Remainder. (Signed) RAMCHANDRA MAHADEV KULKARNI. 26th October 1853.	

Feasant holders, *dharekaris*, often sub-let their fields at a profit to other cultivators, who hold much the same position as tenants of *khoti* land. In villages under *khot* management, the holders, *dharekaris*, are required to make yearly agreements, *kabulayats*, for the payment of their dues, and to give security to the *khot* in the same way as the *khot* engages with Government for the revenue of the whole village. In villages directly under Government management, *khalsa*, and in attached *khot* villages, the holders, *dharekaris*, pass the same agreements to the state. Finally, this much-coveted tenure carries with it certain timber and other rights and privileges denied to inferior holders.

In old Suvarndurg, comprising the present Dapoli and Khed, many resident holders, dharekaris, at various times before British rule, agreed, on the khots' undertaking to meet all Government demands, to pay them from one and a half times to double the quantity of grain at which their fields were rated. When these agreements were made, it is probable that while they obtained a more convenient form of payment, the holders, dharekaris, owing to the low price of grain, lost little by the change. Had this arrangement not been made they would, in years of low prices, have found it hard to raise cash to pay the assessment. The khots would have taken the grain at their own price, often ruinous to the cultivator, and the holders, dharekaris, would, as their only choice, have had to carry their produce to the nearest Government office or grain store, phad. The rise in the price of agricultural produce during the last half century has made these terms, at first reasonable enough to both parties, unduly favourable to the khots, who have enforced them under very altered conditions. Like pure holders, dharekaris, these reduced holders cannot be ousted so long as they pay the assessment, and the khots cannot raise their rents. They have also the privilege, which other khoti tenants do not possess, of disposing of their lands by sale and mortgage. The chief reduced holders are the one and a half payers, didhivalas, who give the khot one and a half mans of grain for every man of assessment, the one and three quarters payers, pavnedonpatkaris, giving one and three quarter mans for each man of assessment, and the double payers, dupatkaris, giving two mans for each man of assessment.

Besides these there is in Dapoli another class of reduced holders called *daspatkaris*. Their origin is different from, and their position higher, than that of other reduced holders. Like pure holders, *dharekaris*, they pay the Government assessment, *dast*, but in addition give the *khots* a fixed cash bonus of eight annas on every *man* of assessment. They are called *daspatkaris*, literally ten times payers, because they pay ten rupees for each *khandi* of assessment.

Tenants

The *khot's* lower tenants, the majority of the cultivators, may be divided into two classes. These are tenants with occupancy rights who, so long as they pay the customary or stipulated rent and such extra

cesses as village usage allows, are not liable to ejectment by the khot; and yearly tenants cultivating on whatever terms they may make with the khot. Under the first class come all resident cultivators of older standing than the khot. These are called hereditary cultivators, vatandar kardas, and are generally supposed to be descended from old families of holders, dharekaris, who, too weak to resist the khot's encroachments, have parted with their ancient rights. Such tenants are for the most part Kunbis or Marathas. In some villages the Mhars belong to this class. But as a rule partly by reason of their useful services, and partly from the extreme difficulty of recovering more rent than they chose to pay, the Mhars have succeeded in keeping their ancestral holdings better than members of the higher castes. Shepherds, dhangars, are never, and potters, kumbhars, and Muhammadans are rarely hereditary tenants, vatandars. Besides the original hereditary tenants, other cultivators have acquired mom or less definite occupancy rights. Originally shifting labourers, upris, induced by the khots to settle and cultivate deserted, gayal, fields, they have, by the khots' grant and by the lapse of time, gained as good a position as the older hereditary, vatandar, tenants. Custom does not allow the *khot* to dispossess them. For long no precise term of years was fixed as giving a tenant a claim to occupancy rights. But in the Khot Act (I. of 1880) passed by the Bombay Legislative Council it has been laid down that all tenants who have contineously held land since the beginning of 1845 have occupancy rigat. Under this rule it is found that at least ninety per cent of the khots tenants are possessed of occupancy rights. In some villages it has been the custom for the khot to keep all relinquished lands in his own management, and to give them out for cultivation to fresh tenants every year, or after each period of crop rotation. In such villages none but old hereditary, vatandar, tenants have gained permanent occupancy rights. Where these rights exist, they are, as a rule, transferable by inheritance only, and not by sale or mortgage, and are liable to forfeiture, should the tenant, even for a time, leave the villags without making arrangements for the cultivation of the land and the payment of the rent. Custom varies considerably in different villages. Lieutenant Dowell, in his report on the survey of the Ratnagiri sub-division (November 1829;, mentions several instances in which occupancy rights in khoti land were mortgaged and sold both with and without the *khot's* consent. These cases are exceptional. The *khots* themselves have, indeed, often sold portions of their khoti land to cultivators, the purchasers virtually becoming holders, dharekaris, the khot parting with his right to demand anything over and above the Government assessment. Grants of khoti lands are also occasionally made by khots to Brahman beggars and village priests, upadhyas, either wholly rentfree or on payment of the Government dues. Such gifts, though unsupported by deeds, are always religiously respected by the grantor's descendants.

Khoti land in the occupation of yearly tenants, if undivided among

the *khot* coparcenary, is entered in the village boook's in the name of the *khot* coparcenary, and is called joint *khot* property, *khot nisbat samaik*. The tenants of such lands are usually styled waste tillers, *badhekaris*, as distinguished from hereditary, *vatandar*, tenants. *Badhekaris* may or may not be residents of the village in which they cultivate as yearly tenants. In many cases they hold hereditary land in one village, and at the same time from year to year undertake the cultivation of waste land in another village, continuing to live in their old homes. This often happens on the boundaries of two villages, because, for convenience in watching and other field work, husbandmen like to have all their cultivation in one place. In other cases they leave their old homes and settle in the new village. In either case they are called waste tillers, *badhekaris*, though many of them have through lapse of time and other causes gained occupancy rights. [Khot Commission to Government, 186 of 1875, February 8.]

A resident of one village who cultivates in another is also called an outsider, dulandi. Yearly tenants are liable to ejectment at the will of the superior holder, and in the absence of any special agreement, are also liable to have their rent raised from time to time. Ordinarily there is little difference in the rent exacted from the khot's tenants whether permanent or temporary. The yearly tenants having no ties to bind them to the land and being free to throw it up whenever it suits them, are usually able to obtain from the khot terms as little unfavourable as those allowed to occupancy tenants.

The rent paid by a khot's tenant consists either of a definite proportion of the actual harvest determined by a crop inspection, or of a grain or cash payment fixed on the basis of the average yield of the land without reference to the actual produce of the year. The first and most common mode of payment is called settlement, thal, and the crop inspection is called appraisement, abhavni. The following description of the system written by Lieutenant Dowell in 1829 still holds good. [Lieutenant Dowell, 1st November 1329. Though written only of the Ratnagiri sub-division, Mr. Dowell's account is fairly applicable to the whole district.] The cultivators under the khot, both occupancy tenants, kardas, and yearly tenants, badhekaris, [It has been already noticed that some badhekaris have occupancy rights.] are called half-crop, ardheli, payers, third-crop, tirdheli, payers, or fourth-crop, chautheli, payers. The share of the gross produce to be paid by them is fixed yearly in every field by agreement between the khot and the cultivator. A few days before the harvest, they go round together and settle the amount by estimating the quantity of grain in each field, both parties trying to get the best of the bargain. In rice lands the khot's share is estimated at one-half or even a little more, in middling uplands at one-third, and in poor uplands at one-fourth. The fees due to the village Mhar and temple servant, gurav, are paid by the cultivator. The occupancy tenant, karda, also pays a small amount for the yearly field sacrifices. When, as often happens, the khot and his tenant, karda, cannot agree as to the produce of a field, they appoint umpires, tirhait, of the chief villagers, and as all are present the payment is settled at once. The tenant's only check against false entries by the khot is his own recollection of the agreement made in each field. In cases of poverty or loss, the khot remits a little of the revenue, but not more than 150 to 200 pounds of grain (4-5 mans) in the whole village. In bad seasons the loss falls on the khot as the tenants pay only for the grain that thrives. On the other hand, when the Government grant remissions, the khot is the only-gainer. The usual proportion of the crop taken by the khots is one-half in rice and garden land, and one-third in uplands. These rates are seldom exceeded. If the khot determines to levy more, he realises the increase under cover of cesses and imposts. Besides to the half-crop payer, the term ardheli is applied to the whole body of settlement, thal, paying tenants, whether permanent or temporary. The other mode of payment by settling for the field itself without reference to the harvest is called contract, makta in the north and khand in the south. The contract system is always preferred by the cultivators. They avoid the yearly haggle with the khot, and in other respects it is usually more favourable to them. In a very few villages, the tenants hold written agreements from the khots, engaging never to levy more than the amount stipulated as the yearly rent. Such permanent contracts, maktas, are very uncommon, and these rents are liable, as a rule, to periodic, if not to yearly, revision. The tenant who undertakes to till the land passes an agreement, makta chithi, to the khot to pay a certain rent from year to year. These documents are carefully kept by the khot as evidence against the tenant, should he at any future settlement claim the land as his holding, dhara. Holders also occasionally till khoti land as tenants of the khot, and where a contract, makta, has been made, the terms and all particulars are duly entered in the yearly agreement executed by the holder, dharekari. A considerable proportion of the district rice lands are thus held on payment of grain contracts, maktas. Coast Muhammadans and other seafaring and fishing classes rent land in this way for hemp cultivation, to supply the materials for ropes and nets. Brahman cultivators too usually induce the khot to substitute the contract, makta or khand, for the settlement, thal, rent. Similarly small plots and gardens within the village homestead are usually let on contracts, maktas, to the residents in khoti villages. In these cases the rent is usually paid in a lump cash sum covering all demands, ukta tharav. In coast villages, where khoti land has, by Bhandaris, with much expense and labour, been made into cocoanut gardens, the Bhandaris usually pay a fixed cash rent when the trees are tapped; when the trees are kept for fruit, the tenants sometimes pay a fixed cash rent and sometimes a share of the produce. Owners who sub-let cocoanut gardens usually exact four-fifths of the produce from the tenant when the trees are kept for fruit only, and from 2s. to 6s. (Re. 1 - 3) a tree when they are tapped. Neither settlement, thal, nor contract, makta, rents are payable during the periodic fallows, which, for want of manure, nearly all uplands require. In any one year generally not

more than one-fourth of the upland area is under tillage. But the tenants are bound not to let any land in their occupation lie fallow without due cause. Those who till rice land have usually assigned to them a certain share of brushwood-bearing upland. In this land the trees are yearly stripped of their leaves, twigs, and branches to be burned on the rice fields as ash manure, *rab*. This is usually the only privilege a tenant has over the timber growing on his land.

The *khot's* claim to a share of the crop is not limited to grain. It extends to all produce alike. Thus in the north for every *man* of grain from twenty to twenty-five bundles of straw are demanded. A share of the produce of all fruit trees growing in *khoti* land, even though planted by the tenant, is also exacted. Jack fruit is everywhere an appreciable item in the *khot's* revenue. The usual mode of assessing fruit produce is for the *khot* to go round and count or estimate the fruit and to receive in cash the value of his share, one-third or one-half as the case may be, and to take in addition two or three of the best for his own use.

In addition to the customary produce rents, the khots, according to circumstances, levy from the tenants certain extra cesses. The custom of different villages varies greatly and the collection of these extra demands depends almost entirely on the personal power and influence of the khot. Cesses were formerly most numerous and oppressive in Dapoli, Chiplun, and Khed, where most of the khots belong to the strong Chitpavan sub-division of Brahmans. The eighth day, ath veth, and other labour cesses, have already been alluded to. Under the head of khot exactions, karsai, the khots used to make irregular demands on the tenants for payments on account of produce other than grain such as grass and firewood. This practice was put a stop to by Government under Act XX. of 1839. Another almost universal demand is the measure cess, mapvartala, consisting of the levy from the tenant of $\frac{1}{64}$ th to $\frac{1}{8}$ th (one *sher* to two *paylis* the *man*) in addition to the regular rental. On the tenant's bringing his grain to the khot's house to be measured, the khot's servant, who measures it, is also entitled to a double handful, phaski. Lastly, the tenant has to pay a cash contribution towards the general village expenses, gaon kharch. A fixed sum for the remuneration of village menial servants is levied by Government from the khot and the holders, dharekaris. The portion paid by the khot is recovered by him from his tenants rateably, and usually a further sum is exacted under the same head for other miscellaneous village charges such as maintenance, of paupers, religious services, and similar objects common to the community.

LAND ADMINISTRATION SECTION III —HISTORY. Bijapur Settlement,1502

The earliest recorded land revenue settlement of Ratnagiri was, in 1502, by Yusuf Adil Shah of Bijapur. [Jervis (Konkan, 89) makes the Bahmani settlement of 1429 extend to the Konkan. But the Bahmanis had not then conquered, hardly even entered the province. If the settlement was introduced in any part of the Konkan, it must have been in the uplands, ghatmatha, above the Sahyadris. See Grant Duff, 26.1 At that time, though the district had passed through many years of trouble for long remembered as the rule of the spear, bhalerai, traces remained of the revenue system of the Vijaynagar kings. [Mr. Dunlop, 15th Aug. 1824; Rev. Rec. 121 of 1825, 2,3.] Such of the old revenue officers as tendered their allegiance, were continued in their posts, and chiefly in central Ratnagiri, under the name of farmers, khots, a new class of officers was introduced partly as revenue farmers partly to carry out the duties of village headmen. [Jervis' Konkan, 75,76.] Under this settlement rice lands were taxed at onesixth of the gross produce payable part in money but most in kind; [Jervis' Konkan, 82, 83. Mr. Dunlop says, (Rev. Rec. 121 of 1825, 67) under Bijapur there was no established measure of land, and the government share, one-sixth of the produce both of grain and of fruit trees, was fixed by appraisement and from year to year varied with the harvest. With a fairly strong government, a rich local and foreign trade, and so moderate a government demand, the country greatly improved.] and hill lands, varkas or bharad, were taxed by the 'plough,' nangar. In the case of waste lands and waste villages the officers would seem to have been allowed to make their own terms with any new tenants they might find, and as they were then greatly in demand, tenants obtained very favourable terms. All members of former village communities were treated as peasant holders, mirasdars or dharekaris, and assessed at a light rent payable chiefly in kind. Vexatious practices and extra cesses were forbidden. Except trade dues and house charges for revenue officers there were no miscellaneous, sayar, cesses. The revenue was gathered by village accountants and brought by subordinate agents to the government treasuries. [Jervis' Konkan, 82, 83.]

Shivaji's Settlement, 1670-1680

The next change in the revenue system was introduced by Shivaji about a century and a half later (1670-1680). At first by Dadaji Konddev, and afterwards by Annaji Dattu, a settlement was made on the same principle as the settlement introduced early in the seventeenth [Malik Ambar's settlement stretched, except the Habshi's lands, from Bassein to Bankot. Jervis' Konkan, 68.] century into parts of the Deccan and of the central Konkan, by Malik Ambar the Ahmednagar minister. The chief change in the new system was the

measurement of rice land by a rod of five cubits and five fists, that is five and five-sixths cubits or 114.035 English inches. Todar Mal's or Akbar's bigha (1590) was a square of 60 Ilahi gaz or yards, the same as used by Naushirvan (550) in Persia, measured by a chain instead of the old elastic Hindu rope. The three chief Indian land measures were the Musalman bigha of 3119.7 square yards, the Maratha bigha of 4013.87, and the Gujarat *bigha* of 2948.77. Jervis' Konkan, 69.1 Shivaji's settlement included three parts, the treatment of rice, of hill, and of garden land. It is believed that all the rice lands were measured into bighas, each of 4014 square yards, divided into twelve classes, [The classes were: 1, First, aval; 2, Second, dum or duyam; 3, Third, sim; 4, Fourth, charum or charsim; 5, Bushland, raupal; 6, Salt, kharvat; 7, Rocky,-baval; 8, Stony, khadi; 9, Pulse, kariyat or turvat; 10, Hemp, tagvat; 11, Rice-land, rahu or roh; 12, Tree root, manat. Jervis' Konkan, 94, 95. and from experiments made during three successive years, The sub-divisions from which villages are said to have been chosen were, in Kolaba, Avchitgad Rajpuri and Raygad, and in Ratnagiri, Suvarndurg Anjanvel Ratnagiri and Vijaydurg. In measuring rice land a deduction, called vaja shirastabad or tipandi of three pands in every bigha, was made. In level uplands, varkas, a quarter and in rough uplands a third was deducted. The deduction was also called tijai. (Mr. J. R. Gibson). The produce raised in second crops on rice land was assessed as follows: turmeric, halad, at 5 mans the bigha, after deducting a third of the actual area cultivated; hemp, tag, 5 mans the bigha, one-fourth being deducted from the area cultivated; sugarcane, $3^{1}/8$ to $6\frac{1}{4}$ mans of raw sugar the bigha; summer rice, vayangane, 2½ mans of grain the bigha.] the government demand, estimated at about forty per cent of the produce, was fixed [The details in bushels the acre are: First quality 57¼ (12½ mans the bigha); second 45 (10 mans); third 36 5/8 (8 mans); fourth 28⁵/8 (6¼ mans) bushlands 36 5/8 (8 mans) salt 34½ (7½ mans); rocky, stony, and pulse land 28 5/8 (6¼ mans); rahu, hemp, and uncleared root land 23 (5 mans). (Jervis' Konkan, 94, 95). Since Shivaji's time, from the pressure of population, two new classes of hill-top, shirvat, land have been added. The better of these have been assessed at 1714 and the poorer at 834 bushels an acre. Jervis' Konkan, 96.] at from 57¼ bushels an acre in the best to 23 bushels in the poorest land. Except in a few cases, where they were measured and according to the years of fallow required three, five, six or seven acres were counted as one, hill lands, varkas or dongar, were assessed by the plough, nangar. Large allowances were made for rocky or unproductive spots. [Nachni was assessed at from 6.56 to 5.25 bushels (3¾ -3 mans) the plough; vari at from 5.25 to 4.37 bushels (3-21/2 mans), harik at 5.25 bushels (3 mans); and other inferior produce at 2.18 bushels (11/4 mans). Of miscellaneous crops, hemp was assessed at 144 pounds the acre (150 the customary bigha); turmeric at 136 pounds (150 the customary bigha); and sugar at 90 to 181 pounds (93-1973/4 the customary bigha), Jervis'

Konkan, 96.] In garden lands, the system in former use of levying a total or absolute amount, kamal, at about one-sixth of the estimated crop was changed into an equal division of the whole produce. Of garden produce, cocoanuts and betelnuts paid in kind and the rest in cash, Cocoanut trees were inspected. All bearing less than five nuts, too old to bear any nuts, barren, or unproductive, were exempted. Of the remaining trees, half of the produce belonged to the grower and half to government, provided that in no case the government share exceeded 42½ nuts the tree. Of cocoa-palm leaves, kejers the government share was for trees about to bear, three; trees that did not yield fruit, four; toddy trees, three; barren trees, one; fruitful trees, four. Betelnut trees paying from one to five shers were assessed like cocoanut trees, the limits for calculation being one and five shers instead of five and ninety-five nuts. Cocoa-palms tapped for toddy paid from 2s. to 3s. 1d. (Re. 1 as. 8 p. 8) each. Wild palms if tapped paid nine pence each. If not tapped, they paid nothing. Jack trees, if they yielded more than 25 jacks, and undi, Calophyllum inophyllum, trees paid 6d. (4 as.). Mr. Dunlop, Bom. Rev. Rec. 121 of 1825, 11, 12.] All other cesses were stopped, and patils, khots, kulkarnis, deshmukhs, and deshpandes were forbidden interfering beyond their strict duties and powers.

Shivaji's demand of forty per cent or two-fifths of the produce would seem to have been more than the cultivators could pay. It was either openly allowed or secretly arranged, that the *bighas* on which the above mentioned rates were charged should be of 4616 instead of 4014 square yards. By this means the government share was reduced to about one-third. [Jervis' Konkan, 99.]

Sambhaji's Settlement, 1683

In 1683, Annaji Dattu's system was upset by Kalush, a friend of Sambhaji. The land revenue was farmed and taxes levied that raised the whole demand to between one-half and two-thirds of the gross produce. Unable to pay, the people went cut as robbers and marauders. After Sambhaji's death (1689) in the south the regent Rajaram did what he could to improve matters. But Suvarndurg and Anjanvelin the north had passed out of the hands of the Marathas into those of the Habshi. [Jervis' Konkan, 109.]

The Sidi's Settlement, 1699-174

The chief change made by the Sidi was commuting, *tasar*, part of the regular demand from produce into money. [Shivaji was anxious for grain to store his forts and so be able to move his troops without baggage. The Habshi had no such inducement to prefer grain to money. Jervis' Konkan, 110.] The proportion *Settlement*, was three-twentieths of the whole (8 *mans* a *khandi*). [The *hhandi* rates were rice Rs. 22½, *vari* Rs. 17½, *harik* Rs. 7, white sesamum Rs. 75, black sesamum, *udid tur*, *til sale* and *mug* Rs. 60, *pavte*, *chavli*, and *kulthi* Rs. 40, and salt Rs, 7. Jervis' Konkan, 111.] Other changes were, a new bullock tax of 3s. (Rs. 1½) and a shopkeeper's cess, *mohtarfa*, of

10s. (Rs. 5). In garden lands fresh imposts were levied and the sub-divisional accountant's, sardesh kulkarni's, allowance was added to the demand, and the amount taken by the state. [Jervis' Konkan, 111.]

A'ngria's Settlement, 1744

In 1744 Angria ousted the Sidi and held the whole of Ratnagiri. [Jervis' Konkan, 112.] He enhanced many taxes and added several fresh ones, [Of enhancement there was a rise of 1/8 (2 annas in the rupee) on laden bullocks, and on jack, palm, and undi trees. Of fresh cesses there was a grain cess of from Rs. 2 to Rs. 3 a khandi, six annas a man on turmeric and raw sugar, and 4 annas on hemp; a house tax of 2s. a house, widowers paying 1s. (8 as.), and village and district officers paying nothing; a milch cattle cess from 1s. to 2s. (8 as.-Re. 1); one goat out of every score; cow-keepe'rs, Gavlis and Dhangars, paid 10 to 30 shers of butter a head of cattle and 10 shers more a house; fishers, Kharvis and Daldis, ½ to one man of oil a head on all males between 15 and 60, and 11/2 mans of oil a boat. Jervis' Konkan, 113.] among others new cesses on grain, sugar and hemp, a house tax, and taxes on cow-keepers and fishers. On a petition from the people, Angria agreed that, in taking the government grain, the measures need not be heaped. To make good his loss from this concession he levied a fresh cess and added another to make up for loss by vermin. To pay for his war ships, Angria required a proportion of the crop at a low fixed price, and to supply the ships with ropes, he levied another cess. Another change was that he took more of the rent in money. At the same time by lowering the commutation rates he considerably lessened the demand. On every *khandi* or twenty *mans* of grain due, the share to be committed into money was changed for rice from 3 mans at Rs. 221/2 a khandi to 5 mans at Rs. 20; for nagli 3 mans at Rs. 20 to 5 mans at Rs. 16; for vari 3 mans at Rs. 174 to 5 mans at Rs. 131/2; for oilseeds 3 mans at Rs. 60 to 5 mans at Rs. 40; and for pulse 3 mans at Rs. 40 to 5 mans at Rs. 30.' Jervis' Konkan, 116.] Other new taxes were: a small levy, karsai, of thatch, baskets, mats, sticks, timber, firewood, torches, brooms, and earthen pots, taken nominally to keep forts and public buildings in repair, but in practice turned to his own use by every government servant down to a messenger. Oil-sellers were charged ten shers of oil a head and the village priest was forced to bring a weekly bundle of pan leaves. There were also Hindu feast taxes, a fowl or a goat at Dasra and a pot of buttermilk at Gokul ashtami. Taxes were also levied on bullocks, on wild liquor-yielding palm trees, and on makers of catechu, kath, Terra japonica. Finally there was a service tax on skilled craftsmen, carpenters, and blacksmiths, who were bound to serve for one month in the year at two annas or two shers of grain a day; on sailors, Kharvis and Daldis, who were bound to supply one man in every eight able to bear arms to serve on board war ships for eight months in the year; and on low caste men including Mhars who were bound to serve in forts one month a year and were paid 2½ shers of rice a day. One important point in most of these taxes was that the headmen and

managers were let off in consideration of the help they give in collecting them. The result was that the exactions pressed with crushing force on the smaller landholders. The accounts became so confused that the people could no longer follow them and they were left at the mercy of the village and district officers. [Jervis' Konkan, 115. Full details of the taxes named in the text are given in Mr. Dunlop's report (15th August 1824), Bom. Rev. Rec. 121 of 1825, 93-110.]

Peshwa's Setlement, 1756-1818

From the destruction of Angria's power by the English in 1756, to his own overthrow in 1818, the whole of Ratnagiri was under the Peshwa. A general survey of the Konkan was, about 1780, begun by Nana Fadnis, but the survey never passed south of Kalyan. Afterwards (1788-1802) two mamlatdars, Parsharam Ramchandra Paranjpe and Raghunath Trimbak Barve, surveyed Suvarndurg, Anjanvel, Ratnagiri, and Vijaydurg. The measurements and classifications were on the same system as Annaji Dattu's survey, and the register, pahani kharda, contained a record of the area of all the cultivated land held by village renters, khots, and peasant holders, dharekaris, together with the names of the holdings and the assessment on each. No record was kept of unoccupied waste land. The bigha assessment was calculated in grain at fixed, beheda, rates for each kind of grain varying in different parts of the district. These rates were supposed to have been fixed at some average price of former years. Mr. Reid (1828), Lithog. Papers, 10, 11.] Gardens were (1828) assessed on the same principle as grain land. In palm gardens the crop of each tree was fixed, and the value of the nuts commuted to a certain sum. If tapped for toddy the rates were raised. Other garden produce paid a bigha rate in kind or money. [Mr. Reid, Lithog. Papers, 10, 11. At Bankot the practice (1824) was to tax palm gardens by the bigha, not by the tree. Mr. Dunlop was anxious that this plan should be introduced over the whole district. Rev. Rec. 121 of 1825, 59-61.] The grain payments were commuted either wholly or in part for cash at standard, beheda, or commutation, tasar, rates. The standard, beheda, rates were altered only at the time of a general survey, and the commutation, tasar, rates were, in each sub-division, fixed every year in accordance with the ruling market prices. The poorer grains, harik, udid, til, mug, and tur were entirely subject to money commutation. Payments for rice, nagli, and vari, were taken partly in cash and partly in kind. The grain thus received was issued for the support of the troops stationed in the forts and other parts of the district. In the south about half the revenue was received in cash and half in kind, and in the north, about one-fourth in cash and threefourths in kind. All arrears were collected in cash calculated at the standard, beheda, which were generally higher than the commutation, tasar, rates. [Part of the produce share was commuted into a money payment, some at an enhanced fixed conversion price, the rest at a more moderate but regulated rate. (Mr. Chaplin, Bom. Rev. Rec. 16 of 1821, 517). In some parts a special system of commutation sale, tasar farokhta, was introduced. Under this system the state officers received the grain, and the cultivators were, at certain fixed prices, allowed to buy it back. (Jervis' Konkan, 120). Of the 1788 survey in the Ratnagiri sub-division, Mr. Dowell (1829) gives the following details: All rice land was set down as if tilled and charged accordingly. To fix the demand from hill lands, the area wanted for grazing, fodder reserves, and thatch was deducted. Then as average hill land yields two crops in twelve years, the twelfth part of the rest was counted as though tilled for two years. During the first year it was charged for the better, and during the second for the poorer hill-crops. Similarly, as level uplands bear thrice in eight years, an eighth part of their whole area was charged for three years. (Bom. Rev. Rec. 225 of 1851, 278-279). In Suvarndurg and Anjanvel the practice was to recover a lump rental, dharabad, from the holder's uplands independent of the area under tillage. Originally applied to rice as well as uplands, the practice was, by the 1806 survey, confined to uplands. Under this system each man was rated on the land he happened to hold at the survey time. The fields were not fixed or marked and each season the man who first began to till had a right to the use of the land. The rent was on the man rather than on the land. This practice was used by the village renters, khots, in a way very hurtful to yearly tenants. If a tenant left a village, the amount of his rent was taken from the khot's payment and transferred to the village to which the tenant had gone. Under British management this abuse was stopped. Bom. Rev. Rec. 211 of 1828, 190-192.]

The collection of the revenue was chiefly managed by village farmers, *khots*, who engaged to pay the whole grain assessment of the village and deliver the grain at the government granaries, *dastans*. Of these stores there were several in each sub-division at convenient places for distributing grain to the troops and exporting it by water. In return for his the *khots* were allowed to make what bargains they pleased with the peasants who tilled *khoti* or village waste land. Many of the *khots* were men of capital, who spent large sums in bringing new land under tillage. During the latter part of the Peshwa's rule, surveys, which should have been made about once in seven years, were never carried out. In their stead the mamlatdars, as they thought the villages could bear it, put on an arbitrary increase, *chadh*. To this, as it gave them much less trouble and expense than the survey, the village renters and land. holders gladly agreed. [Mr. Reid, 6th Dec. 1828; Bom. Lithog. Papers, 3, 4.]

The changes made under the Peshwa were generally for the worse and confirmed every injudicious practice. [Jervis' Konkan, 119.] The vexatious labour taxes and the demands, *karsai*, on all articles required by government officers free of payment grew much heavier and more general. [Jervis' Konkan, 117.] And under the name of court charges, *dashar kharch*, a new and very oppressive levy came into force. Originally meant to repay men in office for the expense of

appearing before the Peshwa and making him presents, this tax was used by the mamlatdar to recover his expenses when away from his own station, and by the officers under him to make good their barges. The whole amounted to an enormous sum. [Jervis' Konkan, 119. The chief cesses that had been levied under Maratha rule were, the measuring cesses, mapvartala and shervartala; the fort cess, killanarrala; the rat cess, undir khaj; vegetable cess, phaski; deficiency cess, kasarbabti; the rent cess, bhade; the storehouse rent cess, kothi bhade; the purchase cuss, kharedi; the hakdar's cess, hakdari; the five per cent cess, panchotra; the salary cess, mushahira; the stable cess, galepatti; the assayer's cess, potdari; the exchange cess, batta; the butter cess, tup; the straw cess, pendhapatti; the vari cess; the contingent charges cess, sadilvar; the one year cess, eksali; the petty division expends cess, mahal kharch. Lir. Reid, 1828, Lithog. Papers, 6, 7.] Searching and elaborate as these cesses were, they formed but a small part of what was taken from the cultivator. [Jervis Konkan, 121,] The government officer, karairisdar, who superintended the collection of the revenue, was generally some profligate unfit person who had plausible schemes for securing or increasing the revenue.[Jervis' Konkan, 124.] Usually holding office for four years, their practice was to farm and sub-let their farms, the subordinate agents, unless an increase was agreed to, threatening the villagerS with a new survey. As the mamlatdars seldom had any future interest in the country, during the last years of their charge they made a point of extorting as much as they possibly could. [Jervis' Konkan, 121.] In one important respect Ratnagiri was better off than the neighbouring districts. Large numbers of its high class Hindus, in places of power all over the Maratha dominions, sent their savings to their own villages. And in Suvarndurg, Anjanvel, and Ratnagiri were several families, who, rising to high office at the Peshwa's court, put together large estates, and spending money freely in improvements, had prosperous villages and very rich rice and garden lands. [Jervis' Konkan, 126.] Still, on the whole, the effects were disastrous. The khots, with larger resources, were able to meet the government demands. But the subordinate peasants were almost annihilated. Most of them were reduced to be serfs, dependent on some one who, by length of occupancy, had acquired a title to lands which had devolved on him from the necessities of their rightful owners. [Jervis' Konkan, 115.] Collusion and the pretext of bad seasons were the cultivator's only escape from over-taxation. The produce of the best lands was in many places reduced beyond all calculation and the general morals of the people suffered severely. [Jervis' Konkan, 124. Again he says most of the families of the original holders of small estates were superseded. Constant demands and heavy assessments rained them, and as they clung to their estates till forced to give them up by actual ruin, they involved their fields and the government in the same calamity. Konkan, 80.]

LAND ADMINISTRATION

British Conquest, 1818

At the time of the British conquest the district included nine subdivisions, talukas, separated in most cases by a river or some other considerable natural boundary, and each including from five to twelve petty divisions, mahals, tappas, mamlas, or tarafs. The nine subdivisions were: Sankshi, Avchitgad, Rajpuri, Raygad, Suvarndurg, Anjanvel, Ratnagiri, Vijaydurg, and Malvan; of these the first four ceased (between 1820 and 1830) to form part of the Ratnagiri district. There is some confusion in the names of sub-divisions. In the list attached to Mr. Pelly's report (December 1820) there are thirteen names: Karmala, Sankshi, Underi, Revdanda, Avchitgad, Rajpuri, Raygad, Bankot, Suvarndurg, Ratnagiri, Anjanvel, Vijaydurg, and Malvan; while in the body of the report, only the number nine is given. See Government orders (1821) on this report. Bom. Rev. Rec. 16 of 1821, p. 329, 461, 490. Of these thirteen, four, Karmala, Bankot, Underi, and Revdanda, were probably petty divisions, mahals.] In the nine sub-divisions there were about 2250 villages, none of them walled and few of them more than a rude cluster of thatched mud huts. [Mr. Pelly (1820), Bom. Rev. Rec. 16 of 1821, 334. In 1824, of 2202 villages, 307 paid less than £10, 1133 between £10 and £50, 485 between £50 and £100, and 277 above £100. Mr. Dunlop in Bom. Rev. Rec. 121 of 1825, 41.] A census, taken in the rains of 1820, showed a total population of 640,857 souls. This gave an average density, of ninety-one to the square mile, an average household of 4.875 souls, and a proportion of twenty males to eighteen females. [Bom. Rev. Rec. 16 of 1824, 336-338, 476. Details are given above, p. 105. There was no difficulty in taking the census and the limit of error was probably not more than five per cent. In the fair season traders from the Deccan, Gujarat, Bombay, Malabar and other places probably brought the total to 700,000 souls. Ditto, 338.]

During the last years of the Peshwa's rule, the district, especially the Suvarndurg and Anjanvel sub-divisions, had suffered severely from attacks of Ramoshis under the pretender Chitursing. [Bom. Rev. Rec. 61 of 1821, 323.] For some years after the British conquest, bands of Deccan plunderers continued to cause much mischief. The wall-less villages lay open to Ramoshis, Mangs, and other banditti, and the spiritless people, looking to Government for everything, yielded themselves a passive sacrifice to any gangs that attacked them. Sure of their prey, and in so hard and rugged a country almost safe to escape, bands of Mangs and Ramoshis roamed about pillaging without restraint. At first the state of things was 'almost hopeless', but as the Deccan began to settle disorder grew less. In 1820, the robber gangs were already fewer and smaller: [Bom. Rev. Rec. 16 of 1821, 336.]

At first revenue and other administrative details were, for two reasons, very hard to collect. On leaving the district the chief civil officers had carried away almost all the public and private records, and what little was left was destroyed in the forts. [Rev. Diaries, 142 of 1819, 2568.] The second difficulty arose from the opposition of the men who alone were able to give information. Closely bound to the Peshwa's Government by caste and family ties, they looked with dislike on their conquerors, and almost all either directly or indirectly connected with the farming of village revenues, it was their interest to keep the government officers in the dark as to the amount of their profits and as to their relations with Government and with the different classes of under-holders. [Mr. Reid, 1828, (Rev. Rec. 211 of 1828, 179) says the rights of the tenants must fall from want of support. There is no other source of information but the interested khots. Every hereditary district officer has from one to ten khoti villages, and there is not a man of the least consideration in the country who has not some share or concern in, such property.]

Under the Collector and Magistrate the revenue and police charge of each sub-division, taluka, with a yearly revenue of from £14,000 to £20,000 (Rs. 1,40,000-2,00,000), was in the hands of a native manager, kamavisdar, on a monthly salary of from £15 to £20 (Rs. 150-200). Receiving his orders from the Collector, the manager had under him a staff of writers and messengers who looked after the police and gathered the revenue, saw that under-servants did their duty, examined and audited the petty division, mahal, accounts, and prepared the whole for monthly transmission to head quarters, huzur. There they were examined by the Collector's secretary, daftardar, and arranged for the examination of the English accountants by whom they were made up and sent to the Presidency. Taking his orders through the sub-divisional manager, kamavisdar, and rendering him his accounts, the officers, mahalkaris, in charge of petty divisions yielding a yearly revenue of from £1200 to £5000 (Rs. 12,000 -50,000), had a suitable staff of clerks and messengers, Brahmans, Parbhus, and Musalmans, for it was best to mix them, engaged on revenue and police work. [Mr. Pelly (1820) in Bom. Rev. Rec. 16 of 1821, 331, 332.]

District officers, 1818.

Under the stipendiary managers was a staff of hereditary district revenue officers styled landlords, zamindars. [Mr. Dunlop in Bom. Rev. Rec. 121 of 1825, 28.] These were, over sub-divisions, talukas, the head superintendent, sar deshmukh or sar desai, the head district accountant, sar deshkulkarni or sar deshpande, and the overheadman, sar mukadam. There was also a rajdeshmukh. In the petty divisions, mahals, petas and tarafs, the officers were desais, deshkulkarnis or deshpandes, and in some towns and villages a mukadam and a mahajan. Of the sub-divisional officers, [In Anjanvel, Ratnagiri, and Vijaydurg, over the deshmukh and deshpande were the sar deshmukh and sar deshpande. They were of little use. Mr. Reid, 26th August 1828; Rev. Rec. 211 of 1828, 217] the duties of the head superintendent, sar deshmukh or sar desdi, did not go beyond the

signing of certain district papers. For many years before British rule they appear not to have been employed. [Mr. Dunlop, 15th August 1824, in Rev. Rec. 121 of 1826, 29.] The head sub-divisional accountant, sar deshkulkarni or sar deshpande, an officer peculiar to Ratnagiri, was supposed to overlook the sub-divisional accountant's, deshpande's, papers in the same way as the deshpande overlooked the records of the village accountant. The office was of little use as the sub-divisional accountant's papers were short enough for all practical purposes.

The petty divisional officers were the superintendent, desai or deshmukh, and the accountant, deshpande, deshkulkarni mujumdar. [The family of these officers, deshkulkarnis or deshpandes, generally held posts as village accountants, gaon kulkarnis. The pay of both offices was barely enough for either and the shares were divided till they were extremely small. Mr. Reid, Rev. Rec. 211 of 1828, 199. Most hereditary district officers were also khots. Mr. Dunlop, Rev. Rec. 64 of 1823, 247.] Like the office of the sub-divisional superintendent, the duties of the petty divisional superintendent were nominal. All he did was to sign some papers. The office of petty divisional accountant, though essential to a connected system of records, had also fallen into disuse. Under the village renting, khoti, system, overlookers of village accountants and keepers of district records were not required. Their rights had been invaded and their pay attached under pretence of family quarrels and on other unknown grounds. [Mr. Dunlop, Rev. Rec. 121, 1825, 30. Except Malvan where there was no office, and Anjanvel where the office was under attachment, no sub-division was without its accountant, deshpande. Ditto, 34-37.]

The district officers were paid, some by a fixed government allowance, *moin*, and others by contributions from the people and *khots*. [Mr. Dunlop, Rev. Rec 121 of 1825, 28, 29.] Their receipts from 2s. to 16s. (Re. 1-8) a village were realised from the cultivators through the village officers, and their small money perquisites from village artisans [From the artisans their dues were, 2½ pounds of oil from the oilman, jars from the potter, baskets and fans from the Mhars a pair of shoes from the leather dresser, nails from the blacksmith, a rice pestle from the carpenter, and bangles from the Kansar or bangle-maker. These were generally commuted for a money payment of 1½d. to 6d, (as. 1 -as. 4).] were generally recovered by their own messengers. The hereditary petty division, *mahal*, officers usually realised their dues by paying artisans something less than market labour rates. [Lieutenant Dowell, 1st November, 1829; Rev. Rec. 225 of 1851, 268, 269.]

Village Staff 1818.

Of the four classes of villages, alienated *inam*, peasant-held *kulargi*, rented *khoti*, and mixed *khichadi*, the peasant-held and the rented, about equal in number, were the chief. [Mr. Chaplin (1821) says, about an equal number are *khoti* and *kulargi*: 21st November 1821;

Bom. Rev. Rec. 16 of 1821, 510. In 1822, in northern districts, though most were rented, khoti, some were peasant-held, kulargi, and most were mixed, khichadi. (Mr. Dunlop, Rev. Rec. 64 of 1823, 246). In 1824, over the whole district, *kulargi* villages paid £4638 (Rs. 46,330) more than khoti. Mr. Dunlop, 15th August 1824; Bom. Rev. Rec. 121 of 1825, 53.] Rented villages were commoner in the northern and central sub-divisions; in the south, or Kudal prant, all of the villageswere peasant-held. [Mr. Dunlop, 31st December 1822; Bom, Rev. Rec. 64 of 1823, 238.] North of Kudal as far as the Kharepatan river, till the middle of the eighteenth century, the whole was peasant-held. About the middle of the eighteenth century (1740-1755), in the struggles between the Peshwa, Angria, and the Savants, the lands lay waste and many villages were deserted. In the rich coast belt fourteen villages continued peasant-held. Inland, where the soil was poorer and from time to time wanted long fallows, the people were less attached to their holdings, and the farmers were able to take the land, and as time established their position, gradually put forward proprietary claims. [Mr. Dunlop, 31st December 1822; Bom. Rev. Rec. 64 of 1823, 241, 242. Hill land, varkas, often belonged to individual peasants as much as rice land.] In the south of the district, in peasant-held villages, there were village managers, gaonkars, village accountants, kulkarnis, temple ministrants, guravs and ghadis, watchmen, mhars, and some imperfect traces of village artisans, halutas. [Generally the only village servants are the mhars, guravs and ghadis. Mr. Dunlop, 31st December 1822; Bom. Rev. Rec. 64 of 1823, 252. The first officers (Mr. Pelly, 1820, Bom. Rev. Rec. 10 of 1821,318) stated that no such municipal village establishments as the bara balute had even, even by tradition, been known in the Konkan. And this view was accepted by Government (Res. in Bom. Rev. Rec. 16 of 1821, 484-487). Further inquiry showed several traces of former village establishments.]

The village heads, gaonkars, They were also known as overmen, vartals, and under them had generally as helpers, men styled mahajan or chaughulas. Mr. Chaplin, Bom. Rev. Rec. 16 of 1821, 155.] managed the village, held the highest social place and overlooked the religious rites. At the same time they had to pay their share of the revenue like ordinary landowners and could enforce no fresh cess without the landholders' consent. [Mr. Dunlop, 31st December 1822; Bom. Rev. Rec. 64 of 1823, 239.] They claimed, apparently with right, the title of hereditary holders, mirasis; in some places held Government land-grants, inams; and enjoyed some rights to the unpaid service of cultivators. Their interests and rights were often overshadowed and seemed likely to be swallowed by the power and influence of the renter or mortgagee khot. Mr. Dunlop, Bom. Rev. Rec. 64 of 1823, 243. Mr. Dunlop mentions an officer styled adhikari, apparently a village superintendent standing in the same relation to the deshmukh or desai as the gaon kulkarni stood to the deshpande. They had become as useless as the deshmukhs. Mr. Dunlop, 1824,

Bom. Rev. Rec. 121 of 1825, 29. Except in the south the *khot* was practically the village headman. *Patil's* still existed, but their power had long merged in the *khot*. Except certain privileges the *patii* had little to mark him from the other villagers. Bom. Rev. Rec. 16 of 1821 318.]

In peasant-held villages there was an accountant, *kulkarnis* occasionally separate, but generally of the family of petty divisional accountants, *deshpandes* or *deshkulkarnis*. [Mr. Reid, 26th August 1828; Bom. Rev. Rec. 211 of 1828, 199.] Their yearly receipts, from 2s. to 16s. (Re. 1 - 8), were generally increased at the introduction of a new survey. They had also the right to recover certain payments from the village servants, the carpenter, coppersmith, blacksmith, oilman, potter, basket maker, and shoemaker, and in most villages at every wedding had a claim to a cocoanut. [Lieut. Dowell, 1st November 1829; Bom. Rev. Rec 225 of 1851, 268, 269. This applies strictly only to the Ratnagiri sub-division.]

The temple ministrants, *guravs* or *ghadis*, were not ill provided for Most temples held one or more small fields whose produce was partly set aside for lights and festivities, and partly for the support of the *gurav*. Besides this they on all village festivals [Mr. Dunlop, 15th August 1824; Bom. Rev. Rec. 121 of 1825, 51. The *ghadis* were children of dancing girls, *bhavine*. Though called the servants of the god, they went on the headman's messages and received village contributions. Bom. Rev. Rec. 64 of 1823, 243.] had a claim to a meal, a cocoanut, and betel leaves and nuts. Of village artisans there was no regular staff. They held no free, *inam*, land and without this help the people were too poor to support them. Except washermen and barbers, who in some cases received yearly grain allowances, village partisans were paid only when they performed certain special work. [Lt. Dowell, 1st Nov. 1829; Bom. Rev. Rec. 225 of 1851, 269, 270.]

The village watchmen, mhars, were very numerous and fairly well paid. In the south they called themselves hereditary holders, mirasis. In some places they had Government grants of lands and they had various privileges and perquisites. As in peasant-held, kulargi, villages the holders watched their own fields, the mhars were less useful and less highly paid than in rented, khoti, villages. [Lt. Dowell, 1st November 1829; Bom. Rev. Rec. 225 of 1851, 266. Their dues were (1829) not fixed on the yearly tillage but on the original, ain, grain revenue. The ordinary rate was one payli the man of what was paid to the khot. They realised about one-half of the claims and generally got about three khandis, reaped a small profit by acting as messengers to the khot, and from each hereditary holder, vatandar, when they went to see him about the revenue, they got a meal or half a meal. Besides this their houses and the grain and jack trees in their gardens were held free of payment. Sometimes the hereditary holders, vatandars, of the village agreed to change the *mhars'* rates of pay. Mr. Dunlop (1824) says mhars had a right to carcasses and to a meal, a cocoanut and *pan supari* on all village festivals, marriages, and village rejoicings. Bom. Rev. Rec. 121 of 1825,50, 51. Mr. Dowell says the *mhars* are not ill provided for. Their houses are free froin the house tax. In *khoti* villages the *khot* allows the *mhars* a small field in lieu of a grain payment. Bom. Rev. Rec. 225 of 1851, 269,270.]

Except in the south of the district the whole management of the village centered in the renter, khot. [As head of the village the khot] had fees varying from 2s. to 16s. (Re. 1 - 8). Like the accountant they could claim a cocoanut at each wedding and pay the village craftsmen less than the market labour rate. Bom. Rev. Rec 225 of 1851, 268,269.] Saving some small immunities, as exemption from the house tax, patils had little to distinguish them from other cultivators. Few rented villages had an accountant. The whole revenue settlement, between himself and the cultivators on the one hand and himself and the Government on the other, was managed by the khot. [Mr. Chaplin, Bom. Rev. Rec. 16 of 1821, 518, 519. People were entirely at the khots' mercy for there were few accountants, kalkarnis, to check the village papers. Mr. H. P, Pelly, Collector, 18th December 1820; Rev. Rec. 16 of 1821, 318, 310, 327. So also Mr. Dowell (1829) says: ' When a peasant-held village becomes rented the accountant loses his place.' Bom. Rev; Rec. 225 of 1851, 266.]

Government Demand 1818.

In the south of the district, where no actual measurements had been made, the grain was assessed according to an old (1698) survey framed on an estimate of the seed wanted to sow the land and of the probable outturn of the field. Mr. Dunlop, 31st December 1822; Bom. Rev. Rec. 64 of 1823, 238. The old settlement was made in 1698 by Gahu Ram an officer of the Vadi government. Each field was rated at a certain amount, Kumla, of grain. Since 1698 occasional additions or deductions had been made, but there had been no general revision. Mr. Reid, 6th December 1828, Lithog. Papers, 9, 10. To the original demand many cesses had, from time to time, been added. They were distributed by the village managers on each estate in proportion to its produce and to the owner's condition. The Vadi and Kolhapur governments sometimes took the rental in kind and sometimes in money. [Mr. Reid (1828), Lithog. Papers 9, 10.] Over the rest of the district the government demand was fixed according to certain acre, bighavni, rates supplemented by the levy of cesses and taxes. In theory the acre rates should have been revised by a survey about once in seven years. [Mr. Pelly, Bom. Rev. Rec. 16 of 1821, 321.] In practice, in some parts for fifteen and in other parts for fifty years, no survey had been made. Instead of a fresh survey the government officers had more or less arbitrarily increased the village rental so that in many places the rates were very unequal. [Mr. Reid (1828), Lithog. Papers 3, 4, 13. The supplemental cesses and taxes, varying in the different sub-divisions, were in each sub-division fairly uniform [Mr. Chaplin (1821), Bom. Rev. Rec. 16 of 1821, 511.] bearing a certain fixed proportion, usually about one-half, to the original rental. [Mr.

Reid (1828), Lithog. Papers, 6-8. The original rental was taken part in grain and part in money. The cash share was calculated either at an enhanced fixed conversion price or at a more moderate but regulated rate. [Mr. Chaplin (1821), Bom. Rev. Rec. 16 of 1821, 517. Mr. Reid (1828) adds the following details: The inferior grains, harik, udiid, til, mug, and tur, were subject to an entire money commutation, darobast tasar. Of the better class of grains, bhat, nagli, and vari, half was commuted, ¼ higher than the established rates, beheda, and ¼ lower, and half was taken in grain. In Salshi, Vijaydurg, Ratnagiri, and Anjanvel one-half, and in Suvarndurg one-quarter was taken in money. Lithog. Papers, 6, 8.] Of the supplemental cesses and taxes, pattis, some were levied in money and some in grain. Among the grain cesses some were commuted for a money payment. [Mr. Reid (1828), Lithog. Papers, 12, 13. Mr. Chaplin (1821), Bom. Rev. Rec.'16 of 1821, 517. The share of the rental taken in grain was received at the government granaries, dastans, and sold by auction. Mr. Reid (1828), Lithog. Papers, 11, 12.]

Accounts, 1818.

In peasant-held, kulargi, villages the records were kept by the accountant, kulkarni, in the same way as in the Deccan. In rented, khoti, villages the khot kept the accounts showing only the Government original demand and the cesses. This, whatever he might have levied from his tenants, he entered regularly and uniformly every year. Government did not know what the tenant paid or whether the khot gained or lost by the farm. In mixed villages the peasant holders, dharekaris, paid direct to Government, and in the Government accounts the rental of their lands was kept distinct from the rental of the khot's lands. The accountant kept a note of the peasant-held land and the khot kept a note of the rest. [Mr. Chaplin, Bom. Rev. Rec. 16] of 1821, 519. Compare Mr. Dunlop, Bom. Rev. Rec. 121 of 1825, 21. In former surveys the fields belonging to peasant holders, dharekaris, were entered in their own names. Those belonging to the khot were entered in the khot's name. At the time of conquest village accounts were in the greatest disorder. The entries, on loose slips of paper, left openings for all sorts of fraud. [Mr. Dunlop, 15th August 1824; Bom. Rev. Rec. 121 of 1825, 54, 55.] Originally few and simple, grain commutation and fresh cesses had made the entries complicated beyond measure. [Mr. Dunlop, 15th August 1824; Bom. Rev. Rec. 121 of 1825, 58.] The labour of keeping the accounts of a moderately sized village was enormous. It was almost hopeless to trace thieving or fraud. Though they were free from fractions, so complicated were the entries that only practised accountants could make them out. It was hopeless for the peasants to try to understand them. [Ditto, 15.]

Land Holders, 1818

There were four classes of landholders, grantees of estates, inamdars, village renters and managers, khots, peasant holders, kularags and dharekaris, and tenants, ardhelis. There were many grantees of villages, inamdars and saranjamdars, whose cultivators were either peasant holders, dharekaris, or tenants-at-will, ardhelis. The grantees were continued in their former position standing in the same relation to the cultivators as Government did in other villages, merely receiving what but for the spontaneous action of alienation Government would itself have collected. [Mr. H. P. Pelly Collector to Gov. 537, 18th December 1820; Bom. Rev. Rec. 16 of 1821, 312-318.]

Khots.

The village renters and managers, khots, were a special class. [Much of the materials for this account of the khots has been taken from Mr. E. T. Candy's compilation. Bom. Gov. Sel., New Series, CXXXIV.] Both directly as village managers, and through their close connection with the hereditary revenue officers, [All the officers of the district were connected with the khots. Bom. Rev. Rec. 211 of 1828, 179. the khots were so completely masters of the district records that the early British officers were baffled and bauked in their attempts to settle their relations to Government and to the different classes of under-holders. Of the village farmers or renters, [The word khot means farmer or renter. In one of the oldest deeds khot and izardar, that is farmer, are used as synonymous. Mr. Dunlop (1824); Bom. Gov. Sel. CXXXIV 13. at the beginning of British rule, some had and others had not title deeds, sanads. The original grants date from the reign of Yusuf Adil Shah (1489-1510) of Bijapur, [Mr. Chaplin, 21st November 1821; Bom. Rev. Rec. 16 of 1821, 519, 520. Mr. Pelly (18th December 1820) says it is believed that they were introduced at the time of Nizam Shah Rev. Rec. 16 of 1821, 319. Mr. Chaplin's is the correct account (see above, p. 195).] and show that they were in some cases made with the object of restoring the villages to prosperity. Some of the grants state that the village was nearly waste and the people petitioned for a khot. Mr. Candy in Gov. SeI., New Series, CXXXIV. 5.] Only a small proportion of the khots represented the holders of the original grants. Grantee khots were found only in the strip of land between the Bankot and Kharepatan rivers. North of the Bankot river no khots held grants. In the north Konkan, wrote Mr. Chaplin in 1820 (Bom. Gov. Sel. CXXXIV. 2), the right of a khot to hereditary succession either never existed or had been entirely disregarded. To the older inhabitants of north Konkan, wrote Mr. Pelly in 1819 (Bom. Gov. Sel. CXXXIV. 1), the khot is purely a contractor. To them the idea of an hereditary contractor is ridiculous.] In the extreme south near Malvan there were (1818) no khots. Mr. Hale (1813-1818), Bom. Gov. Sel. CXXXIV. 6.] From Malvan north to the Kharepatan river the khots had either gained possession by mortgage from the peasant proprietors, or they were the representatives of farmers to whom, about the middle of the eighteenth century, certain

villages had been rented. None of them seem to have held deeds. [Mr. Dunlop, Bom. Rev. Rec 64 of 1823, 242. Of the southern *khots* even those with the strongest power and position were, according to Mr. Dunlop, 'pure farmers'. Bom. Gov. Sel. CXXXIV. 8.] Among grantee *khots* were many whose title was of later date than the times of the Bijapur kings.

1818.

Some held under Moghal (1690-1720), others under Maratha (1750-1818) grants, and the deeds of a third class passed by local, subha or mahal, officers were under the Peshwa held to give no certain rights. [In the last years of Bajirao's government (1795-1818) the district was farmed to men who cared neither what they, nor what their predecessors, granted. Deeds for the same village had been passed by three or four officers. Mr. Dunlop, 31st December 1822; Bom. Rev. Rec 64 of 1823, 244. According to Major Jervis (Konkan, 77), khots who gained their estate by mortgage or in other way than by direct succession, had the duties, but something short of the privileges of a grantee khot. It has been estimated that not one-sixth of the whole body of Ratnagiri khots are holders of title deeds. Mr. Nairne to Government, 8th April 1875.] When the British first took the Konkan, it was thought by some that certain khots, who held sanads or title deeds, were entitled to special hereditary rights and privileges not possessed by those khots who simply passed an agreement from year to year. In practice, however, the British Government have never seen reason to make any distinction between those khots who can and those who cannot produce documents relating to or confirmatory of their occupation of these villages. Some few of these deeds are no doubt real title deeds, but many of them are merely decisions by the Peshwa's and other courts on disputes between different claimants. [Mr. A. T. Crawford, C. S.]

The khots had hereditary rights as village renters and managers. [Vatandar khots claim an hereditary and indefeasible right and under the late government freely pawned and sometimes sold their offices. Mr. Chaplin, Bom. Rev. Rec. 16 of 1821, 519. It cannot be questioned that the villages are farmed. Mr. Pelly, December 18, 1820; Bom. Rev. Rec. 16 of 1821, 321. Whatever their origin it has grown into a regular established and acknowledged right of farm. Mr. Chaplin, Bom. Gov. Rev. Rec 16 of 1821, 520. How far they had proprietary rights was doubtful. [The grantee or vatandar khots were farmers of the rent of the village. Mr. Chaplia, Bom. Gov. Rev. Rec 16 of 1821, 519. Without a deed a khot has no proprietary right in the village soil (Judgment in Tazubai's case (1866), Bom. Gov. Sel. CXXXIV. 85). Unless a deed contains words expressly granting the ownership of the soil it must be held that the ownership of the soil was not granted. (Bombay High Court Reports, VI. 199). It may well be doubted, says Mr. Candy (Bom. Gov. Sel. CXXXIV. 85) whether any of the old deeds expressly granted ownership in the soil. They run something like this: You axe from generation to generation to enjoy the hereditary farm, khoti valan, of the village and the honour, manpan, that goes with it. You are to spread tillage, to pay the Government revenue, and to live happily. There is nothing in the grants, says Sir H. B. Ellis (2nd February 1874), that gives the slightest colour to any pretension to proprietary rights in the land. The only deed quoted by Rao Saheb Mandlik (Brief History of Vatandar Khots, 6) that seems to grant ownership in the land is dated 1833. So again, the khot's claim of a sort of hereditary right in everything in the village has always been disallowed by the manager of the district. (Bom. Gov. to Directors, 3rd May 1826; Rev. Letters to Directors, Vol. 18, 234). Captain Wingate (1851) stated that at first the British officers imagined the khots to be proprietors of their villages (Bom. Gov. Sel. II. 15), and Mr. Candy says (Bom. Gov. Sel. CXXXIV 85) innumerable extracts from old records might be made to show that the *khot* had some proprietary right. As far as has been traced Government, as in the passages quoted above, was, from the first, careful neither to style nor to consider the *khot* a proprietor.] The *khot* was not only the farmer of the revenue, he was also a Government officer bound to perform certain duties, to conciliate and superintend the cultivators, and to help the Government in collecting the revenue and distributing the Government demand. [Jervis' Konkan, 74-79. When a khot died without heirs Government handed over his office to a new family charging the new khot a fine or succession fee. Lieut. Dowell, 1st November 1829; Bom. Rev. Rec. 225 of 1851, 256.] The great power which the *khot's* position, as renter and manager of the village, gave him-was limited on the one hand by the right of Government to increase the village rental and oust the *khot* if he refused to pay, [In the oldest (1595) collection of khotipapers a case is cited in which a village was taken from a khot and given to another on his agreeing to pay a larger sum. (Bom. Gov. Sel. CXXXIV. 13). Mr. Turquand (1857) (ditto 4) states that the Peshwa transferred khoti villages without the khots' consent. But on agreeing to pay the enhanced rental the khot would seem to have always been allowed to resume his management (see Bom. Gov. Sel. CXXXIV. 4, 13, 33). He was not stripped of his khotship unless he passed a formal deed, bedava patra. Government had the power to enhance its demand on the introduction of a fresh survey. Fresh surveys were originally made once in six or eight years. (Mr. Chaplin, 1820, in Bom. Gov. Sel, CXXXIV. 34). But as described above, under the Peshwa it was usual to enhance the demand by agreement and without any survey. (See above, p. 218).] and on the other hand by the custom of the country which prevented the khot from recovering from the bulk of the villagers more than a certain share of the produce. [Mr. Pelly (1819) says the lower class of tenants generally pay one-half of the produce. To oust a regularly paying tenant would be thought a hardship. (Bom. Gov. Sel. CXXXIV. 11). Mr. Chaplin also notices one-half the produce as a limit. (Ditto 12).]

Khots were of all castes, but chiefly Musalmans, Marathas, Parbhus, and Brahmans. The original khots were in most cases Marathas or

Musalmans. The Brahmans were chiefly new men who had come to the front in the latter part of the eighteenth century in the years of Brahman power and Brahman misrule. [Mr. Chaplin (1821) and Mr. Dowell (1829) in Bom. Gov. Sel. CXXXIV; see also Bom. Rev. Rec. 16 of 1821, 619. Villages under Maratha *khots* did not flourish. Mr. Dowell (1829) cites the case of a chief *khot* of the village of Ori spending some years in Satara on 4s. (Rs. 2) a month taking care of a Brahman's turban and shoes. The family was so poor that they could not raise 30s. (Rs. 15) to rebuild their house. 1st November 1829, Rev. Rec. 225 of 1851, 258.] Of all conditions, *khots* as a class were rich, and from their connection with the native district officers very powerful. [The *khots* are of almost every caste and condition in life. Some are poor peasants, some are men of wealth and intelligence. Bom. Gov. Sel. II. 2.]

Under Holders, 1818.

The early British officers divided the under holders into two main classes, peasant holders, kularags or dharekaris, and tenants, ardhelis. The lands of peasant holders were entered in their own names, those of tenants in the khot's name. Peasant holders kept their land on almost the same terms as the Deccan mirasdars. [Lieut Dowell (1829), Bom. Rev. Rec. 225 of 1851, 259. One point of difference seems to have been that it was doubtful whether the Ratnagiri peasant holders had the right to sell their land. Jervis' Konkan, 78. Mr. Pelly (1818) said it was generally believed he could dispose of his property. Bom: Rev. Rec, 16 of 1821, 314. The right of the peasant holders to their land was admitted. Except at a new survey their rent was not liable to be raised. [Mr. Chaplin, 1821, Bom. Rev. Rec. 16 of 1821, 515. Those in the south of the district, where the khots had little power, were (1822) consulted by their village managers before any new cess was levied. Each, with a voice in the village management, had a sense of his own consequence and felt himself of importance and respected. They were the best class in the country. [Mr. Dunlop, 31st Dec. 1822; Bom. Rev. Rec. 64 of 1823, 239. If a peasant holder left the village, his land lapsed to the khot. But if the holder within a certain vague time and under certain vague conditions came back and claimed the land, the khot had to restore it. Mr. Reid, 26th April (1828); Bom. Rev. Rec. 211 of 1828, 183.] Besides the peasant holders from whom the Government assessment only was recovered there were some bodies of reduced peasant holders who had agreed to pay the khot something more than the Government demand. These holders, from paying this additional demand, were known as daspatkaris, who on every khandi paid an extra Rs. 10, didpatkaris who paid one and a half instead of one man, and dupatkaris who paid two instead of one man. [Mr. E. T. Candy; Bom. Rev. Comp. 1071 of 1876. In the south was (1822) a class who had fallen lower than this. They had pawned their rights as holders and agreed to pay the mortgagee half their grain produce. Mr. Dunlop, Bom. Rev. Rec. 64 of 1823, 242.] From men of this class the khot could not exact the eighth day labour tax, ath veth. [Mr. Felly (1820), Bom. Rev. Rec. 16 of 1821, 314. Under the British the khots tried to enforce this cess from the peasant holders, but Mr. Felly stopped it. Ditto,.317. The rest of the cultivators were grouped by the first British officers under the general head of half-crop payers, ardhelis. Among these they believed there were some from whom the khot could not take more than a fixed amount and whom to oust would be held a hardship, [Mr. Pelly (1820), Bom. Rev. Rec. 16 of 1821, 315, so also Mr. Chaplin (1821). Custom has fixed half the produce as the limit of rent. Local usage rules the rats. Bom. Rev. Rec. 16 of 1821, 514.] and others whose only safeguard was the fear of the khot that if he extorted too much the land would be thrown up. Mr. Chaplin, Rev. Rec. 16 of 1821, 512 - 514. The khot had power of ejectment, and the peasant had no right to land except on such terms as he could settle with the *khot*. They were bound only by the ties of mutual interest. Mr. Chaplin, Bom. Rev. Rec. 16 of 1821, 612-514 Half produce, says Mr. Dunlop (1822), seems to be the utmost limit of assessment from tenants. They often got better terms and were then called khandkaris or maktedars. In both cases, unless otherwise provided for, they had to perform one day's service in eight, ath veth, for the khot, and pay Government a house and miscellaneous, karsai, cess. Bom. Rev. Rec. 64 of 1823; 248, 249. Some of the half-crop tenants, ardhelis, held on lease, utthi, istava, and kaul, others on a mere verbal agreement, ukli. Jems' Konkan, 80.] The early officers admitted that the khots had baffled their attempts to find out the true position of their tenants. They were strongly impressed with the need of a survey. [In 1822 Mr. Dunlop urged a survey, and in 1823 Government agreed that a survey was the only means to guard the under-holders against oppression. Bom. Gov. Sel. CXXX1V.13.] Unless a register was kept the rights of the tenant must fall from want of support. [Mr. Reid (1828), Rev. Rec. 211 of 1828, 179. The result of the Ratnagiri survey (1826-1829) was to show a large proportion of customary tenants, that is tenants who could not be called on to pay more than a customary rate.]

In two respects the system in force at the beginning of British rule was a success. Under it all the arable land of the district had been brought under tillage, [There was (1824) no waste land available to grant as assignments to patils. Mr. Dunlop, Bom. Rev. Rec. 121 of 1825, 40, 41. Considering the character of the country it was surprising how large a harvest it yielded. Of the whole produce at least four-fifths was rice, and besides nagli and vari, there was a grain grown to make oil and feed cattle. Little gram and not much wheat was planted. The whole of the rice lands were flooded in the rains. As in Bombay the rice was sometimes sown broadcast, but generally in beds and afterwards planted out. Rice lands were, according to quality, assessed at different rates. The best grew sugarcane, turmeric, and ginger. Some small watered tracts yielded double crops. Mr. Pelly (1820), Bom. Rev. Rec. 16 of 1821, 328, 329.] and the revenue was realised with ease and without remissions. [Mr. Pelly

(1819), Bom. Gov. Sel. CXXXIV. 5. Except in cases of extreme distress, neither in rented nor in peasant-held villages were remissions allowed, Mr. Chaplin (1821), Bom. Rev. Rec. 16 of 1821, 513.] As a class the khots were well off. The more respectable were men of capital who laid out money in bringing new land under tillage. [Mr. Pelly (1820), Bom. Rev. Rec. 16 of 1821, 319, 320. The best lands in central Ratnagiri had been recovered by extensive embankments from the sea. [Mr. Dunlop (1822), Bom. Rev. Rec. 64 of 1823, 255.] Of the peasant holders some were in distress, others were substantial farmers. Mr. Chaplin (1821), Bom. Rev. Rec. 16 of 1821, 523. The half-crop tenants had two safeguards against the khot's oppression: the fear that if too much was asked the land would lie waste, and the right of appeal to Government against over-exaction. The scarcity of waste land and the power of the khot to seize the house and goods of any tenant who left his village, [The khots (1828) claimed the houses, and in some cases even the cattle and stock of cultivators, who, having settled, in their village, might retire to another. Mr. Reid, Bom. Rev. Rec. 211 of 1828, 192.] and to transfer to the village he went to the share of the Government demand the tenant had formerly paid, made the first safeguard of little use. This practice was known as dharabad. The effect, says Mr. Reid (1828), was that the khot felt no interest in conciliating his tenants or in making them easy and contented. Bom. Rev. Rec. 211 of 1828, 190-192. With the help of the custom that the khot's demand was not to go beyond one-half of the crop, the appeal to the Government was of some practical value. [Mr. Dunlop (1822) says the practice of former governments authorizes ours in establishing rates to restrain the exactions of khots. Bom. Rev. Rec. 64 of 1823, 247. So Mr. Turquand (1857) says the Peshwa occasionally interfered (Bom. Gov. Sel. CXXXIV. 4); and the Joint Judge in Tazubai's case (1866) speaks of the Peshwa removing a khot for oppressing the cultivators. Still it was very hard for his tenants to combine against a khot and they were (1819) generally deep in his debt and wholly at his mercy. [Mr. Pelly, Bom. Gov. Sel. CXXXIV. 10. Undisputed rights were (1819) fraudulently withheld by the *khots*. One great cause of the success of the *khots*' encroachments was the trifling amount each individual was called on to pay. It bore no proportion to the expense and trouble of making a complaint. (Mr. Dunlop, 31st December 1822, Bom. Rev. Rec. 64 of 1822, 247). At the time of the conquest, writes Mr. Crawford (28th December 1873), population had increased and all the arable area was tilled. The khot could get what terms he pleased. He no longer hesitated to rackrent, and was sometimes able even to oust his tenants.]

In every respect, in spirit, intelligence, and comfort, the half-crop tenants were far below the people of Gujarat and the Decean. [Mr. Chaplin (1821), Bom. Rev. Rec. 16 of 1821, 522.] Among them a man wearing a decent turban or ever so coarse a dress attracted attention as being above the lower orders. [Mr. Pelly (1820), Bom. Rev. Rec. 16 of 1821,343.] No money passed (1821) among them. The *khot*

advanced grain for seed and food and in return took their crops. In a khot's village it was rare to see a rupee in a tenant's hand. In the deepest poverty, almost in villanage, they looked to the khot as their sole master and landlord. [Mr. Chaplin (1821), Bom. Rev. Rec. 16 of 1821, 507 - 526. The *khot* made the greatest possible profit by leaving the husbandman the least possible share. The only limit was the absolute necessities of nature. He allowed the peasant no more than his existence required. Still they were said to treat them with kindness and to be generally popular. Their villages were guite as good as peasant-held villages. (Bom. Rev. Rec. 16 of 1821, 521-523). Mr. Dunlop (1822) speaks of an oppressive taxation and an impoverished, dispirited, and degraded people. (Bom. Rev. Rec. 64 of 1823, 276). The villagers are (1820) much in debt to the khot and wholly at his mercy. (Bom. Rev. Rec. 16 of 1821, 326, 327). Deeply indebted to their khots, many are little better than abject slaves. In some degree time has reconciled them and where this may not be the case the habit of dependence has deprived them of the spirit and confidence as well as the means of providing for themselves. (Mr. Dunlop, 1822, Rev. Rec. 64 of 1823, 250). In 1824, Mr. Dunlop wrote, 'though, since the transfer of the district, the position of the cultivators has certainly improved, their circumstances are still bad enough. The most carefully prepared statements I can frame have left the cultivator without the means of subsistence No doubt I have been imposed on. But I am satisfied that they live on incredibly little.' (Bom. Rev. Rec. 121 of 1825, 79, 80).] A great number could not afford themselves or their families the luxury of a full meal of any sort of grain even once a day. Mr. Dunlop, Bom. Rev. Rec. 121 of 1825, 80, 81.] Too listless to grow vegetables, they preferred trusting to forest produce, gathering firewood, gallnuts hirdas, and red flowers dhayti. From these and occasional labour hire, they bought, their blankets and other scanty clothing. [Mr. Dunlop, Bom. Rev. Rec. 121 of 1825, 81.]

British Changes, 1818-1820

The early British, officers made no change in the system of fixing and gathering the revenue. At first (25th August 1818) the Collector, Mr. Pelly, suggested that the district should as soon as possible be surveyed. [Bom. Rev. Rec. 16 of 1821, 323.] Afterwards a fuller knowledge of the distressed state of the country led him to advise delay. The revenue of the year (1819-20) showed an increase of 33,201 (RS. '3,32,010) on the amount realised in the year before. This was due to no rise in the rate of rents. Grain was dear and the prices forched at the government auction sales were much higher than was expected. The mode of collecting the land revenue was in no way changed. It was taken in kind according to the ancient custom of the Konkan. [Mr. Pelly, 18th December 1820; Bom. Rev. Rec. 16 of 1821, 310.] Next year (1820) Mr. Pelly recommended that, native surveyors should be brought from the Habsan, and under the Collector's superintendence, one or two sub-divisions should be surveyed and

settled for five years. Mr. Pelly was strongly of opinion that except in removing oppressive and improper imposts and correcting abuses, for a few years in revenue matters local customs, shirastas, should be closely followed. The land could be measured, classed, and assessed according to usage. The landholders would gain because the Government demand from each would become clearly known and easily found out, and the appointment of village accountants would gradually give a knowledge of the true position of the khots and help Government to recover rights then fraudulently with held. [Bom, Rev. Rec, 16 of 1821, 326. Government agreed with Mr. Pelly that there could be no doubt of the objectionable tendency of the khoti system and of the need of curtailing the khot's authority and subjecting him to control. [Bom. Rev, Rec. 16 of 1821, 485.] Before other changes were made the number of rented, khots, and peasant-held, kulargi, villages should be recorded and an inquiry made into the rights of the different classes, of landholders, [Bom. Gov. Letter, 28th June 1821; Bom. Rev. Rec. 16 of 1821, 498, 499.] As regards a village staff, Government were of opinion that while the khot was the fittest agent for police and revenue duties, it was of great importance to introduce the office of village accountant. [Bom. Rev. Rec. 16 of 1821, 485,486,489. Their wish that a staff of village accountants should be appointed had already been brought to the notice of the district officers. Gov. Res. 18th November 1820; Ditto, 486. To improve the village watch it was proposed that bands of Ramoshis should be entertained. [Bom. Rev. Rec. 16 of 1821, 487.] Mr. Pelly's (16th December 1820) proposed commutation scale for the grain rental was also sanctioned. [The rates were for the khandi of sweet rice £2 2s. to £2 8s. (Rs. 21-Rs. 24), for nagli £2 is. 3d. to £2 14s. (Rs. 22 as. 2 - Rs. 27), and for vari £1 14s. 3d. to £2 (Rs. 17 as. 2 - Rs. 20). These rates at first fixed for the south were afterwards extended to the whole district. Bom. Rev. Rec. 16 of 1821,535,541. According to Mr. Gibson these rates were in some sub-divisions fifty per cent higher than the old rates.]

During this year (1820) Ratnagiri was visited by a destructive attack of cholera that from one end of the district to the other daily carried off numbers. Besides from this epidemic the district suffered severely. In May a storm of wind and rain caused great damage by land and sea.. Between Anjanvel and Goa about forty coasting vessels were totally wrecked, and at Rajapur, about £10,000 (Rs. 1,00,000) of property, including much Government grain, was washed away by the rise of the river. In the south the dams of two large ponds, Kumbharmat and Dhamapur near Malvan, burst, and at the salt works much damage was done. Remissions to the amount of £319 (Rs. 3190) were granted. [Mr. Pelly (1820), Bom, Rev. Rec. 16 of 1821, 687, 688, 697. In 1821, though the Ramoshis and Mangs were less troublesome than some years before, gang robberies, believed to be the work of discharged fort garrisons, were very distressing. [Bom. Gov. Letter, 28th June 1821; Rev. Rec. 16 of 1821, 503.] Mr. Elphinstone, when on tour in Ratnagiri in 1823, was impressed with

the loud complaints against the English Government. The bad feeling was, he thought, due to the Brahmans who had supplied almost all of the Peshwa's civil and many of his military officers, and whose priests greatly missed Baji Rao's lavish bounty. Baji Rao used to send £50,000 (Rs. 5,00,000) a year in charity into the south Konkan. Government to the Directors, 5th November 1823; Bom. Rev. Rec. 17 of 1823, 84.] As khots the Brahmans had almost unlimited prver and their habits of business and intrigue gave them such an influence that they made the common people adopt views most opposed to their real interest's. [Gov. to the Directors, Bom. Rev. Rec. 17 of 1823, 85.] Mr. strongly advocated the establishment of village Elphinstone accountants and the conversion of rented, khoti, into peasant-held, kulargi, villages. Though so old an institution the khots caused the bitterest discontent. Their arbitrary exactions and their demand of one day's work in eight were the subject of common complaint. Consistent with the khots' rights every measure should be taken to raise the villagers out of their thraldom. A survey would be very difficult. The khots would thwart and corrupt it. Still Mr. Dunlop should make a beginning. He should find whether tenants, ardhelis, had any rights in which Government could protect them, and whether there was any limit beyond which the khots' demands should not be allowed to go. [Government to the Directors, Bom. Rev. Rec. 17 of 1823, 93.] 1820-1824.

Equal rates and good village servants were, in Mr. Dunlop's opinion, the only means for bettering the mass of the people. [Bom. Rev. Rec. 121 of 1825, 79.] Without a survey, equality of rates could not be ensured. Measurements were accordingly pressed on in different parts of the district. But as the staff was untrained and wanted European supervision, the results were not trustworthy. Still they brought to light the great roughness and unevenness of former surveys, proving that the tillage area was double and in places treble what had formerly been returned. [Mr. Dunlop, Bom. Rev. Rec. 121 of 1825, 65-68.] As regards tenures, inquiries snowed that over the whole district the revenue paid under the peasant, kulargi, system was £4633 (Rs. 46,330) more than the revenue paid by farmers, khots. Mr. Dunlop proposed some changes in village management which, he thought, would greatly increase the amount of peasant-paid revenue and give so great a preponderance to the more favourable tenure, that the khots would be kept back from oppressive acts by the fear of their people moving into peasant-held villages. [Mr. Dunlop, Bom. Rev. Rec. 121 of 1825, 53, 54.] The chief changes were that the khots should be kept on as headmen, and their pay be made to depend on the prosperity of their villages by assigning them a small quantity of grain from each rent-paying field. At the same time a staff of village accountants should be introduced, so that the managers, kamavisdars, might find out the truth of all claims to abatement of revenue. [Mr. Dunlop (21st December 1822), Bom. Rev. Rec. 64 of 1823, 252.] In parts of Malvan Mr. Dunlop proposed reductions in the assessment rates. Those were, he thought, the only over-assessed parts of the district. [The reason for lowering the rates was the fall in the price of rice from £1 4s. to £1 (Rs. 12-Rs. 10) a bhara. Bom. Rev. Rec. 64 of 1823, 269.] Besides this lowering of rates, Mr. Dunlop thought (1824) that the farms of certain forest produce and several miscellaneous cesses should be abolished. [Bom. Rev. Rec. 121 of 1825, 81 - 85. The farms of tirewood, gallnut, and a red flower used as a dye, of selling cocoanuts in the parts of the district where they did not grow, the sale of betel leaves, and the sale of cattle.]

Changes in the village staff were also pressed on. Khoti villages were being surrendered and arrangements were made to choose one of the khots as the head or manager. In the south, the headmen's payment had some years before (1818-1820) been fixed, by an assignment of five or three per cent of the village rental. This system, with some change of rates, Mr. Dunlop thought should be introduced over the whole district. [His proposals were, villages yielding less than £50 (Rs. 500) at six per cent; villages yielding from £50 to £100 (Rs. 500-1000) four per cent; from £100 to £200 (Rs. 1000-2000) three percent; from £200 to £300 (Rs. 2000-3000) two per cent; and one per cent on all above £300 (Rs. 3000). Mr. Dunlop, 15th August 1824; Bom. Rev. Rec. 121 of 1825, 38 - 47, The inquiry into the system of keeping village accounts bad shown that though most villages in the district had nominally an accountant, the duties were very carelessly done. The members of the accountants' families generally arranged among themselves to hold the office in turn. And so it happened that the village accountant was often a man from Sindia's or Holkar's court utterly ignorant of the village, never visiting it except when, perhaps once in fifteen years, his turn came. Nor was their work supervised, for the office of divisional accountant, deshpande, was, as a rule, in the hands of the village accountant's family. [Mr. Dunlop, 15th August 1824; Bom. Rev. Rec. 121 of 1825, 47, 48. Each family should, said Mr. Dunlop, be called on to choose one of their number for the constant exercise of the duty, [Bom. Rev. Rec. 121 of 1825, 49, 50.] and instead of on loose leaves the accounts should be kept in regular books. Accountants were greatly needed as a check on the khots. One great source of khot, exactions was the mixing of public and private claims. If a cultivator showed that he had been called on to pay more than he ought, the khot was never at a loss. The excess was said to have been taken on account of some old debt or other private transaction. The khots would oppose the change; but this could not be helped. Without village accountants remissions wore nseless. Attempts to better the state of the people only went to enrich the khots. [Ditto, 33, 34.1

In some ways the change of Government pressed heavily on the district. The large amount of savings and pensions that used to flow into it from officers in the Peshwa's service ceased, and instead of consignments of treasure from Poona for the support of the garrisons much of the revenue was sent to Bombay. [Mr. Dunlop, Bom. Rev.

Rec. 121 of 1825, 78.] At first neither the revenue nor the judicial courts worked well. In the revenue courts there were no records from which the people's claims could be tested. They made frequent complaints, but they did not promote their interests by complaining. It was generally better for them to submit to imposition. [Ditto, 32,] To get to the judicial court, adalat, was, from many parts of the district, a long journey. Without a small stock of ready money the journey could not be made, and as many of the people had no cash and no means of raising cash, the new system opened a way for fraud and oppression and pressed hardly on the poor. [Ditto, 85-88.] On the other hand the demand, for unpaid labour was stopped, grievances were redressed, and several of the most oppressive and unpopular cesses remitted. Though unquestionably improved the people were still very badly off, many of them eking out a living by gathering forest produce. [Ditto, 79-81.] Without proper village establishments and equal assessments there was little hope of lasting improvement. [Ditto, 79.] 1825.

On this report of Mr. Dunlop's, Government (10th January 1825) decided, that though the *khot's* claim to an hereditary right in every thing in the village had always been disallowed, they had an hereditary claim to their farms with which it was neither just nor politic to interfere. It was not the wish of Government to make the khots give up their position and office. Improvements should be confined to ascertaining and securing the rights of other classes without setting aside the khot's established claims. Of the husbandmen, the peasant-holders, dharekaris, were the only class who had rights limiting the power of the khots. To find out the rights of the peasant holders some period of good Maratha government should be chosen and from the records of that time it should be discovered whether the rent due by the peasant holder, dharekari, to the village farmer was fixed. If the farmer made any further claim he would have to prove it. If the peasant holder, dharekari, could not establish a limit to the farmer's claim of rent, the average payment in past years was to be fixed as the future rent, the peasant holder, if he could, proving any exemption. Peasant holders, dharekaris, such as those in Suvarndurg, who had made over some of their original rights to the village farmer, could not, unless fraud was proved, claim to be restored to their former position. In their case, as in the case of the full peasant holders, any limit of the farmer's demand should be carefully maintained. Yearly tenants, ardhelis or upris, who moved from place to place as they were tempted by favourable terms, and who had not even a usufructuary right to the soil, had no need of Government interference. Competition among the khots would secure them proper pay. If the khots combined against them the yearly tenants could be tempted to peasant-held, kalargi, villages. Perfect freedom to move was all that men of this class wanted and this they seemed to have. The introduction of a survey was approved. A beginning should be made in some place under the Collector's eye,

and progress should be very gradual. Village accountants should also be appointed, and arrangements made to ensure peasant holders against exactions. But care should be taken that the accountant did not meddle with the farmer's rights. [Under these orders no more accountants were sent to *khoti* villages. In peasant-held villages the accountants worked well. With correct accounts and receipts the people were free from the oppression of the headmen. Mr. Reid, Bom. Rev Rec. 211 of 1828, 193, 194.] To appoint headmen, *patils*, to rented, *khoti*, villages would only lead to the clashing of authority. The better plan would be to make the *khots* responsible for the village police. [Bom. Rev. Rec. 121 of 1825,231. These instructions, in due course (Despatch dated 6th August 1828; Bom. Rev. Rec. 6, 1828-1831, 17) met with the approval of the Court of Directors.]

In the want of information as to who were peasant holders with a claim to limit the *khot's* demand, and who were shifting labourers with no rights which Government could protect, these instructions would seem to have added considerably to the khot's power. Within three years (1828), in the country south of the Bankot river, the khoti system was complete. Most villages were purely khoti without a single peasant holder, the rest were mixed and peasant-held. In mixed villages the *khot's* power was gradually spreading as he claimed the land and was held answerable for the revenue of absent peasant holders. Instead of occasionally hinting at a claim to land not in the hands of peasant holders, the khots now openly avowed and maintained their claim to proprietary rights. Mr. Reid, 26th August 1828; Bom. Rev. Rec. 211 of 1828,174, 175, and 176-179.] Meanwhile two despatches (4th May 1825, 23rd May 1827) came from the Court of Directors dwelling strongly on the degraded state of the people and on the right and duty of Government to protect them from the *khot's* exactions. [In reply to the early accounts (23rd February and 27th November 1822) of the state of Ratnagiri the Court of Directors wrote (4th May 1825): We can by no means rest satisfied that the interests of the villagers or of any portion of them should remain without protection against the exactions of such a class of men as the khots. We recommend it to you in a most particular manner not only to ascertain and protect the existing rights of the peasants, but to ameliorate their situation, and relieve them from any claims which operate upon them severely or oppressively. If any privileges of the khots are inconsistent with the required arrangements, it may be equitable to allow compensation for the loss of even a hurtful privilege, the right to which is well established or of long standing. But in all cases it is necessary to put an end to the causes of abuse and to powers which can be exercised only to the disadvantage of the community. (Court's Letters (Bom. Rev. Rec. 1825-1827), 5, 7). Again in reply to Bombay Government letter 5th November 1823, the Court wrote (23rd May 1827): The grand evil in the south Konkan is the undue power of those headmen of villages called khots. By their exactions in the way both of money and labour, and probably also by

other methods of oppression, the cultivators are reduced to a state little better than slavery. It is the natural consequence of this oppression that the people's character is degraded, and that they should be addicted to drunkenness, idleness, and lying. The first step to improvement is to protect the cultivators. The demands on the cultivators should be defined and this both for demands on their labour and on their money. Government should effectually interfere to ensure the due limitation as well as the exact definition of the demand. (Court's Letters, Bom. Rev. Rec. 5 (1825-1827), 107-110) Again (14th November 1827) they said: The exposure of the cultivators to constant pillage is ruining the country. The rights of the people as established by their own customs should be ascevtained and they should be protected in their exercise. (Court's Letters (Bom. Rev. Roc. 1825-1827), 5, 258-260). These and the letter of 6th August 1828, which gives no details, are the only despatches between 1825 and 1828 traced in the Bombay Records. But other more definite orders would seem to have, been received to reinstate the reduced peasant holders of Suvarndurg in their original position, See Bom. Gov. Letter 1907 of 1828, 12, in Bom. Gov. Sel. CXXXIV. 17.] The result of this strong expression of the views of the Home Government was twofold. An attempt was made to change rented into peasant-held villages, and a survey of the Ratnagiri sub-division was begun. The introduction into khoti villages of a peasant-holding, mirasi, system recommended by Government was not found practicable. Mr. Reid, 26th August 1828; Bom. Rev. Rec. 211 of 1828, 176. At the same time the people of the peasant-held villages near the coast were so much better off than those of rented villages, that Mr. Reid regretted that the peasant tenure was not mevalent throughout the country. Ditto, 175.] At the same time, many villages in the northern subdivisions, formerly rented, were resumed and managed Government through the agency of village accountants. In these villages the attempt was made to raise the tenants to the level of peasant holders. But they were so poor that they preferred having a man of capital between them and Government, who would advance them the petty sums they wanted and help them in their tillage. [Mr Reid, 26th August 1828; Rev. Rec. 211 of 1828, 183,184. These villages would seem to have been all north of the Bankot creek. The khot who was thus preferred by the people to the direct system was not the type of *khot* who claimed hereditary rights. They were farmers to whom the villages were rented annually or for a term of years.] Still the inquiries then made brought to light the important fact that the khot's tenants were not all yearly tenants or shifting labourers, that there was a class of peasant holders reduced by the encroachments of khots, who had for years tilled their fields on paying the khot a fixed part of the produce. With an hereditary right to their fields these tenants were not liable to be ousted so long as they paid their share of the produce. It was this class of men whose rights had from the first been so carefully concealed by the khots and khot-connected district officers, and who, since the Government resolution of 1825, had

suffered still more by the rough classification of all half-crop payers, ardhelis, as shifting labourers without occupancy rights. [Mr. Reid, 1828; Rev. Rec. 211 of 1828, 176-179.] To define and secure the rights of these occupancy holders Mr. Reid strongly advised a fresh survey.



Maharashtra State Gazetteers

LAND ADMINISTRATION Survey 1827-1851

Survey 1827-1830.

In 1827 Lieut. Dowell, with a few native surveyors, was appointed to survey the Ratnagiri sub-division. In this survey the acre, equal to one and a quarter bighas, was made the unit of measurement. In other respects the Peshwa's system of measuring and classifying was not changed. In the places first surveyed the chain and cross staff were tried. But as the ground was waving and the fields were small, the old plan of measuring lengths and breadths by rods, kathis, [The old Maratha rod of 9 feet 4.37 inches was increased to 10 feet 5.11 inches, so that, as was the case with the bigha, 400 square kathis might go to the acre.] was afterwards adopted, with this difference, that instead of being thrown over the arm, the rod was laid flat on the ground. The former classification of soils was well suited to the country, and was continued unchanged. The rice land was divided into twenty-two sorts each with a distinct name and paying a special grain assessment. The uplands, varkas, were either hill or level. The hill uplands were lightly assessed, each of the fourteen hill grains paying a different rate. Under the name of customary discount, vaja shirastabad, deductions from the actual area of rice and uplands were made on the same scale as in Annaji Dattu's survey. All the measurements were recorded and the areas of the fields and their boundaries entered in a village ledger, khatavni. Maps were prepared showing the relative position of the fields and villages on the scale of 200 feet to an inch and of five inches to a mile. The survey extended to all the villages now in the Ratnagiri and Sangameshvar subdivisions and the petty divisions of Saitavda and Lanja. The records of the new assessment of several villages were ready by the end of 1829, but owing to the difficulty of fixing the khot's rights, the settlement was not carried out, and in 1830, survey operations were stopped. [Mr. J. R. Gibson. Mr. Candy (Bom. Gov. Sel. CXXXIV. 20) says the survey inquiries went on till 1833 and were then stopped chiefly from the difficulty of settling the claims of the Vishalgad chief.] Like Mr. Reid's inquiries, Mr. Dowell's researches into the details of the actual tenure of land [Lt. Dowell has left in three closely written volumes the results of his inquiries, between November 1829 and May 1830, from all kinds of people. His opinion is entitled to great weight. Mr. Candy, Bom. Gov. Sel. CXXXIV. 21, 29. served to show how important a class of villagers held a position between peasant holders and yearly tenants. The lands in a rented, khoti, village were partly divided among the villagers, partly undivided. The divided lands were held partly by members of the khot's family, partly by peasant holders. These hereditary cultivators, vatandar kardas, were the descendants of original peasant holders, dharekaris, who had come under the power of the khot and paid him rent. Of all castes, but chiefly Kunbis, they formed the bulk of the people. Each family, or

cluster of houses, bore the same name, tilled a fixed share of upland, and managed the crops and fallows without reference to the *khots*. At seed time the *khot* went round and examined the fields, and at harvest he again went round and gathered his dues.

As a rule a tenant, karda, who paid his rent could not be ousted by the khot, nor so long as he tilled the usual share, could the khot or any other tenant cultivate within his bounds. If a khot wished to oust a troublesome tenant, his only means was to assess his fields above what he could pay. If a tenant's family fell sick, so that part of his lands were waste, the khot might give them to a stranger to till or he might divide the waste part among the neighbouring tenants. When, even after many years, the tenant's family became able to till their lands they might oust the new tenants. If the family never returned, their land became deserted, gayal, and lapsed to the khot. The undivided land, generally the poorest uplands and not more than a quarter of the village area, was called common, garik. Its tillage was, under the khot, carried on partly by villagers, but more often by [These strangers were either called waste tillers, badhekaris, or outsiders, dulandis. All waste tillers, badhekaris, were not shifting labourers or yearly tenants. Many of them had been settled for generations in the same village and had been given occupancy privillages. See Bom. (Bov. Sel. CXXXIV. 25.) Even among the stranger peasants all were not shifting labourers. Some, though they hold no land in the village, were hereditary holders, vatandar kardas, in a village close by. The tillers of common lands were like Deccan upris, the khots standing in the place of Government. The cultivators under the khot both holders, kardas, and waste tillers, badhekaris, were called half or third produce payers, ardhelis or tirdhelis. The share of the produce due from them to the khot was fixed every year by agreement between the khot and the cultivator. A few days before harvest they went together round the fields, estimated the produce of each field, and after haggling over it, agreed to the quantity to be paid. [The assumed share of the khot varied in uplands from ¼ to ½; in rice laird it was about ½. The cultivator had from his share to pay the fees due to the village servants, mhar and gurar, and meet the cost of the yearly sacrifices, Mr. Dowell (1829) in Bom. Gov. Sel. II. 12.] When, as often happened, the khot and the cultivator could not agree they chose a jury, tirhait, of the chief villagers. The only check the cultivator had on the khot was his recollection of the agreement made. In cases of poverty or loss the khot remitted a little revenue. In bad seasons the loss fell on the khot, and the khot gained by Government remissions. The tillage in khoti villages was poor, as, under the system of yearly estimates, the people had little motive to make improvements. [Mr. Dowell in Bom. Gov. Sel. II. 12.]

On the whole the result was to show that even in rented, *khoti,* villages, except the small area of common, *garik,* and of deserted, *gayal,* land which was managed by the *khot,* the land was divided

among, and held in perpetuity by, permanent cultivators, kardas, whom the khot had no right to dispossess and from whom he could exact no more than the recognized share of the produce and some additional cesses according to the usage of the village. [Capt. Wingate, 30th January 1851; Bom. Gov. Sel. II. 14. Mr. Candy (Bom. Gov. Sel. CXXXIV. 29)), who thinks Captain Wingate's summary not quite correct, divides the lands of a rented, khoti, village into two classes, (A) Lands held by the khot's family, (B) Lands held by the khot's tenants. The lands held by the khot's tenants were (a) held by hereditary landholders, vatandar kurdas, who had lasting rights including, in most cases, the power to mortgage and sell their fields; (b) common, gavik, land belonging to the khot. This was either waste or deserted. The tillers of the common land, whether hereditary landholders or outsiders, tilled this partas the khot's tenants-at-will. Mr. Dowell's notes established two very important points that an hereditary tenant had, under the Peshwas, the right to appeal to the Government against the action of his *khot* (p.27), and that a fresh tenant gained hereditary, vatan, rights by the gift of the khot, by lapse of time, or by building a stone house. The variety of cases cited would seem to show that this process of rising from the position of shifting labourers or yearly tenants to that of hereditary tenants with occupancy rights was common and widespread. (See Gov, Sel. CXXXIV. 23-29). The origin of the grant of customary rights was in the rivalry among the different village renters to tempt peasants to settle in their villages. It is important, says Mr. Crawford (28th Dec. 1873), to remember that while the settlement of the district was going on, peasant's were in demand and could gain good terms from the village renter who dared not rackrent or oppress them. Sir George Campbell's description of the origin of occupancy rights among Bengal tenants applies to the earlier stages of the settlement of Ratnagiri. The endeavour of the landlord was to get new customers. Men were the only riches and the struggle of a good landlord was to get men by the offer of favourable terms. The newcomer settled on waste land, tilled and stocked it, built his house and dug his well at his own expense and by his own labour. Hence he was given all the rights and privileges of resident cultivators. Quoted by the Honourable Mr. Melvill, in Mr. Candy's Summary of Khoti Reports (1873), 23.]

No action would seem to have boon taken on Mr. Dowell's survey report, and the survey was not extended beyond the Ratnagiri subdivision. But his inquiries had shown that a large body of the *khot's* tenants had customary or occupancy rights, and the practice was introduced of renewing the grant of the village to the *khot* only on condition of his promise not to act oppressively and to respect the villagers' rights. [Examples of the clauses from time to time introduced in these agreements are given in Bom. Gov. Sel. CXXXIV. 80, 81.]

1830-1840.

Between 1830 and 1840 the district officers held the most opposed

views regarding the position of the khot. In 1833 a village was rented to a khot under a deed giving much wider rights than those granted in the old Musalman and Maratha deeds. [Mr. Mandlik (Vatandar Khots, 8) gives this translation:" You are to understand that the lands and fields, trees and bushes, water-courses, grass, wood, stones, and all rights are your ancestral property." How different this is from the old deeds will be seen from the example quoted above, p. 226.] About the same time (1835), Major Jervis was doing his utmost to prove that the khots had no proprietary rights, and that of late years they had gained powers over the cultivators to which they had no claim, and been freed from services they were bound to perform. [Jervis' Konkan, 74, 75. Two years later Mr. Glass the Collector (5th May 1837) supported the view that in purely rented villages the proprietary right centred in the khot. He admitted that the direct tendency of the system was to keep the tenants, ardhelis, in the deepest poverty. Still he held that the khots treated their tenants with a certain degree of liberality, and that, though never flourishing, they seldom suffered from absolute want. [Bom. Gov. Sel. CXXXIV. 30.]

In 1833, after some years of very cheap grain, the district profited by a rise in prices due to a failure of crops in the Deccan. [Mr. Forbes, 26th September 1833; Rev. Rec. 550 of 1834, 124, 125. The years of very cheap grain (1826 - 1832) had lowered the value of land. Before this fall in value the best rice lands fetched from £15 to £20 (Rs. 150-200) an acre, good dry grain land £6 (Rs. 60), and strong hill land £1 4s. (Rs. 12). The 1829 rates were somewhat lower. Lieutenant Dowell, 1st November 1829; Bom. Rev. Rec. 225 of 1851, 267.] The improvement seems to have continued during the next year. Order was unbroken, the revenue easily collected, prosperity seemed increasing, and all classes wore satisfied with the revenue management. [Mr. Elliot, 4th Sep. 1834; Rev. Rec. 550 of 1834, 153. This is strangely opposed to Major Jervis' (1835) opinion (Konkan, 105) that the cultivators in the neighbouring native states were more contented and infinitely more prosperous than, under the British. Government had abolished many distressing taxes. But the constant need for remission showed that the demand was still too high. Ditto, 36.] In 1837 there were very heavy later rains, the crops were damaged, and cholera and cattle disease caused much loss. [Jamabandi Rep. 1837-38; Rev. Rec. 975 of 1839, 17-19,] Many cesses, among them an oppressive house tax, were abolished, and an order was issued that money payments at the ruling market rates were to take the place of the part payments in kind. [Rev. Rec. 975 of 1839, 44, 45, and 1099 of 1840, 28, 29. In spite of this order part of the rental continued to be taken in kind. The rains of 1838 were very scanty. The rice crop suffered greatly and as the stock of grain was small, the price rose higher than it had been since 1824. There was much distress, and grain had to be brought from Malabar. [Jamabandi Rep. 1838-39; Rev. Rec. 1099 of 1840, 22-24.] In peasant-held villages remissions to the extent of £5570 (Rs. 55,700) were granted. During 1838-39, in addition to fifty-five villages already under Government management, fourteen *khoti* villages were thrown up. In the Collector's opinion the Government demand was too high. He proposed that the commutation rates should be lowered and cesses yielding in all £10,528 (Rs. 1,05,280) should be abolished. [Jamabandi Rep. 1838-39; Ditto, 32-34.] These proposals were sanctioned by Government, and with a very favourable season in 1840 the district greatly recovered. [Rev. Rec. 1345 of 1842, 122, 123. The cesses on bullocks, buffaloes, and goats were abolished in 1839. Rev. Rec. 1099 of 1840, 91. A fixed rate of commutation, instead of the enhanced tasar and farokhta rates, was sanctioned in 1840. Rev. Rec. 1242 of 1841, 68.]

Survey proposed 1845-1851.

A few years later (1845) the question of the *khots'* position again came under discussion. In reporting on some villagers' complaints of illegal levies by the khot, one of the district officers stated that in his opinion, though the *khot* could not raise the grain rental, provided he gave notice and made an agreement with the people, he could levy such taxes on miscellancous produce as he chose. Government held that it was monstrous that while limited by the custom of the country to a certain portion of the produce, the khot should by irregular levies raise the demand to a rackrent. Still, though the law gave Government power to stop vexatious levies, this power must be used with care, lest Government, in their desire to relieve the people, should deal unfairly with the khots. In the opinion of Government nothing but a correct field survey and classification could afford the data on which alone justice could be done to all parties. [Bom. Gov. Sel. CXXXIV. 32.] Accordingly, in 1819 (22nd August and 26th September), Captain Wingate the Survey Superintendent was called on to report on the advisability of undertaking a survey and revision assessment in Ratnagiri. Captain Wingate's absence in Europe for some time delayed his report. On his return, after studying all the land tenure and land management records, discussing the different questions with Mr. Coles the Collector, and himself making local inquiries, Captain Wingate (15th January 1851) wrote a most complete account of Ratnagiri and its peculiar land system.

LAND ADMINISTRATION

Captain Wingate's Report, 1851

The district contained 1336 villages and hamlets distributed among five sub-divisions, Suvarndurg, Anjanvel, Ratnagiri, Vijaydurg, and Malvan. Its barren rugged surface was fully cultivated. There is little, if any, unappropriated waste in the district. Bom. Gov. Sel. II. 7.] Wherever there was soil, even to the tops of the highest hills, by the plough or by the pickaxe, grain was grown. The uplands, varkas, were tilled as often as they could yield a crop, [The best uplands bore crops for five or six years and then wanted five or six years' rest, poorer lands wanted longer rests, and the worst yielded only twice in twelve years. From the increased pressure of population, crops were raised once in four or five instead of as in 1829 in six years. Bom. Gov. Sel. II. 7.] and their trees were stripped of branches and leaves for manuring the rice beds. Something more might be done by terracing hill sides, but all level spots where water drained were turned to rice lands. Much of this land was poor. But along the creek with the salt water shut out by masonry walls and earth banks, were many rich gardens yielding two crops of rice, or sugarcane and vegetables. [Bom. Gov. Sel. II. 7.] The district suffered much from the want of roads. Carts were unknown, the tracts were in many places dangerous to man and beast, and of many villages the whole produce went to market on men's heads. [Bom, Gov. Sel. II. 21.]

From the healthiness of the climate and the freedom from smallpox, the district teemed with people. Though industrious and hardworking the women and even the children sharing in the most toilsome field labour, they failed to grow grain enough for their support. Large numbers left the district in search of work. Brahmans as civil officers and clerks, and Marathas and Mhars in the police and army, received in pay and pension a sum nearly as large as the whole district revenue. Besides this, an even larger sum was brought back yearly by the crowd of labourers who, starting for Bombay and the districts round, at the beginning of the fair weather (November) came back with their savings before the burst of the rains (June). In this way without the help of manufactures the district paid for its imports of grain. But there was little margin. Inland where there was no fishing or sea trading to help, almost all the people looked half-starved and many for months had not a full meal. [Bom. Gov. Sel. II. 15, 16.] The revenue system of estimating the Government assessment in produce, and taking some of it at fixed money rates and the rest either in kind or with reference to the prices of the season, was cumbrous in the extreme. [Ditto, 20.] In a large proportion of the villages the rates were believed to be burdensome. [Ditto, 23.] Of the two chief classes of villages, peasant-held, kulargi, and rented, khoti, the peasant-held were much the fewest, not one-tenth of the whole. [Ditto, 7.] The peasant-held villages mostly along the coast and the banks of salt water creeks, though more highly assessed than the rented villages,

[In 1829, in Ratnagiri, the average acre rate in peasant-held villages was 7s. 11/8d. (Rs. 3 as. 8 P. 9), and in rented villages only 2s. 5d. (Re. 1 as. 3 p. 4), Bom. Gov. Sel. II.9.] were much richer. Vastly more capital had been sunk in them. In many cases the land had been greatly improved by digging wells, banking out the sea, and even by the toilsome plan of bringing earth from a distance to cover bare rock. [Bom. Gov. Sel. II. 9.] In these villages the arable lands were divided into a certain number of holdings, dhara. Each of these holdings, often scattered fields sometimes only one plot or even only one tree, had at some former survey been entered in the name of the representative of one of the original families. Each holding bore the charge fixed at the last survey. By inheritance, mortgage, and sale, the holdings had become greatly sub-divided, and had occasionally altogether changed hands. Of their internal management Government took no account. Each year some one of the sharers became responsible for the payment of the sum due on the entire holding, and by private arrangements recovered their rents from the other sharers and from his own tenants. The accountant kept a record of each holding under its original name, showing every year the name of the manager. If the sharers failed to choose a manager the Collector attached and managed the holding till the sharers paid any deficiency and took back the management.

The rented, 'khoti, villages, though much more numerous than the peasant-held, were far more backward. The khot was one of the worst of landlords. Claiming more right in the soil than the under-holder admitted him to have, he strove to keep the under-holder from gaining any more rights and to reduce him to be a tenant-at-will. The khot was often so deep in debt and his estate so divided among sharers, that however much he might wish it, he could do little for the good of the village. Supposed to take from the under-holders one-half, one-third, or one-fourth, he could and often did take more. There was no proper check on his estimate of the crop. He often settled it without seeing the field, and forced the under-holder to accept his estimate. Formerly, in case of a difference, it had been usual to refer the dispute to arbitrators. Now the khot was grown so powerful that this safeguard was of little use. In such a state of things it was idle for Government to lower its demand in khoti villages. The khot would as before squeeze from the under-holder as much as he could. Such a concession would be simply a boon to the khot.; it would in no way better the state of the cultivator. [Bom, Gov. Sel II, 17.]

Captain Wingate was satisfied that over a large; body of the under holders, the *khot* had no right to exercise unlimited power. Mr. Dowell (1829) had shewn that in the Ratnagiri sub-division the bulk of the land was held by permanent tenants whom the *khot* had no right to oust. The rights of the *khots* in other parts of the district were, Captain Wingate understood, much the same as in Ratnagiri. All the *khots* with whom he had talked, indirectly admitted that, without his consent, they could not take the land of a permanent tenant and give

it to some one else. [Bom. Gov. Sel. II, 14.] The rights of a khot fell far short of ownership of the soil. The members of the khots' families held much of the best land in khoti villages, but this they held as permanent cultivators not as khots. As the members of the khot's family got hold of the best land, the original holders were mostly obliged to content themselves with poor uplands, and in this their ancient rights were, to a greater or less extent, admitted. So strong was the feeling of hereditary right, that even in villages peopled entirely by tho efforts of the khot, the lapse of two or three generations would, in the people's opinion, constitute a tenant right. Any attempt on the part of a *khot* to oust a tenant with occupancy rights would be viewed as an act of glaring injustice and oppression. The rights of permanent tenants were free from taint, the exercise by tho khot of tho power of ousting permanent tenants was based on usurpation. It was true that under early British management the want of information about the class of occupancy or customary tenants had led to the bulk of them being treated as yearly tenants or shifting labourers. Since then, inquiry had, in Captain Wingate's opinion, proved that the great body of tenants had occupancy rights.

Government had power by passing an Act, if not by issuing an order, to regulate the relations of the *khot* and his tenants. Still the question remained, how far was it advisable to interfere? No change in the *khoti* system could remove the district's poverty. This was the result of the pressure of over-population on a poor soil. Still it was beyond doubt that the *khot's* unrestrained power was evil. The tenant took no care to improve his lands as he knew the khot would reap the fruit of his toils. Government did not care to grant remissions or to lower its demand as they knew their bounty would benefit no one but the khot. The eighth day, athveth, tax of unpaid labour was a burden on the people. Formerly, when only the richer soils were tilled, the tenants had leisure and the tax was light and useful. Now most tenants had to work as labourers and the tax was to them a heavy and direct loss. In any case the labour tax should be stopped. This was not enough. The power of the khot must be controlled so as to secure to all tenants, except those of common, garik, land, a limit beyond which the khot's demands might not pass. This might be secured either by abolishing the *khots*, or by defining the relations between the khots and their permanent tenants. Khots could be abolished only if it was impossible to modify or reform their claims. The claims could be limited by recording the present usage and forbidding change. But the power of the *khots* made a true statement of present usage impossible. A survey might frame a record of all the village lands, and in the ease of permanent tenants. one-half, onethird, or one-fourth of the produce might he fixed as the limit of the khot's demand. common garik, land might be managed as the khot pleased, except that no rent of more than one-half of the produce should be levied. If this mode of settlement lowered the khot's rents the Government demand should be proportionately reduced. Besides in fixing the khot's demands a survey would do good by revising assessments. The present rates both in rented, khot's, and peasantheld, kulargi, villages were oppressively high and prevented the improvement of the land. The digging of wells and the banking out of salt water still went on in peasant-held villages. But in rented villages the outlay of capital was very small. [Bom, Gov. Sel. II. 20.] Besides lowering oppressive rates and changing the Government demand from the cumbrous system of part money, part grain, and part cess payment, a survey would do good by fixing the boundaries of villages, estates, and to some extent of shares of estates. The ignorance of everything connected with landed property was a fruitful source of litigation. [Bom. Gov. Sol. II. 21.] At the same time, though useful in making reforms the survey would, from the extreme sub-division of lands, be very costly, and instead of adding to it would, from the fact that the whole arable area was under tillage and that the existing rates were very high, probably end in a reduction of the Government revenue. In an overcrowded district like Ratnagiri, where the land had been extensively sold and transferred, it would not be advisable to change existing assessments. So many years had passed since the last survey, that lowly assessed land had risen in value and the present holders who had probably paid a high price for them would be unable to bear any fresh burdens. In so rugged and minutely divided a district, it would be a work of great time, labour, and cost, to survey separately the land of every holder. The village boundaries should be laid down, and in gardens, rice plots, and the leveller dry crop lands, the limits and areas of the several holdings should be lived. But steep hill sides, worked only by the hand and of extremely small value, might be left unsurveyed. The relative values of the surveyed plots, ascertained by a classification adapted to the peculiarities of the garden, rice, and dry crop tillage, would, with a record of tenures and other village circumstances, supply materials to regulate the assessment when it was found to want, amendment. [Bom. Gov. Sel. II. 22.] In Captain Wingate's opinion, before undertaking a complete survey, an experiment should be made in some detached villages. [Bom, Gov. Sel. II, 23.]

LAND ADMINISTRATION

Survey Determined on, 1851

Mr. Townsend the Revenue Commissioner, in forwarding Captain ' Wingate's letter, expressed his opinion (10th March 1851) that the present assessment was unequal and in many cases burdensome. Though it might end in a sacrifice of revenue, it was, in his opinion, the duty of Government to make their demands lighter and more equal. The right of Government, to make a new survey and to change the rates of assessment was undoubted. He thought there was no need of an experimental survey and that the measure should include at least one sub-division. He thought, that in some cases so much was taken from the khots that they could not help being bad landlords. It must not be forgotten, he said, that the *khots* have rights as well as their tenants, and while in the case; of hereditary tenants the khot's demands should be modified and controlled and the labour tax abolished, there was a class of tenants-at-will in whose case a certain amount of manual labour was part of the rent. [Bom. Gov. Sol. II. 3.] On these papers Government decided [Letter 10,555, 8th November 1851. Bom. Gov. Sel. II. 25-27.] that a survey of Ratnagiri should be begun. In surveying gardens, rice plots, and level dry crop lands, convenient sections should be measured off and their limits fixed by boundary marks. The fields and sub-divisions of each section should be measured, classed, and assessed separately, and recorded as subordinate numbers. Except so far as was necessary to fix village boundaries, steep uplands should not be surveyed. In the course of the survey, the particular terms on which each field was held, and the length of time it had been in the hands of the present holders and their ancestors should be recorded in the survey papers. The officers appointed to settle the relations of the khot and his permanent and yearly tenants ought, in the opinion of Government, to have special powers given them under a legislative enactment. The provisions of the Act could not well be fixed till after an experimental survey had been made. They would probably include the abolition of the service tax ath veth, the absorption of all cesses into one rate, the fixing of the rents payable to the khot by permanent tenants, the declaring of the occupancies of permanent tenants and possibly also of tenants atwill transferable, and the assignment to the khot of a percentage in lieu of all his claims.

Mr. Kemball was appointed survey officer and Mr. Coles the Collector was directed to arrange for the survey of a few peasants held, *kulargi*, and rented, *khoti*, villages. In 1852 Mr. Kemball reported the results of the experimental survey. In spite of the vague powers and privileges claimed and exercised by the *khot*, Mr. Kemball was satisfied that his hereditary rights were limited to the office of village renter and manager, and did not extend to the ownership of the village land. Trustworthy information about Kunbis' rights was very hard to collect. [Bom. Gov. Sel CXXXIV. 52.] Their tenure of rice

patches was in a measure undisputed, but over the uplands, *varkas*, their rights were undefined.

Experimental Survey, 1851.

The result of this inquiry satisfied Captain Wingate that for the settlement to have a chance of success, the rents payable by cultivators must be fixed. This, in Captain Wingate's opinion, could be done without injustice to the khot. Except over the lands which they held as occupants, the rights of the khot did not go beyond collecting the rent and cesses payable by the cultivators in accordance with the village custom. The khot managed the village as an hereditary farmer, and as Government had not interfered, had levied the assessment unfettered except by the resistance of the peasants and their respect for usage. In khoti villages rice and garden lands were generally divided into separate occupancies and managed by the holders independent of the khot. In all cases the rent, not the land, was the khot's hereditary property. In mortgage deeds executed by the khot the mortgage referred to the rents and profits of the village, never to the ownership of a definite plot of land. When a khot mortgaged special pieces of land, it was as his private property, not as part of the hereditary khotship.

Under these circumstances, Captain Wingate proposed[Bom. Gov. Sel. CXXXIV. 52.53.]; (1), to improve the position of the holders of rice and garden lands by making them occupants under a fixed tenure instead of being at any time liable to an enhanced demand; (2), to grant parts of the uplands, *varkas*, as private property; and (3), to define the under-holders' liabilities, appoint village accountants, and abolish labour and other cesses. To some extent this would lessen the *khot's* power and privileges. Still as occupants they would, under a better tenure than before, continue to hold most of the best lands. The rights they would lose in lands not in their occupation were in most cases of little value. To make up for the loss of those rights and for the loss of the labour-levy and other of their customary perquisites, in addition to any lowering of the Government demand, ten per cent of the new rental should be handed over to the *khot*.

In forwarding Captain Wingate's letter, the Collector Mr. Coles (25th November 1852) stated that in his opinion the hereditary *khotship* was restricted to the revenue of the village lands and conferred no proprietary right. He approved of the proposal to declare the holders of rice and garden lands occupants, but thought that only holders of some standing and not outsiders should be so recognized. He approved of the compensation proposed by Captain Wingate and urged that an Act should be passed. [Bom. Gov. Sel. CXXXIV. 54.] The Revenue Commissioner (29th December 1852), while admitting that originally the office of *khot* may have carried with it no proprietary claims, held that the lapse of time had served to create something more than the original farming and managing rights. He thought that before they pledged themselves to consider the *khot* as simply an

hereditary farmer, Government should call on the khots to prove their claim to proprietary rights. [Bom. Gov. Sel. CXXXIV. 54.] Government agreed in the view that the office of khot did not carry with it a right to the village lands not in the khot's occupancy. They thought that by confirming the khots in the occupancy of any lands to which they could prove their title, the Revenue Commissioner's view of the case would be sufficiently provided for. The under-holders, probably with more justice than the khots, claimed a right of property in the land. Any settlement must be a compromise, and the grant in their favour of an allowance of ten per cent of the village rental was a sufficient return for any of the khot's rights and usages that the settlement did not recognize. [Bom. Gov. Sel. CXXXIV. 55.] The chief object of the survey was, by an equitable settlement, by abolishing forced labour, and by protecting them from the exaction and oppressions of the khots, to place the people of Ratnagiri on an equality with the subjects of Government in other districts, and to recover a large body of the cultivating classes from a state of thraldom. Another object was to set apart a certain portion of the village area as forest reserves. [Gov. Res. 1937, 31st May 1853, quoted in Bom. Rev. Rec. 20 of 1856, part 4,1295-1296.]

Sruvey, 1853.

A beginning of the survey settlement was shortly after made. In 1853, [These details of survey operations have been furnished by Mr. J. R. Gibson, Depy, Supt. Ratnagiri Revenue Survey, the strength of the Ratnagiri survey party was raised from two assistants and a subassistant to a Superintendent, four assistants, and two sub-assistants. The survey was begun in the villages near Ratnagiri. The boundaries of the villages were fixed by a careful survey made by the the odolite. Rice, garden lands, and uplands level enough for the plough were measured into sections or survey numbers. The rest of the village land, the rough plots sometimes tilled by the hand, were left unsurveyed. Within the survey numbers the different holdings were separately measured and classed, and the trees in garden land were counted. The measurements were made under the Southern Maratha Survey rules, but to meet the peculiarities of rice, garden, and dry crop tillage, the classification rules were modified. The villages of the Ratnagiri and Sangameshvar sub-divisions, and of the petty divisions of Saitavda and Lanja were measured and classed. No attempt was at first made to introduce new rates. In 1855, Mr. Kemball made an experimental settlement in the three Ratnagiri villages of Kolamba, Bag-agasha and Tika, at that time, from the resignation of their khots, under Government management. Inl856 Lieut., now General, Waddington, Acting Superintendent of Survey, submitted proposals for introducing rates into eight other villages. These proposals were not sanctioned. The rates had been introduced quietly enough into two of the three villages first settled. In the third, a rented, khoti, village, the settlement caused great trouble.

Survey Stopped, 1856.

The survey officers felt that the new settlement could not be successfully introduced without legislation, and the new Collector Mr.Turquand(19thFebruary 1856) urged that khots who had reclaimed villages should receive special compensation for the transfer of their limited proprietary rights to the under-holders. The Revenue Commissioner Mr. Reeves, on the other hand, held that as the khots had for many years managed their villages, only under a yearly agreement, and as Government and not the khots had the power of granting leases of waste village land, the right of the khot in land not in his own occupancy went no further than the right to manage it. At the same time the *khots* were entitled to very great consideration. They should be allowed to enjoy as much of their past privileges as was consistent with the interests of the rest of the people and of Government. He suggested that except lands appropriated by purchase, lease, or other satisfactory mode, the khot should be registered as the superior holder of all Government land in actual cultivation; and that he should engage for the whole assessment of the uplands, varkas, which, where practicable, should be surveyed, assessed, and settled in holdings of fifty acres. [Bom. Gov. Sel. CXXXIV. 66.] On these and other papers Government (23rd April 1857) decided that until the rights and privileges of the khots were more fully investigated, the attempt to introduce the new settlement should cease. The settlement of the three villages was annulled, and survey operations suspended. [Mr. Gibson.]

State of the District 1856.

A detailed report on the condition of the district in 1856 would seem to show that it had changed little since Captain Wingate's report five years before. The population, returned at 681,147 souls, was more than the district could support. Even the poorest hill-side and hill-top soils were under tillage, and bare rocks were covered with earth brought from a distance. [Collector, 614, 22nd July 1856; Bom. Rev. Rec. 20 of 1856, part 4, 1264; Besides the labourers who sought work yearly in Bombay there were 2791 emigrants, 1368 of them to other districts and 1423 to foreign parts. Government had, in 1852, [Letter 5681, 27th August 1852, in Bom. Rev. Rec, 20 of 1856, part 4, 1288.] proposed that the excess population should be drafted to Khandesh. The proposal was published throughout the district, money advances for cattle and field tools were offered, and those who were willing to go were asked to send in their names. Up to 1856 not a name had been received. The high paid labour on the railways then making in the north Konkan, and the demand for workmen in the Bombay dockyard and other establishments, combined with the love of home kept people from leaving Ratnagiri. [Bom. Rev. Rec. 20 of 1856, part 4, 1286-1289.]

General Francis Survey, 1859.

Two years later a second attempt was made to introduce the survey into Ratnagiri. Captain, now General, Francis to whom this duty was

entrusted, reported (23rd September 1859) on the khoti tenure, noticing the points which seemed to him to have stood in the way of the successful working of Captain Wingate's scheme. In Captain Francis' opinion the *khots* would not be brought to agree that all lands not in their possession should be entered in the cultivator's name. If they did agree they would probably soon be able to get the whole body of the people back into their power. The khot was generally the moneylender as well as the village manager. He supplied the people with seed grain and in some eases even with plough cattle. The land would soon pass into the khot's hands not as the superior holder, but as the occupier. Then the people would be in a worse position than ever. Captain Francis was convinced that the only practicable form of settlement must be based on an agreement with the khot as superior holder. His proposal was to settle with the khot for the revenues of the village in the gross, and to protect the under-holders who, he showed, were in much need of help, [Captain Francis Strongly represented the sufferings of the cultivators at the hands of the khots. The khots had lately been ejecting all their tenants that no occupation record might appear in the survey papers. This was in central Konkan. In Ratnagiri Mr. Crawford (1860), then Second Asst. Col., complained of the same behaviour on the part of the khots. Bom. Gov. Sel. CXXXIV. 70.] by giving them a right of occupancy, by taking from the khot the power of ousting his tenants except by order obtained on petition to the Collector, and by making it compulsory on the *khot* to grant the tenant a receipt. All holders of land, except tenants in the khots' or in peasant proprietors' lands, were to get occupancy rights. They were to pay the khot not at the survey rates but on terms agreed upon with the khot. There would thus be three forms of tenure: 1, peasant holders, dharckaris, independent of the khot, but paying the Government assessment through him; 2, occupancy tenants holding on terms agreed with the khot not liable to be ousted, and except under special circumstances not liable to a rise in rent; [The special circumstances were, (a) when the rent was below that paid in other corresponding lands; (b) when its value had risen not through any work of the tenants; (c) when the tenant held more land than he paid for. Bom, Gov, Sel. CXXXIV. 72. 3, tenants-at-will entirely dependent on the superior holder, khot, or peasant holder, dharekari, both for the possession of the land and for the terms of the rent. One important principle of the settlement was to remove the jurisdiction in rent and land suits between the khot and his tenants from the civil court to the Collector. Afterwards it was arranged that, as superior holders, the khots should take their villages on thirty years' leases, giving to all occupiers, except tenants in *khoti* holdings, a thirty years' lease of the land at rates not more than one-half in excess of the survey assessment. [Bom. Gov. Sel. CXXXIV. 73.]

Government, in approving Captain Francis' proposals, said that in attempting to reform the present system it was their object, as far as justice and sound management allowed, to adopt rather than overthrow institutions firmly rooted in the district. Three points seemed established; that Government had the right to revise and alter the rent paid by the khot; that the khot had the right to settle with Government for the whole village; and that the under-holder had a right to protection against the *khot's* over-exactions. The former settlement had stirred up the ill will of the khots by settling with the under-holders direct, treating the khot merely as an agent. The system now proposed was to settle with the khot modifying the present practice only so far as change was urgently called for. The khot was to get a lease of the village at survey rates for thirty years. In turn he was to give a thirty years' lease to all permanent occupants. The under-holder's right was to be hereditary, and under certain restrictions transferable. Land held by a tenant-at-will was not transferable without the khot's consent. Land held by an occupancy tenant was transferable on paying the khot a find, nazrana. If the occupancy holder had made improvements he should gain the advantage of them, and if the khot had made improvements he should have the power to refuse to allow the transfer. Bom. Gov. Sel. CXXXIV. 75. Captain Francis prepared a draft Act embodying the provisions of the proposed settlement. Government were of opinion that the new settlement could be introduced under the Act (Reg. XVII. of 1827) then in force. The khot had the hereditary right to manage the lands of his village, and was therefore the occupant of the village with whom Government made the settlement. That Government had the power to make changes in the terms under which the khot was allowed to collect the revenues, [As to the extent to which Government might exercise this power Mr. Chaplin (1821) said Government can unquestionably raise the rent, and perhaps to such a pitch as to absorb all profits and render the farm not worth having. Bom. Gov. Sel. CXXXI V, 83.1 was shown by his passing a yearly agreement for the management of his village. Under these circumstances the survey settlement was ordered to be begun in Ratnagiri. Before the survey of any part of Ratnagiri was completed, the provisions of the special settlement provided for khoti villages were embodied in the Bombay Survey Settlement Act (I. of 1865). [The sections embodying these provisions were Nos. 37 and 38. Section 37 declared that on introducing the survey settlement into villages held by khots, it should be competent for the Superintendent of Survey to grant the khot a lease for the full period guaranteed by the settlement. Section 38 declared that the Superintendent of survey might, at the time of a general survey, fix the demands of the *khot* on the tenants. But the limitation of demand should not confer on the tenant any right of transfer that did not before exist.]

Survey, 1866-1876.

In introducing this second survey [The details of this second survey (1865-1876) have been furnished by Mr. Gibson of toe Ratnagiri Revenue Survey. The sub-divisions surveyed were, Bankot in 1865-66, Khed in 1866-67, Saitavda petty division of Ratnagiri in 1866-67,

Dapoli in 1867-68, Ratnagiri in 1868-69, and Chiplun in 1870-72; Vengurla was afterwards (1875-76) surveyed.] the system of measuring formerly adopted by Mr. Kemball was not changed. New rules for classifying rice, garden, and hill soils were introduced. The hill lands were now divided into survey numbers and a rough survey, was made of the holdings in each number. The work was begun in Bankot. The *khots* were as much opposed to the survey as ever and kept back the work in every possible way, refusing to give the boundaries of the holdings or the names of the occupants. Still the work was pressed on. The survey of Bankot was completed in. 1865, and a thirty years' settlement introduced in 1866. The result was, on a total of £3570 4s. (Rs. 35,702), an increase of £350 10s. (Rs. 3505) in the Government demand. The details were:

Bankot Survey and Settlement, 1866.

NIA NA E	AC	CREAGE.		REN	TAL.	INCDEACE	
NAME.	Unarable.	Arable	Total	Former.	Present.	INCREASE.	
				Rs.	Rs.	Rs.	
Bankot	19,508	63,318	82,826	32,197	35,702	3505	

The average acre rates showed a fall in rice lands from 9s. 6d. to 8s. 6d. (Rs. 4 as. 12-Rs. 4 as. 4),in gardens from £1 7s. $10\frac{1}{2}$.to 19s. $10\frac{1}{2}$ d. (Rs. 13 as. 15-Rs. 9 as. 15), and in uplands, varlcas, from $7\frac{1}{2}$ d. to $5\frac{2}{2}$ d. (as.5-as. 3p. 7). Meanwhile (Novr. 1863), shortly after the survey was begun, Captain Francis was appointed Survey Commissioner of the Northern Division, and the Ratnagiri Survey was supervised by Major, now General, Waddington. Under his supervision the survey of the Khed sub-division was completed in 1860 and a thirty years' settlement introduced in 1867. The result was, on a total of £10,763 (Rs. 1,07,630), an increase of £3446 10s. (Rs. 34,465) in the Government demand. The details were:

Khed Survey and Settlement, 1867.

NAME	Å	ACREAGE,		REN	INCDEACE		
NAME.	Unarable.	Arable.	Total.	Former.	Present.	INCREASE	
				Rs.	Rs-	Rs.	
Khed	53,494	182,833	236,327	73,165	1,07,630	34,465	

The average acre rates showed a rise in rice lands from 3s. 6d. to 6s. $4\frac{1}{2}d$ (Re. 1 as. 12-Rs. 3 as. 3), in garden lands there was formerly no rate, and the present survey settlement rate was fixed at 12s. (Rs. 6), and in uplands, varlcas, there was a fall from 6d. to $5\frac{1}{4}d$ (as. 4 - as. 3 p. 6).

The next settlement was of the Saitavda petty division of Ratnagiri. In the new settlement the areas of rice and garden lands measured by Mr. Kemball in 1855-56 were used. In 1864-65, an establishment was

sent to class the soils and record all boundary changes since Mr. Kemballs survey. The work was finished in 1866 and a thirty years' settlement introduced in 1867. The results showed, on a total of £3315 10s. (Rs. 33,155), an increase of £209 (Rs. 2090) in the Government demand. The details were:

Saitavda Survey and Settlement, 1867.

NI A NA E	ACREAGE.			REN	ITAL	INCDEACE
NAME.	Unarable.	Arable.	Total.	Former.	Present.	INCREASE.
Peta				Rs.	Rs.	Rs.
Saitavda	29,098	54,093	83,191	31,065	33,155	2090

The average acre rates showed a rise in rice lands from 8s, $7\frac{1}{2}d$. to 9s. $\frac{3}{4}d$ ". (Rs. 4 as. 5-Rs. 4 as. 8 p. 6), a fall in garden lands from 10s. 3d. to 8s. 6d. (Rs. 5 as. 2 - Rs. 4 as. 4), and in uplands, varkas, from 2s. 3d. to 6d (Re. 1 as. 2 - annas 4).

In 1867, the survey of the Dapoli sub-division was finished, and a temporarily sanctioned settlement introduced in the following year. The results showed, on a total of £11,071 (Rs. 1,10,710), an increase of £400 12s. (Rs. 4006) in the Government demand. The details were:

Dapoli Survey and Settlement, 1868.

NIANAE	F	ACREAGE.		REN	INCDEACE	
NAME.	Unarable.	Unarable. Arable. Total. Former.		Present	INCREASE.	
				Rs.	Rs.	Rs.
Dapoli	67,663	182,169	249,832	1,06,704	1,10,710	4006

The average acre rates showed in rice lands a fall from 9s. 3d. to 7s. 9d. (Rs. 4 as. 10 - Rs. 3 as. 14), in garden lands a rise from 12s. 3d. to 15s. 6d. (Rs. 6 as. 2 - Rs. 7 as. 12), and in uplands, varkas, a fall from 6d. to $4\frac{1}{2}d$. (as. 4 - as. 3).

For the Ratnagiri sub-division Mr. Kemball's measurements were made use of, the boundaries of holdings were revised, and all the land classified. The work was finished at the end of 1868, and a temporarily uanctioned settlement was introduced in April and May 1869. The result showed, on a total of £5842 10s. (Rs. 58,425), a fall in the Government demand of £2120 12s. (Rs. 21,206), The details were:

Ratnagiri Survey and Settlement, 1869.

NI A NA E	A	CREAGE.		REN	TAI,.	DECDEACE	
NAME.	Unarable. Arable. Total		Total.	Former.	Present.	DECREASE.	
				Rs, Rs.		Rs.	
Ratnagiri	62,002	97,921	159,923	79,631	58,425	21,206	

The average acre rate in rice lands was the same, 7s. 4 ½d (Rs. 3

as. 11), in garden lands there was a rise from 1s. $1\frac{1}{2}d$. to 6s. $11\frac{1}{4}d$. (annas 9 - Rs. 3 as. 7 p. 6), and in uplands a fall from 6d. to $4\frac{1}{2}d$. (as. 4 - as. 3).

In 1870 the survey of Chiplun was finished, and the settlement introduced in 1871-72. In this survey the uplands, varkas, instead of being roughly measured, had each holding carefully surveyed and classified. The result of the temporarily sanctioned settlement was, on a total of £10,081 16s. (Rs. 1,00,818), a rise of £131 18s. (Rs. 1319) in the Government demand. The details were:

Chiplun Survey and Settlement, 1871.

NAME	А	CREAGE.		REN	ITAL.	INCDEACE	
NAME.	Unarable.	Arable.	Total.	Former.		INCREASE.	
Chiplun, including				Rs.	Rs.	Rs.	
Guhagar.	100,102	212,534	312,636	99,499	1,00,813	1319	

The average acre rates showed a rise in rice lands from 6s. $4\frac{1}{2}d$. to 6s. $10\frac{1}{2}d$. (Rs. 3 as. 3 - Rs. 3 as. 7), and in garden lands from 1s. $1\frac{1}{2}d$. to 6s. $11\frac{1}{4}d$. (annas. 9 - Rs. 3 as. 7 p. 6), and a fall in uplands, varkas, from 6d. to $5\frac{1}{4}d$. (as.4-as. 3 p. 6).

All this had been carried on in the face of much opposition. In 1873, matters had come to such a pass that the khots, objecting to have their demands on their tenants limited or to let the tenants' names be entered in the records, [Captain Francis, Bom. Gov. Sel. CXX-XIV. 101.] refused to manage their villages, and filed suits against the Collector and survey officers for loss caused by the survey. Not only by the khots was the settlement disliked. The regular cash payments were new to the under-holders, and though less in amount, were perhaps more irksome than the former way of realising the khot's demands. [Mr. Nairne, Bom. Gov. Sel. CXXXIV. 103.] The division, of the uplands, varkas, and wrong entries of peasants-held, dhara, land, as rented, khoti, caused much confusion. In April 1873, Mr. Havelock the Revenue Commissioner reported extreme discontent and alarm among all classes. Peasant holders as well as khots were hostile to the new settlement, and even tenants-at-will, though pleased at gaining an entry in the survey records, were universally opposed to the payment of khoti profit. The system had absolutely no friends. Mr. Havelock recommended a return to grain rentals and yearly commutations. [Bom. Gov. Sel. CXXXIV. 109.]

LAND ADMINISTRATION

Khot Commission, 1874

In consequence of this failure, Government, in 1874, appointed [Gov. Res. 4983, 16th Sept. 1874. The Commission consisted of Colonel Francis, president, Mr. A. K. Nairne, C.'S., Mr. Narayan Ganesh Sathe, and Mr. Naro Babji Gole, members, the last named gentleman representing the khots.] a commission to ascertain, by actual experiment in the field, the mode of settlement most likely to meet the views of the different parties. In their instructions to the Commission, Government decided that both the rice lands and the uplands in the hands of peasant holders, dharekaris, and reduced peasant holders, daspatkaris, dupatkaris, and panchpatkaris, should be surveyed and assessed. Government gave up the attempt to fix the precise amount that other tenants should pay the khot. Government interference must be limited to protecting them against being ousted or having their rents arbitrarily raised. To ensure this measure of protection their customary rents were to be recorded, the areas of rice fields and uplands fixed, and the rule laid down that so long as they paid they could not be ousted. The Commission were to settle to whom occupancy rights should be granted, and if granted, how far they should be transferable. As far as possible the particular plot of upland held by each tenant should be marked, and ground set apart for village grazing. The khot was to have the power to manage all lands except those in the hands of peasant holders and occupancy tenants, to dispose of lapsed land, and if he pleased, to give occupancy rights to his yearly tenants. In return for managing the village the khot was to receive a percentage payment. He was not to be reckoned a Government servant.

Government Decision, 1876

On [This and the account of the final settlement have been contributed by Mr. A. T. Crawford, C. S.] the report of the Commission, Government decided [Gov. Res. 2474, 24th April 1876.] that the differences of opinion were irreconcilable, and that no settlement could be devised which could command the general assent of both parties, *khots* and cultivators holding under them. It was decided to abandon as impracticable all attempts to arrive at a settlement by mutual consent. Government were, however, at last in possession of sufficient information on all points to enable them to lay down the principles which they finally adopted, principles which not being opposed to any existing law, Government were prepared to give better effect to by legislation, should this course seem necessary. Government held that the claims of the *khots* were in some respects, especially in regard to proprietary rights, entirely untenable. At the same time, they were of opinion that 'the method in which the former settlement [The settlement laid down in Gov. Res. 1832 of 1860,] had been carried

out, if not the principles therein adopted, had in some respects injuriously affected the legitimate interests of the khots. On the other hand, Government, while endeavouring to strengthen the title and position of the khot, as of other landholders, had never intended to do so at the expense of existing private rights subordinate to his; Government held that the entire khoti question had been somewhat complicated by a confusion between the phrases 'survey occupant' and 'occupancy tenant/ and that the only person who could be considered to have the 'right of occupancy' under the Survey Act in a khoti estate was the khot himself. His tenants might or might not be 'occupancy tenants' in the sense in which that phrase is used in India, that is have the right of occupying their land under him so long as they pay a certain fixed or customary rent. The survey officers, however, were apparently under the impression that the persons whose names they recorded as 'occupancy or permanent tenants' of khoti lands, thereby became survey occupants; and to this the khots naturally and rightly objected. Government next proceeded to recount the arguments in favour of the *khot* paying somewhat less to Government than the full survey assessment of all assessable lands in his village, namely, that the expenses of village management are borne by the khot, and that he has to bear any loss on account of assessed lands lying waste, or of failure or delay to pay their rent by the cultivators. Government next dealt with the questions arising from the relations of the khots with the different classes of cultivators holding under them. It was decided that all tenants, whatever their status, who were shewn to have rights of occupancy against the khot, must be entered in the village register of lands, with full particulars of the incidents of their tenure and of their rent. At the same time, such tenants were not to be recorded as 'survey occupants' holding from Government, but as tenants holding on certain terms from the khots. It was decided that the administration papers of the village should contain a stipulation in legal form binding the khot to observe the rights thus recorded, and declaring that his tenure of the estate depended upon his observance of them. Government then proceeded to enumerate the several classes of privileged tenants, dharekaris, daspatkaris, dupatkaris, and the like, whose tenures have been above described. Last of all, they considered the status of the customary holders of khoti land, regarding whose position the greatest difference of opinion existed, the khots contending that they were mere tenants-at-will without hereditary rights of occupancy, much more without transferable rights, liable to be ejected or to have their rents raised at the pleasure of the khots. Government were satisfied that all old tenants of khoti lands possessed customary rights of occupancy, that is of holding their lands hereditarily so long as they paid the customary rents of the village, originally not higher than half the produce of rice and one-third the produce of hill crops, varkas, and that so far from the tenants having encroached on the rights of the khots, the khots had gradually encroached on the rights of the tenants, especially by the imposition of extra cesses. It was therefore declared that all extra cesses should cease, that the customary rents of khoti land might as heretofore be taken in kind, as this was better suited to a poor improvident hand-to-mouth peasantry, but that in no case should the rents exceed the

proportions mentioned above. Existing agreements between khots and tenants, where found, were to be respected and enforced. Customary tenants were to have hereditable rights, but no right of transfer except in special cases, in which on inquiry the right should be found to exist. All old tenants who, themselves or by their predecessors in inheritance, had permanently resided as cultivators in the village twenty years prior to the passing of the Bombay Survey Act (I. of 1865), were to be recorded as occupancy tenants paying customary rents, fallow years in the case of uplands, varkas, being counted in the twenty years. All tenants of the khots' home farms, khoti khasqi, were to be regarded as tenants-at-will, and not registered. The khot was to be entitled to assistance, free of payment, in recovering from defaulters the rents recorded as due by them. To give effect to these provisions it was decided that the hill lands in the older surveyed sub-divisions which had been only roughly measured off, should be remeasured and classified in detail. A settlement in accordance with these provisions could proceed at once in those sub-divisions only in which the former settlement had not been guaranteed. In sub-divisions where a guarantee had been given, the adoption of the new settlement must be with the consent of the cultivators. But Government held that it should be the aim of the settlement officer, as far as possible, to induce both parties, the khots and the tenants, to agree to substitute the new for the old settlement in sub-divisions already settled with a guarantee. The following subsidiary points were also decided: that it was unnecessary to set apart grazing lands: that Government should concede to the khots the much-coveted right of converting khoti land into dhara; that the khots were to keep accounts of a simple character, but in a prescribed form; that if a khoti village remained under Government management for twelve years and no petition for taking it back was presented within that time, the right of re-entry was to be for ever barred; that the managing khots should be nominated in accordance with lists decided on by the coparcenary, or in the event of dispute by the Collector; that Government should concede to the khots the refusal of the right to reclaim the salt swamps, khajans; that occupancy rights were to be settled once for all, and. were not to accrue in future.

This Resolution passed, Government transferred it to the Legal Remembrancer that a Bill embodying its provisions might be drafted for the Legislative Council, and Mr. Arthur Crawford, who had been for several years an Assistant Collector and Senior Assistant Judge in the Ratnagiri district, was transferred to Ratnagiri. as Collector to carry out the new settlement. A long discussion then ensued as to the subordinate agency to be employed under Mr. Crawford, and as to the necessity for passing an act at once to legalise the proposed settlement, Mr. Crawford contending that it would be better to wait for two or three years until experience had been gained of the working of the new settlement. Sir Richard Temple took up the question immediately on assuming the Governorship of Bombay, in May 1877. On the 12th June, [Gov. Res. 3662,12th June 1877.] Mr. Crawford received definite instructions to proceed at once with the settlement on the principles above laid down, which were modified only to

the extent of a direction that the record of tenant right should include a list of tenants-at-will. At the same time, Government expressed a hope that it might be possible, as suggested by Mr. Naylor the Legal Remembrancer, that the cumbrous practice of calling on managing *khots* to pass yearly agreements should be abolished in favour of some simpler system.

Final Settlement, 1877-1879

Mr. Crawford, who was shortly after appointed ex-officio Settlement Officer with a special assistant in addition to his covenanted assistant collectors, carried out the settlement in the following manner. The survey officers were first deputed to remeasure and reclassify the hill lands wherever, in the previous survey, this work had been roughly performed. The assistant collectors were told off to groups of villages in which the survey settlement had been temporarily introduced without a guarantee, and were required to hold a review, ruzuvat, of the khots and villagers in each village, if possible at or near the village temple. No law agents, mukhtyars, were allowed to speak, both khots and villagers being well able to represent their own case. The following points were to be specially attended to: Was the tenure of the village, pure khoti, mixed khichadi, or dharekari? If khoti or mixed, khiehadi, had the khots a title deed, sanad? If so, a copy was to be recorded. A list of khot sharers, showing the interest of each co-sharer and the rotation of management, was to be made out and signed by all present. A memorandum, declaring the customary rates of rent for each kind of crop, was to be made out, and signed by the *khots* present, and by the chief or spokesmen villagers. The village-land register, botkhat, was to be taken by the assistant collector, and each man was to be called in succession before the assembled villagers, his holding read out to him, and his claim as a dharekari, a privileged, or a customary tenant, in respect of each piece of ground, was to be recorded. The khot's reply to such claim was to be recorded. In every possible case, evidence was to be taken, and a decision passed and recorded on the spot. Inquiry was to be made if there was any other dispute between khot and tenant, or between tenant and tenant, and disputes were to be summarily settled then and there Every possible effort was to be made to reconcile khots with tenants and tenants with each other. Khots were to be urged to permit good tenants of long standing to be recorded as customary tenants rather than as tenants-at-will, notwithstanding that their tenancy might not have lasted for twenty years prior to Act I. of 1865.

In this manner, in the year 1877- 78, [Gov. Res. 5580, 31st October 1878,] the status of 26,179 *khoti* tenants in 240 villages was finally settled; numerous disputes of long standing, not only between *khots* and villagers, but between villager and villager and *khots* and *khot-sharera*, were carefully inquired into and summarily decided in the face of the assembled villagers. The five survey establishments completed the resurvey of the hill lands in 127 villages, and were far advanced in 120

more. The delay in beginning the work prevented the introduction of the new settlement with crop appraisement and grain rentals into more than forty-seven villages. In the season ending 30th June 1879, the status of 20,845 *rayats* in 167 villages was settled, eighty-seven villages were completely resurveyed and seventeen were far advanced. In the season now ended, 10,761 tenants were reviewed in 105 villages, and about eighty villages have been resurveyed.

No steps were taken, in the season of 1877-78, to secure the consent of the tenants in guaranteed villages to the substitution of the new settlement in place of the old. It was thought better that they should have time to learn from their neighbours in unguaranteed villages what the new settlement was, and what were its benefits to *khoti* tenants. The people of four such guaranteed villages, of their own accord, petitioned for the new settlement. In the season of 1878-79, the guaranteed villages were thought generally to be well disposed towards the new settlement, and the *khoti* tenants were thereupon canvassed, when, in 184 out of 186 guaranteed villages, all the *khoti* tenants to the number of 12,565 separately recorded a petition asking for the new settlement. In two villages only do (1880) the tenants still hold aloof, but there is little doubt they too will soon follow their neighbours.

The new settlement in its entirety, with a crop appraisement and grain rentals, is now in force in every village hitherto surveyed, except the two guaranteed villages above mentioned, that is to say in 742 villages or more than half the gross number of *khoti* villages in the district. The small amount of friction may be judged from the fact that out of 81,753 *khoti* tenants, it has been necessary, in the past season, to adopt coercive measures only against 548 tenants scattered among 175 out of the 742 villages. In a large majority of *khoti* villages, perfect harmony has been restored between the *khot* and his tenant, while the precautions adopted in the crop appraisement rules have been found sufficient and effectual to protect the tenant from over-exactions by the *khot*. Only about five per cent of the tenants remain recorded as tenants-at-will, the *khots* having been found very liberal in consenting to register good tenants-at-will as customary tenants.

The Khot Act (I. of 1880) legalises all that has been effected as above related, and prescribes the same procedure for the future.

Survey, 1876.

When, [Contributed by Mr, Gibson of the Ratnagiri Revenue Survey.] in 1874, settlement work in *khoti* villages was brought to an end, survey operations were transferred to the peasant-held villages of the south of the district. In 1875 the survey of Vengurla was finished, and as all the villages were managed by Government, *khalsa*, a thirty years' settlement was introduced in 1876. The result was, on a total rental of £3844 18s. (Rs. 38,449), an increase in the Government demand of £107 8s. (Rs. 1074). The details were:

NAME.	AC	CREAGE.		REN	TAL.	INCREASE.	
	Unarable.	Arable.	Total.	Former,	Present.		
				Rs.	Rs.	Rs.	
Vengurla	14,033	28,120	42,153	37,375	38,449	1074	

The average acre rates showed in rice lands a fall from $5s. 10 \frac{1}{2}d.$ to 5s. 9d. (Rs. 2 as. 15-Rs. 2 as. 14), in garden lands from 16s. to 14s. 9d. (Rs. 8 - Rs. 7 as. 6), and the levy on uplands of a cess of $3\frac{3}{4}d.$ (as. 2 p. 6).

In accordance with the changes sanctioned by Government in the settlement of the rights of the *khots* and under-holders, the uplands in surveyed sub-divisions were remeasured and a settlement introduced by the Collector on the terms laid down by Government. Since November 1877, survey work has been confined to remeasuring uplands and preparing records of the new settlement made by the Collector.

Survey Results, 1855-1878

The following statement shows, in the twenty-three years ending 1877-78, a spreadin the occupied area from 389,973 to 1,004,529 acres; in the revenue due to Government a rise from £70,683 (Rs. 7,06,830) to £92,901 (Rs. 9,29,010); and in the outstandings a fall from £4938 (Rs. 49,380) in 1856 to £1622 (Rs. 16,220) in 1878. The spread in the area under tillage is probably almost entirely due to the introduction of correct measurements. The survey of each section of the district showed that while since the last survey the nominal area had remained unchanged, the actual tillage had greatly spread. The area of arable unoccupied land disclosed by the survey rose from 327 acres in 1868 to 3640 in 1872. It has again fallen to 569 in 1878. The total of occupied acres fell from 389,973 in 1856 to 353,919 in 1860, and again rose steadily to 404,948 in 1866. From this the work of remeasurement in different parts of the district quickly brought up the whole area to about 650,000 in 1869, 850,000 in 1873, and 1,000,000 in 1876. Outstanding balances, in 1856 as high as £4938 (Rs. 49,380), rose in the next three years to £5893 (Rs. 58,930). They then suddenly fell to £194 (Rs. 1940) in 1860 and continued under £1000 (Rs. 10,000) until the introduction of the new survey in 1867. Since then, after rising to £3144 (Rs.31,440) in 1872, they fell to £591 (Rs. 5910) in 1876, and again rose to £1703 (Rs. 17,030) in 1877, and £1622 (Rs. 16,220) in 1878.

Ratnagiri Occupied Area, Assessment, and Outstanding Balances, 1855-1878.

		OCCUPIE	ED RENT-	PAYING LA	AND.	
YEAR.			F	Remissions).	
TEAK.	a. Acres.	Full assess- ment.	Perma- nent.	Casual.	Total.	Balance for collection
1	2	3	4	5	6	7
		Rs.	Rs.	Rs.	Rs.	Rs.
1855-56	389,973	7,07,479	<u> </u>	647	647	7,06,832'
1856-57	372,934	7,21 <mark>,32</mark> 9		579	579	7,20,749
1857-58	368,287	7,6 <mark>1,</mark> 117		626	626	7,60,491
1858-59	366,835	8,00,150		792	792	7,99,358
1859-60	353,919	8,94,222		1607	1607	8,92,615
1860-61	362,408	7,92,245		1606	1606	7,90,639
1861-62	367,392	8,24,171		1590	1590	8,22,581
1862-63	370,565	8,51,228	toto	1753	1753	8,49,475
1863-64	364,677	10,44,225	tatt	1580	1580	10,42,645
1864-65	364,193	10,91,004		1200	1200	10,89,804
1866-66	404,948	10,01,168		4208	4208	9,96,960
1866-67	419,622	10,31,661		1725	1725	10,29,936
1867-68	662,834	8,09,501		1568	1568	8,07,933
1868-68	667,701	8,42,386		1530	1530	8,40,856
1869-70	729,312	8,50,557		3091	3091	8,47,466
1870-71	845,253	8,22,172		11,365	11,365	8.10,807
1871-72	846,950	8,41,596		1231	1231	8,40,365
1872-73	849,512	8,20,920		571	571	8,20,349
1873-74	986,823	8,59,815		748	748	8,59,067
1874 75	995,622	8,62,561		989	989	8,61,572
1875-76	1,001,072	8,74,130		7685	7,685	8,66,445
1876-77	1,003,421	9,00,106		1129	1,129	8,98,977
1877-78	1,004,529	9,29,738		732	732	9,29,006

continued.

	U	NOCCUPIED ASSE	SSED LAND.	
YEAR.	a. Acres.	Full assess-ment.	Realization from auction sale of grazing.	
1	8	9	10	
		Rs.	Rs.	
1855-56	🚣		2444	
1856-57			3061	
1857-58			1752	
1858-69			1820	
1859-60			10,967	
1860-61			5865	
1881-63	chtro	State C	6679	
1863-63	om <u>u</u> a i	ora <u>re</u> O	5557	
1863-64			5924	
1864-65			5633	
1866-66			5671	
1866-67			4467	
1867-68	327	153	4495	
1868-68	173	437	3480	
1869-70	370	1045	8660	
1870-71	422	1060	11,171	
1871-72	3640	1535	12,346	
1872-73	3398	1489	10,601	
1873-74.	3361	1681	12,256	
1874 75	3366	1766	11,696	
1875-76	818	1902	6996	
1876-77	954	2151	30,883	
1877-78	569	2004	2823	

Ratnagiri Occupied Area, Assessment, and Outstanding Balances, 1855-1878—continued.

	ALIE	ENATED L	AND.		TOTAL LAN	D.	OUT-	
YEAR.	<i>a.</i> Acres.	Full standard assess- ment.	Quit- rent.	Acres.	Assess- ment,	Collect- ions.	STAN- DING BALAN- CES.	REMARKS.
1	11	12	13	14	15	16	17	18
		Rs.	Rs.		Rs.	Rs.	Rs.	
1855- 56		85,205	3737	389,973	7,92,684	7,13,013	49,377	
1856- 57		84,910	3737	37 <mark>2,93</mark> 4	8,06,239	<mark>7</mark> ,27,547	49,650	
1857- 58		85,335	3739	368,287	8,46,452	<mark>7</mark> ,65,982	54,266	
1858- 59		85,342	3739	366,835	8,85,492	8,04,917	58,932	
1859- 60		84,655	3739	353,919	9,78,877	9,07,321	1940	
1860- 61	aĥ	84,465	3739	362,408	8,76,710	8,00,243	1825	ars
1861- 62		84,487	3739	367,392	9,08,658	8,32,999	4295	
1862- 63		84,696	3742	370,565	9,35,925	8,58,774	4169	
1863- 64		85,058	c 8780	364,677	11,29,283	10,57,349	5962	
1864- 65		86,696	11,004	364,193	11,77,700	11,06,441	9921	
1865- 66		87,376	11,094	404,948	10,88,524	10,13,725	2621	
1866- 67		89,071	11,530	119,622	11,20,732	10,45,933	8078	Survey and settlement Introduced In 77 villages of Bankot.

	ALIE	ENATED L	AND.	тс	TAL LAND).	OUT-		
YEAR.	<i>a.</i> Acres.	Full standard assess- ment.	Quit- rent.	Acres.	Assess- ment,	Collect- ions.	STAN- DING BALAN- CES.	REMARKS.	
1	11	12	13	14	15	16	17	18	
		Rs.	Rs.		Rs.	Rs.	Rs.		
1867- 68	2751	85,243	10,155	665,912	8,94,897	8,22,583	23,324	Ditto ditto in 49 villages of Saitavda and 142 of Khed.	
1868- 69	3856	85,099	10,595	661,730	9,27,923	8,54,931	14,230	Ditto ditto in 177 villages of Dapoli.	
1869- 70	5449	81,975	12,673	735,131	9,33,577	8,68,799	17,173	Ditto ditto in 95 villages of Ratnagiri.	
1870- 71	6567	83,396	13,377	852,242	9,06,628	8,35,355	14,029	Ditto ditto in 69 villages of Chiplun.	
1871- 72	6618	83,305	13,080	857,208	9,26,436	8,65,791	31,443	Ditto ditto in 35villages of Chiplum and 31 of Guhagar.	
1872- 73	4600	83,655	18,277	857,510	9,06,064	8,44,227	23,054	Ditto ditto in 73 villages of Guhagar.	
1873- 74	6917	86,631	14,028	997,101	9,48,127	8,85,350	10,407		
1874- 75	6999	85,553	14,028	1,005,987	9,49,880	8,87,296	9773		

	ALIEN	NATED LA	ND.	TC	OTAL LAND).	OUT-	
YEAR.	<i>a.</i> Acres.	Full standard assess- ment.	Quit- rent.	Acres.	Assess- ment,	Collect- ions.	STAN- DING BALAN- CES.	REMARKS.
1	11	12	13	14	15	16	17	18
		Rs.	Rs.		Rs.	Rs.	Rs.	
1875- 76	570,158	85,368	14,188	1,072,048	9,61,401	8,87,628	5912	Ditto ditto in 10 villages of Vengurla.
1876- 77	69,956	85,763	14,205	1,074,331	9,88,020	9,16,266	17,035	
1877- 78	69,967	84,871	14,178	1,075,065	10,16,713	9,46,007	16,219	

- a. As the survey is not finished these figures are estimates from returns prepared in the Collectors office.
- b. Villages, a share of whose revenue, not whose land, had been granted, were for the first time shown as alienations!
 - c Many quit-rents had formerly been shown under ordinary revenue.

Special Tenures

In addition to the regular tenures mentioned above, three [Contributed by Mr. A. T. Crawford, C.S.] special tenures have lately been brought to notice in the southern subdivisions of Malvan and Vengurla. In the disturbed times antecedent to British rule, the Savants of Vadi had either retained certain valuable garden lands in their own possession, putting in crown lessees, or from time to time as lands of all kinds, mostly however inferior lands, were abandoned by the occupants, they were registered as crown lands; or again the holdings of persona inimical to the state were seized and taken in forfeit. The whole made a by no means inconsiderable area of crown lands to which the British Government succeeded. These have been dealt with in three different ways according to the circumstances of each case.

Sheri Thikans.

First there were the 'sheri thikans' or crown lands, properly so called. They consist of rice, garden, and hill lands, which, during the time of the former government, were partly assigned to certain servants of the Vadi state, in lieu of their pay, and partly held by relatives of the chief. On the cession of the district in the year 1819, the British Government became the sole proprietors of these lands, and they were then farmed out for periods not exceeding ten years, the right of cultivating them being sold by

public auction to the highest bidder.

This system continued to the year 1842, when the Collector of Ratnagiri reported that the shortness of the term of lease operated as a bar to their improvement, and that many of the lands were annually decreasing in value. In order to induce the lessees to lay out money on the improvement of the land, the Collector proposed to appoint a committee to classify the land and to determine the assessment to be paid in future, and then to let out the lands on a permanent settlement. The Collector's proposal to classify and assess was sanctioned. [Gov. Res. 1056, 9th April 1852.] But Government declined to make a permanent settlement, and directed that the leases should be given for thirty years, and that the persons then in occupation, especially those who had expended capital in improvements, should have the first refusal of the new leases. These orders were subsequently modified in many cases, the leases being declared terminable at the introduction of the revenue survey settlement. All leases granted for thirty years expired shortly before the late survey, but from year to year were continued to the existing lessees on the former terms until the new survey settlement should take effect. In each case there was a clause by which the lessee was bound at any time to give up to Government, without compensation, all lands required for forest purposes.

In the course of the late survey of the sub-divisions of Malvan and Vengurla, all lands, including these sheri thikana or crown lands, were remeasured and classified according to the rules now in force in the Ratnagiri Survey. It was then found that the survey rates were only about one-half of the rates hitherto paid under the existing leases, and the question arose as to the mode in which Government should deal with these crown lands the leases being terminable on the introduction of a general survey.

In many of the farms, cocoanut, betelnut, and cashewnut plantations had been made at very considerable cost. Substantial houses and farm steadings had been built, both by the crown lessees and by their subtenants, most of whom had been on the ground from the beginning of the lease and had been encouraged by the crown lessees to improve their holdings and settle permanently. The further question, therefore, arose whether the sub-tenants had acquired by prescription or otherwise any rights of tenure which it behaved Government to consider and provide for.

After very full discussion Government decided to retain the *sheri thikans* strictly as crown lands, in preference *to* parting with the proprietary right for a sum equal to a certain number of years' assessment which the old lessees and many persons were ready to give if the lands should be entered in their names as survey occupants. Government also took the most liberal view of the claims of the existing lessees, derived from long occupation and considerable expenditure, and renewed the leases to them for a fresh term of thirty years on their relinquishment of all lands selected for forest reserves. As to the sub-tenants, the Collector was ordered to prepare a record of their rights in all cases where there was no dispute as to their tenure between landlord and tenant. Where there was a dispute'

the Collector might decide it, if both parties agreed to abide by his decision. In other cases he was not to interfere.

Katuban.

Secondly, there were the lands held on the katuban tenure. The word katuban in itself implies a fixed rent not liable to fluctuation. From the preamble of most of the katuban deeds it would seem that the origin of the tenure was as follows. The hereditary occupant of certain lands of a poor description would represent to the state officials that if they were let to him on a fixed rent, katuban, he would bring them under full cultivation, and he was granted the lands accordingly, on a fixed rent, on the ground of the expense to which he would be put. In other words the occupant asked for a permanent settlement, in order that he might safely invest his capital in the land and avoid being taxed for his improvements, and his request was granted. Moreover, the deed declared that the lands should be enjoyed hereditarily from father to son, that no new deed was to be expected, and that the fixed assessment would cover any new plantations of cocoa or betel palms, or any other crop that might be cultivated. At the late survey all these lands were re-measured and classified according to the rules in force in Ratnagiri, and the result showed that they were held at rates considerably below the survey assessment. Government, however, decided that the settlement had been permanent and must hold good in the future. [Gov. Res. 513, 29th January 1880.]

Gair Dasti Lands.

Thirdly, there were the gair dasti lands, or lands which, as the word imports, were waste and unassessed, gair, without, and dast, rent or assessment. The gair dasti lands consist almost entirely of hill sides, which being uncultivated at the time of the last survey under native rule, were left unassessed. They are not, like the sheri thikans, lapsed assignments of lands for service or otherwise, but still come properly under the category of crown lands. Though unassessed, they have for a great number of years been used by the dharekaris or holders of the neighbouring rice fields, forgathering grass and brushwood for ash manure. The hill side has in most cases, by some tacit or mutual agreement, been divided among the dharekaris, who have thus each held an apportioned share of what might otherwise have come to be regarded as common land. At the date of the British accession no regular revenue was derived from these lands. By degrees a system sprang up of leasing them for short periods to contractors. Persons were found cultivating in them without permission, but their occupation was not disturbed when they consented to execute an agreement to pay a certain rent. Thus, by degrees, with the increased demand for land, the whole area was leased under various agreements. Most of these leases were granted between 1853 and 1854, and declared that the lease should hold good until the new survey settlement. The leases, when no specific agreement had been entered into with individuals, were for large blocks of hill side, and were put up to auction. They were usually bought in by one of the dharekaris of the village, put forward by the whole body. This nominee collected the rent proportionately due by each occupant, and adding his own share, paid the whole to Government. He did not acquire any more land by becoming the nominal lessee. He was, in fact, merely a puppet put forward by the villagers to go through the form of executing the lease with Government, so that they might each and all be left in undisturbed possession of land acquired irregularly. In most cases, as a consequence of this harmonious arrangement, the leases, when put up to auction, realised a very small, almost a nominal rent, because no outsider dared to bid against the village community. Occasionally, but rarely, where there were two hostile factions in a village, the lease would realise a fancy price, and endless bickering was the result. Ordinarily the rent realised was nominal.

These lands also were remeasured and classified at the late survey, and as was to be expected, the survey assessment was found to be considerably in excess of the rent fixed in the lease which in every case was terminable on a new survey. Two questions then arose; 1st, Whether the lessees or the actual occupants should be registered as the holders of the lands, or whether the leases should again be put to auction? 2nd, Whether the lands should be re-let on the same rentals, or whether the survey assessment should be imposed? In view of the circumstances above related, Government determined that the actual occupant in each case should be registered as the survey occupant and pay the full survey assessment. [Gov. Res. 2918, 7th June 1880.]

Maharashtra State Gazetteers

LAND ADMINISTRATION

SECTION IV.-SEASON REPORTS.

Season Reports

The following is a summary of the chief available facts regarding the state of the district during the thirteen years ending 1878-79:

1866-67.

In 1866-67, the rainfall of 106.5 inches was plentiful and seasonable, and with a few exceptions the crops were on the whole good. Near Kharepatan over-much rain destroyed half of the rice crop. In Anjanvel and Suvarndurg, though the first sowings were washed away, the harvest was fair. Public health was good, though in some parts cholera, fever, and cattle-disease prevailed to a slight extent. The land revenue for collection rose from £101,479 to £104 634 (Rs. 10,14,790 - Rs. 10,46,340), £172 (Rs. 1720) were remitted, and £808 (Rs. 8080) left outstanding. Rice rupee prices fell from fifteen to twenty-two pounds, and *nachni*, the food of the lower classes, from twenty-six to forty pounds.

1867-68.

In 1867-68, the rainfall of 92.5 inches was abundant, and the season favourable. Public health was good. The land revenue for collection fell from £104,631 to £87,562 (Rs. 10,46,340 -Rs. 8,75,620), £157 (Rs. 1570) were remitted, and £2331 (Rs. 23,310) left outstanding. Rice rupee prices rose from twenty-two to eighteen pounds, and *nachni* fell from forty to forty-three pounds.

1868-69.

In 1868-69, the rainfall was 88.32 inches. The monsoon began favourably, but later in the season the rainfall was partial and insufficient. On the whole, the season was scarcely an average one. With few exceptions public health was good. Cattle disease appeared in some places, but the mortality was not great. The land revenue for collection rose from £87,562 to £91,530 (Rs. 8,75,620 -Rs. 9,15,300), £150 (Rs. 1500) were remitted, and £1423 (Rs. 14,230) left outstanding. Rice rupee prices fell from eighteen to twenty pounds, and *nachni* rose from forty-three to twenty-eight pounds.

1869-70.

In 1869-70, the rainfall of 101.43 inches was short in the beginning, but plentiful in the latter part of the season. With a few exceptions the crops yielded well. Public health was on the whole good, and there was no great mortality among the cattle. The land revenue for collection rose from £91,530 to £93,406 (Rs. 9,15,300-Rs. 9,34,060); £309 (Rs. 3090) were remitted, £227 of them on account of the introduction of the survey, and £1717 (Rs. 17,170) left outstanding. Rice rupee prices fell from twenty to twenty-three

pounds, and *nachni* from twenty-eight to forty pounds. 1870-71.

In 1870-71, though not very seasonable, the rainfall of 93.37 inches was sufficient. Though small-pox, diarrhoea, dysentery, fever, and cattle-disease prevailed to a slight extent, public health was on the whole good. The land revenue for collection fell from £93,406 to £89,650 (Rs. 9,34,060 - Rs. 8,96,500), £1136 (Rs. 11,360) were remitted, £1074 of them on account of the introduction of the survey, and £1217 (Rs. 12,170) left outstanding Bice rupee prices rose from twenty-three to twenty-one pounds, and *nachni* from forty to thirty-nine pounds.

1871-72.

In 1871-72, the rainfall was 73.80 inches, The rain set in very early, but till August the fall was insufficient, and rice did not yield a full harvest. On the whole the other crops yielded well, and the season was not unfavourable. Dysentery, small-pox, and cholera prevailed to a slight extent in some sub-divisions; and there was also slight disease among cattle. The land revenue for collection rose from £89,650 to £92,499 (Rs. 8,96,500 - Rs. 9,24,990), £1177 (Rs. 11,770) were remitted, £1052 of them on account of the introduction, of the survey, and £3158 (Rs. 31,580) left outstanding. Rice rupee prices rose from twenty-one to twenty pounds, and *nachni* from thirty-nine to twenty-seven pounds.

1872-73.

In 1872-73, the rainfall of 84.12 inches was seasonable, and the harvest fair. Public health was on the whole good, though cholera, small-pox, and dysentery prevailed to a slight extent. In Mandan-gad, during a temporary scarcity of grain before harvest, fifty persons died from cholera, weakness, and want. Many cattle also died from weakness, and from a disease said to have been caused *by* the sudden and very heavy burst of the rains. The land revenue for collect ton fell from £92,499 to £91,422 (Rs. 9,24,990-Rs. 9,1.4,220), £57 (Rs. 570) were remitted, and £2515 (Rs. 25,150) left outstanding. Rice rupee prices fell from twenty to thirty-two pounds, and *nachni* from twenty-seven to thirty-seven pounds.

1873-74.

In 1873-74, the rainfall of 83.64 inches, at first free and well timed, was later on scanty with long stretches of dry weather. The result was a harvest rather below the average. Except in Devgad, Malvan, Sangameshvar, and Khed, fever, small pox, dysentery, and cattle-disease prevailed to a slight extent. The land revenue for collection fell from £91,422 to £88,997 (Rs. 9,14,220-Rs. 8,89,970), £75 (Rs. 750) were remitted, and £1365 (Rs. 13,650) left outstanding. Rice rupee prices rose from thirty-two to twenty-seven pounds, and *nachni* fell from thirty-seven to fifty pounds.

In 1874-75, the rainfall was 121.60 inches. In June, July, and August, the fall was on the whole favourable, but in September a heavy downpour did great harm to the early crops. The late crops suffered from want of rain in October, and in some places from insects. Except in Dapoli, Chiplun, and Sangameshvar, fever, dysentery, small-pox, and cattle-disease prevailed over most of the district. The land revenue for collection rose from £88,997 to £89,707 (Rs. 8,89,970-Rs. 8,97,070), £99 (Rs. 990) were remitted, and £653 (Rs. 6530) left outstanding. Rice rupee prices rose from twenty-seven to twenty-five pounds, and *nachni* from fifty to forty-five pounds.

1875-76.

In 1875-76, the rainfall of 136.48 inches was unseasonable and unequal, very heavy at one time and scanty at another. The failure of crops was, in rice-fields, estimated at from $\frac{1}{4}$ to $\frac{3}{8}$, and in uplands at from $\frac{1}{8}$ to $\frac{1}{2}$ Public health was bad. Except in Sangameshvar, cholera prevailed everywhere and carried off 762 persons. Fever was also common in Dapoli, Devgad, Malvan, and Rajapur. Cattle disease broke out all over the district causing the loss of 1625 head of cattle. The land revenue for collection fell from £89,707 to £89,383 (Rs. 8,97,070-Rs. 8,93,830), £769 (Rs. 7690) were remitted, £706 of them on account of the introduction of the survey; and £592 (Rs. 5920) left outstanding. Rice rupee prices rose from twenty-five to twenty-three pounds, and *nachni* from forty-five to thirty-three pounds.

1876-77.

In 1876-77, the rainfall of 68.25 inches was scanty, and the complete failure of the October rains seriouely injured the late *nagli* and *harik*, and to some extent the rice. The loss in *nagli* and *vari* was set down at $^{3}4$ and in rice at $^{3}8$. *Harik* was a complete failure. This failure caused distress amongst the poorest classes for whom a few relief works were opened. Though public health was on the whole good, dysentery prevailed in Malvan, Ratnagiri, Rajapur and Chiplun, and small-pox in all parts of the district but Rajapur. Cattle disease was fatal in 1154 cases. The land revenue for collection rose from £89,383 to £90,882 (Rs. 8,93,830 - Rs. 9,08,820), £112 (Rs. 1120) were remitted, and £1706 (Rs. 17,060) left outstanding. Rice rupee prices rose from twenty-three to seventeen, and *nachni* from thirty-three to twenty-four pounds.

1877-78.

In 1877-78, the rainfall of 89.71 inches, though fitful and uneven, was on the whole favourable; and despite blight and. insects, the outturn in rice and *nagli* was good. Up to the end of July cholera and dysentery were general. Cattle disease of one kind or other also prevailed in most sub-divisions and carried off 985 head of cattle. The land revenue for collection rose from £90,882 to £93,772 (Rs. 9,08,820- Rs. 9,37,720), £73 (Rs. 730) were remitted, and £1112

(Rs. 11,120) left outstanding. Rice rupee prices remained the same, seventeen pounds, while *nachni* fell from twenty-four to twenty-five pounds.

1878-79.

In 1878-79, the rainfall of 165.66 inches was the highest on record. The season was on the whole favourable, rice especially yielding a good outturn. The land revenue for collection fell from £93,772 to £93,357 (Rs. 9,37,720-Rs. 9,33,570), £78 (Rs. 780) were remitted, and £1092 (Rs. 10,920) left outstanding. Rice rupee prices fell from seventeen to twenty-three pounds, and *nachni* from twenty-five to twenty-eight pounds.



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1756-1880.

UP [Centributed by Mr. W. Wedderburn, C.S., District Judge, Ratnagiri. to the year 1812, except the fort and factory of Bankot and nine surrounding villages handed over by the Peshwa in 1756, the British Government had no territory south of the river Apta. The Resident of Bankot, who was also the commandant of the garrison, did not at first enjoy extensive judicial powers. He could only expel persons of a suspicious character under severe penalties, and all offenders were sent for examination and trial before His Majesty's Justices in Bombay. This state of things lasted till, in 1803, the civil and criminal jurisdiction of the Judge and Magistrate of Salsette was extended to Bankot, the court adjourning there for twenty days in each year. In 1811 the Bankot Resident was invested with power to decide civil cases of not more than £10 (Rs. 100), an appeal lying against his decision to the Circuit Judge at Salsette. He was at the same time placed in police charge of the district, and persons committed or held to bail were remanded to Thana to take their trial there. In 1812, when Malvan and the surrounding districts were ceded by Kolhapur, a Resident was appointed with jurisdiction to try civil suits of not more than £50 (Rs. 500), an appeal lying, as in the case of 'Bankot decisions, to Salsette. Owing to the distance of Malvan from Salsette the Resident was, in 1814, invested with increased powers, both civil and criminal, and made to some extent independent of Salsette authority. In 1815 the jurisdiction of both the Residents was further extended. Their decisions in suits above £40 (Rs. 400) were subject to an appeal to the Governor in Council, in the separate department of the chief court of justice, Sadar Adalat. Offenders were no longer sent to Thana for trial. The Circuit Judge went to Bankot and Malvan to deliver the jails twice a year.

1819.

This arrangement continued till 1819, when the whole of the present Ratnagiri district passed into the hands of the English. In that year the two Residencies were abolished, and the southern Konkan was formed into a separate collectorate with Bankot as its head-quarters. In 1820 Ratnagiri was chosen as the most central and convenient place for the civil station of the district. The powers of Magistrate were modified and transferred from the Judge to the Collector, and the Judge constituted the Criminal, Judge of the district with charge of the head-quarter police. The judicial machinery consisted of a Judge, a registrar, an assistant registrar, and two native commissioners. In the same year two more native commissioners were added. In 1827, when the territorial limits of the district were rearranged, the courts of civil and criminal jurisdiction were constituted anew. The staff of native commissioners was increased and the offices of registrar and assistant registrar abolished, and that of assistant

judge created in their place. In 1830, when three of its northern subdivisions were placed under the direct control of the Thana Judge, Ratnagiri was, for purposes of civil and criminal justice, reduced to a detached station of the Thana district, with a senior assistant judge and sessions judge. Ratnagiri remained a detached station under Thana till 1869.

In 1836, the designation of native commissioner was altered to *munsif* and *sadar amin*. In 1838, the oldest year for which detailed statistics are available, there were seven courts and 2805 decisions. Twelve years later (1850) there were six courts and 4303 decisions. In 1851, owing to press of work, a Joint Judge was stationed at Ratnagiri for one year. In 1860 there were six courts and 5580 decisions. From 1866 to 1869 a Joint Judge was again appointed, and in 1869 Ratnagiri was made a distinct district, and a Judge and assistant judge permanently stationed there. The staff of judicial functionaries was increased, and in 1870 there were in all nine judges and 6375 decisions. In 1872 an extra assistant judge was appointed for a year, and in 1875 an additional sub-judge was stationed at Dapoli. In 1879 the sub-judge's court at Sangameshvar was removed to Devrukh.

Judicial Staff, 1880

At present there are in all ten judges in the district. Of these the District Judge is the chief, with original civil jurisdiction over the whole of the district, and power to hear appeals against the decisions of subordinate courts. The assistant judge tries original cases below £1000 (Rs. 10,000), and such appeal cases below £500 (Rs. 5000)as are referred to him by the District Judge. The first class subordinate judge at Ratnagiri, in addition to his ordinary jurisdiction, exercises special jurisdiction over the whole district in respect of original civil suits of more than £500 (Rs. 5000) in value. The other sub-judges are stationed at the chief sub-divisional towns of Dapoli, Chiplun, Devrukh, Rajapur, Devgad, Malvan, and Vengurla. The ordinary jurisdiction of the Ratnagiri sub-judge extends over the greater part of the Ratnagiri sub-division; that of the Dapoli sub-judge over the Dapoli sub-division and some villages of the Khed sub-division; that of the Chiplun sub-judge over the greater part of the Chiplun subdivision and some villages of the Khed sub-division; that of the Devrukh sub-judge over the greater part of the Sangameshvar subdivision and some villages of the Chiplun sub-division; that of the Rajapur sub-judge over the Rajapur sub-division and some villages of the Sangameshvar sub-division; that of the Devgad sub-judge over the Devgad Bub-division and some villages of the Malvan sub-division; that of the Malvan sub-judge over the greater part of the Malvan subdivision; and that of the Vengurla sub-judge over the Vengurla subdivision and some villages of the Malvan sub-division.

Civil Statistics

The average distance from their six furthest villages, of the District and assistant district judges' courts, and of the first class sub-judge's court at Ratnagiri as regards its special jurisdiction, is seventy-eight miles. As regards the ordinary jurisdiction of the Ratnagiri sub-judge, the average distance is nineteen miles; that of the Dapoli sub-judge 31% miles; that of Chiplun 22% miles; that of Devrukh $30^{5}/6$ miles; that of Rajapur 30% miles; that of Devgad 34% miles; that of Malvan, thirteen miles; and that of Vengurla 12% miles.

Working of Courts.

At first the working of the courts was far from satisfactory. The decisions, especially in cases where the cause of action arose before their institution, were unduly favourable to the creditors. The long distances the people had to come was a great evil. Money was wanted to take a man from his home to the court, and as ready cash was most difficult to raise, men were ruined from no fault but poverty. Exparte decrees were a great evil. Intriguing suitors managed to have the summons served so late that the defendant could not be in time and so lost his case. [Bom. Rev. Rec. 121 of 1825, 88.]

Partly from the litigious character of the people and partly from the minute sub-divisions of Khot estates, and until lately their uncertain relations to Government and the subordinate land-holders, civil suits in Ratnagiri have always been specially numerous and troublesome. [In 1825, Mr. Dunlop noticed that the people seemed fond of going to law, and that the number of miscellaneous petitions was very much greater than in other districts. Bom. Rev. Rec, 121 of 1825, 58.]

Ratnagiri Ex-parte Decrees, 1870-1880.

YEAR.	Suits.	Decreed Ex-parte.	Percentage.
1870	6375	3441	53.97
1871	6834	3558	52.06
1872	6964	3876	55.65
1873	7290	4206	57.69
1874	7282	3891	53.44
1875	7502	4029	53.70
1876	7601	4123	54.24
1877	6918	3582	51.77
1878	7331	3376	46.05
Total	64,097	34,082	53.17

The average number of cases decided during the nine years ending 1878 was 7121. During the first five years, the total rose from 6375 in 1870 to 7290 in 1873, with a slight fall in 1874. It then again rose to 7601 in 1876, and again fell to 6918 in 1877. In 1878 it rose to 7331. Of the total number of cases decided during the nine years, 53.17 per cent have, on an average, as shown in the margin, been given against the defendant in his absence. The proportion of cases decided in this way has varied little except in 1873 when it rose to 57.69 and in 1878

when it fell to 46.05. Of contested cases only 1939 per cent have, during this period of nine years, been on an average decided for the defendant. The percentage of such cases decided in favour of the defendant fell from 22 in 1870 to 2103 in 1878. In 230 or 313 per cent of the whole number of suits decided in 1878, the decree was executed by putting the plaintiff in possession of the immovable property claimed. The number of cases of this kind fell from 401 out of 6375 in 1870 to 197 out of 7290 in 1873, and then during the next five years rose to 230 out of 7331 in 1878. In 51.30 per cent of the decisions passed in 1878, decrees for money due have been executed by the attachment or sale of property. Of these 9.48 per cent have been by the sale of movable and 41.82 per cent by the sale of immovable property. Compared with 1870, the 1878 returns of attachments or sales of movable and immovable property show a rise from 400 to 695 in the former, and from 1845 to 3066 in the latter.

Debtors.

Compared with 1870, the number of decrees executed by the arrest of debtors during the nine years has considerably fallen, the total for 1870 being 389 against 70 in 1878. As will be seen from the following table, the number of civil prisoners has varied little during the nine years, the total in 1870 being 49 against 41 in 1878.

				R	RELEASES.		
YEAR.	PRISONERS	DAYS.	By satisfying the decree.	At creditor's request.	No subsistence allowance.	Disclosure of property.	Time expiry.
1870	49	23	4	10	33	2	
1871	64	38	3	8	48	4	1
1872	40	22	1	2	29	8	
1873	55	25	2	6	41	6	
1874	56	39	4	9	37	4	2
1875	63	28	1	5	50	5	1 a
1876	52	31	2	3	43		4
1877	53	19	4	9	37		3
1878	41	27		4	34		3

(a) One was released on account of the decree being reversed in appeal.

Of the forty-one prisoners in 1878, thirty-six were Hindus and five Musalmans.

The following statement shows in tabular form the working of the district civil courts during the nine years ending 1878:

Ratnagiri Civil Courts, 1870 -1878.

	Suits			UNCONTESTED.								
YEAR.	disposed of.	Average value.		_		Average value.		Decreed ex- parte.	Dismissed ex-parte.	Decreed on confession.	Otherwise disposed of.	Total.
		£	s.									
1870	6375	7	7	3441	10	424	986	4861a				
1871	6834	6	18	3558	30	451	1002	5041 <i>b</i>				
1872	6964	7	17	3876	19	424	997	5316				
1873	7290	7	4	4206	51	407	971	5635				
1874	7282	6	7	3891	125	386	1027	5429				
1875	7502	6	7	4029	169	353	1101	5652				
1876	7601	6	6	4123	279	346	1162	5910				
1877	6918	6	8	3582	253	310	929	5074				
1878	7331	6	17	3376	218	420	1121	5135				

continued..

		l										
				C	ONTES	TED		EXECUTION OF DECREES.				
	Suits	Suits Ave		Judg-	Judg-			A was a b	Decree holder put in	Attachment or sale of property		
YEAR.	dispos- ed of.		ge lue.	ment for Plaintiff.	ment for Defen- dant.	Mix- ed.	Total.	Arrest of debtor.	of ssion of		Mov- able.	
		£	s.									
1870	6375	7	7	991	330	192	1513	389	401	1845	400	
1871	6834	6	18	1048	449	293	1790	325	323	2048	491	
1872	6964	7	17	1067	310	271	1648	264	327	1898	418	
1873	7290	7	4	1035	267	353	1655	198	197	3211	635	
1874	7282	6	7	1108	332	413	1853	193	163	3029	588	
1875	7502	6	7	1164	367	319	1850	159	224	3553	805	
1876	7601	6	6	1040	254	397	1691	152	199	4238	937	
1877	6918	6	8	1034	366	444	1844	93	180	3369	742	
1878	7331	6	17	1280	462	454	2196	70	230	3066	695	

(a) One referred to arbitrators. (b) Three referred to arbitrators.

Arbitration Court.

In August 1876, an association was formed at Ratnagiri for the purpose of settling by arbitration, lavad, debt and other civil disputes. Though the association is not yet formally dissolved, the court has, since November 1877, been virtually closed for want of work. The members about forty-eight in number are merchants, bankers, Government pensioners, pleaders, and newspaper editors. The business was managed by a committee helped by a secretary. Three of the members attended in turn to dispose of business. Before a case was heard, the parties stated in writing that they would be bound by the court's award. Pleaders, if the parties wished, were allowed to appear. The award was passed according to the opinion of the sitting members or of a majority of them, and unless the parties applied for a review, the award was final. Unless they were filed in the civil courts, these arbitration awards had no legal force. The members received no pay. To meet the expenses, except in pauper suits, an institution fee of one-fourth or one-sixth of the proper court fee was levied according as the suits were below or above £5 (Rs. 50) in value. In references from the civil courts, one-eighth of the court fee or 1s. (8 annas) was levied for each sitting. If the defendant absented himself, the whole fees, or in case of amicable settlement, half the fees, were refunded. During the fifteen months of the court's existence (21st August 1876 to 23rd November 1877), of fifty-six suits filed, twenty-four were decided, twenty-four withdrawn or compromised, and eight dismissed.

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Registration

There is registration enough to employ ten sub-registrars, eight of whom are special, and two, head clerks to the Sangameshvar mamlatdar and the Guhagar mahalkari, belong to the ex-officio class of sub-registrars. The special sub-registrars are distributed one at each of the sub-divisional head-quarters. In addition to the supervision exercised by the Collector who is the District Registrar, a special scrutiny is, under the control of the Inspector General of Registration and Stamps, carried on by the Inspector of Registration for the third division of the Presidency, comprising the districts of Poona, Satara, Sholapur, Ratnagiri, and Kolaba. According to the registration report for 1877-78, the registration receipts for that year amounted to £1030 12s. 3d. (Rs. 10,306-2-0), and the charges to £776 13s. 3d. (Rs. 7766-10-0), leaving a balance of £253 19s. (Rs. 2539-8-0). Of 3327, the total number of registrations, twelve were wills, one was an authority to adopt, and twenty-six were documents affecting movable and 3288 affecting immovable property. Of these last, 1995 were mortgages, 955 deeds of sale, ten deeds of gift,217 leases, and 111 miscellaneous. The registered value of the movable property was £592 8s. 4d. (Rs. 5924-2-8), and of the immovable property £111,480 7s. 3d. (Rs. 11,14,803-10-0), making a total of £112,072 15s. 7d. (Rs. 11,20,727-12-8).

As the long-pending *khot* disputes are now settled, it is likely that with increased transfers of land, the operations of the Registration department will become more important.

Criminal Justice

Staff, 1880.

At present (1880) twenty-five officers share the administration criminal justice. Of these, one is the District Magistrate, four are magistrates of the first class, and twenty of the second and third classes. Of the former three are covenanted European civilians and one is a native. Except the District Magistrate, who has a general supervision over the whole district, each first class magistrate has an average charge of 1263 square miles and a population of 339,712 souls. In the year 1878, the District Magistrate decided two original and three appeal cases; and the four first class magistrates, 120 original and ninety-three appeal cases. As Collector and assistant collectors, the magistrates have revenue charge of the parts of the district in which they exercise magisterial powers, and the huzur deputy collector has charge of the treasury department of the Collector's office. Of subordinate magistrates of the second and third classes there are twenty, all of them natives with an average charge of 189 square miles and a population of 50,956 souls. In 1878, they decided 543 original criminal cases. Besides their magisterial duties, these officers exercise revenue powers as mamlatdars, mahalkaris, or the head-clerks of mamlatdars. Besides these, there are 1349 police patils receiving in surveyed villages an average yearly allowance of £1 5s. 3d. (Rs. 12-10-2), and entrusted with the powers contemplated by the Bombay Village Police Act (Act No. VIII. of 1867). Of the whole number, twelve, under section 15 of the Act, can in certain cases fine up to 10s. (Rs. 5) and imprison for forty-eight hours. The others, under section 14, cannot fine and can imprison for only twenty-four

Village Police

There is no regular village police system. One of the leading villagers is generally chosen police *pdtil* for life or for a term of years, and the Mhars help him, acting as watchmen. [Further details Have been given above, p. 140.] In surveyed villages the police *patil* is paid from 8s. to £4 8s. (Rs. 4 - Rs. 44) a year, in unsurveyed villages he is unpaid.

Offences, 1874-1878.

From the table given below, it will be seen that during the five years ending 1878, 2426 offences, or one offence to every 420 of the population, were on an average committed. Of these there were on an average five murders and attempts to commit murder; two culpable homicides; twelve cases of grievous hurt and hurt by dangerous weapons; seven cases of dacoity and robbery; and 2396 or 98.76 per cent minor offences.

District Police

At the beginning of British rule (1820), Ratnagiri villages, rude clusters of thatched mud huts without the shelter of village walls, were subject to night attacks of Mangs, Ramoshis, and other Deccan gang robbers. The people were most weak and spiritless, never offering any combined resistance. In so rugged a country, without the help of the villagers, it was most difficult for the police to capture the robbers who generally made good their escape. [Mr. H. P. Pelly Collector, Bom, Rev. Rec, 16 of 1821, 334-336.]

The rugged and broken character of the country, its numerous hills, rivers, and streams are the chief special difficulties with which the Ratnagiri police have to contend. In the north, Vanjaris and Katkaris occasionally commit petty thefts, but as a rule the district is free from these and other wandering tribes. Among the better classes, abetting petty crimes, making groundless complaints, giving false evidence, and bribery and forgery are the most common forms of crime. Though very lawabiding, the people are most litigious, the smallest differences in matters of right or custom resulting in a series of legal proceedings. The first phase of a dispute about immovable property is invariably an accusation of criminal trespass, or mischief in removing a wall or hedge, or theft in taking the produce of a disputed field or tree. The decision in such cases generally serves as a standing ground or evidence in a civil suit that follows. [Mr. A. T. Crawford Collector, Police Report, 1878.] Agrarian offences are rare. The khots, who are also the moneylenders, are sometimes at the instigation of the villagers waylaid and murdered, and their houses and haystacks set on fire. But this does not often happen. [Such a case of dacoity occurred on the night of the 27th March 1874, at the village of Harkol in Devgad. The house of one Mahadaji khot was attacked by some forty men armed with sticks. Property worth £130 (Rs. 1300) was taken and the khot severely beaten. The offenders were not discovered. It seems that the robbery was committed by some strangers with the villagers' help. Revenge seems to have been the chief motive. Only the day before, the property of three of the villagers had, at the *khot's* instigation, been sold under a decree of the court.]

Strength, 1878.

In 1878 the total strength of the district or regular police force was 743. Of these, under the District Superintendent, two were subordinate officers, 121 inferior subordinate officers, and 619 foot constables.

Cost.

The cost of maintaining this force was, for the Superintendent a total yearly salary of £840 (Rs. 8400); for the two subordinate officers on yearly salaries of not less than £120 (Rs. 1200), and the 121 inferior subordinate officers on yearly salaries of less than £120 (Rs. 1200), a total yearly cost of £3060 8s. (Rs. 30,604); and for the 619 constables a sum of £5907 (Rs. 59,070). Besides their pay, a total yearly charge of £444 (Rs. 4440) was allowed for the horses and travelling expenses of the superior officers; £206 8s. (Rs. 2064) for yearly pay and travelling allowance of their establishments; and £926 (Rs. 9260) a year for contingencies and other expenses, raising the total yearly charges to £11,4583 16s. (Rs. 1,13,838). On an area of 3789 square miles and a population of 1,019,136 souls, these figures give one man for every 5.1 square miles and 1372 souls. The cost of the force is £3 0s. 1d (Rs. 30-0-8) the square mile, or $2\frac{1}{2}d$. ($1\frac{1}{3}$ annas) a head of the population.

Disposal.

In 1878 of the total strength of 742, exclusive of the Superintendent, nine, two of them officers and seven constables, were employed as guards at district or subsidiary jails; 128, sixteen of them officers and 112 constables, were engaged as guards over treasuries, lock-ups, or as escorts to prisoners and treasure; 561, 100 of them officers and 461 constables, were engaged on other duties, and forty-four, five of them officers and thirty-nine constables, were stationed in towns and municipalities or employed on harbour duty. Of the whole number, exclusive of the Superintendent, 360 were provided with fire arms; thirty-two with swords or with swords and batons; and 350 with batons only; 366, seventy-six of them officers and 290 constables, could read and write; and 145, six of them officers and 139 constables, were under instruction.

Race, 1878.

Except the European Superintendent, all the members of the police force were natives of India. Of these, ten officers and twelve constables were Brahmans; fifty-two officers and 331 constables were Marathas including Savants; and forty-three officers and 214 constables were Hindus of other castes, including Vanis, Bhandaris, Gabits, and Mhars; one, the Superintendent, and five constables were Christians; and fourteen officers and sixty-one constables were Musalmans.

Working.

In 1878, of twenty-four persons accused of heinous crimes, fourteen or 58.33 per cent were convicted. Of 2717, the total number of persons accused of crimes of all sorts, 1104 or 40.63 per cent were' convicted. In the matter of the recovery of stolen property, of £2659 16s. (Rs. 26,598) alleged to have been stolen, £1583 4s. (Rs. 15,832) or 59.33 per cent of the whole amount were recovered.

Crime, 1874-1878.

The following table gives the chief crime and police details for the five years ending 1878:

Ratnagiri Crime and Police, 1874-1378.

	OFFENCES AND CONVICTIONS.											
YEAR.	М	urder an	d Attempt to	Murder.	Culpable Homicide.							
	Cases.	Arrests.	Convictions.	Percentage.	Cases.	Arrests.	Convictions.	Percentage.				
1874	5	13	6	46.15	1	1	1	100				
1875	7	8	5	62.50	1	1						
1876	4	4	1	25.00	3	5	4	80				
1877	3	6			4	5	4	80				
1878	6	8	5	62.50	1	1	1	100				
Total	25	39	17	43.58	10	13	10	76.9				

continued..

		OFF <mark>ENCES AND CONVIC</mark> TIONS.											
YEAR.		Gr	rievous Hurt.		Dacoities and Robberies.								
	Cases.	Arrests.	Convictions.	Percentage.	Cases.	Arrests.	Convictions.	Percentage.					
1874	6	7	4	57.14	4	2	2	100					
1875	17	20	14	70.00	9	6	5	83.33					
1876	15	18	8	44.44	3	1	1	100					
1877	16	11	3	27.27	10	11	5	45.45					
1878	6 10		3	30.00	9	5	5	100					
Total			32	48.4	35	25	18	72					

		OFFENC	CES AND	CONV	CTIONS	S—CON7	INUED.			Р	ROPE	RTY	′ .
YEAR.		Other O	ffences.			Tot	tal.				Dogov		
	Cases.	Arrests.	Convic- tions.	Percen- tage.	Cases.	Arrests.	Convic- tions.	Percen- tage.	Stole	n.	Recov red		Percen- tage.
									£	s.	£	s.	
1874	1755	3257	854	26.22	1771	3280	867	26.43	697	8	410	6	58.83
1875	2237	2490	944	37.91	2271	2525	968	38.33	1069	6	761	10	71.21
1876	1968	2384	1128	47.31	1993	2412	1142	47.34	1643	18	1088	6	66.20
1877	2448	2724	1175	43.13	2496	2757	1187	43.05	3090	16	1577	14	51.04
1878	3576	2693	1090	40.48	3598	2717	1104	40.63	2659	1	1583	4	59.33
Total	11,984	13,548	5091	37.5	12,129	13,691	5268	38.4	9161	4	5421	0	59.1

YEAR.	Mur- der.	Homi- cide.	Robb- ery includ- ing cattle tneft.	Arson.	Miscella- neous.	Total.	Arrests.	Convi- ctions.	Percen- tage.	Prop rty stole		Prope recov ed	er-	Percen- tage.
										£	s.	£	s.	
1845	1	1	50	18	1623	1693	5172	1612	50.81	988	12	74	4	7.01
1846	6		71	11	1766	1854	3150	1512	48.00	2130	2	215	10	10.51
1847	6		64	6	1751	1827	3518	1912	54.34	1238	6	241	12	19.51
1848	9	3	64	6	1883	1965	3295	1634	49.59	1954	16	716	2	36.69
1849	1	1	95	5	1575	1677	3167	1616	51.02	3592	4	1730	4	48.13
Total	23	5	344	46	8528	9016	16,302	8296	50.82	9904	0	2977	12	30.06

Ratnagiri Crime, 1845-1849. Crime.

1845-1849, and 1874-1879.

A comparison of the two statements shows for the whole amount of crime a comparative decrease from the yearly average of 1803 in the five years ending 1849, or on the basis of the 1846 census one crime to every 347 inhabitants, to a yearly average of 2426 in the five years ending 1878, or on the basis of the 1872 census one crime to every 420 inhabitants. The largeness of the head Miscellaneous, in the first period, was due to a number of cases of treason and rebellion, arising out of the disturbances in Kolhapur and Savantvadi. Murder cases are few. They were formerly, as they still are, the result of acts of adultery. Arson, formerly shown separately with a yearly average of nine cases, is now much less common. In robbery and dacoity there is a considerable falling off from a yearly average of sixty-nine to seven. Formerly crimes of this class were generally committed at night, and the offenders were scarcely ever detected.

In 1878, for protection of life and property, 3284 gun licenses were granted. These, in the Commissioner's opinion, are necessary, as the eastern districts, bordering for nearly 200 miles with the Sahyadris, abound in wild beasts.

Jails

Besides the accommodation provided for under-trial prisoners at the head-quarters of each sub-division, there is near the Collector's office at Ratnagiri a district criminal jail. Built about fifty-three years ago, it has accommodation for 320 prisoners. The wards for the prisoners, which are vaulted and iron-barred in front, are in a circle in the centre of the jail. Outside this circle there are three other wards, for females, quarantine, and untried prisoners, and four worksheds. The jail is managed by a staff twenty-three strong, and had, in 1879, a total population of 767 prisoners, a large number of whom were transfers from the Bombay and Thana jails. The daily average

was 346. Nearly two-thirds of the prisoners were employed extramurally, in gardening, quarrying, and on public works. The jail industries are cottoncloth-weaving, carpet-making, coir-matting, and cane-plaiting. The total cost in 1879 was £1951 (Rs. 19,510) or an average of £5 12s. (Rs. 56) to each prisoner. There are two gardens, one in front of the jail and separated from it by the road, the other within the compound at the back. The jail is remarkably healthy, the average death rate for the last ten years having been only 1.4 per cent of average strength. [Dr. F. C. Barker, Superintendent Ratnagiri Jail.]



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REVENUE AND FINANCE

1832-1878.

THE earliest balance sheet of the district, as at present constituted, is for 1832-33. From territorial changes, older accounts are useless for purposes of comparison. Since 1833 several changes have taken place in the system of accounts, but most items can be arranged under corresponding heads in the forms now in use. Exclusive of the adjustment on account of alienated lands, the total transactions entered in the district balance sheet for 1878-79 amounted, under receipts, to £230,470 (Rs. 23,04,700) against £117,829 11,78,290) in 1832-33, and under charges, to £206,762 (Rs. against £135,628 (Rs. 13,56,280). 20,67,620) Exclusive departmental miscellaneous receipts and payments in return for services rendered, such as post and telegraph receipts, the 1878-79 revenue under all heads, Imperial, provincial, local, and municipal, came to £136,249 (Rs. 13,62,490), or on a population of 1,019,136 souls, a share of 2s. 8¼d. (Rs. 1-5-6) per head. The corresponding receipts in 1832-33 amounted to £91,528 (Rs. 9,15,280), which, according to the 1846 population of 625,782 souls, gave per head a share of 2s. 11d. (Rs. 1-7-4).

Land Revenue.

During the last forty-seven years the following changes have taken place under the chief heads of receipts and charges: Land revenue receipts, forming 6885 per cent of £186,249 (Rs. 13,62,490) the entire revenue of the district, have risen from £66,080 (Rs. 6,60,800) in 1830-31 to £93,807 (Rs. 9,38,070) in 1878-79. The increase is chiefly due; (1) to the large area of land brought under tillage; (2) to the rise in produce prices, as in some parts of the district the Government assessment is still collected in kind; and (3) to the more correct measurements introduced with the survey. The land revenue charges show an increase from £11,157 to £33,665 (Rs. 1,11,570 - Rs. 3,36,650). This is partly due to new grants and increase of cash allowances to village officers and partly to general administrative changes.

The following statement [Figures for the years between 1830 and 1867 are taken from Statement No. 9 in Mr. Bell's Excise Report, dated 1st October 1869. Figures for subsequent years are taken from, the Annual Reports.] shows the land revenue collected in each of the forty-seven years ending 31st July 1879:

Ratnagiri Land Revenue, 1830-1879,

YEAR.	Land Revenue;	YEAR.	Land Revenue.	YEAR.	Land Revenue.	TEAR.	Land Revenue.
	£		£		£		£
1830- 31	66,080	1835- 36	73,492	1840- 41	61,415	1845- 46	63,596
1831- 32	66,681	1836- 37	74,500	1841- 42	58,601	1846- 47	62,950
1832- 33	73,371	1837- 38	75,945	1842- 43	58,230	1847- 48	67,265
1833- 34	72,369	1838- 39	73,707	1843- 44	60,924	1848- 49	70,748
1834- 35	70,537	1839- 40	66,712	1844 - 45	62,665	1849- 50	66,360

Ratnagiri Land Revenue, 1830-1879—continued.

YEAR.	Land Revenue.	YEAR.	Land - Revenue.	YEAR.	Land - Revenue.	YEAR.	Land- Revenue.
	£		£		£		£
1850- 51	65,163	1858- 59	80,011	1866- 67	104,634	1874- 75	96,176
1851- 52	61,558	1859- 60	91,603	1867- 68	87,719	1875- 76	88,880
1852- 53	64,500	1860- 61	79,554	1868- 69	95,564	1876- 77	87,672
1853- 54	69,142	1861- 62	82,830	1869- 70	90,717	1877- 78	90,755
1854- 55	69,358	1862- 63	85,514	1870- 71	93,187	1878- 79	93,807
I855- 56	70.834	1863- 64	105,912	1871- 72	92,659		
1850- 57	72,284	1864- 65	110,677	1872- 73	95,341		
1857- 58	76,120	1865- 66	101,479	1873- 74	92,442		

Stamps.

Stamp receipts have risen from £1620 to £14,482 (Rs. 16,200-Rs. 1,44,820), and stamp expenditure from £20 to £394 (Rs. 200-Rs. 3940). The increase under both heads is duo to changes in the law and administration of the stamp revenue.

Excise.

Excise receipts have fallen from £13,341 to £8006 (Rs. 1,33,410-Rs. 80,060). Many old cesses such as the house-tax, buffalo-tax, and others were abolished in 1844. The expenditure amounted in 1878-79 to £19 (Rs. 190). There are many cocoa palms along the coast and a fair number of wild date, *shindi*, trees in the villages near the Sahyadris. From the juice of these trees Bhandaris manufacture spirits and sell them to the liquor farmers at a fixed price. Since 1868, the assessment on each tapped cocoa palm has been 1s. (8 annas).

Justice.

Law and justice receipts have risen from £367 to £815 (Rs. 3670 - Rs. 8150), and the expenditure from £10,876 to £17,333 (Rs. 1,08,760-Rs. 1,73,330). The rise in the expenditure is due to an increase in the pay of officers and establishment and to the opening of new civil courts.

Forests.

Forests is a new head. The receipts in 1878-79 amounted to £835 (Rs. 8350) and the expenditure to £1161 (Rs. 11,610).

Assessed Taxes.

The following table shows, exclusive of official salaries, the amount realised from the different assessed taxes levied between 1800 and 1879. Owing to their variety of rates and incidence it is difficult to make any satisfactory comparison of the result:

Ratnagiri Assessed Taxes, 1860-1879.

YEAR.	Amount.	YEAR.	Amount.	YEAR.	Amount.
Income Tax.	£	License Tax.	£	Income Tax.	£
1860-61	2301	1867-68	2070	1869-70	1869
1800-01	2301	1007-00	2070	1870-71	2403
1861-62	5725			1871-72	1255
1862-63	3654	Certificate Tax.		1872-73	748
1863-64	2589			License Tax.	
1861-65	2301	1868-69	851	1878-79	4222

Customs.

Customs receipts have fallen from £7698 to £289 (Rs. 76,980-Rs. 2890).

Salt.

Salt receipts have risen from £4352 to £36,071 (Rs. 43,520-Rs. 3,60,710), and salt expenditure from £12 to £3526 (Rs. 120-Rs. 35;260). The increase in the receipts is due to the enhanced rate of duty. In 1832-33 salt and customs transactions were shown separately; they were subsequently amalgamated and in 1871 again separated.

Military.

Military charges have fallen from £57,443 to £46,190 (Rs. 5,74,430 Rs. 4,61,900); the decrease is due to the abolition of the military cantonment at Dapoli and the total withdrawal of troops.

Post.

Postal receipts have risen from £258 to £4199 (Rs. 2580 Rs. 41,990), and post expenditure from £336 to £4538 (Rs. 3360 Rs. 45,380).

Telegraph.

Telegraph is a new head. The 1878-79 receipts amounted to £366 (Rs. 3660) and the expenditure to £337 (Rs. 3370).

Registration.

Registration receipts have risen from £45 to £1201 (Rs. 450 Rs. 12,010). In 1832-33 there were no charges; they have since risen to £736 (Rs. 7360).

Education.

Education receipts, a new item, amounted in 1878-79 to £313 (Rs.3130). The expenditure has risen from £124 to £1656 (Rs. 1240-Rs. 16,560).

Police.

Police charges have risen from £65 to £11,237 (Rs. 650 Rs. 1,12,370). The increase is due to the removal of the military and to the reorganization of the police force.

Medicine.

Medical charges have risen from £1749 to £2886 (Rs. 17,490 Rs. 28,860).

Jail.

The 1878-79 receipts, £491 (Rs. 4910) against £33 (Rs. 330) in 1832-33, represent the earnings of the Ratnagiri jail. The charges have risen from £37 to £2075 (Rs. 370 - Rs. 20,750).

Transfers.

Transfer receipts have risen from £17,739 to £56,132 (Rs.1,77,390 Rs. 5,61,320),and expenditure from £35,517 to £49,090 (Rs. 3,55,170 Rs. 4,90,900). The increased receipts are due to local funds income, to remittances from other treasuries, and to the adjustment of advances on account of boundary mark expenditure.

Balance Sheet

1832-33 & 1878-79.

In the following balance sheets for 1832-33 and 1878-79, the figures shown in black type on both sides are book adjustments. On the receipt side the item £7975 (Rs. 79,750) represents the additional revenue the district would yield had none of its lands been given away. On the debit side the item £865 (Rs. 8650) under land revenue is the rental of the lands granted for service to village and district

officers. The item £7110 (Rs. 71,100) shown under allowances and assignments, represents cash allowances, the rental of lands granted to hereditary district officers whose services have been dispensed with, and religious and charitable grants continued from former governments. Cash allowances to district and village hereditary officers are treated as actual charges and debited to land revenue.

Ratnagiri Balance Sheet, 1832-33 and 1878-79.

CED /ICE		RECE	IPT	S.			
SERVICE.	Head.	183	2-33	3.	1878	-79	
		£	s.	d.	£	s.	d.
	Land Davanua	C4 101	0	0	02.007	10	1
	Land Revenue	64,101	8	9	93,807	19	2
		7611	1	_	7975	4	11%
	Stamps	1619	18	11/2	14,482	3	71/2
	Excise	13,341	7	6	8005	18	61/8
A.—	Law and Jus <mark>tice</mark>	626	4	41/2	815	12	61/2
Supervised by	Forests	367	10	4	835	14	101/4
the Collector.	Assessed Taxes				4222	0	0
	Miscellaneous	33	2	9	295	2	61/8
Vahara	Interest on advances, loans, and arrears.	ate		az	49	12	47/8
	Total	79,463	7	5½	122,514	3	73/8
		8237	5	11½	7975	4	11%
		7698	13	0	289	11	11/4
	Salt	4352	2	11¼	36,070	19	91/8
B— Administered	Public Works				7132	9	101/8
by	Military				1415	15	9¾
Departmental Heads.	Mint				5	8	111/8
	Post	258	9	1½	4199	11	41/8
	Telegraph				366	16	0
	Total	12,309	5	31⁄4	49,480	12	111/4

SERVICE.		RECEI	PTS				
SERVICE.	Head.	1832	:-33	•	1878	-79 s. 8 0 13 0 11 6 7 7 7 2 5 4	•
		£	s.	d.	£	s.	d.
	Registration	45	12	0	1201	8	11/8
	Education				313	0	71/2
	Police				45	13	61/4
Provincial.	Medical	0	11	8	297	0	51/8
	Jails	33	2	0	491	10	11%
	Sales of Books, &c.				24	11	9%
	Miscellaneous						
	Total	79	5	8	2343	6	51/2
Transfer	Deposits and repayments of Advances and Loans	17,494	0	10	32,222	7	10%
Items of Account.	Bills and Cash Remittances				12,766	7	31/8
/laha	Pension Fund receipts	30	19	51⁄4	10	7	31/8
vialia	Local Funds	214	16	73/4	11,133	0	31/2
	Total	17,739	16	11	56,132	2	8%
	Grand Total	117,829	1	0¾	230,470	5	9
		8237	5	11½	7975	4	11%

continued.

CHARGES.									
Head.	1832-33.			1878-79.					
	£	s.	d.	£	s.	d.			
Land Revenue	11,157	5	71/2	33,666	13	5¾			
		337	4	8	866	6	01/2		
Stamps		20	9	11	394	10	51/2		
Excise		1	1	I	19	13	61/2		
law and Justice.	Civil	10,484	10	81/4	12,063	4	81/2		
iaw ana sasace.	Criminal	442	3	11	6270	9	2		

Forests				1161	1	51/2
Assessed Taxes						
Allowances and Assignments	4382	3	21/2	9654	10	13/4
	7890	1	31/2	7109	18	111/2
Pensions to Government Servants	5251	12	5	4569	9	81/2
Ecclesiastical	18	18	41/2	167	4	0
Profit and Loss	33	4	21/2			
Miscellaneous	0	14	61/2	648	2	11
Total	31,741	2	10¾	67,612	19	61/2
	8237	5	11½	7975	4	11%
Customs				0	0	6
Salt	12	11	21/4	3526	8	11/2
Public Works	359	3	41/2	16,778	8	5¾
Military	57,443	0	31/4	46,190	3	71/2
Mint		r		32	1	7
Post	336	8	3	4538	8	9%
Telegraph			1	337	9	101/2
Total	58,151	3	1	71,403	0	11¼
Registration				736	16	81/4
Education	124	0	0	1665	19	3?
Police	65	12	0	11,237	12	01/2
Medical	1748	18	9	2886	3	61/4
Jails	37	1	4	2075	16	111/4
Cemeteries, Office rents, &c	6	0	0	17	6	0
Printing				46	0	41/2
Miscellaneous						
Public Works						
Total	1981	12	7	18,655	14	10¾
Deposits returned and Advances and Loans made	22,915	3	101/4	31,292	19	51/4
Bills and Cash Remittances	12,519	19	01/4	6953	9	3
Interest on Government Securities				111	2	11
Local Funds	82	4	0	10,733	4	81/2
Total	35,517	6	10½	49,090	16	3¾
Grand Total	135,628	11	43/4	206,762	11	8
	8237	5	11½	7975	4	11%

REVENUE AND FINANCE

Revenue other than Imperial.

Local Funds

The district local funds collected since 1865 to promote rural education and supply roads, water, drains, rest-houses, dispensaries, and other useful objects, amounted in 1878-79 to a total sum of £9930 (Rs. 99,300); the expenditure during the same year was £10,733 (Rs. 1,07,330). This revenue is drawn from three sources, a special cess of one-sixteenth in addition to the land tax, the proceeds of certain local funds, and some miscellaneous items of revenue. The special land cess, of which two-thirds are set apart as a road fund and the rest as a school fund, yielded in 1878-79 a revenue of £6245 (Rs. 62,450). Smaller heads, including a ferry fund, a cattle pound fund, a travellers' bungalow fund, and a school fee fund, yielded £1691 (Rs. 16,910). Government and private subscriptions amounted to £1854 (Rs. 18,540), and miscellaneous receipts, including certain items of land revenue, to £141 (Rs. 1410). This revenue is administered by committees composed partly of official and partly of private members.

For administrative purposes the local funds of the district are divided into two main sections, one sot apart for public works and the other for instruction. The 1878-79 receipts and disbursements under these two heads were as follows:

RATNAGIRI LOCAL FUNDS, 1878-79.

Public Works.

RECEIPTS.			CHARGE	S.	
	£	s.		£s.	
Balance, 1st April 1878	743	8	Establishment	816	15
Two-thirds of the Land Cess	4155	8	New Works	1432	17
Road Tolls	143	0	Repairs	2019	18
Ferries	874	16	Medical Charges	650	14
Cattle-pounds	112	12	Miscellaneous	1350	6
Travellers' Rest-houses	16	1	Balance, 31st March 1879	164	18

RECEIPTS.			CHARGE	S.	
	£	s.		£ s.	
Contributions	260	5			
Miscellaneous	129	18	Total	6435	8
Total	6435	8			
	Ιι	nstruct	ion.		
	£	s.		£	s.
Balance, 1st April 1878	459	2	School Charges	3734	1
One-third of the Land Cess	2089	13	Scholarships	89	17
School-fee Fund	544	8	School-houses, new	356	2
Contributions (Government)	14 <mark>89</mark>	8	Ditto repairs	177	19
Ditto (Private)	104	6	Miscellaneous	104	15
Miscellaneous	8	14	Balance, 31st March 1879	234	17
Interest on funded investment	2	0	Total	4697	11
Total	46 <mark>97</mark>	11			

Since 1865 the following local fund works have been carried out. To improve communication, 670 miles of road have been either made, cleared, or repaired, and planted with trees. To improve the water supply, 107 wells, thirty-six ponds, and fifty-one water-courses have been made or repaired. To help village instruction, forty-eight schools, and for the comfort of travellers, sixty-four rest-houses, *dharmshalas*, have been either built or repaired. Besides these works, one dispensary, sixty cattle pounds, and two staging bungalows have been constructed, and at the towns of Chiplun, Rajapur, Vengurla, and Ratnagiri, with the help of the municipalities, telegraph and water works have been undertaken. [Details of these water works are given in the accounts of the different towns; see below, "Places of Interest".]

Municipality

Since 1875 four municipalities have been established. In 1878-79 the total municipal revenue amounted to £2002 (Rs. 20,020). Of this, £1498 (Rs. 14,980) were recovered from octroi dues, £281 (Rs. 2810) from house tax, £17 (Rs. 170) from toll and wheel taxes, and £206 (Rs. 2060) from miscellaneous sources. Under the provisions of the Bombay District Municipal Act (VI. of 1873), the four municipalities of Vengurla, Rajapur, Ratnagiri, and Chiplun are town municipalities administered by a body of commissioners with

the Collector as president, and the assistant or deputy collector in charge of the. sub-division as vice-president.

The following statement gives for each municipality the receipts, charges, and incidence of taxation during the year ending 31st March 1879:

Ratnagiri Municipal Details, 1878-79.

				RE	CEIP	ΓS.							
NAME.	When establi- shed.	Popula- tion.	Octro	oi.	Hou:		To ar Wh Ta	nd eel	Assessed Taxes.	Misc		Tota	ıl.
			£	s.	£	S.	£	s.		£	s.	£	s.
Vengurla	1st April 1876	9000	727	5	63	11	17	5		40	6	848	7
Rajapur	Ditto	8207	364	6	107	14				135	18	607	18
Ratnagiri	Ditto	15,000			51	1				4	8	55	9
Chiplun	Ditto	5341	406	6	58	15				25	9	490	10
Total			1497	17	281	1	17	5		206	1	2002	4

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								CHA	ARGES	5.									
NAME.	Sta	ff	Safa	·+· /	4 00	l+h	Inst	ruc-	٧	/OF	RKS.		Miso	cel-	Tota	, I		CIE	DE- E.
	Sta	11.	Safe	ty.	пеа	ILII.	tio	n.	Origir	nal.	Repa	airs.	lane	ous.	Tota	11.			
	£	s.	£	s.	£	s.	£	s.	£	s.	£	s.	£	s.	£	s.	£.	s.	d.
Vengurla	110	9	62	13	69	7	7	10	991	13	13	18	52	9	1307	19	0	1	10
Rajapur	146	2	38	4	437	11	11	10		i	12	2	61	18	707	7	0	1	5
Ratnagiri			31	8	-			I	10	1	1	13	0	17	43	19	0	0	0
Chiplun	69	6	13	17	135	0	74	3	65	19	81	3	9	11	448	19	0	1	10
Total	325	17	146	2	641	18	93	3	1067	13	108	16	124	15	2508	4	0	1	0

INSTRUCTION

Schools, 1878-79

IN 1878-79, there were 119 Government schools, or one school For every eleven inhabited villages, with 8247 names on the rolls, and an average attendance of 6287 pupils, or 1.16 per cent of 541,142, the entire population of not more than twenty years of age.

Cost.

Excluding superintendence, the total expenditure on these schools amounted in 1878-79 to £4627 (Rs. 46,270). Except the Ratnagiri high school, a purely Government institution, all were local fund vernacular schools. No private school obtained a Government grant.

Staff.

Under the Director of Public Instruction and the educational inspector, central division, the schooling of the district was, in 1878-79, conducted by a local staff 329 strong. Of these, one was a deputy inspector, with general charge over all the schools of the district drawing a yearly pay of £180 (Rs. 1800); one was an assistant deputy inspector drawing a yearly pay of £60 (Rs. 600); and the rest were masters and assistant masters of schools with yearly salaries ranging from £6 to £420 (Rs. 60-Rs. 4200).

Instruction.

Of 119 Government schools, in 114 Marathi only was taught and in four Urdu. The remaining school was a high school teaching English, Marathi, and Sanskrit up to the Bombay University entrance standard. Of the vernacular schools, four were for girls and the rest for boys.

Private Schools.

Besides the Government schools, there are (1879) five registered and 292 unregistered private vernacular schools. Before the introduction of Government education every large village had one or more private schools taught either by Shenvis or Konkanasth Brahmans. In 1856 there were in all 204 schools of this sort with a nominal attendance of 3869 pupils, 1029 of them Brahmans, 952 Musalmans, 550 Marathas, 419 Bhandaris, two Mhars, and the rest of other castes. The masters of the present private schools, who are not generally a very high class of men, keep them open only so long as they pay, at times closing

them when they have other business in hand. The fees, paid in money or grain, amount to a yearly sum of from £2 10s. to £14 (Rs.25-Rs. 140). Every boy on first entering worships Sarasvati the goddess of learning, giving the master a cocoanut, one *sher* of rice, two or three betelnuts, and from 6d. to 2s. (4 as. - Re. 1) in cash. On the eleventh day, *ekadashi*, of every fortnight the master gets 3kd. (one pice) from each of his pupils, and certain extra fees at different stages in their progress. Besides to *Modi* or current Marathi writing and reading, great attention is paid to teaching mental arithmetic. In the morning devotional songs, *bhupavalis*, and in the evening verses in honour of Ganpati and Sarasvati, and the multiplication tables are shouted out by all the boys at the same time. The schools are held in village temples or on the verandah of the masters dwelling.

Progress, 1824-1879.

The following figures show the increased means for learning to read and write offered by Government to the people of the district during the last fifty-five years. In 1824, besides private schools in large and populous villages, there were three Government schools, one at Ratnagiri with 146 pupils, one at Nandivra with forty-four pupils, and one at Chiplun with thirty-two pupils. In the private schools, 5080 children, including five girls, were being taught the rudiments of learning. Of 5302, the total number of pupils, 1354 or 255 per cent were Brahmans. As already noticed (page 135), between 1822 and 1828 the Scotch missionaries at Bankot had as many as seventy-nine schools and 3219 scholars, 300 of them girls. In 1845 the first English school was started by Government at Ratnagiri. In 1853 the Board of Education, besides the English school at Ratnagiri with forty-six pupils on the rolls, maintained eighteen vernacular schools with 842 pupils. In 1855-56 there were in all twenty Government schools with 2403 names on the rolls. The English school at Ratnagiri was made a high school in 1862. In 1865 the number of Government schools had risen to seventy-one, with 5006 names on the rolls, and an average attendance of 3782 pupils. Of these, besides the high school at Ratnagiri, eight were second grade Anglo-vernacular schools, two at Ratnagiri and one each in the towns of Vengurla, Chiplun, Dabhol, Malvan, Rajapur, and Dapoli. In 1875-76, including the high school at Ratnagiri, there were 140 schools with 8568 names on the rolls and an average attendance of 6454 pupils. At present, 1378-79, as the Anglo-vernacular and some other schools have been abolished, there are only 119 schools with 8247 names on the rolls and an average attendance of 6287' pupils, or on the basis of the 1872 census 1.16 per cent of 541,142, the total population of not more than twenty years of age.

Girls' Schools.

Before the establishment of girls' schools, a few girls used to attend private schools. The first girls' school was opened at Ratnagiri in 1865, with twenty-five names on the roll. In 1873-74 there were four girls' schools, one at Ratnagiri, two in Malvan, and one in Dapoli, with 161 names on the rolls and an average attendance of 112 pupils. At present there are four Government girls' schools at

Ratnagiri, Malvan, Vengurla, and Kelshi, with 221 names on the rolls and an average daily attendance of 145 pupils. Besides these, a girls' school, lately opened by a missionary lady in Ratnagiri, is attended by about twenty-five pupils.

Readers and Writers

Hindus.

The 1872 census returns give, for the two chief races of the district, the following proportion of persons able to read and write. Of 187,661, the total Hindu male population of not more than twelve years of age, 10,268 or 5.47 per cent; of 62,751 above twelve and not more than twenty years 7095 or 11.30 per cent; and of 203,307 above twenty years, 2062 or 1.01 per cent were able to read and write, or were under instruction. Of 176,507 the total Hindu female population of not more than twelve years of age, 93 or 0.05 per cent; of 72,470 above twelve and not more than twenty years, 25; and of 238,353, above twenty years, 30 were able to read and write, or were being taught.

Musalmans.

Of 15,729 the total Musalman male population of not more than twelve years of age, 1185 or 7.53 per cent; of 4334 above twelve and not more than twenty years, 468 or 1079 per cent; and of 15,597 above twenty years, 1625 or 10.41 per cent were able to read and write, or were being taught. Of 14,422 the total Musalman female population of not more than twelve years, 10; of 5534 above twelve and not more than twenty years, 3; and of 19,218 above twenty years, 21 were able to read and write, or were being taught.

Pupils by RaceBefore 1865-66, there were no returns arranging the pupils

	Р	UPILS BY RACE,	1865-1879.		
Race.	1865-66.	Percentage.	1878-79.	Percentage.	Increase
Hindus	4896	.84	7884	.83	01
Musalmans	103	.22	349	.46	24
Total		.80	8233	.81	0.01

according to race and religion. The statement [The census of 1846 gives 577,984 Hindus and 45,822 Musalmans. The census of 1872 gives 941,049 Hindus and 74,834 Musalmans. On the basis of these figures the population and percentage figures for 1866 and 1878 have been calculated.] given in the margin shows that of the two chief races, Hindus have a larger proportion of their boys and girls under instruction.

Pupils by Caste.

Of 8247, the total number of pupils in Government schools at the end of March 1879, there were 3942 or 47.79 per cent Brahmans; 329 or 3.9 per cent Kshatris including ninety-nine Kayasth Prabhus, and others; 780 or 9.45 per cent trading castes, including seventy-eight Lingayats, fourteen Jains, and others; 1178 or 14.28 per cent cultivators; 490 or 5.9 per cent artisans; 118 labourers and menial servants; two low castes; and 946 or 11.4 ' Other Hindus'; 349 or 4.23 per cent Musalmans; thirteen Christians; and one Jew. Mhars and other low caste boys sit in the school house verandah, while Kharvis are allowed to sit with the other boys. Of 221 the total number of girls enrolled in 1878-79 in the four girls' schools 218 or 98.65 per cent were Hindus; and three or 135 per cent were Musalmans.

Schools, 1865-1879.

The following table, prepared from special returns furnished by the Education department, shows in detail the number of schools and pupils with their cost to Government.

Ratnagiri School Return, 1855-56, 1865-66, and 1878-79.

				_			PUPII	_S.		
CLASS	ha	S	CHOOL	S.	tat	Hindus	aze	M	usalmaı	ns.
		1855- 56.	1865- 66.	1878- 79.	1855- 56.	1865- 66.	1878- 79.	1855- 56.	1865- 66.	1878- 79
Governme	ent.									
High School			1	1		180	161		1	6
Anglo-Verna	cular	1	8		76	1131	1131	2	24	
\/oun = ol = u	Boys	19	61	114	2280	3560	7508	44	78	340
Vernacular	Girls		1	4		25	218			3
Private Insp	ected.									
) / o wo o o vilo w	Boys									
Vernacular	Girls									
Total		20	71	119	2356	4896	7884	46	103	349

				PU	PILS.			AV	'ERAGE	DAILY
CLASS			Parsis.			Total.		A	TTENDA	NCE.
		1855- 56.	1865- 66.	1878- 79	1855- 56.	1865- 66.	1878- 79.	1855- 56.	1865- 66.	1878-79.
Governme	ent.									
High School			1			182	167		186	143
Anglo-Verna	acular		6		78	1161	1	39	877	
\	Boys	1			2325	3638	7845	1637	2701	5999
Vernacular	Girls					25	221		18	1455
Private Inspecte										
\	Boys									
Vernacular	Girls				-4-					
Total		1	7		2403	5906	8233	1676	3782	*62875

^{*} Add 13 Christians and 1 Jew to make up the total.

			FEE.						Cost	of Pup	il.		
CLASS		1855- 56.	1865- 66.	1878- 79.	18	855	5-56.	1	L865	-66.		1878	8-79.
Governme	ent.	as	ntra	151	£	s.	d.	£	s.	d.	£	s.	d.
High School			2 <i>s.</i>	2s. to 4s.		-		5	8	10%	7	19	5½
Anglo-Verna	cular	1 <i>s</i> .	1 <i>s.</i>		4	1	01/4	0	17	4	1 1		
Vernacular	Boys	1½d.	3 <i>d</i> .	1½ <i>d.</i> to 6 <i>d</i> .	0	6	93/8	0	14	71⁄4	0	13	6 ⁷ /8
	Girls		None.	None.				1	13	9¾	1	0	10 ⁷ /8
Private Insp	ected.												
Vornacular	Boys									-	0	13	52/8
Vernacular	Girls										1	6	92/8

									REC	CEIPTS	5.						
CLASS			Gov	err	ım	ent.				Local	Cess			Mun	icipali	tie	s.
		1855- 56.	1865	5-6	66	187	8-7	79.	1855- 66.	1865- 66.	187	78-	79	1855- 56.	1865- 66.		378- 79.
Governme	ent.		£	s.	d.	£	s.	d.			£	s.	d.			£	s.d.
High School	ol		854	9	1	857	17	5								-	
Anglo- Vernacular			519	14	8											-	
	Boys		1479	12	3	1343	13	25/8			2034	18	0			9	0 0
Vernacular	Girls		15	6	4	145	14	93/8								- -	- -
Private Inspecte						1											
Vornacular	Boys					385	16	43/8			431	13	8 ⁴ /8			-	
Vernacular	Girls					53	10	83/4								-	-

Ratnagiri School Return, 1855-56, 1865-66, and 1878-79—continued.

Ma	na		3	S	ht	ra	1	S	REC	EIPTS	—со	NTI	INL	JED.	tt	еє	ers		
CLASS					F	Priv	ate	e.						ı	Fees	s.			
Government. High School			85 56		186	5-6	6.	18	378 [.]	-79.	185	5-50	6.	186	55-6	66.	187	78-7	79.
Governme	ent.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
High School								2	5	0				204	19	6	248	1	93/8
Anglo-Verna	cular				47	17	6				35	17	3	212	14	3¾			
\/ovn = ol= v	Boys	6	0	0	181	1	6	95	5	101/2	147	14	9	467	12	51/4	544	8	53/8
Vernacular	Girls				10	7	0	2	0	0	-			-		!	-		
Private Inspe	ected.																		
Vornacular	Boys							3	11	3							132	19	6
Vernacular	Girls										-	-							

				REC	CEIPTS—	CONT	ΓINUE	D.		
CLASS.					To	tal.				
		186	55-56.		186	55-66		187	78-79	
Governme	ent.	£	s.	d.	£	S.	d.	£	s.	d.
High School					1059	8	71/2	1108	4	23/8
Anglo-Vernacu	lar	187	17	3	780	6	61/2	-		
Vernacular	Boys	598	19	3	2128	6	2?	4027	5	6¾
vernaculai	Girls				25	13	41/2	147	14	9%
Private Impe	eded.					?				
Vernacular	Boys							954	0	91/8
vernacular	Girls					-		53	10	81/8

N // _ I_					EXP	PEND]	TURE.			
CLASS	ara	SM	Ira	Oli	al In	struc	tion.	elle	er	S
		1	.855-5	56.	18	365-6	66.	1	878-7	79.
Governme	ent.	£	s.	d.	£	s.	d.	£	s.	d.
High School					923	13	9	1034	18	8¾
Auglo Vernacul	lar	158	0	0	622	11	41/4			
Vornacular	Boys	554	16	5¾	1458	14	2¾	3492	3	9 ⁷ /8
Vernacular	Girls				30	8	71/2	146	11	10 ⁷ /8
Private Inspect	ted.									
Vornacular	Boys							821	2	4 ⁷ /8
Vernacular	Girls							53	10	8 ⁶ /8

						EXPE	ND]	ITUR	E.				
CLASS				Вι	ıildings.					Librari	es.		
32,33	•	1855- 56.	1	866	-66.	187	78-7	79.	1855- 56.	1865- 66	18	78-	79.
Governme	ent.		£	s.	d.	£	s.	d.			£	s.	d.
High School			50	13	10 ⁷ /8						34	17	6
Auglo Vernac	ular		130	6	0								
Vernacular	Boys		514	2	3	538	1	6				1	
vernacular	Girls					2	19	81/4	-			I	
Private Inspe	cted.												
Vornacular	Boys												
Vernacular	Girls												

Ratnagiri School Return, 1855-56,1865-66, and 1878-79—continued.

		·															
							EX	PE	NDIT	UR	E-	-CONTI	INU	ED.			
CLASS	_	So	cho	lar	shi	ps.							To	tal			
Mal	nai	1855- 56.		365 56.			378 79.		185	5-5	6.	186	5-6	5.	187	8-7	9.
Governme	ent.		£	s.	d.	£	s,	d.	£	s.	d.	£	s.	d.	£	s.	d.
High School			38	8	0	38	8	0		i		1012	14	5	1,108	4	23/8
Anglo-Verna	cular								158	0	0	752	14	41⁄4			
Vernacular	Boys								554	16	3	1972	15	5¾	4030	5	3 ⁷ /8
Verriaculai	Girls					2	0	0				30	8	7½	151	11	71/8
Private Inspe	ected.																
Vous souls :	Boys														821	2	4 ⁷ /8
Vernacular	Girls														53	10	86/8

CLASS.		COST TO										
		Government.										
		18!	55-56	5 .	186	65-66.		187	78-79			
Government.		£	s.	d.	£	s.	d.	£	s.	d.		
High School					854	9	11/2	1105	19	23/8		
Anglo-Vernacu	Anglo-Vernacular		0	0	519	14	81/2	-	1			
.,	Boys	445	4	6	1479	12	3%	1343	13	25/8		
Vernacular	Girls				15	6	41/2	1	1			
Private Inspected.												
Vernacular	Boys		-					385	16	4 ² /8		
	Girls							53	10	8 ⁶ /8		

CLASS.		COST TO—CONTINUED.													
			Local Cess; Other Fund								nds.	5.			
		1855- 56.	1865- 66.	187	8-7	9.	18	1855-56. 1865-66. 1878			-79.				
Government.				£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
High School										158	5	3	2	5	0
Anglo-Verna	Anglo-Vernacular						6	0	0	233	2	6			
Vernacular Boys Girls				2886	12	11/4	109	11	11%	493	3	2	1	-	
				3	16	9¾				15	2	3	2	0	0
Private Inspected.															
Vernacular	Boys			431	16	1	-				-		3	9	11%
	Girls														

CLASS.		COST TO—CONTINUED.										
			Total									
		1	855-56	5.	18	65-66	j.	18	378-79	d.		
Government.		£	s.	d.	£	s.	d.	£	s.	d.		
High School					1012	14	5	1108	4	23/8		
Anglo-Vernacu	Anglo-Vernacular		0	0	752	14	41/4					
Vernacular	Boys	554	16	3	1972	15	5¾	4030	5	3 ⁷ /8		
vernaculai	Girls				30	8	71/2	151	11	71/8		
Private Inspected.							1					
Vernacular	Boys				-			821	2	4 ⁷ /8		
	Girls					 -		53	10	86/8		

Town Education

A comparison of the present (1878-79) provision for teaching the town and country population gives the following results. In the town of Ratnagiri there are four Government schools, with, out of 613 names on the rolls, an average attendance of 475 pupils. Of these schools, one is a High school and three vernacular schools, two for boys and one for girls. The first English school in Ratnagiri was opened on the 1st April 1845. Seventeen years later (25th September 1862) it was raised to the rank of a high school. The staff is a head master, eight assistants, and a shastri or Sanskrit teacher. The subjects taught are English, Sanskrit, Marathi, history and geography, pure mathematics, and natural science. Special success has attended the study of Sanskrit as shown by the number of Ratnagiri students who have won the Jagannath Shankar Sheet Scholarships at the Bombay University. Between 1865 and 1879, 192 students passed the Bombay University entrance examination. [The details are: 1865, 4; 1866, 9; 1867, 8; 1868, 22; 1869, 13; 1870, 13; 1871, 18; 1872, 24; 1873, 18; 1874, 15; 1875, 13; 1876, 8; 1877, 9; 1878, 5; and 1879, 13.] The number of boys in the school in January 1880 was 166 of whom a large majority were Chitpavan Brahmans. Of the total of 166, 138 were Brahmans, 20 other Hindus, 7 Muhammadans, and one a Christian. The boys are mostly of poor physique and constitution; but they are hardworking, well behaved, and as might be expected from their class, highly intelligent. A gymnasium attached to the school is presided over by a professional gymnast. Many of the boys gain a degree of skill in the various athletic exercises which are taught in the intervals of study. The number of pupils in the high school has of late years steadily declined. The causes assigned are the opening of other high schools in the Southern Maratha country, poverty, the raising of school fees, and the diminished value of English education.

Vernacular Schools.

The three vernacular schools, two for boys and one for girls, are all provided with convenient school houses. The boys' school in which the teaching is most elementary, had on the 1st April 1879 189 scholars on the roll, of whom 66 were Brahmans, 109 other Hindus, 13 Muhammadans, and one a Portuguese. The other boys' school for more advanced boys, had (1st April 1879) 195 scholars on the roll, of whom 132 were Brahmans-, 57 other Hindus, 4 Muhammadans, and 2 Portuguese. The girls' school had (1st April 1879) 61 pupils on the roll, of whom 20 were Brahmans, and the rest other Hindus. The attendance is irregular and the girls leave the school at too early an age to make any real progress. The age of the girls is from six to ten and the utmost they can learn during their short term of school life is a little reading, writing, simple arithmetic, and plain needlework. No admission or monthly fee is charged and free books and slates are provided. Notwithstanding these and other encouragements the institution, though of many years' standing, has never had much success.

School of Industry.

School of industry was established on the 1st of April 1879, the local funds committee purchasing from the proprietors the buildings, workshops, plant, and machinery of the old Ratnagiri Steam Saw Mills Company. [A more detailed history of this institution will be found in Chap. VI. p. 189.] The general permanent establishment of the school consists of a superintendent, a head master, a clerk and accountant, a storekeeper, a timekeeper, and an overseer. The saw mills and workshop establishment consists of one saw mill overseer, mestri, one head and one assistant carpenter and machine overseer, one boys' overseer, one fitting tool overseer, three carpenters, one saw sharpener, three saw tenders, and two belting tenders and oilmen. For the engine and boiler house a further establishment of one engine tender, two firemen and a boy is maintained. The total monthly cost of this fixed establishment is about £50 (Rs. 500). Extra hands, carpenters, smiths, and other workmen are taken on from time to time according to the work on hand. The scholars are of all ages from seven to fifteen. After a month's probation, they are paid, according to the value of their work, from 2s. to 16s. (Re. 1 - Rs. 8) a month. Their parents are not required to enter into any bond or agreement. The school hours are for reading and writing from 7 A.M. to 9 A.M.; from 9 A.M. to 11 A.M. in the workshop; from 11 A.M. to 1 P.M. meals and recreation; from 1 P.M. to 4 P.M. in the workshop; from 4 to 5 P.M. arithmetic and mensuration. The boys are taught in succession the use of the simpler carpenter's tools, hand planing, and making mortises and tenors. As soon as they are proficient in this and in the square and foot rules, they are taught the use of fitting tools, circular saws, tenoning and mortising machines, fret and vertical saws, drilling machines, saw sharpeners, and lathes. As the boys become more advanced, they are taught practical mensuration by lining out with chalk on the floor full sized plans of roofing, scantling, door and window frames, and other similar work. To this follows instruction in taking out quantities and making estimates, and lastly the drawing of designs and the working of the steam engine. [Collector's 509, 17th February 1879.] The number of pupils on the opening of the school on the 1st April 1879 was 37. Six months later (1st October) the number had risen to 45. The boys are of various castes, Brahmans, carpenters, blacksmiths, Vanis Bhandaris. Marathas, Shindas, Kunbis, and Gabits being represented as well as Musalmans.

Private Schools.

Besides these Government institutions there are eleven private or indigenous schools. Of these one was a English school teaching to the third standard, four gave instruction in Marathi, three in Hindustani and Arabic, two were Missionary vernacular schools one for boys and one for girls, and one was a Veda school. The attendance at the Marathi schools varies from forty to thirty-five, while the Muhammadan schools each attract about twenty boys who are taught little else but to read the Kuran.

Mission Schools.

The American mission boys' school has an excellent house and is attended by about sixty pupils. Their girls' school, attended by about twenty-five pupils, has no special building.

Vedic School.

In 1867 a Vedic school, *Veda shala*, was started and continues to flourish with an attendance of about fourteen pupils. The scholars, usually the sons of mendicant, *bhikshuk*, Brahmans, are supported by the members of the school committee. The funds, which are increasing, amount to £200 (Rs. 2000); a school house has been built and the teacher, *guru*, is paid a yearly salary of £10 (Rs. 100). The instruction is limited to the mere recital of the Vedas and the incantations, *mantras*, repeated at Hindu rites and ceremonies. No attempt at explanation or translation is made.

In Malvan there were in 1878-79 three Government vernacular schools, with a roll call of 385 names and an average attendance of 310. Of these schools two were for boys and one for girls. The average yearly cost of each pupil in the boys' schools was $9s.\ 2\frac{1}{4}d$. (Rs. 4-9-6), and in the girls' school $13s.\ 5\frac{1}{8}d$. (Rs. 0-11-7). In Vengurla there were in 1878-79 three Government vernacular schools, with 313 names on the rolls and an average attendance of 230. Of these two were for boys and one for girls. The average yearly cost of each pupil in the boys' schools was $8s.\ 5d$. (Rs. 4-3-4), and in the girls' school $12s.\ 10d$. (Rs. 6-6-8). In Masura there was in 1878-79 one Government vernacular school for boys, with 108 names on the school books and 77.5 in average attendance. The. average yearly cost of each pupil was $9s.\ 7\frac{3}{4}d$. (Rs. 4-13-2). In Chiplun there was in 1878-79 one Government vernacular school. The number on the rolls was 153, the

average attendance 114, and the yearly cost of each pupil $8s.\ 5\%d.$ (Rs. 4-3-5). In Harnai there was in 1878-79 one Government vernacular school, with 107 names on the rolls, an average attendance of ninety, and an average yearly cost of each pupil of $8s.\ 4\%d.$ (Rs. 4-2-11). In Rajapur there were in 1878-79 two schools for boys, with a total roll call of 196 names and an average attendance of 139. Hindustani was taught in one school and Marathi in the other. The average yearly cost of each pupil in the Hindustani school was $14s.\ 4\%d$ (Rs. 7-3-1), and in the Marathi school $10s.\ 7\%d.$ (Rs. 5-5-0).

Village Education

Exclusive of the seven towns of Ratnagiri, Malvan, Vengurla, Masura, Chiplun, Harnai, and Rajapur, the district of Ratnagiri was in 1878-79 provided with 103 schools, or on an average one school for every twelve inhabited villages.

The following statement shows the distribution of these schools by sub-

SUB -DIVISIONS.	\	Popula-	Scho	ools.	SUB-	\	Popula-	Scho	ools. Girls 1
	Villages.	tion.	Boys.	Girls.	DIVISIONS.	Villages.	tion.	Boys.	
Dapoli	242 1/2	136,944	16	1	Devgad	120	124,115	9	
Khed	146	89,647	6	7	Malvan	60	66,922	7	
Chiplun	211	158,882	14		Vengurla	9	20,092	4	
Saugameshvar	179	107,891	13						
Ratnagiri	159	118,962	23						
Rajapur	161	131,176	10		Total	12871/2	954,631	102	1

Libraries

There are libraries and reading rooms at six places, Chiplun, Dapoli, Malvan, Rajapur, Ratnagiri, and Vengurla. Only the Ratnagiri and Vengurla libraries have special buildings. The rest are lodged in Government rooms, schools, or offices. A few of the leading vernacular papers and magazines are found on the library tables, and the number of books varies from fifty to 725. Nearly ninety members support the Vengurla library. In other places the number varies from live to thirty-five. Except at Ratnagiri and Vengurla where they nearly amount to £30 (Rs. 300), the yearly receipts generally vary from £2 to £10 (Rs. 20-100).

Newspapers

Three Marathi weekly lithographed newspapers are published, two the *Jaganmitra* 'Friend of the World' and *Satyashodhak* 'Truth Seeker' in the town of Ratnagiri, and one, the *Malvan Samaclar* and *Vengurla Vritt* ' Malvan and Vengurla News' in Vengurla. The Jaganmitra is an old paper of some standing. The rest are very ordinary prints. A small monthly Marathi magazine called *Vidyamala* ' Garland of Knowledge' is also published in the town of Ratnagiri.



Maharashtra State Gazetteers

HEALTH

Diseases

Fever.

INTERMITTENT fever, the prevailing disease, is commonest in July, August, and September. The lower classes, with scanty and poor food and much exposure to rain, suffer severely from fever. Some years ago Bankot was so feverish that the mahalkari's office had to be moved to Mandangad. Of late, without any apparent cause, the climate has become more healthy.

Leprosy.

Leprosy is commoner than elsewhere, especially in the inland parts of the centre and north. In 1871 there were more than 1600 lepers, or one to every 636 of the population and five for every four villages. More than one-third were bad cases with mutilation of hands and feet. The proportion of male to female sufferers was four to one. Their ages, especially among the females, were advanced, and there were few leper children. Musalman lepers are very few, while among Hindus, the chief classes are Maratha and Kunbi cultivators, and next to them Mhars. Heredity is more marked than usual. [Surgeon H, V. Carter, M.D., Trans. Med. and Phys. Soc Bom. XI, 162-167.]

Cholera.

Cholera rages every year more or less severely in some part of the district. The epidemics of 1820 and 1837 are mentioned as specially widespread and fatal. In 1869, 1871 and 1872 there were serious outbreaks at Vengurla. Except in 1877, the town of Ratnagiri has enjoyed a remarkable freedom from cholera.

Small-pox.

Small-pox is very common in the town of Ratnagiri. Both in 1871 and 1872, the disease was of a very deadly type.

Dysentery.

During the rainy season dysentery is very fatal. In 1873, there were 257 deaths in Vengurla and Malvan.

Especially in the south of the district the people suffer much from bilious attacks which often take the form of intermittent fever and cholera biliosa. Disease of the nervous system, showing itself in mental alienation and paralytic affections, is a not uncommon result of the habitual use of naVcotic drugs, *kuchli*, Strychnos nux vomica, thorn-apple, *dhotra*, Datura hummatu, and a coarse kind of spirit called *pheni* distilled from toddy. Itch and other forms of skin disease are common along the coast. Scurvy, sometimes observed among prisoners, presents symptoms somewhat different from those of the sea scurvy.

Worms.

Worms is a very general disease. They are passed in large numbers both by young and grown-up persons.

Civil Hospitals, 1878

The district is ill supplied with hospitals and dispensaries. There are only three civil hospitals at Ratnagiri, Dapoli, and Vengurla camp. In 1878, there were in all 9655 treated in the three hospitals, 283 of them in-door and 9372 out-door patients. The total amount spent in checking disease in the same year was £2510-1-4 (Rs. 25,100-10-8). The following working details are taken from the 1878 hospital reports.

Ratanagiri.

The Ratnagiri civil hospital, originally built and used as a criminal jail, is some distance from the town. It is well built and airy and has room for forty patients. It has one large ward for men, and smaller wards for women and for insanes. Additional accommodation is much needed. There are no quarters for servants, and those for the hospital assistant and medical pupil are badly placed. In 1878, 166 in-patients and 2828 out-patients were treated, most of them for malarious fevers and bowel affections. There were seven deaths chiefly from injuries. Seven major and fifty-seven minor surgical operations were performed. The total cost of the institution ammounted to £1090-4-9 (Rs. 10,902-6-0) or 7s. 2% d. (Rs. 3-9-9) a patient.

Dapoli.

The Dapoli civil hospital, established in 1860, has a building of its own, formerly the storeroom for the arms and ammunition of the Veteran Battalion. Well situated in the centre of the camp, it has but one ward with eight beds and no separate compartment for women. In 1878, the chief diseases were malarious fevers, respiratory affections, diarrhoea, and skin diseases. The total treated in the year were twenty-eight in-door and 2715 out-door patients. There were sixty-five successful vaccinations. The cost of the hospital was £844-11-5% (Rs. 8445-11-9) or 6s. 2d. (Rs. 3-1-4) a patient.

Vengurla.

The Vengurla civil hospital has a building of its own, a massive structure supposed to have been raised by the Portuguese or Dutch. It has two wards with ton cots and two end rooms, one used as an office and store, the other as an operating room. The roof is tiled and the floor stone-paved. There is a good plinth and sufficient ventilation. Except during the last two years, 1877 and 1878, the attendance has been very meagre with generally not more than two in-patients and twenty-nine out-patients. During the last two years, from the prevalence of malarious fevers, attendance has considerably increased. In 1878, the chief diseases were malarious fevers, rheumatism, respiratory affections, and skin diseases. The total treated were eighty-nine in-patients and 3829 out-patients. Nine deaths occurred among the in-patients due to bowel diseases and injuries. There were sixty-eight successful vaccinations.

The cost of the hospital was £575 5s. 1%d. (Rs. 5752-8-10) or 2s. 11%d. (Re. 1-7-5) a patient.

Leper Hospital.

The Ratnagiri leper hospital, established in 1875, has buildings costing about £2700 (Rs. 27,000) and with room for 100 patients. They stand about two miles from the station on an isolated part of the rocky eastern table-land. Most, of the funds were provided by the liberality of Mr. Dinsha Manikji Petit, a Parsi gentleman of Bombay, whose name the institution bears. The balance was met from the district local funds supplemented by minor popular contributions. The hospital is maintained by a yearly grant of £250 (Rs. 2500) from Government and £200 (Rs. 2000) from the district local funds. There is a resident hospital assistant and the civil surgeon of the station, in whose charge the institution is, visits it three times a week. The general affairs of the hospital are managed by a local committee of which the Collector is ex-officio president. The number of patients varies considerably, being always greater during the rainy months (June to October).

Practitioners.

Vaidas.

Native medical practitioners, *Vaidyas*, whose number is on the decrease, use a variety of seeds, roots, barks, and leaves in the cure of disease. They are somewhat partial to counter irritants, using for this purpose especially the acrid juice found under the cuticle of the cashewnut. They frequently have recourse to the actual cautery scoring with no tender hand the integuments both of man and beast. The acrid juice of cashew, mixed with molasses, *gul*, is also prescribed internally for worms. Hemp seed, opium, and green tobacco are generally administered in cases of dysentery. Chunanl plaster is considered a specific for headaches of all sorts, and chillies and nux vomica for cholera. Senna leaves and castor oil are used as purgatives, while water and salt is their only emetic. Small doses of opium are frequently administered to enable children to sleep quietly at night. They admit the efficacy of quinine and some other English medicines, and recommend vaccination. [Bom. Med. and Phys. Soc. Trams. IV. 77.]

Cattle Diseases

The cattle foot disease is prevalent in the rainy season in most villages of the Ratnagiri, Dapoli, Rajapur, and Khed sub-divisions. The animal suffers for two or three days from fever. Saliva flows from its swollen mouth and all appetite is lost. When the fever abates the hoofs swell and then burst out and gangrene. This disease in some cases causes death. In another disease called peya, observed in the hot season, the stomach of the animal swells; and in a third, a rarer and contagious sickness called bhovya, the animal turns round and round, refuses to chew the cud, grows weak, and dies within about a week. Some of these diseases and colic and rheumatic affections of the joints, to which cattle are very liable in the rains, are treated by branding with a hot iron. Dysentery among cattle, attributed to an ulcerated condition of the

intestines, is said to prevail during epidemics of small-pox. The sharp, bitter, and somewhat astringent seed-pods of the wild balsam, *terda*, Impatiens balsamina, are often, used in this complaint. In the rains cattle are sometimes stricken with paralysis, *kaksha vayu*, of the legs, and sheep with rot in the hoof. Domestic poultry are, especially in the hot season, at times infested by small fleas, so worrving and hard to get rid of, that fowls often scratch themselves to death. The best remedy is an ointment of oil and turmeric. Turkeys, when young, are subject to a pustular disease about the head and wattles. This and sudden apoplexy are often fatal.

In 1879-80, the work of vaccination was, under the supervision of the Deputy Sanitary Commissioner, Konkan Division, carried on by thirteen vaccinators distributed over the district, with yearly salaries varying from £16 16s. (Rs. 168) to £28 16s. (Rs. 288).

Vaccination

The total number of operations was 22,911, besides 3289 re-vaccinations, compared with 22,231 primary vaccinations in 1869-70.

The following abstract shows the sex, religion, and age of the persons vaccinated:

				4						
				PER	SONS	VACCINATI	ED.			
		ex.			Religi	on.		Ag	je.	Total.
Years		Female.	Hindus.	Musal- mans.	Parsis.	Christians.	Others.	Under one year.	Above one year.	Total.
1869- 70	11,891	10,340	18,668	2099	-	7	1457	4274	17,957	22,231
1879-	11,566	11,345	20,168	1077		123	1543	10,701	12,210	22,911

Ratnagiri Vaccination Details, 1869-70 and 1879-80.

The total cost of the operations in 1879-80 was £758 4s. (Rs. 7582) of about 8d. (5½ as.) for each successful case. The entire charge was made up of the following items: Supervision' and inspection £364 2s. (Rs. 3641), establishment £375 12s. (Rs. 3756), and contingencies £18 10s. (Rs. 185). Of these the supervising and inspecting charges were wholly met from Government provincial funds, whilst the other charges were borne by the local funds of the different sub-divisions.

80

Births and Deaths

The total number of deaths in the five years ending 1879, as shown in the Sanitary Commissioner's Annual Reports, was 97,552 or an average yearly

mortality of 19,511 or, according to the 1872 census, 1.9 per cent of the total population. Of the average number of deaths, 10,642 or 54.45 per cent were returned as due to fevers; [In 1879, there were 19,955 deaths due to fever as compared with 10,667 is the previous year.] 1796 or 919 per cent to bowel complaints; 963 or 493 per cent to cholera; 534 or 2.73 per cent to small-pox; and 5176 or 26.49 per cent to miscellaneous diseases. Deaths from violence or accidents averaged 432 or 2.21 per cent of the average mortality of the district. During the same period, the number of births was returned at 76,047 souls, 39,552 of them males and 36,495 females, or an average yearly birth-rate of 15,209 souls or, according to the 1872 census, 14 per cent of the total population of the district. [The figures are incorrect; for while the population of the district, is increasing, the returns show a birth-rate less by 4334 than the death-rate. The explanation probably is that nearly all the deaths and not nearly all the births are recorded.]



Maharashtra State Gazetteers

SUB-DIVISIONS

[The paras about aspect, climate, water, and soil have been compiled for Dapoli, Khed, Chiplun, Sangameshvar, Ratnagiri, Kajapur, and Devgad by Mr. G. W. Vidal, C.S., and for Malvan and Vengurla by Mr. N. Krishnarav. As the 1872 census figures and the produce returns for 1877-78 are not available for the ninn sub-divisions as they are at present constituted, the people and produce figures inserted in this chapter refer to the old sub-divisions,]

DAPOLI

Da'poli, the northmost of the sub-divisions, is bounded on the north by Janjira and Kolaba, on the east partly by Kolaba partly by Khed, on the south by the Vashishti which separates it from Chiplun, and on the west by the sea. Its area is about 500 square miles; its population, according to the 1872 census returns. was 143,137 souls, or 286.16 to the square mile; and in 1878-79 its realizable land revenue was £14,434 (Rs. 1,44,340).

Area.

As the sub-division is not yet fully surveyed area details are not available.

Aspect.

Dapoli, in the extreme north, of the district, and separaty, from the Sahyadri range by the Khed sub-division, has a seaboard of some thirty miles, stretching from Bankot to Dabbol. Its. breadth varies from fifteen to twenty miles. The coast line differs little in its general character from that of other parts of the Konkan. Bluff headlands flank the mouths of the principal rivers, and in the indentations of the coast are numerous sandy bays and strips of windblown drift. The villages on the coast, which are uniformly situated on the low belts of sand between the sea and the cliffs, and at the estuaries of the rivers, are largo and thickly peopled, and as is usual throughout the Konkan seaboard, densely shaded by cocoa palms. At Bankot and Dabhol the estuaries of the Savitri and the Vashishti afford good fair-weather ports for moderate sized craft, while at Harnai is fair anchorage during northerly breezes. Several smaller bays at intervals along the coast give shelter to the numerous fishing boats and small craft kept by the seafaring classes. Opposite Harnai, the picturesque island-fort of Suvarndurg, divided from the mainland by a channel about a guarter of a mile broad, is one of the most conspicuous features of the coast. Details are given below, p. 351. Passing inland, the general aspect of the sub-division is, especially in the petty division of Mandangad, extremely rugged, though, except Mandangad, there are no hills of

any great height. High cliffs rise abruptly from the sea shore, crowned by bare and bleak plateaus, on whose surface the laterite crops out, sometimes in huge boulders, sometimes in flat sheets of blackened weather-beaten rock. Here and there is a level plain, as at the-station of Dapoli, where the laterite is less exposed. But for the most part the country consists of a series of irregular hills, scoured and laid bare by innumerable water-course's, and broken at intervals by the deep precipitous ravines through which the larger streams find their way to the sea. Eastwards the country becomes more undulating and less bare, and the valleys and river banks are almost everywhere fairly cohered with brushwood. The inland villages are uniformly well shaded with clumps of jack, mango, and other trees, while here and there are found luxuriant groves dedicated to the village templs. Teak grows well in many parts of the sub-division, on the banks of the rivers and in sheltered ravines, and although since the beginning of the century much valuable timber has been cut and removed, there remains on the banks of the Jog river a valuable Government teak reserve, planted nearly two hundred years ago by Kanhoji Angria.

Climate.

The climate of Dapoli is on the whole very healthy., Bankot and other populous villages on the coast used to have a bad name for fever, and on this account the head-quarters of the mahalkari's station had to be moved from Bankot to Mandangad. Of late years there has been no special sickness, and the fever, from causes as yet imperfectly understood, has almost entirely disappeared both from Bankot and the neighbouring villages. With this doubtful exceptions, the rest of the sub-division is free from malarious ediseases and epidemics. The climate is temperate; no great extremes of heat and cold are experienced, and in every part of the sub-division the sea breeze is felt all through the hottest months. Dapoli station has long been known as one of the healthiest localities in the Konkan, and as being well suited for a military sanitarium and a residence for Europeans throughout the year. It has an elevation of about 600 feet above the sea, from which it is about five miles distant as the crow flies. The mean annual temperature for the eight years ending 1877-78 was found to be 76° 5', which is less by about 3° 5' than that recorded in Ratnagiri. [In his Meteorology of the Bombay Presidency (p. 164), Mr. Chambers gives the mean annual temperature of Dapoli as 78° 5 and the range between the greatest and least monthly means as 9.5 These results were obtained from observations extending over two years only.] The average rainfall recorded for the ten years ending 1877 was 112.24 inches. For the same period the fall recorded at Mandangad, which has a higher elevation, was 133.41 inches.

Water.

The principal rivers are the Savitri in the north and the Vashishti in the south. Between them lies the Jog, a smaller river, and several insignificant streams and creeks. Both the Savitri and Vashishti are navigable for craft of fair size throughout the section of their course which passes through the sub-division. There are no canals or other large irrigation works. With few exceptions, the cocoanut garden's on the coast, and other crops requiring water are irrigated by wells, fitted with lifts worked by bullock power. Rice lands, except in a very few cases, where summer crops are raised in the beds of dry ponds, depend entirely on the monsoon rainfall.

The supply of drinking water is scanty in many of the large coast villages. The water of most of the wells in use in such places, especially those in or near cocoa palm gardens, is, besides being brackish, more or loss tainted with impure subsoil drainage. In the hills above, pure water is usually obtainable at no great distance; but to ensure a constant and sufficient supply, a considerable expenditure is necessary. Inland the supply is, generally speaking, pure and abundant throughout the sub-division, and the Dapoli station is famous for the excellence of its drinking water. Thermal springs occur in two or three places. [Details are given above, p. 21.]

Soil

A small proportion of alluvial soil is found on the banks of the rivers and on the flats formed by deposits at their estuaries. A good deal of salt marsh and tidal swamp has been from time to time reclaimed and converted into fertile gardens and rice fields. Elsewhere, throughout the sub-division, on uplands and hill sides the soil consists entirely of crumbled laterite, with here and there towards the eastern boundary, a sprinkling of red and grey trap. The dry-crop soil is everywhere poor and unproductive, requiring constant manuring and long fallows, and yielding only coarse hill grains.

Stock.

According to the 1878-79 agricultural stock returns, there were 10,000 ploughs, 79 carts, 22,000 oxen, 16,200 cows, 7700 buffaloes, 60 horses, and 6273 sheep and goats.

Produce.

Of the 232,127 acres under actual cultivation in 1877-78, grain crops, occupied as many as 211,719 acres or 91.208 per cent, 21,035 of them under rice, bhat, Oryza sativa; 72,110 under nachni, Eleusine corocana; 52,094 under sava, Panicum miliaceum; 56,110 under harik, Paspalum scrobiculatum; and 10,370 under other grain crops. Pulses occupied 2200 acres or 0.94 per cent, 47 of them under gram, harbhara, Cicer arietinum 470 under tur, Cajanus indicus 139 under kulith, Dolichos uniflorus; 230 under mug, Phaseolus radiatus; 322 under udid, Phaseolus mungo; and 992 under miscellaneous pulses. Oilseeds occupied 15,720 acres or 6.77 per cent, all of them under gingelly oils.eed, til, Sesamum indicum. Fibres occupied 560 acres or 0.24 per cent, 140 of them under brown hemp, ambadi, Hibiscus cannabinus, and 420 under Bombay hemp, san, Crotalaria juncea. Miscellaneous crops occupied 1928 acres or 0.83 per cent, 130 of

them under sugarcane, *us*, Saccharum officinarum, and 1798 under miscellaneous vegetables and fruits.

People, 1872

The 1872 census returns show, of a total population of 143,137 souls, 124,380 or 86.89 per cent Hindus; 18,545 or 12.95 per cent Musalmans; 208 or 0.14 per cent Christians; and 4 Parsis. Statistics specially prepared from the enumerators' returns give the following caste details: 8598 Brahmans; 156 Parbhus, writers; 1054 Vanis, 566 Gujars, 13 Bhatias, 11 Marvadis, and 7 Lingayats, traders and merchants; 49,563 Kunbis, 19,187 Marathas, 5619 Bhandaris, 228 Malis, and 74 Gavdas, cultivators; 1520 Telis, oil-pressers; 698 Salis, and 77 Koshtis, weavers; 2153 Kumbhars, potters; 1810 Sutars, carpenters; 2037 Sonars, gold and silversmiths; 475 Kasars, workers in bell metal; 83 Lohars, blacksmiths; 11 Tambats, braziers and coppersmiths; 15 Ghisadis, tinkers; 2 Gaundis, masons; 793 Shimpis, tailors; 10 Patharvats, stone-hewers; 4 Rangaris, dyers; 321 Guravs, worshippers and temple servants; 1007 Nhavis, barbers; 452 Parits, washermen; 3593 Gavlis, cowherds; 113 Dhangars, shepherds; 3575 Kolis, 1484 Kharvis, 579 Bhois, and 182 Gabits, sailors and fishermen; 226 Buruds, makers of bamboo and. rattan baskets; 27 Bhadbhunjas, parchers and sellers of parched grain; 35 Ramoshis, watchmen; 2 Rajputs, messengers and constables; 9 Beldars, stone-cutters; 1994 Chambhars, and 11 jingars, shoemakers and cobblers; 14,225 Mhars, 9 Mangs, and 3 Bhangis, depressed classes; 296 Katkaris, catechumakers, 57 Dongar Kolis, and 13 Thakurs, unsettled tribes; 486 Saravdas, 181 jangams, 155 Jogis, 235 Gondhlis, 314 Gosavis, and 32 Gopals, religious beggars and mendicants. As regards occupation the same return arranges the whole population under the seven followingclasses: i. Employed under Government or local authorities, 508; ii. Professional persons, 669; iii. In service or performing personal offices, 2215; iv. Engaged in agriculture and with animals, (a) cultivators, 62,933; (b) labourers, 1645; total, 64,578; v. Engaged in commerce and trade, 4848; vi. Employed in mechanical arts, manufactures, and engineering operations, and engaged in the sale of articles manufactured or otherwise prepared for consumption, 10,473; vii. Miscellaneous persons not classed otherwise, (a) women 11,427 and children 47,159, in all 58,586; and (b) miscellaneous persons 1260; total 59,846.

KHED

Khed, fifteen miles from the coast, is bounded on the north by Kolaba, on the east by Satara, on the south by Chiplun, and on the west by Dapoli, which lies between it and the sea. Its area is about 390 square miles; its population, according to the 1872 census returns, was 89,647 souls, or 230 to the square mile, and its realizable land revenue in 1878-79 was £9262 (Rs. 92,620).

Area.

As the sub-division is not yet fully surveyed area details are not available.

Aspect.

The Khed sub-division lies inland and has no seaboard. It is very rugged and hilly, with a large proportion of rocky and almost barren land. Between Khed and Chiplun, the country is pretty open though undulating, and in the south-west corner of the sub-division there are large plateaus of tolerably level land, but the north-west portion is extremely hilly and much broken by ravines. At the north-east corner lie in succession the three lofty hills of Mahipatgad, Sumargad, and Rasalgad, detached from the main Sahyadri range by the deep valley of the Jagbudi river. South of these hills the country is broken in all directions by spurs, ravines, and precipitous defiles. The principal passes by which the Sahyadri range is crossed in this sub-division are the Hatlot and the Ambavli, the latter of which is passable for pack bullocks. Most parts of the country are fairly well covered with brushwood and scrub. Teak is very scarce; but the ain, Terminalia glabra, and the kinjal, Terminalia paniculata, are found, though not in any quantity or of fine growth. The village sites are everywhere well protected by shady trees, and there are numerous sacred groves dedicated to temples scattered over the country and strictly preserved by the village commupnities.

Climate.

The greater part of the sub-division lies beyond the influence of the sea breeze, and is consequently very hot during March, April, and May. From December to February the nights are chilly, and the daily range of the thermometer is considerable. The average rainfall for the ten years ending 1877 was 130.59 inches.

Water.

The Vashishti river skirts the sub-division on the south-west. while its tributary the Jagbudi flows through the sub-division in an irregular course from its source in the north-eastern corner to its meeting with the Vashishti in the extreme south-west. There are no other streams of any size or importance. The Jagbudi is, for small craft, navigable as far as Khed. There are no irrigations works; the little garden land is watered almost entirely by wells. In the neighbourhood of Khed the fields on the banks of the Jagbudi are here and there watered by wheel lifts. The supply of drinking water is deficient in the belt of villages lying at the fee of the Sahyadri range, but is moderately good in other parts of the sub-division. A hot spring is found at Khed. [Details are given above, p. 21.]

Soil.

A narrow belt of alluvial soil, stretching along the banks of the rivers, yields fair crops of rice and pulse. The rest consists almost

entirely of worn-down trap mixed here and there with laterite. On the whole, as regards soil, this sub-division is, with the exception perhaps of Devgad, the poorest in the district.

Slock.

According to the 1878-79 agricultural stock returns, there were 10,362 ploughs, 33 carts, 18,209 oxen, 11,810 cows, 6755 buffaloes, 21 horses, and 2793 sheep and goats.

Produce.

Of the 187,949 acres under actual cultivation in 1877-78, grain crops occupied 184,094 acres or 97.9 per cent, 18,794 of them under rice, bhat, Oryza sativa; 34,700 under nachni, Elensine corocana; 17,600 under sava, Panicum miliaceum; and 113,000 under harilc, Paspalum scrobiculatum. Pulses occupied 900 acres or 0.47 per cent, 250 of them under tur, Cajanus indicus, 50 under mug, Phaseolus radiatus, 100 under udid, Phaseolus mungo, and 500 under miscellaneous pulses. Oilseeds occupied 625 acres or 0.33 per cent, all of them under gingelly oilseed, til, Sesamum indicum. Fibres occupied 2291 acres or 1.21 per cent, 355 of them under brown hemp, ambadi, Hibiscus cannabinus, and 1936 under Bombay hemp, san, Crotalaria juncea. Miscellaneous vegetables and fruits occupied 39 acres.

CHIPLUN

Chiplun, the largest, of the sub-divisions, is bounded on the norflf by Dapoli and Khed, on the east by Satara, on the south by Sangameshvar and Ratnagiri, and on the west by the sea. Its area is about, 670 square miles; its population was, according to the 1872 census returns, 104,953 souls, or 216 to the square mile, and its realizable land revenue in 1878-79 was £16,830 (Rs. 1,68,300).

Area.

As the, sub-division is not yet fully surveyed area details are not available.

Aspect.

This sub-division stretches from the coast to the Sahyadri watershed. Like the whole of Ratnagiri, the country is throughout more or less hilly and rugged. The seaboard, with the exception of an open sandy roadstead some five miles long, extending on either side of the populous village of Guhagar, is broken and irregular. Bold bluff headlands alternate with snug bays and sandy coves fringed with belts of cocoa palms, beneath whose shade hestle picturesque villages. Close to the sea shore rise a series of high latorite plateaus which stretch some ten miles inland, where they are succeeded by a belt of lower undulating land of mixed trap and laterite loss barren and better wooded. Nearer the Sahyadri range, as it meets the innumerable spurs and ravines thrown out from the great mountain chain, the

country becomes very rugged and precipitous. The Sahyadris are crossed in this sub-division at two points, the north Tivra and the Kumbharli passes, the first a rough mountain pass and the latter a made cart road. In the inland racts, the village' homesteads are everywhere well shaded with ofty groves of mango, jack, tamarind, pipal, and other shady trees. Here and there on the red soil hill sides the ain and the kinjal flourish, while on the coast, besides the cocoa and betel palm, the undi, Calophylum inophyllum, bearing valuable crops of oilnuts, grows freely. Still, as a whole, the sub-division is badly off for forest trees and good timber is scarce. Teak,is rare, and the head waters and gathering grounds of the chief rivers are comparatively bare and treeless.

Climate.

The climate, though damp and relaxing, is not unhealthy. Inland, and at the foot of the Sahyadris, the heat during March, April, and May, is oppressive. On the sea coast and on the high plateau, running from north to south through the Guhagar petty division, the climate is at all times temperate and free from malaria. The average rainfall for the ten years from 1868 to 1877 was 126.58 inches at Chiplun, while at Guhagar the average during the same period was 76.27, the latter station being on the coast, and the former some twenty-five miles inland.

Water.

The Vashishti and the Shastri, which skirt the sub-division on the north and south respectively, are the only rivers of importance. Both streams are tidal for a distance of twenty to twenty-five miles from their mouths, and both are navigable for moderate sized craft up to within a few miles of the furthest point reached by the tide. Of late years both rivers have greatly silted. There are no regular canals or other large irrigational works. On the coast, garden lands arc watered entirely by wells, and inland, well water is nearly always used, though here and there during the fair season; temporary dam turns the water of a stream into a garden. The rice lands, drained and terraced with infinite labour, entirely depend or the monsoon rainfall. Except the tract at the foot of the Sahyadri and a few of the coast villages, the water supply is on the whole good and abundant. In the villages towards the center of the sub-division, as for instance at Ibhrampur, the water is celebratec for its purity. In the town of Chiplun itself, and at the landing place and wharf of Govalkot the supply has hitherto bee scanty, But extensive works, a large dam and storage reservoir some three miles from the town, and a covered trench leading thence to the market place, are now under construction.

SoiI.

On the coast and along the estuaries of the rivers there is a small amount of sandy drift on which, and on beds of silt brought down by monsoon freshes and artificially reclaimed, garden cultivation is successfully carried on. The bulk of the soil consists of laterite and trap detritus, on which coarse hill grains such as *nachni* Eleusine corocana, *vari* Panicum miliare, and *harik* Paspalum scrobiculatum, can alone be produced. Along the banks of the rivers there is a small proportion of good alluvial soil, winch yields fair crops of rice, and in some cases second crops of various kinds of pulses. The *tur* or pigeon pea, Cajanus indicus, is also successfully grown on the banks of the Vashishti and on the island of Grovalkot The stalks of the *tur*, here grown, have from their length and straightness been found especially suitable for the charcoal required for gunpowder manufacture. Gram, wheat, and sugarcane are sometimes hut rarely grown in the same localities.

Stock.

According to the 1878-79 agricultural stock returns, there were 16,666 ploughs, 120 carts, 31,286 oxen, 22,313 cows, 11,051 buffaloes, 92 horses, and 8514 sheep and goats.

Produce.

Of the 296,576 acres under actual tillage in 1877-78, grain crops occupied 280,271 acres or 94.5 per cent, 28,599 of them under rice, bhat, Oryza sativa; 90,600 under nachni, Eleusine corocana; 59,760 under sdva, Panicum miliaceum; and 101,312 under harik, Paspalum scrobiculatum. Pulses occupied 12,673 acres or 4.3 per cent, 1525 of them under gram, harbhara, Cicer arietinum; 4560 under tur, Cajanus indicus'; 668 under kulith, Dolichos uniflorus; 2400 under mug, Phaseolus radiatus; 2500 under udid, Phaseolus mungo; and 1020 under other pulses. Oilseeds occupied 2000 acres or 0.67 per cent, all of them under gingelly oilseed, til, Sesamum indicum. Fibres occupied 525 acres or 017 per cent, 400 of them under Bombay hemp, san, Crotalaria juncea, and 125 under brown hemp, ambadi, Hibiscus cannabinus. Miscellaneous crops occupied 1107 acres or 0.37 per cent, 236 of them under sugarcane, us, Saccharum officinarum, and the rest under miscellaneous vegetables and fruits.

People, 1872

The 1872 census returns show of a *total* population of 177,134 souls, 163,314 or 92.19 per cent Hindus; 13,818 or 7.80 per cent Musalmans; and 2 Christians. Statistics specially prepared from the enumerators' returns give the following caste details: 4982Bralnnans; 283 Parblms, writers; 4364 Vanis, 358 Gujars, 1 79 Bhatias, 127 Lingayats, and 4 Marvadis, traders and merchants; 46,159 Kunbis, 59,960 Marathas, 451 Bhandaris, 388 Malis, 380 Shindas and 7 Mitgavdas, cultivators; 740 Telis,oil-pressers; 491 Koshtis, and 414 Salis, weavers; 22 Sangars, weavers of coarse woollens; 2873 Sutars, carpenters; 2041 Kumbhars, potters; 2136 Sonars, gold and silversmiths; 740 Kasars, workers in bell metal; 85 Lobars, blacksmiths; 16 Otaris, founders; 220 Shimpis, tailors; 187 Guravs, worshippers and temple servants; 156 Bhorpis, rope-dancers; 1723

Nhavis, barbors; 801 Parits, washermen; 4991 Gavlis, cowherds, 847 Dhaugars, shepbierds; 1661 Bhois, and 3 Kharvis, sailors and fishers; 234 Buruds, bamboo and rattan baskotmakers; 15 Bhadbhunjas, pachers and sellers of parched grain; 2 Tambolis, betelnut and leaf sellers; 6 Rajputs, and 21 Ramoshis, messengers and constables; 590 Beldars, stonecutters; 2633 Chambhars, shoemakers, and 26 Jingars, saddlers and workers in leather; 21,020 Mhars, and 3 Mangs, depressed classes; 39 Katkaris, catechumakers, and 29 Dongar Kolis, unsettled tribes; 8G2 Jangams, 353 Gosavis, 122 Gondhlis, and 70 Saravdas, religious beggars and merchants. As regards occupation, the same return arranges the whole population under the seven following classes: i. Employed under Government or local authorities, 538; ii. Professional persons, 726; iii. In Aservice or performing personal offices, 1512; iv. Engaged in agriculture or with animals, (a) cultivators 85,474, (b) labourers 3, total 85,477; v. Engaged in commerce and trade, 2201; vi. Employed f in mechanical arts, manufactures, and engineering operations, and engaged in the sale of articles manufactured or otherwise prepared for consumption, 8431; vii. Miscellaneous persons not classed otherwise, (a) women 15,062 and children 61,191, in all 76,253; and (b) miscellaneous persons 1996; total 78,249.

SANGAMESHVAR

Sangameshvar, separated like Khed from the coast by the Ratnagiri sub-division, has on its north the Chiplun sub-division, on its east Satara and the Kolhapur state, on its south Rajapur, and on its west Ratnagiri. Its area is about 538 square miles; its population was, according to the 1872 census returns, 107,891 souls or 200 to the square mile, and its realizable land revenue in 1878-79 was £12,620 (Rs. 1,26,200).

Area.

As the sub-division is not yet fully surveyed area details are not available.

Aspect.

This sub-division is situated inland and has no seaboard. The tract lying to the north of the Shastri river is hilly but not particularly rugged, save at the foot of the Sahyadris. To the south of the river the sub-division consists for the most part of comparatively level tableland running close up to the foot of the Sahyadri range. Towards the south of this plain lies the village of Devrukh, the present head-quarters of the sub-division. In former years the banks and valleys of the Shastri and its tributary the Bav are said to have been well stocked with teak of fair size and other useful forest trees. All the most valuable timber has long since been cut for shipbuilding, and the hill sides are now either bare or covered with thin scrub and

brushwood. Elsewhere the country is fairly well wooded and the village sites are all shaded with lofty trees. The principal points at which the Sahyadri range is crossed in this sub-division are the south Tivra, the Mala, and the Kundi passes. The water-shed of the Sahyadris forms the eastern boundary of this sub-division, as of the whole district, as far south as the state of Savantvadi. The village of Gotne is an exception, as it is situated on the eastern side of the water-shed.

Climate.

This sub-division, from its inland situation, is subject to greater extremes of heat and cold than tracts lying nearer to the coast. In the hot months the influence of the cool sea breeze is scarcely felt, as the currents pass high overhead. The country is not unhealthy and the level plain on which Devrukh the present hend quarters of the sub-division stands, is during the cold season one of the pleasantest camping grounds in the district. The average rainfall recorded at Sangameshvar, the former head-quarters, was, for the ten years ending 1877, 127.25 inches.

Water

The chief river is the Shastri, the main stream of which cuts the sub-division nearly in half. The Gad, a tributary of the Shastri, A bounds the sub-division on the north, while the Bav, another tributary, forms the western boundary. The Shastri was formerlyty navigable for the largest native craft up to the quay at Sangamesh- var, but no vessels of any size can now come within six miles of this point. The Bav river is navigable for small boats as far as the village of Vandri, and similarly the Gad affords a passage for small craft as far as the village of Makhjan, where there is a small landing place. There are no irrigational works in the sub-division, and very little garden land; but here and there along the course of the Bav, rude water-lifts are used for irrigating fair weather crops. Drinking water is rather scanty, only 54 villages out of 155 having good wells. The want is most felt near the Sahyadris. Several hot springs of varying temperature are found in this subdivision. [Details are given above, P. 21.]

Soil

There is a fair amount of alluvial soil in the river valleys yielding average crops of rice and pulse. Almost all of the rest is crumbled trap.

Stock.

According to the 1878-79 agricultural stock returns, there were 518,3 ploughs, 13 carts, 10,224 oxen, 8447 cows, 3466 buffaloes, 22 horses, and 4339 sheep and goats.

Produce.

Of the 20,423 acres under actual tillage in 1877-78, grain crops occupied 19,136 acres or 93.69 per cent, 6069 of them under rice, bhat, Oryza sativa; 5253 under nachni, Eleusine corocana; 3310 under

sava, Panicum miliaceum; and 4504 under harik, Paspalum scrobiculatum. Pulses occupied 736 acres or 3.60 per cent, 3 of them under gram, harbhara, Cicer arietinum; 10 -under tur, Cajanus indicus; 10 under kulith, Dolichos uniflorus; 80 under mug, Phaseolus radiatus; 320 under udid, Phaseolus mungo; and 313 under other pulses. Oilseeds occupied 467 acres or 2.28 per cent, all of them under gingelly oilsced, til, Sesamum indicum. Fibres occupied 28 acres or 13 percent, all of them under Bombay hemp, san. Miscellancous crops occupied 56 acres, or 0.26 per cont, of which. 36 acres were under sugarcane, us, Saccharum officinarum, and 20 under miscellaneous vegetables and fruits.

People. 1872

The 1872 census returns show, of a total population of 90,966 souls, 86,118 or 94.67 per cent Hindus; 4815 or 5.32 percent Musalmans; and 3 Christians. Statistics specially prepared from the enumerators' forms give the following caste details: 5925 Brahmans; 3138 Vanis, 118 Lingayats, 18 Bhatias, and 9 Jains, Shephe and merchants; 31,209 Kunbis, 14,864 Marathas, 2745 Shindas,959 Bhandaris, 4 Gavdas, and 1 Mali, cultivators; 1141 Telis, oil-pressers; 157 Koshtis, and 41 Salis, weavers; 162 Sangars, weavers of coarse woollen blankets; 1072 Sutars, carpenters; 933 Kumbhars, potters; 1152 Sonars, gold and silversmiths; 655 Kasars, workers in bell metal; 66 Tambats, braziers and coppersmiths; 125 Lohars, blacksmiths; 4 Otaris, founders; 18 Ghisadis, tinkers; '93 Shimpis, tailors; 3351 Guravs, worshippers and temple servants; 49 Bhorpis, rope-dancers; 890 Nhavis, barbers; 208 Parits, Washermen; 3177 Gavlis, cowherds, 730 Dhangars, shepherds; 75 Kharvis, 3 Kolis, 225 Bhois, and 1 Gabit, sailors and fishers; 4 Ramoshis, watchmen; 821 Chambhars, shoemakers; 6 Jingars, saddlers; 10,261 Mhars, village servants; 15 Thakurs, wanderers; 493 Gosavis, 194 Jangams, 28 Gondhlis, and 72 Saravdis, religious beggars. With respect, to occupation the same return arranges the whole population under the seven following classes: i. Employed under Government or local authorities; 290; ii. Professional persons, 111; iii. In service or performing personal offices, 528; iv. Engaged in agriculture and with animals, 42,946, all under the sub-head (a) cultivators; v. Engaged in commerce and trade, 859; vi. Employed in mechanical arts, manufactures, and engineering operations, and engaged in the sale of articles manufactured or otherwise prepared for consumption, 3543; vii. Miscellaneous persons not classed otherwise, (a) women 5108 and children 35,782, in all 40,950; and (b) miscellaneous persons 1739; total 42,689.

RATNAGIRI

Ratna'giri, lying in the centre of the district, is bounded on the north by Chiplun, on the east by Sangameshvar, on the south by

Rajapur, and on the west by the sea. Its area is about 430 square miles; its population was, according to the 1872 census, 129,576 souls, or 301 to the square mile; and in 1878-79, its realizable land revenue was £10,578 (Rs. 1,05,780).

Area.

As the sub-division is not yet fully surveyed area details are not available.

Aspect.

The Ratnagiri sub-division has a seaboard of about thirty-five miles, stretching from the bold headland of Jaygad at the month of the Shastri river on the north, to the fort of Purangad at the mouth of the Muchkundi on the south. Eastwards it is flanked by portions of the Sangameshvar and Rajapur sub-divisions, which separate it from the Sahyadri range. The tract thus enclosed is in shape an irregular triangle, with its apex at the north-western end. The country consists for the most part of a series of rocky plateaus capped with weatherstained laterite and low rugged hills intersected by steep ravines and deeply scoured water-courses. The extreme, breadth of the tract is from sixteen to seventeen miles. The coast line is bold and indented by numerous bays, creeks, and backwaters. Bold headlands, jutting out at intervals into the sea, give protection to the local shipping and small craft during northerly winds, while the Kalbadevi bay, lying on the north side of the high hill of Mirya, gives safe anchorage for craft of all size during the south-west monsoon. The cliffs throughout a great part. of the coast line rise abruptly from a rocky beach. Sandy bays occur at intervals with narrow belts of drift between sea and cliff, thickly planted with cocoanut, betelnut, and undi, Calophyllum inophyllum In places as near Ratnagiri the cliffs fall back a considerable distance from the sea, the intervening space being filled with extensive salt swamps, with here and there a few reclaimed rice. fields. From the cliffs overhanging the sea to the summit of the valley of the Bav river, which during several miles of its course forms the eastern boundary of the sub-division, a gentle and gradual rise may be observed. The laterite plateau, of which great part of the whole area of the tract consists, is mostly bare and uninviting Coarse grass and stunted trees forcing themselves with difficulty through crevices, and here and there a patch of the poorer hill grains are the only vegetation during the greater part of the year. these may be added, during the rainy season, a profusion of ferns and lilies springing, as if by magic, under the influence of the countless rills and water-courses which redeem the land from utter barrenness. Throughout the greater part of this tract the landscape is flat and unpleasing. But here and there at the edges of the larger ravines, where the rivers may be seen winding through more fertile valleys and shady village homesteads, the scenery is at once homely and picturesque.

Climate.

The sub-division is on the whole decidedly healthy and free from epidemic disease.. Liver complaints are rare, and the chief sickness that prevails is due to intermittent fevers. Boils also are a very common ailment. The climate is moist and relaxing. During the rainy season the air is close and muggy in the intervals between the showers, and raw and chilly while rain is falling. From November to the end of May the heat of the sun is tempered through the greater part of the day by cool northerly breezes. Extremes of heat and cold are not felt and the climate is equable throughout the year. [The station stands 150 feet above the sea. Detailed thermometer readings are given above, p. 24, 25.] The mean annual temperature during 1878 was found to be 80° 54', the average monthly maximum during this period being 87° 7', and the average monthly minimum 74° 2'. [1878 was an exceptional year' with the highest recorded rainfall. The mean yearly temperature taken from the monthly averages of the six years ending 1876 was 81°45.] May, with a mean maximum of 93°, was the hottest, and December, with a moan minimum of 66° 7', the coolest mouth. The average rainfall for the twenty-eight years ending 1878, as recorded at the Civil Hospital, is 101.49 inches. This divided into three shorter periods of ten, ten, and eight years shows a progressive increase. The average for the first period 1851 to 1860 is 100.63 inches; for the second, 1861 to 1870 101.23 inches; and for the third, 1871 to 1878, 102.90 inches. The annual mean temperature of Ratnagiri is given in Chambers' Meteorology of the Bombay Presidency (p. 184) as 80° 8' and the range between the greatest and least monthly means as 7°.]

Water.

The- chief Ratnagiri rivers are the Shastri, the Bav (a tributary of the, Shashtri), and the Muchkundi, which bound it on the north-cast and south, and the Blatia creek or Ratnagiri river, at the mouth of which, on the northern bank, lies the head-quarter station of the district. Of these the Shashtri alone is navigable for craft of any size. Boats of light draught pass up the Bhatia creek as far as Harchari, a distance of about twelve miles, and up the Muchkuudi as far as Satavli, about fifteen miles. The. May river is also navigable as far as Vandri in the Sangameshvar subdivision on the north bank, and is much used for fleating timber down to the; landing places. Within the limits of this sub-division all these rivers are tidal and unfit for irrigation. In a few villages crops of summer rice arc watered by damming the smaller streams. There are no large ponds or reservoirs. The supply of drinking water is on the whole fair. An extensive project for supplying the town and civil station of Ratnagiri with water brought in a covered channel from a stream in the village of Nachni, two miles and a half distant, has lately been completed. Details are given below, p. 304.]

Soil

The soil differs in no respect from that of the sub-divisions already

described. There are alluvial deposits on the banks and at the estuaries of the creeks. The plateaus and hills above consist almost entirely of laterite, which crops to the surface in boulders and flat sheets of rock. Here and there, where by the crumbling of the rock a sufficient depth of soil has been formed, hill grains are grown; but the proportion of waste land is very large. Below in the valleys and on the river banks there is a fair amount of good rice and garden land,, the latter being watered chiefly from wells. The staple products of the soil are rice, *harik*, Paspalum scrobiculatum, *van*, Panicum miliare, and *nachni*, Eleusine corocana.

Stock.

According to the 1878-79 agricultural stock returns, there were 9560 ploughs, 64 carts, 19,133 oxen, 13,093 cows, 5763 buffaloes, 82 horses, and 4325 sheep and goats.

Produce.

Of the 150,538 acres under actual tillage in 1877-78, grain crops occupied 146,285 acres or 97.17 per cent, 14,107 of them under rice, bhaf, Oryza sativa; 51,073 under nachni, Eleusine corocaua; 24,388 under sava Panicum miliaceum; and 56,717 under harik, Paspalum scrobiculatum. Pulses occupied 15.00 acres or 0.99 per cent, 500 of them under horse gram, kulith, Dolichos uniflorus; 10 under mug, Phaseolus radiatus; 20 under udid, Phaseoloa mungo; and 970 under other pulses. Oilseeds occupied 1050 acres or 0.69 per cent, all of them under gingelly oilseed, til, Sesamum indicum. Fibres occupied 125 acres or 0.08 Produce. per cent, 62 of them under brown hemp, ambadi, Hibiscus cannabinus, and 63 under Bombay hemp, san, Crotalaria juncea. Miscellaneous crops occupied 1578 acres, or 1.04 per cent, 60 of them under sugarcane, us, Saccharum officinarum, and the rest under miscellaneous vegetables and fruits.

People 1872

The 1872 census returns show, of a total population of 119,741 souls, 103,689 or 86.59 per cent Hindus; 15,933 or 13.30 per cent Musalmans; and 119 or 0.09 per cent Christians. Statistics specially prepared from the enumerators' returns give the following caste details: 11,174 Brahmans; 140 Parbhus, writers; 2211 Vanis 24 Bhatias, 34 Jains, and 9 Marvadis, traders and merchants 34,931 Kunbis, 8623 Marathas, 4812 Shindas, 16,372 Bhandaris, 36 Mitgavdas, and 1 Ghadi, cultivators; 2597 Telis, oil-pressers; 204 Salis, weavers; 1578 Sutars, carpenters; 1373 Kumbhars, potters 1624 Sonars, gold and silversmiths; 82 Kasars, workers in bell metal 150 Tambats, brass and coppersmiths; 1 Otari, founder; 591 Lohars blacksmiths; 110 Shimpis, tailors; and 3 Gaundis, masons; 278 Guravs, worshippers and temple servants; 26 Bhorpis, rope-dancers and 2 Devlis, temple servants; 930 Nhavis, barbers; 415 Parits washermen; 27 Gavlis, cowherds; 628 Dhangars, shepherds; 3095 Kharvis, 70 Gabits, 23 Kolis, and 228 Bhois, sailors and fishermen; 2

Ramoshis, messengers and constables; 816 Chambhars, shoemakers; 18 Jingars, saddlers; 7799 Mhars, village servants; 119 Sarvadas, 28 Gondhlis, and. 1 Jangam, religious beggars. With regard to occupation the same return arranges the whole population under the seven following classes: i. Employed under Government or local authorities, 582; ii. Professional persons, 931; iii. In service or performing personal offices, 575; iv. Engaged in agriculture or with cattle, (a) cultivators 34,814, (b) labourers 605, total 35,419; v. Eugaged in commerce and trade, 5274; vi. Employed in mechanical arts, manufactures, and engineering operations, and engaged in the sale of articles manufactured or otherwise prepared for consumption, 9915; vii. Miscellaneous persons not classed otherwise, (a) women 23,108 and children 40,461, in all 63,569; and (b) miscellaneous persons 476; total 64,045.

RAJAPUR

Ra'ja'pur, second in size to Chiplun, is bounded on the north by the Ratnagiri and Sangameshvar sub-divisions, on the east by Kolhapur, on the south by Devgad from which it is separated by the Vijaydurg creek, and on the west by the sea. Its area is about 632 square miles, its population, according to the 1872 census returns, was 136,544 souls, or 216 to the square mile, and in 1878-79, its realizable land revenue was £15,340 (Rs. 1,53,400).

Area.

As. the sub-division is not yet fully surveyed area details are not available.

Aspect.

The Rajapur sub-division has a seaboard of about twenty miles lying between the Muchkundi river on the north and the Vijaydurg creek on the south. Extending inland to the water-shod of the Sahyadri range, it has an average breadth of about thirty-five miles. The physical configuration of the country differs little from that of the adjoining sub-division of Ratnagiri. The line of coast, broken into two sections by the large estuaries of the Muchkundi, Jaytapur, and Vijaydurg rivers, is very bold and irregular, the chief headland being Yashvantgad at the mouth of the Jaytapur creek. The cliffs rise close to the sea shore to a height of about seventy feet, faced by huge masses of laterite, which have been dislodged by the continued action of the sea during the south-west monsoon. The coast is deeply indented in many places, and at any distance above a quarter of a mile from land is clear of danger. For some ten or twelve miles inland lie a series of low rugged hills and rocky plateaus, becoming more waving towards the east, where trap replaces laterite. Towards the coast the hills are bare, and save in the rainy months, destitute of vegetation. The soil is poor and worthless, and cultivation is chiefly confined to the numerous valleys

and ravines. The villages on the coast are well shaded by cocoanut gardens. Further inland the country is better wooded, and the 'village homesteads are surrounded by shady groves, but there are no forests of any importance or value. The tract at the foot of the Sahyadris is broken by countless spurs, ridgeg, and deeply cut gorges. At the north-east angle, close to the old fort of Vishalgad and detached from Machal, [Transferred the main Sahyadri range, is Sangameshvar sub-division from 1st August 1879. a high hill surmounted by a fine broad plateau. The two chief passes in this subb-division are -the Anaskura and the Kajirda, both of which can be traversed by pack bullocks. The chief port of the sub-division is Jaytapur.

Climate.

The climate is usually considered healthy, especially near the coast, where the sea breeze is felt throughout the greater part of the year. Inland, during April and May, the heat is oppressive. The average rainfall for the ten years ending 1877 was 113.32 inches at Rajapur and 127.25 at Lanja.

Water.

The chief rivers from north to south are the Muchkundi, the Jaytapur, and the Vijaydurg, each of which receives the waters of several small tributary streams. All these rivers owing, it is believed, to the denudation of the forests protecting their head waters, have of late years silted much. The Muchkundi can be navigated by very small craft for about twelve miles into the interior. The Jaytapur river was formerly navigable for good sized craft up to the old town and port of Rajapur. But for many years no vessels drawing more than eight feet have passed within four miles of this point. The mouth of the river, flanked on its north bank by the Yashvantgad headland, makes a moderate fair weather port, but is exposed to westerly winds. The Vijaydurg river is navigable throughout its course in this sub-division. The estuary affords good anchorage all the year round, and the Vijaydurg, unlike most of the Konkan rivers, has no bar. There are no ponds or other largo irrigational works. The supply of drinking water is generally good for twelve miles inland, but is deficient in the villages at the foot of the

Soil.

Sahyadri hills. In the town of Rajapur extensive works for water supply have been executed by the municipality, and pure water is now distributed by pipes in all the principal streets and houses of the town. Near Rajapur is an intermittent and several hot springs. Near the coast, the soil consists of disintegrated laterite and iron clay, and inland, of a darker material, the product of the trap rocks. Alluvial deposits occur along the lower reaches of the rivers forming *rabi* and rice land, while the sandy ground on the coast produces flourishing cocoanut gardens.

Stock.

According to the 1878-79 agricultural stock returns, there were 14,050 ploughs, 45 carts, 28,500 oxen, 25,400 cows, 10,040 buffaloes, 35 horses, 5 asses, and 9025 sheep and goats.

Produce.

Of the 40,445 acres under actual tillage in 1877-78 grain crops occupied 37,134 acres or 91.68 percent, 14,744 of them under rice, bhat, Oryza sativa; 7320 under nachni, Elousine corocana, 5750 under sava, Panicum miliaceum; and 9320 under harik, Paspalum scrobiculatum. Pulses occupied 1057 acres or 2.61 per cent, 32 of them under tur, Cajanus indicus; 402 under horse-gram, kulith, Dolichos uniflorus; 32 under mug, Phaseolus radiatus; 366 under udid, Phaseolus mungo; and 225 under miscellaneous pulses Oilseeds occupied 870 acres or 2.13 per cent, all of them under gingelly oilseed, til, Sesamum indicum. Fibres occupied 767 acres or 1.89 per cent, all under Bombay hemp, san, Crotalaria juncea Miscellaneous crops occupied 617 acres or 1.52 per cent, 200 of them under sugarcane, us, Saccharum officinarum, and the rest, 417 acres under miscellaneous vegetables and fruits.

People, 1872.

The 872 census returns show, of a total population of 1G8,498 souls, 156,735 or 93.02 per cent Hindus, 11,616 or 6.89 per cent Musalmans, 146 or 0.09 per cent Christians; and one Parsi. Statistics specially prepared from the enumerators' forms give the following caste details: 13,199 Brahmans; 19 Parbhus, writers; 7885 Vanis, 542 Lingayats, 16 Gujars, 88 Bhatias, and 151 Jains, traders and merchants; 55,932 Kunbis, 22,243 Marathas, 10,493 Bhandaris, 3687 Shindas, 1596 Gavdas, 242 Ghadis, and 1 Mali, cultivators; 3920 Telis, oil-pressors; 123 Koshtis, and 154 Salis, weavers; 209 Sangars, makers of coarse woollen cloth; 2629 Sutars, carpenters; 1672 Kumbhars, potters; 1817 Sonars, gold and silversmiths; 355 Kasars, workers in bell metal; 155 Tambats, brass and coppersmiths; 95 Lohars, blacksmiths; 20 Otaris, founders; 294 Shimpis, tailors; 6689 Guravs, worshippers and temple servants; 10 Bhorpis, rope-dancers; 1327 Nhavis, barbers; 445, Parits, washermen, 900 Dhangars, shepherds; 1267 Gavlis, cowherds; 1800 Gabits, 120 Kolis, 539 Kharvis, and 18 Bhois, sailors and fishermen; 18 Rajputs, messengers and constables; 1435 Chambhars, cobblers and shoemakers; 13,0 74 Mhars, village servants; 28 Katkaris, catechumakers, and 20 Thakurs, wanderers; 340 Saravdas, 976 Gosavis, 51 Gondhlis, 57 Bhutes, and 84 Jangams, religious beggars. With respect to occupation the same return arranges the whole population under the seven following classes: i. Employed under Government or local authorities, 939; ii. Professional persons, 1335; iii. In service or performing personal offices, 1420; iv. Engaged in agriculture and with animals, (a) cultivators 71,768, (b) labourers 1326, total 73,094; v. Engaged in commerce, and trade, 3296; vi. Employed in mechanical arts,

manufactures, and engineering operations, and engaged in the sale of articles manufactured or otherwise prepared for consumption, 6379; vii. Miscellaneous persons not classed otherwise, (a) women 23,514 and children 56,947, in all 80,461; and (b) miscellaneous persons. 1661; total 82,122.

DEVGAD

Devgad is bounded on the north by Rajapur, on the cast by the Kolhapur state, on the south by the Malvan sub-division and the Savantvadi state, and on the west by the sea. Its area is about 521 square miles, its population, according to the 1872 census returns, was 124,115 souls or 238 to the square mile, and in 1878-79, its realizable land revenue was £9275 (Rs. 92,750).

Area,

As the sub-division is not yet fully surveyed area details are not available.

Aspect.

The Devgad sub-division, about twenty-six miles long and on an average thirty-two broad, stretches, except for a few Bavda villages at the north-east corner, from the coast to the water-shed of the Sahvadris. At the north-west corner the rocky headland of Vijaydurg juts some distance into the sea. On the inner side of this neck of land, about 100 feet above the sea, stands the old timeworn and crumbling fort of Girya. Fourteen miles south of Vijaydurg is the headland and fort of Devgad, the present head-quarters of the sub-division. The coast line from Vijaydurg to Devgad, and from Devgad to the Achra river the southern boundary, is comparatively regular, though cut into by numerous small rivers and creeks. The cliffs are steep and rise close to the beach, leaving here and there at their base small sandy coves, where, hidden among groves of palms, lie picturesque fishing villages, Above the cliffs are flat table-lands and jagged hills of bare laterite with little or no vegetation save in the rainy months. Twelve miles or so inland are numerous chains of hills more waving and better wooded, leading in broken and irregular lines to the wilder tract at the base of the Sahyadris. There are no forests of any value, but the inland parts and all the village sites are well wooded. The only pass into the Deccan of any note is the Phonda, over which there is a made cart road communicating with Nipani and Kolhapur. The principal ports are Vijaydurg, Vaghotan, and Devgad.

Climate.

Devgad, the head-quarters of the sub-division, is by the native officials, but perhaps without sufficient cause, considered feverish and unhealthy. Like the rest of the district the climate is temperate on the coast and for a few miles inland, while at the foot of the Sahyadris are wide extremes of heat and cold. The rainfall at Devgad from 1875 to

1877 averaged eighty-one inches, and at Kharepatan, the former head-quarters, from 1868 to 1874, 127 inches.

Water.

The principal rivers are the Vijaydurg, the Mitmumbari, the Mithbav, and the Achra. Besides these the Gad, a tributary of the Kalavali creek, flows for a part of its course through the smith eastern corner of the sub-division. The Vijaydurg, the northern boundary, is navigable for vessels drawing seven feet of water as far as Vaghotan, where there is a stone jetty, and for canoes as far as Kharepatan, twenty miles inland. The mouth of this river gives a good anchorage all the year round. The Achra, which for the last few miles of its course forms the southern boundary of the sub-division, is navigable for four miles for small craft only. The Devgad river, the estuary of which forms an indifferent fair weather port, and the Mithbav and the Mitmumbari are similarly navigable for small boats only. All the above rivers are tidal except the Gad. There are no irrigational works worth notice. The water supply is fair for twenty miles inland, but as usual deficient in the villages on the slopes and spurs of the Sahyadri range.

Soil.

The soil is everywhere poor. Here and there at the foot of the Phonda pass, and about the village of Lora, patches of soft clay soil and variously coloured shales relieve the monotony of laterite and trap, but add nothing to the agricultural value of the tract which is the poorest in the district.

Stock.

According to the 1878-79 agricultural stock returns, there were 14,840 ploughs, 69 carts, 34,684 oxen, 23,563 cows, 11,231 buffaloes, 56 horses, and 7964 sheep and goats.

Produce.

Of the 30,325 acres under actual tillage in 1877-78, grain crops occupied 24,766 acres or 81 per cent, 13,969 of them under rice, bhat, Oryza sativa; 3461 under nachni, Eleusine coroeana; 2551 under sdva, Panicum miliaceum; and 4785 under harik, Paspalum scrobiculatum. Pulses occupied 2071 acres or 6.82 per cent, 4 of them under gram, harbhara, Cicer arietinum; 39 under tur, Cajanus indicus; 1421 under kulith, Dolichos unillorus; 66 under mug, Phaseolus radiatus; 480 under udid, Phascolus mungo; and 61 under miscellaneous pulses. Oilseeds occupied 1393 acres or 4.5 per cent, 1369 of them under gingelly oilseed, til, Sesamum indicum, and 24 under miscellaneous oilseeds. Fibres occupied 993 acres or 3.27 per cent, all of them under Bombay hemp, sun, Crotalaria juncea. Miscellaneous crops occupied 1102 acres or 3.63 per cent, 352 of them under sugarcane, us, Saccharum officinarum, and the rest under various orchard and vegetable crops.

People, 1872.

The 1872 census returns show, of a total population of 118,921 souls, 114,892 or 96.61 per cent Hindus, 3166 or 2.66 per cent Musalmans, and 863 or 0.72 per cent Christians. Statistics specially prepared from the enumerators' forms give the following caste details: 6975 Brahmans; 9 Parbhus, writers; 10,152 Vanis, 249 Lingayats, 12 Bhatias, and 672 Jains, traders and merchants; 13,459 Kunbis, 46,270 Marathas, 668 Shindas, 5956 Bhandaris, 82 G:ivdas, 3982 Mitgavdas, and 4 Malis, cultivators; 2981 Tel is, oil-pressers; 568 Koshtis, weavers; 45 Sangars, weavers of coarse woollen cloth; 2030 Sutars, carpenters; 1462 Kumbhars, potters; 15 15 Sonars, gold and silversmiths;' 592 Krasars, workers' in bell metal; 38 Tambats, brass and coppersmiths; 38 Lohars, blacksmiths; 305 Shimpis, tailors; 329 Guravs, worshippers and temple servants; 20 Bhorpis, rope-dancers; 163 Devlis, temple-servants; 957 Nhavis, barbers; 655 Parits, washermen; 521 Dhangars, shepherds; 19 Gavlis, cowherds; 4113 Gabits, 31 Kolis, and 1 Kharvi, sailors and fishers; 2 Rajputs, and 2 Ramoshis, messengers and constables; 1016 Chambhars, cobblers and shoemakers; 29 Jingars, saddlers; 8203 Mhara, village servants; 225 Thakura, and 18 Vadars, wanderers; 481 Gosavis, and 10 Gondhlis, religious beggars. As regards occupation, the same return arranges the whole population under the seven following classes: i. Employed under Government or local authorities; 414; ii. Professional persons, 413; iii. In service or performing personal offices, 902; iv. Engaged in agriculture and with animals, (a) cultivators 57,691, (b) labourers 1423, total 59,114; v. Engaged in commerce and trade, 1503; vi. Einployed in mechanical arts, manufactures, and engineering operations, and engaged in the sale of articles manufactured or otherwise prepared for consumption, 9023; vii. Miscellaneous persons not classed otherwise, (a) women 6028 and children 40,145, in all 46,173; and (6) miscellaneous persons 1379; total 47,552.

MALVAN

Ma'Ivan is bounded on the north by the Devgad sub-division, on the east by the Savantvadi state which runs between the Malvan country and the Sahyadri range, on the south by the Karli creek, and) on the west by the sea. Its area is about 56 square miles; its population was, according to the 1872 census, 88,135 souls or 1573 to the square mile, and in 1878-79 its realisable land revenue was £8326 (Rs. 83,260).

Area.

As the sub-division is not yet fully surveyed area details are not available.

Aspect.

Malvan, about eighteen miles from north to south and from sixteen to eighteen from east to west, the seaboard between the mouth of the

Achra in the north and the mouth of the Karli in the south, consists chiefly of an open sandy roadstead intersected by the Kolamb and Kalavali creeks. Like the rest of the district, Malvan is broken and irregular, a series of rugged hills and rich valleys. The plateaus are chiefly of bare laterite almost without trees or brushwood. The hill sides are generally steep and brushwood covered. The banks of the Karli and Kalavali creeks are open level plains, yielding rice and sugarcane. The headland of Rajkot at Malvan gives protection to small steamers and country vessels which, during northerly breezes, anchor in Malvan bay. The bay contains a number of rocks, and without a local pilot it is very dangerous to attempt an entrance. The estuaries of the Karli, Kalavali, and Achra creeks are good fair-weather ports for small sized craft. The villages are well shaded with cocoa palms, jack, mango, kaju (Anacardium occidentale), and undi (Calophyllum inophyllum) trees. The villages of Dhamapur, Kandalgaon, and Ovaliye contain Government forest reserves of teak and other valuable trees. The seaboard is densely shaded by cocoa palms. The island fort of Sindhudurg is cut off from the mainland by a channel less than a quarter of a mile broad. [Gov. List of Civil Forts, 1862.]

Though occasionally feverish, and especially in the inland villages oppressively hot in April and May, the climate of Malvan is on the whole healthy. The average rainfall recorded for the ten years ending 1878 is 85.32 inches. [Chambers' Meteorology of the Bombay Presidency, 184.]

Water.

The water supply is abundant. The Kalavali and Karli creeks are the chief rivers. Both of them are, for fifteen to twenty miles, tidal and navigable for small sized craft. The Dhamapur lake, the largest in the district, has an area of fifty-five acres, and waters about 500 acres in the villages of Dhamapur, Kalsa, and Pendur. The smaller ponds of Pendur, Varad, Tulgaon, and Malvan; and the streamlets running through the villages supply abundance of water throughout the hot weather, and the rice lands irrigated by them yield two crops a year. The supply of drinking water is good, except at Varad and in some parts of Nandos and Pendur where scarcity is felt in April and May. The water of the town of Malvan, and especially of the wells near the sea is a little brackish.

Soil.

The soil here as elsewhere is chiefly composed of laterite, but there is a good deal of alluvial land in the villages along the Karli and Kalavali creeks, which, especially the plain of Bandivde, yields excellent crops of rice, chillies, and sugarcane. The soil of the rice lands at the foot of the hills is generally red and that of the villages bordering the sea is sandy, particularly suited to the growth of cocoa palms. The slopes of the hills are fit only for the coarser grains such as vari, harik, and sesame. There is also, chiefly along the creeks, a large area of partly reclaimed salt marsh, khajan.

Stock.

The 1878-79 agricultural stock returns show a total of 13,029 ploughs, 330 carts, 23,130 oxen, 12,389 cows, 11,373 buffaloes, 35 horses, and 3608 sheep and goats.

Produce.

Of the 62,449 acres under actual cultivation in 1877-78, grain crops occupied 45,741 acres or 73.24 per cent, 26,481 of them under rice, bhat, Oryza sativa; 47 under rala, Panicum italicum; 9125 under nachni, Eleusine corocana; 2496 under mva, Panicum miliaceum; 7180 under harik, Paspalum scrobiculatum; and 412 under other cereals. Pulses occupied 4585 acres or 7.34 per cent," 18 of them under tur, Cajanus indicus; 3111 under kulith, Dolichos uniflorus; 244 under mug, Phaseolus radiatus; 1133 under udid, Phaseolus mungo; and 79 under other pulses. Oilseeds occupied 3236 acres or 5.18 per cent, all of them under gingelly oilseed, til, Sesamum indicum. Fibres occupied 406 acres or 0.65 per cent, all of them under Bombay hemp, san, Crotalaria juncea. Miscellaneous crops occupied 8481 acres or 13.5 per cent, 562 of them under sugarcane, us, Saceharum officinarum, and 7919 under miscellaneous vegetables and fruits.

People, 1872.

The 1872 census returns show, of a total population of 123,273 souls, 119,640 or 97.05 per cent Hindus; 1741 or 1.41 per cent Musalmans; 1888 or 1.53 per cent Christians; and 4 Parsis. [These figures are both for Malvan and Yengurla.] Statistics specially prepared from the enumerators' forms give the following caste details: 9743 Brahmans; 33 Parbhus, writers; 2772 Vanis, 86 Lingayats, 178 Bhatias, 141 Jains, 5 Marvadis, and 3 Gujars, traders and merchants; 21,882 Kunbis, 25,334 Marathas, 27,535 Bhandaris, 5276 Gavdas, 488 Farjans, and 480 Shindas, cultivators; 1805 Telis, oil-pressers; 137 Koshtis, weavers; 1863 Sutars, carpenters; 604 Kumbhars, potters; 71 Kasars, workers in bell metal; 1338 Sonars, gold and silversmiths; 35 Tambats, brass and coppersmiths; 453 Lohars, blacksmiths; 88 Shimpis, tailors; 141 Guravs, worshippers and temple servants; 20 Bhorpis, rope-dancers; 1156 Devlis, temple servants; 418 Bhavins, prostitutes; 69 Kalavantins, dancing girls; 1200 Nhavis, barbers; 803 Parits, washermen; 66 Gavlis, cowherds; 207 Dhangars, shepherds; 8695 Gabits, and 200 Kolis, fishers and sailors; 3 Rajputs, messengers and constables; 869 Chambhars, cobblers shoemakers; 21 Jingars, saddlers; 4506 Mhars, village servants; 31 Lamans, and 212 Thakurs, wanderers; 654 Gosavis, 13 Jangams, and 6 Gondhlis, religious beggars. With respect to occupation the same return arranges the whole population under the seven following classes: i. Employed under Government or local authorities, 641; ii. Professional persons, 606; iii. In service or performing personal offices, 910; iv. Engaged in agriculture or with animals, (a) cultivators 49,963, (b) labourers 2129, total 52,092; v. Engaged in commerce and trade, 2163; vi. Employed in mechanical arts, manufactures, and engineering operations, and engaged in the sale of articles manufactured or otherwise prepared for consumption, 14,441; vii. Miscellaneous persons not classed otherwise, (a) women 7390 and children 42,560, in all 49,950; and (b) miscellaneous persons 2470; total 52,420.

VENGURLA

Vengurla, situated in the extreme south of the district, is bounded on the north by the Karli creek, which separates it from Malvan, on the east by the Savantvadi state, on the south by the Portuguese territory of Goa, and on the west by the sea Its area is about 52 square miles, its population was, according to the 1872 census returns, 35,088 or 674 to the square mile, and in 1878-79, its realisable land revenue was £4677 (Rs, 46,770).

Area.

As the sub-division is not yet fully surveyed area details are not available.

Aspect.

Vengurla, about twenty-two miles long and nowhere, more than five broad, has in the north a succession of high bare rocky plains and narrow valleys. The steep hill sides have their upper slopes well clothed with brushwood and much of the lower slopes covered with cocoanut and betelnut palms. In the valleys the soil is generally very rich. Much of the south consists of low open belts of sand. The south and east of Redi, the east of Aravli and the south' of Vengurla are hilly. Compared with the rest of the district the cliffs are low. The chief headlands are the points of Nivti, Vengurla, and Redi. There are on navigable rivers or creeks. The mouths of the Vengurla, Aravli, and Shiravda streamlets are high tide fair-weather ports for small vessels and fishing boats. At Vengurla there is, for steamers and large country craft, safe anchorage during northerly breezes, but on account of the rocka the approaches are at all times difficult. On one of a cluster of twelve bare springless sandstone rocks, about twelve miles northwest of Vengurla, a light-house has been built. The villages, each of several hamlets, are large and thickly peopled.

Climate.

As it all lies within the influence of the sea breeze the climate is free from extreme heat or cold; Though feverish during the last year (1879), it is generally healthy, especially at Vengurla and Redi. The mean annual temperature is 80° 2', and the range between the greatest and least monthly means is 6° . [Chambers' Meteorology of the Bombay Presidency, 184.] The average rainfall in the nine years ending 1877 was 110 inches.

Water.

The supply of water is abundant. Almost every valley in the north has a perennial stream. In the south of Redi, a large reservoir waters the valley of Kaniella with gardens of cocoanut and betelnut palms, and at Pat in the Savantvadi state, to the north of Mhapan, a similar pond waters the Mhapan and Kochra valleys. Throughout the hot weather the streams supply abundance of water and all irrigated rice lands yield a second crop. Except in Shiravda where it is a little brackish, the supply of drinking water is good. The Vengurla municipality lately, at considerable expense, has made water works for the supply of the town.

Soil.

The soil varies considerably in the different parts of the subdivision. In the northern valleys the rice lands are red with a slight mixture of sand. Except in the hills the southern villages are generally sandy. Salt marsh, *khajan*, land is found at the mouths of all streams. Coarse rice is grown on land reclaimed from the sea, while the sandy drifts are planted with cocoa palms.

Maharashtra State Gazetteers

PLACES

[Many of the descriptive notices and details of the present condition, trade, and management of the leading town, have been contributed by Mr, G. Vidal, C. S.]

ACHRA

A'chra, a village and port on the small creek of the same name, lies on the north-west boundary of the Malvan sub-division about ten miles north of Malvan. It had, in 1872, a population of 4507 souls, and for the five years ending 1877-78, an average trade valued at £4529 (Rs. 45,290), of which £1929 (Rs. 19,290) were exports and £2600 (Rs. 26,000) imports.

Achra was in 1555 the scene of a Portuguese victory over Bijapur troops. [De Coutto, VII. 169, in Maine's Konkan. 43.] In 1819, the year after its capture by Colonel Imlack, it was in every way unimportant. [Malvan Resident, 31st May 1819; Bom. Rev. Diaries 141 of 1819, 2311.] Its chief object of interest is the Rameshvar temple. The principal building, enclosed by a stone wall and surrounded by a paved courtyard, measures sixty-three feet by thirty-eight, and besides the shrine, has a large rest-house with accommodation for all Hindu castes. A fair, held yearly on Ramnavmi in Chaitra (March -April), is attended by about 1000 people from the neighbouring villages. The village revenues, amounting yearly to £250 (Rs. 2500), are by a grant of Shambhu Maharaj of Kolhapur, dated 1674, set apart for the support of the temple. In the river near Achra sections of slate beds are exposed. These, not hitherto worked, are probably of some economic value. A china clay or kaolin capable of being used for pottery is also found in and about the village. The fine white sandstones freely exposed in the neighbourhood are locally used as whetstones.

ADE

A'de, on a small rather deep creek three miles south of Kelsi, had, in 1872, a population of 1884 souls, chiefly fishermen. In 1819 it was a port with a small trade in corn and fish. [Collector to Gov.15th july 1819; Bom. Rev. Diaries, 142 of 1819, 2673.] It is now of no importance. There is a small temple of Bhargavram.

ADIVRA

Adivra, a village in the Rajapur sub-division, twelve miles west of Rajapur, with, in 1872, 4293 people, has a well known temple dedicated to Mahakali. In her honour, from the second to the tenth day of the first fortnight of *Ashvin* (September - October), a fair is held. Petty shops are opened and about 1000 persons attend.

AMBOLGAD

Ambolgad Fort, on the bay at the north entrance of the Rajapur river, raised very little above sea level and with a ditch on the north

and west sides, covers an area of a quarter of an acre. In 1818 the fort surrendered to Colonel Imlack. [Service Record, H. M.'s IVth Rifles, 28.] In 1862 it was a complete ruin without remains of houses, walls, or bastions. There was no garrison and no water. Supplies were plentiful. [Gov. List of Civil Forts, 1862.]

ANJANVEL

Anjanvel, north latitude 17° 31' and east longitude 73° 15', a village with an old fort having, along with Peth, in 1872, 3285 people lodged in 540 houses, stands on the south shore of the entrance to the Vashishti or Dabhol river, to which also it gives the name Anjanvel. Under the Marathas it was the head-quarters of a district administered by a *subhedar*. [Nairne's MS.] In 1819, in consequence of the removal of the head-quarters to Guhagar, it fell into insignificance, [Collector to Gov. 15th July 1819; Bom. Rev. Daries 142 of 1819, 2575.] and since then it has grown little in size or wealth. The river mouth, about a mile broad, is narrowed by a sandbank, that from the north runs within two cables length of the south shore, where on the edge of a plateau 300 feet high is the ancient temple of Talkeshvar. On the bar at low tide are ten feet of water with, at springs, a rise of ten feet. From its exposed position there is generally a swell. [Taylor's Sailing Directory, 387.] A lighthouse is being built at the entrance of the harbour. The average trade for the five years ending 1877-78, was valued at £592,393 8s. (Rs. 59,23,934) of which £314,163 4s (Rs. 31,41,632) represented exports and £2 78,230 4s. (Rs. 27,82,302) imports. The port gives good anchorage during the fair weather to vessels passing to and from Chiplun. The custom house at the entrance to the harbour, and a resthouse are the only public buildings. Coasting steamers used to call at Anjanvel. Of late their place of call has been changed to the more sheltered port of Dabhol, two miles higher up the river on the north bank. Weaving is the only industry.

Fort.

Anjanvel fort, called Gopalgad, was built by the Bijapur kings in the sixteenth century, strengthened by Shivaji about 1660,[Jervis' Konkan, 92.] and improved by his son Sambhaji (1681-1689). In 1699 the fort was attacked and captured by Khairat Khan, Habshi of Janjira (1680-1708), who added the lower fort, padkot. [Some Persian verses on a flat oblong stone give the date 1707 and the builder's name Sidi Saad. The verses are: Whoever built a new mansion, when he was called away did it not belong to another? God is immortal and all else subject to death. When the kind king, the light of the world, gave the order, the fort was made which he could not live to see. Sidi Saad (built) the fort. Written on the 10th of Zil Hajj, the first year of the reign, Hijra 1119 (A.D. 1707).] In 1744 (December), Tulaji Angria Sirkhel took it from the Habshi, and naming it Gopalgad, added the upper fort, balekot. From him, in 1755, it passed to the Peshwa, [Nairne's Konkan, 92.] and on the Peshwa's overthrow, fell to Colonel

Kennedy on the 17th May 1818. [Nairne's Konkan, 116; Service Record of B. M.'S XXIst Regiment K. I. (Marine Battalion). The fort stands on a prominent and commanding point on the south shore of the creek entrance half a mile from Anjanvel. It covers seven acres, and is surrounded on three sides by the sea, and on the fourth by a deep ditch now partly filled. [Gov. List of Civil Forts, 1862.] There is no complete line of outworks, only one or two covered ways leading down to batteries. [Kairne's MS.] The fort walls, built of stone and mortar, are very strong about twenty feet high "and eight thick, with, at some distance from each other, twelve bastions, until very lately armed with cannon. South of the fort is a deep trench eighteen feet broad. There are two doors, one to the east, the other to the west. On either side of the west door is a guardroom. The interior of the fort, once full of buildings, still has traces of small houses. There are also three wells with a plentiful supply of water. Near the wells is a building said to have been the storeroom, close to it a granary, and at a little distance the governor's palace. Till 1829, when it was abandoned and the troops moved to Dapoli, the fort was garrisoned by a small force of two officers and 200 native soldiers. In 1862 it had no garrison and only eighty-eight old unserviceable guns. [Gov, List of Civil Forts, 1862.]

ANJARLA

Anjarla, a small port at the mouth of the Jog river, about three miles south of Ade and two north of Suvarndurg, had, in 1872, a population of 1952 souls. The trade is in the hands of a few local merchants. Anjarla was probably never a place of consequence. In 1819 it had some trade in salt, fish, and corn. [Collector to Gov. 16th July 1819; Bom. Rev. Diaries, 142 of 1819, 2573.] Most of the present population, belonging to the upper classes, *pandharpeshas*, live in well built and tiled houses standing in dense cocoa groves.

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BAGMANDLA

Ba'gma'ndla, a large fishing village in the Dapoli sub-division on the north bank of the Savitri opposite Bankot, had, in 1872, a population of 2829 souls. This village together with the oining village of Kolmandla, one-half of which belongs to the bshi'of Janjira, is the only part of Ratnagiri that lies north of Savitri. It has no trade, and being surrounded on three sides by great mud swamps, is unhealthy. Bagmandla was one of the ten Bankot villages ceded to the British in 1756. Bagmandla. and Kolmandla are probably the remains of Mandal, or Mandan, an old trading place of some consequence. Barbosa (1514) has a Mandabad at the mouth of the Bankot river, where many ships, especially from Malabar, came taking stuffs and leaving cocoanuts, areca nuts, a few spices, copper, and quicksilver. [Stanley's Barbosa, 71. The name and position suggest that it may be the site of Mandagora mentioned both by Ptolemy (150) and in the Periplus (247). [MS. Records in Nairae's Konkan, 114. The reduction of the forte of Mandangad and Jamba was announced in General Orders of the 20th February 1818. In Colonel Kennedy's detailed report, he specially thanked Captain Farguharson, Lieuts. Domi-nicette and Capon, and the seamen and native officers for the intrepid and gallant manner in which they assaulted the triple stockades in front of the communication gateway and carried the forte by escalade. Service Record of H. M.'s XXIst Regiment N. I.]

BAHIRAVGAD

Bahiravgad Fort, high and hard to reach, on a spur of the Sahyadris in Chiplun, covers an area of about eight acres of very broken, rocky and brushwood-covered ground. In 1862 the walls were ruinous and there were only four old unserviceable guns. There was no garrison, water was abundant but provisions were scarce. [Gov. List of Civil Forts, 1862.]

BAHIRAVGAD.

Bahiravgad Fort, on the top of the Sahyadris in the Devgad village of Digavle, is between four and five acres in area. In 1862 there were no walls or bastions, no garrison, and no water.[Gov. List of Civil Forts, 1862.]

BALAPIR

Ba'la'pir, on the top of a conical hill about half a mile from Dabhol creek and four miles north-east of Dabhol, has a ruined mosque and a shrine [The story of the shrine is that a Deccani Vani named Ralasheth, becoming a Musalman, let loose a bull, and vowed to build a mosque wherever the bull stopped. The bull stopped on the top of the hill, and the Vani built a mosque and a tomb. The graves in the tomb are those of the builder, his wife and his child, and those outside are raised over his horse and bull.] of soft red laterite both domed,

very simple, and of rough workmanship. In the tomb are three graves without any inscriptions, and in the enclosure outside are three more. An endowment, originally granted by the Habshi about the year 1650, and continued by Angria and the Peshwa, has been (1874) confirmed by the British. Of the date of the buildings there is no trace. The Habshi's grants show that they must be at least as old as the beginning of the eighteenth century, and their battered weatherworn stones seem to point to a much greater age. The ruined step well in the plateau of the hill top is said to be the quarry from which the stones for the mosque were cut.

BANDAR SAKHRI MOSQUE

Bandar Sa'khri, a landing place two miles north-east of Dabhol, has, on a reclaimed piece of ground on the left bank of the Vashishti, a very simple ruined black stone building known as the Jama, or Amina, mosque. Its age is not known, but from a paper about the appointment of a warden, the building must be as old as the beginning of the seventeenth century (1624). It was probably built by one of a family of Khans who formerly held several villages in the neighbourhood. To the east and west of Sakhri, in the villages of Kothamba and Maji Tentla, are two other mosques, and on a hill close by, a step well called the horse well, *ghodbav*, seemingly of the same age as the mosques.

BANKOT

Ba'nkot, or **Fort Victoria,** north latitude 17° 75' and east longitude 73° 2', with, in 1872, 3763 inhabitants, is next, to the island of Bombay, the earliest English possession in Western India. Bankot lies at the foot of a rocky headland in the extreme north of the district on the south shore of the entrance to the Bankot or Savitri river, [It seems possible that the Savitri is Ptolemy's Kanaguna, which in his map enters the Arabian Sea within Ratnagiri limits. Nanaguna should perhaps be Nana Ganga, or the little Ganga, a name naturally applied to the Savitri, as it is a small stream compared with the other Mahabaleshvar gangas, the Krishna, Vena, and Koyna.] seventy-three miles south-east of Bombay. [The name Bankot, given to the fort by the Marathas, was in time extended to the settlement, peth, at the foot of the hill. Velas, the original village, on the coast two miles south of the fort, is inhabited chiefly by Hindus, as Bankot is by Musalmans.] A mile outside of the village, and two miles south-west of Fort Victoria, the bar of the Bankot river, with a narrow channel on its south-east side, stands nine feet deep at low water. Though well buoyed, the bar is much exposed even in the fine season (September-June), and should not be passed without a pilot. [Taylor's Sailing Directory, 386.] Bankot, though closed during the south-west monsoon, opens earlier and remains open longer than most Ratnagiri ports. The river is, for vessels of sixteen feet draught, navigable eighteen miles to Mahapral in Dapoli, and for vessels drawing seven feet ten miles further to Mahad in Kolaba.

Trade

Trade has long left Bankot. It is now little more than a large fishing village. A few cocoanuts, betelnuts, and grafted mangoes, and small quantities of salt fish, and fins and maws are exported. A few resident shopkeepers supply the people with cloth, grain, and groceries. Bankot has no manufactures, but at Bagmandla on the north bank of the creek, a few Salis find employment in weaving coarse cotton cloth.

Water and Climate.

Chiefly from crowding and bad drainage, Bankot had for many years a bad name for fever. Latterly sickness has much decreased. The water supply is scanty, and an attempt to bring water from a spring in the hill above through a small iron pipe has failed. At Velas, a few miles south of Bankot, are the remains of a masonry aqueduct of considerable length said to have been built by Nana Fadnis (1720-1800).

History.

Bankot does not seem to have ever been a place of importance. [The Chinese traveller Hiouan Thsang (640) is supposed to have embarked at Bankot. The identification is doubtful. Nairne's Konkan, 10.] In 1540 Dom Joao de Castro, under the name Beicoim, describes the Bankot river with great detail. It took its name Beicoim from a town on the south bank about a league from the river mouth. Ships went there to load wheat and many other kinds of food, and had its harbour not been so difficult, it would have been one of the first places on the coast. [Primeiro Roteiro da Costa da India, 41. He says the river is also called the Mahad river from a large town of that name, and the Honey river from the quantity of honey found on its banks. Beicoim would seem to be a corruption of Velas. In 1548, with other Bijapur coast towns, [Grant Duff, I. 76-78.] it, was destroyed by the Portuguese. No further reference has been traced till, on 8th April 1755, five days after the fall of Suvarndurg, Commodore James arrived off Bankot. The fort surrendered on the first summons. Commodore James handed over charge to the Marathas, and at the end of the rains (October), the fort and nine neighbouring villages [The nine villages were: Velas, Veshvi, Bagmandla, Shipola, Kuduk, Panderi, Peva, Kumbla, and Dasgaon. were ceded to the British and its name changed from Himmatgad to Fort Victoria. [Nairne's Konkan, 92.1 To the English Bankot was chiefly valuable as a place from which Bombay Europeans and Musalmans might be supplied with beef. There was also the hope that its once considerable trade would revive. It proved very serviceable in providing hemp ropes, then much in demand for lashing cotton bales. But its trade remained very small, and the place was a burden, with, in 1787, a cost of £3500 (Rs. 35,000) and an income of £1200 (Rs. 12,000) [According to Hove (December 1788), the fort was costing the Company about £10,000 a year. At the same time, he says, the chiefs commonly retire after a few year with immense sums, and it is calculated as good a post as the Bombay council. Bom. Gov. Sel. XVL 193, In 1812 the neighbouring native governments were so oppressive that the population of Bankot might have increased to overflowing. As it was, the numbers doubled within ten years, and nothing but the want of fresh water prevented a much greater increase. Several wells were dug and ponds repaired, and every spot of arable land was made the most of. But as great part was bare rock the settlement never yielded much agricultural wealth. Many of the people, keeping their families and property in British villages, earned their living by tilling lands in the neighbouring Maratha territories. Bankot never became a place of trade. The country inland was rugged and difficult, and as vessels of about twenty tons (70-80 khandis) could at that time easily pass up the river, the whole traffic centred at Mahad. [In 1818, so safe was its navigation that on the occasion of the attack on the strong fortress of Mandangad, the Prince of Wales Cruiser and Sylph Brig went twelve miles up the river and might easily have gone further. Collector to Gov. 15th July 1819; Rev. Diaries 142 of 1819, 2573.] In 1818, on the final conquest of the Konkan, a detachment of British troops was for a time stationed at Bankot, and it was made the headquarters of the collectorate. In 1822 the station was broken up and the head-quarters moved to Ratnagiri. Bankot was then made a sub-divisional station under a mamlatdar. Subsequently, in 1837, the mamlatdar was removed and Bankot was placed under a mahalkari. The place proved so unhealthy that it was given up, and the mahalkari's head-quarters were changed to Mandangad where they now are.

Objects.

On a high red hill covered with low bushes, stands the old, now much ruined fort, small and square, with bastions like those of many an English river mouth or harbour fort. Bound the walls on the land side is a ditch. There are two separate bastions, connected with the fort. One of these called the Refuge, Panah, bastion was built by the Habshi to guard the creek. The other bastion, higher up the hill and approached from the water bastion by 300 steps, was built by the Angrias. From this second bastion a further ascent of about 700 steps leads to the fort. Both bastions are now in ruins, but there are still the remains of a covered path. The fort was in 1892 in good order except part of the outer wall on the western side. It had no garrison and only a scanty supply of water. [Gov. List of Civil Forts, 1862.] There are also the foundations of several good European dwellings with the remains of gardens and several tombs. One tomb, dated 1803, is to Mrs. Kennedy the grandmother of Mrs. Malet who is buried close by beneath an Ionic column with the following inscription: ' Here lie the remains of Mary Sophia Marcia aged 26, and Ellen Harriet aged 32 days, the beloved wife and daughter of Arthur Malet of the Bombay Civil Service. They with thirteen boatmen and attendants were drowned on the bar of the river Savitri, on the night of the 6th December 1853. [C. Niebuhr (1763) states that close to Bankot was a very large rock temple divided into twenty-five chambers (Pinkerton's

Voyages, IX. 209). This was probably either the Mahad or the Janjira caves.]

To the north of Hareshvar, the round hill across the river is a rather famous but architecturally commonplace temple. Not far from the temple stands a large garden house and lake made by the wife of one of the Janjira chiefs. In Velas are two temples dedicated to Shri Rameshvar and Kalbhairav built respectively by Moroba Dada Fadnis and Nana Fadnis (1720 -1800). The chief Bankot buildings are the custom house, the travellers' bungalow ten the hill overlooking the harbour entrance, and the residences of the Parkars; a distinguished Muhammadan family who enjoy grants land from Governmental as rewards for faithful services in collecting supplies for the fourth Mysor (1799) war.

Coasting steamers call daily during the fair season. Close to the landing stage, a floating bridge of boats, is a roomy rest-house.

BHARATGAD

Bharatgad Fort, on the south shore of the Kalavali creek, on a hill commanding the Malvan village of Masura, has an area of between five and six acres. The inside of the citadel is an oblong of 105 yards by sixty. The citadel wallsare about seventeen or eighteen feet high and five feet thick. At the opposite ends of a diagonal running north and south are outstanding round towers. Within the citadel, about a quarter of its whole length from the north end, is a square watch tower reached by steps. Close to the north tower is a small temple, and near it is a great well about 228 feet deep, cut through solid rock. About seventeen yards from each side and 100 yards from each end of this citadel, is an outer wall with nine or ten semi-circular towers. The wall is ten or twelve feet thick with an outer ditch. It is not very strong and seems to have been built without mortar. In 1862 the walls were in fair order, there was no garrison, and water and provisions were abundant. There were eighteen old and unserviceable guns. [Gov. List of Civil Forts, 1862. The fort has constantly changed hands. In 1670 Shivaji surveyed the hill, but finding no water, would not fortify it. Ten years later (1680) Phone Savant, fearful of its falling into the hands of a chief named Bavdekar, cut the great well through the rock, and finding water, built the fort (1701). [Captain Hutchinson (Memoir on the Savantvadi State, 156) mentions a report that after a few shots from the fort guns, the water of the well disappears. In support of the truth of this story he notices that the garrison had wooden water tanks. But with so deep a well, even without a leak, it would be useful to have a store of water at the mouth of the well. Mr. R. B. Worthington.

BHAVANGAD

Bhavangad Fort, on rising ground close to the village of Chikhli in Sangameshvar sub-division, is a small fort not more than half an in area. It has no garrison and no water. In 1862 it was very ruinous and

had only one old and unserviceable gun. [Gov. List of Civil Forts, 1862.]

BHAGVANTGAD

Bhagvantgad Fort, on a high hill in the Malvan sub-division across the creek from Bharatgad, has an area of about one and a half acres. In 1862 the walls were nearly in ruin, there was no garrison, no water, and only scanty supplies. There were fourteen old and unserviceable guns. [Gov. List of Civil Forts, 1862.] In a temple is a sacred stone, a pointed rock jutting through the floor, and apparently the peak of the hill. The fort was built about the same time as Bharatgad Fort (1701), by Bavdekar the rival of Phond Savant. After some resistance it was taken by Colonel Imlack in 1818 (April - May). [As. Jour. VI. 320 The particulars of the capture are thus detailed: A detachment of the IVth Rifles, arriving on the 29th of March, was during the night employed in raising batteries, which were opened the next morning at daybreak. As it was found impossible to effect a breach across the river, two columns of the detachment under the command of Captains Gray and Pearson were ordered to cross at different passes to take the place by escalade. The garrison, on seeing that the troops had crossed, abandoned the fort. It was taken about ten o'clock on that day. Service Record of H. M.'s IVth Rifles, 22.]

BORIA OR ADUR

Boria or Adur, a small port in the Chiplun sub-division, midway between the mouths of the Vashishti and Shastri rivers, had, in 1872, 2351 people. Protected by the bold and conspicuous headland of Adur, 360 feet above sea level, it is a safe anchorage during northerly gales. In former years a place of call for coasting steamers, it has now a trade, for the five years ending 1877-78, valued at £5224 2s. (Rs. 52,241) of which £2495 12s. (Rs. 24,956) represented exports and £2728 10s. (Rs. 27,285) imports. On the top of the hill, overlooking the bay, is a trigonometrical survey station.

BURNT ISLANDS

Burnt Islands.—See Vengurla.

BURONDI

Burondi, a small port and fishing village in Dapoli, with, in 1872, 2847 people, lying about six miles south of Harnai, is joined with Dapoli by a good bullock road. A yearly fair in honour of Durgadevi, held in *Chaitra* (April-May), is attended by from 1800 to 2000 persons.

PLACES CHIPLUN

Chiplun, north latitude 17° 30' and east longitude 73° 36', the chief town of the Chiplun sub-division, with, in 1872, 6071 people, is situated 108 miles south-east of Bombay and twenty-five miles from the sea, on the south bank of the Vashishti river, which, up to Govalkot, one and a half miles from Chiplun, is navigable for boast of about fifteen tons. [At Govalkot about twenty years ago stone quays were built for loading and discharging cargo. From Govalkot to Chiplun, one and a half miles, runs a narrow tidal gullet, up which only flat bottomed boats can work. At the head of the Chiplun market is a pier, made seen after the territory was gained by the British. Owing to the silting of the creek, it is now little used, most of the traffic being carried by carts to the Govalkot quays.]

Population.

Of 6071, the total (1872) population, 4334 were Hindus, 1736 Musalmans, and one was a Christian, Of 4331 the total Hindu population, 806 were Brahmans, 935 Vanis, 462 Marathas, 382 Kunbis, 188 Shindas, 122 Potters, 121 Cobblers, and 191 Mhars. The. rest (1127) came under the head 'Others',]

Trade.

At the head of a navigable river and near the entrance to the Kumbharli pass one of the easiest routes from the Deccan to the sea, Chiplun must always have been a centre of trade. Of late, by the opening of a cart road through the pass", traffic has much increased. Its leading merchants are local Brahmans and Bhatias, with, in the fair season, a few agents of Bombay firms. All goods passing through Chiplun are, in the first instance, consigned to local merchants in accordance with orders given by them to their correspondents in Bombay or the Deccan. Bulk is broken on arrival, and the goods are sold in large or small lots to the petty dealers and agents of Bombay firms. After changing hands, most of the imports are, in the course of two or three months, again exported. The chief articles received from the Deccan are, cotton, molasses, clarified butter, oil, grain, turmeric, and chillies; and from Bombay, most of them to be sent on to the Deccan, are piece goods, metals, and other miscellaneous articles. In ordinary years little or no grain travels east. But in the 1877 famine about 25,000 tons went from Bombay to the Deccan through the Kumbharli pass. During the busy season, February to May, from 300 to 400 carts pass daily into Chiplun by this route. The merchants deal in every kind, of goods, but never largely in any particular commodity. The trade is carried on in the fair season only. During these months (November - June) every empty space near the market or the landing place, and even in the river bed is covered by sheds or booths. This large trading camp is broken up on the first sign of the south-west monsoon, and during the rains almost the whole site is flooded. The

special fair-weather trading population is estimated at about 5000. *Manufactures.*

The making of a coarse household pottery and leather-covered baskets, *petaras*, or native travelling trunks, are the only industries. *Management*.

The town, with a subordinate judge's court and a post and sea custom office, is a sub-divisional revenue and police head-quarter station. Made a town municipality in 1876, Chiplun had, in 1879, from octroi duties and a house tax, an income of £490 (Rs. 4900). Since 1873, good roads have been made, an efficient conservancy establishment maintained, and the streets lighted. The chief want is drinking water. Private wells are few, and from the hardness of the rock and the low level of the water, they are costly. A stream that runs through the town is every year dammed to provide water for the droves of cattle, and a large well has been built for the use of the traders who throng the town during the fair season. Still by the end of April the cattle pond and most of the wells are dry, distress is severe, and the cattle have to be driven two miles up the river to be watered. At Govalkot the want of water is still more serious. After March there is no water, and the numerous native craft have to bring their supplies partly by boat and partly by headloads over the rice fields, from a spring some three miles distant. During the famine year (1877) the municipality was forced to keep water carriers at Govalkot to supply the native shipping. [Letter of Collector to Commissioner S. D., 1527 of 1879. Disastrous fires mainly owing to want of water are also common. To remedy this the municipality is, with the aid of public subscription, now making large water works. The head works are a solid masonry dam thrown across the bed of a river some three miles south of the town.

The dam has five sluices and an outlet pipe. The main aqueduct, leading to the service reservoir to be built close to the town, is to be a covered masonry channel. From the reservoir the water will be distributed to all parts of the town by iron mains, and crossing the bed of the Vashishti a branch pipe will be taken to Govalkot, and a cattle watering place with numerous troughs provided. At a total cost of about £6000 (Rs. 60,000) an abundant supply is expected. The head works are already far advanced.

History.

Chiplun, the first home of the Konkanasth or Chitpavan Brahmans, according to local tradition stocked with Brahmans and supplied with sixty ponds and sixty gardens by Parashnram the reclaimer of the Konkan, has for long been a place of consequence. [A stone has lately been found at Chiplun bearing the date 1156 (1078 S.). Bom, As. Soc. Meeting, September 1879.] In the seventeenth century it was a great village, very populous and plentifully stored with all provisions. [Ogilby's (1670) Atlas, V. 247.] In 1818 it was taken by a body of

Ramoshis, but abandoned by them on Colonel Kennedy's approach. [Nairne's Konkan, 116.] In 1819 it was an insignificant village, but bid fair to bo, Rajapur excepted, one of the chief trade centres of the southern Konkan. During the dry season Vanjaris, Vanis, and a few Parsis, came, set up temporary booths, and left when the rains fell. [Collector to Gov. 15th July 1819; Rev. Diaries 142 of 1819, 2575.] In 1821 it is spoken of as a place of very important trade. [Bom. Rev. Rec. 16 of 1821, 638.] In 1826, Chiplun was a considerable town. The river was navigable for bouts of about eight tons (30 *khandis*) close to, and for boats of about. fifteen tons (60 *khandis*) within three miles of, the town. [Clune's Itinerary, 38.] The building now used as a Government office was made as a rest-house for Bajirav Peshwa, who for several years (1812 - 1815) came down the Kumbharli pass to visit his palace at Guhagar near Dhabol. [Nairne's Konkan, 121.]

Rock Temples.

Govalkot Fort,

About a quarter of a mile south of the town is a series of rock temples. Of those the chief is a tolerably large hall twenty-two feet long by fifteen broad and ten high, with, at its inner end, a Buddhist relic shrine, daghoba. There are also two or three smaller caves, and a deep thirteen feet square pond. Three stages on the road from Chiplun to Karhad in Satara is another series of Buddhist caves, consisting of a room with a small round relic shrine six feet in diameter, and a hall, shala, nineteen feet by eighteen, with a raised seat at one corner and three recesses at the inner end. [Jour. Bom. Royal As. Soc. IV. 342.]

At Chiplun on a detached hill commanding the creek, and surrounded on nearly all sides by higher hills, is the fort of Govalkot. This is said to have, at different times, belonged to the Habshi, Angria, and the Peshwa, and Angria is said to have besieged it for twelve years. At the top of the fort is a fine reservoir. [Nairne's MS. notes.]

Of the sixty legendary ponds dug by Parashuram, the only traces left are eight reservoirs in various parts of the town. The only pond of any size is the Ram Tirth to the east of the town. There is a small temple and rest-house close by, and the. banks are used as a burning ground.

PLACES DABHOL

Da'bhol, [According to a local saying, Dabhol once bore the name of Amaravati or the abode of the gods. The present name is said either to be a short form of Dabhilavati, a name given to it from the still remaining temple of Shiva Dabhileshvar, or to be a corrupt form of Dabhya according to the Purans, a god-inhabited forest. Mr. A. X. Crawford's MS. north latitude 17° 34' and east longitude 73° 16', a small straggling town with, in 1872, 3980 people, lies six miles from the sea, at the foot of the hills on the north bank of the Anjanvel or Vashishti river, eighty-five miles south-cast of Bombay. Some details of the entrance to Dabhol are given under the head " Anjanvel." The site of Dabhol, a narrow strip of land between the river and very high steep hills, is ill suited for a large town. [Large remains, several feet under ground, seem to show that Dabhol was in very early times a place of consequence. An under-ground temple of Chandikadevi is said to be of the same age as the Badami rock-temples (A.D. 550-578). Mr. Crawford's MS. A. local history, bakhar, states that in the eleventh century, Dabhol was the seat of a powerful" Jain ruler, and a stone writing has been found bearing date 1156 (3rd Vaishakh 1078 Shalivahan).] If it ever was as populous as is stated, the buildings must have stretcheel three or four miles up the river.

Trade.

Dabhol is connected by a bullock road with Dapoli, twelve milles north. Coasting steamers call daily during the fair season, and up the Vashishti, in connection with the service to Bombay, a small steam launch takes passengers to and from Govalkot, the landing place for Chiplun. At Dabhol a steamer landing place, a floating platform raised on boats, has been built, and some old cells attached to the outer or north wall of the mosque serve as passenger rest-houses. Except beteluuts sent in small quantities to Bombay there is no trade. Weaving is the only industry. There is a post office and a police station, but no public buildings. The population is very mixed. The houses of the well-to-do are substantial and enclosed in rich gardens, the fishers' huts are poor, crowded and dirty. The town is fairly supplied with water.

History.

Though it has long been of no consequence, Dabhol would seem to be a settlement of very great age. [Large remains, several feet under ground, seem to show that Dabhol was in very early times a place of consequence. An under-ground temple of Chandikadevi is said to be of the same age as the Badami rock-temples (A. D. 550-578). Mr. Crawford's MS. A local history, bakhar, states that in the eleventh centuary, Dabhol was the seat of a powerful Jain ruler, and a stone writing has been found bearing date 1156 (3rd Vaishakh 1078 Shalivahan).] It was one of the places destroyed by Malik Kafur in

1312. [Briggs' Ferishta, I. 379. According to a Persian history, now in the library of the Janjira Nawab, Dabhol was, about the middle of the thirteenth century, taken by a certain Shah Nasir-ud-din or Azam Khan who came to Ratnagiri from beyond seas. The Hindu chief Nagojirav, attacking them both by land and sea, tried to drive off the strangers. The attack failed, and after one of Azam Khan's sons, Dabhol was called Mustafabad and another settlement was, after a second son, named Hamzabad. Mr. Crawford's MS. It seems probable that this local history is incorrect in its dates, and that the Musalman governors, after whom Dabhol and other places near it are named, were officers of the Bahmani (1347-1500) and Bijapur (1500-1600) courts.] About fifty years later (1357) it is again spoken of as the western limit of the Bahmani dominions, In the fifteenth century, during the prosperous times of the Bahmani kings, Dabhol was the centro of a great trade. In 1459 (864 H.) Yusuf Adil Khan, a son of Murad II., Sultan of Constantinople, afterwards the founder of the Bijapur Adil Shahi dynasty, describes it as possessing the delights of paradise, [Persian Ferishta, II, 3; Scott, I. 209.] and under the name of Mustafabad or Khizrabad, it is mentioned as one of the great towns of the Bahmani king Sultan Mahmud II. (1482-1518), where, with ample funds, he established orphan schools. Persian Ferishta, I. 578; Briggs, II. 543; Scott, I. 56, 57.] About 1470, the Russian traveller Athanasius Nikitin (1468 -1474), found it a large town and extensive sea port, the head of a large district where horses were brought from Mysor, Arabia, Khorasan, and Nighostan, and all nations living along the coast of India and Ethiopia met. [Major's India in the X Vth Century, 20-30. Mysor should perhaps be *Misr*, Egypt. In 1478 it was taken by Bahadur Khan Gilani, the son of the Governor of Goa, [Nairne's Konkan, 27.] who tried to establish himself as an independent ruler. On the complaint of Mahmud Begada (1459-1511), Sultan of Gujarat, whose slips Bahaurbad plundered, Mahmud Bahmani attacked and slew him (1494), Persian Ferishta, I. 715-710; Scott, I. 101-194; Briggs' Ferishta, II. 543. Ferishta gives the date 1494 (900 H.). According to the Gujarat historians Bahadur was taken alive and his head cut off'and sent to Mahmud Begada. Watson's Gujarat, 44,45.] and visiting Dabhol, sailed along the coast. In 1500, about ton years after the new Deccan dynasties rose (1489) to power, Dabhol fell to Bijapur, and was made the head quarters of a district very closely corresponding to the present Ratnagiri. [Jervis' Konkan, 73. According to one account (Mr, Dunlop, Bom. Rev. Rec. 121 of 1819,2526) Dabhol was called Mustafabad after a certain Mustafa Khan, a Bijapur officer, who, in 1495 (903 H.), founded the town and appointed district and village officers. This is incorrect, as under the Bahmanis, Dabhol was known as Mustafabad. See above, p. 327.]

Dabhol.

At the beginning of the sixteenth century two influences depressed Dabhol. By the transfer of the Load-quarters of power from Bedar to Bijapur the direct line of traffic from the coast was moved south of Dabhol, and its position, so close to the coast, made specially open to the attacks of the Portuguese, the enemies of the Bijapur kings. Varthema, in 1503, speaks of it as extremely good, surrounded by walls in the European fashion, containing great numbers of Moorish merclants and governed by a pagan king, a great observer of justice. [Badger's Varthema, 115.] In 1508, Dabhol was one of the most noted coast towns with a considerable trade and stately and magnificent buildings, girt with a wall, surrounded by country Louses, and fortified by a strong castle garrisoned by 6000 men of whom 500 were Turks. [Faria-y Suza, iu Kerr's Voyages, VI. 115. De Barros (1550-1579) mentions it as a place of great commerce, full of noble houses, fine buildings, superb temples, and old mosques (V. 266). (Compare also DeCoutto, VI. 419, VII. 289, and Mickle's Lusiad, X.) Dom Joao de Castro (1538) says the defences were slight and the Musalman garrison only 4000 strong. Before it was pillaged by the Portuguese, Dabhol was, he says, a very large and noble settlement, the emporium of all India, thronged by Persians, Arabs, and traders from Cambay. Vida de J. Castro, 264-269; Prim. Rot. da Costa da India, 136.] Against, it, the Portuguese Viceroy, Admiral Dom Francisco d'Almeida, came (12tb November 1508) with nineteen vessels, carrying' 1300 Portuguese soldiers and marines and 401 Malabar seamen, and under cover of a false attack, landed at some distance. The resistance was vigorous; 'Piles of dead strengthened the barrier of the city palisades'. But the assailants pressed on, scaled the ramparts, and entering the city, plundered it, razed it to the ground, and reduced it to ashes, putting to death men, women, and children. [DaCunha's Chaul, 30, the wrath of the Faringi as it fell on Dabhol became a proverb. Baldaeus, 1660 (Churchill, III. 540), says that most of the booty was afterwards destroyed by fire. Faria-y Suza notices that preserved locusts were found by the Portuguese and much liked by them. They tasted not unlike shrimps.] Those who escaped came back, aud restored the city so that in a few years it was inhabited as before. [Stanley's Barbosa, 72.] In 1511 it was defended by a rampart and artillery, and was a place of great trade with many resident, Moor, Gentile, and Gujarat merchants, and large fleets of Moorish ships from Makka, Aden, and Ormuz, and from Cambay, Diu, and Malabar. The imports were much copper, quicksilver, vermilion and horses; the exports were great quantities of country fabrics, wheat, and vegetables. [Stanley's Barbosa, 72.] In 1520 Ismail Adil Shah (1510-1534) offered the Portuguese a friendly alliance if they would protect the import of horses into Dabhol. [Lassen's Ind. Alt. IV. 198. To this the Portuguese seem not to have agreed and two years later (1522) Dabhol was again sacked. From this sacking it soon recovered, and in 1540 was a great city, with the largest concourse of merchants of the whole Indian ocean, thronged with people from all parts of the world. [Dom Joao de Castro, Primeiro Roteiro da Costa da India, 39.] Seven years later it had only 4000 inhabitants, two forts and some redoubts. In that year it was destroyed by the Portuguese who took the upper town some way from the sea. [Vida de Joao]

Castro, 264-269.]

In the following year (1548) a treaty was made between Bijapur and the Portuguese. The Portuguese promised to send a factor to Dabhol to give passports to merchants and others wanting to go to sea and to try their best to people and enrich Dabhol. [Col. de Mon. Ined. V. 1-43. The Portuguese for some years (1547-1554) seem to have paid £154 (2000 gold pardaos) a year for the privilege of granting passports. Ditto, 244. In 1554 the Portuguese refused to pay the sum agreed on for the privilege of granting sea passports at Dabhol, and in 1555, and again in 1557, they pillaged Dabhol. [Nairne's Konkan, 143. Faria-y Suza in Kerr's Voyages, VL 192. In. 1571 the Portuguese made another attack on Dabhol. But the governor, Khaja Ali Shirazi, having heard of their intentions, let them land and put to death upwards of 150 of them. Briggs' Ferishta, IV. 540.] "In 1570 the Gujarat historians speak of Dabhol as one of the European ports. [Bird's Mirati-Ahmadi, 129.] But it is doubtful if the Portuguese ever held it. If they did, they kept it only for a few years, as early in the seventeenth century (1611) Middleton found the governor a Sidi, friendly, offering presents and free trade. Still the place was disappointing. The people 'made a noise of' fine cloth, indigo, and pepper, but none was forthcoming, and all they took was some broadcloth, kerseys, and lead bars. [Middleton in Harris, I. 107. About the same time (1611) Captain Saris speaks of selling iron, ivory, and indigo (Harris, I. 119), and Captain Peyton (1615) notices that the Portuguese had a factory but no fort (Harris, I. 155), How important a place of trade Dabhol was, appears from the fact that one of its ships the Mahmudi, 136 feet long 41 broad and 291/2 deep, was of 1200 tons burden. Orme's Hist Frag, 325 In 1616, in consequence of Middleton's honourable treatment of the Mokha junk, the governor 6£ Dabhol offered the English free trade, and as their position in Surat was most uncomfortable, they thought of removing to Dabhol. In 1618 the English made a further attempt to trade, [Milburn's Oriental Commerce, XVII. and in 1624, again proposed to move to Dabhol from Surat. [Bruce's Annals, 1.261 274.] At first they were received by the Dabhol people with much honour. Then a scuffle arose and the English took to their guns and set fire to the town. The people fled, but encouraged by a Portuguese factor and some others, came back and drove the English to their ships. [De La Valle's Letters, III. 130. Three years later (1626) Herbert describes the town as with low houses terraced at the top, and with nothing to boast of but an old castle and a few temples. Nairne in Ind. Ant. III. 102. Ten years later (1634) they asked if they might start a factory, but probably because of the former disturbance, were refused. [Brace's Annals, I. 334. Mr. Nairne thinks that no. factory was ever established, Konkan 118.] In 1639 Mandelslo describes the Dabhol fortifications as in ruins, without walls or gates, defended on the river side by two batteries; the entrance, none of the best by reason of a sand bank at the mouth, was dry at low water. The people were Vanis and Musalmans, and the

chief trade was in salt and pepper. Instead of the fleets it used to send to the Persian Gulf and the Red Sea, there were only a few wretched boats trading with Gombrun. [Mandelslo in Harris, II. 130, and Voyages, 220. The salt was said to come from Oranubammera perhaps Uran-Bombay.]

In 1660, and again in 1661, Dabhol was burnt by Shivaji, and in 1662 it was wrested from the Moghals and made a part of Shivaji's kingdom. [Grant Duff, 80, 83.] Thevenot about this time (1660) described it as an old city, with low houses and few fortifications. [Voyages, V. 249. Of the town Ogilby (1670) gives the following details: Anciently very famous, Dabhol is now much ruined by wars and decreased in trade. It is open only on the south side which fronts the water where are two batteries with four iron guns. On the mountains are several decayed fortresses and an ancient castle without guns or garrison. On the north point is a little wood, at a distance like a fort, and below the wood, near the water, a white temple. On the south point is another temple and several stately edifices. Atlas, V. 247. In 1670 Father Navaritte spoke of it as a strong and handsome fort belonging to Shivaji. [Orme's Hist. Frag. 206. In 1695 Gemelli Careri passed it almost without notice. Shortly after (1697) it was granted to the Shirke family. [Nairne in Ind. Ant. II. 280.] From 1700 to 1714, under the joint, government of the Habshi and the Marathas, Dabhol is described as an old place, deserted by trade, where the English once had a factory. About this time Tulaji Angria took it, and driving out the Habshi governed it for eleven years. It was then (1755) taken by the Peshwa, [Bankot Diaries in Nairne's Konkan, 92. and held by him till, without, a struggle, it was, in 1818, handed over to the British.

Remains.

Except in the hills, where there seem to have been a round tower or two, there are no signs of fortifications. Of Musalman remains the chief is, close to the sea and almost buried in cocoanut trees, a handsome mosque sixty-three by fifty-four feet in its inner measurements, with minarets and a dome about seventy-five feet high. The style is like that of the chief Bijapur mosques. It is on all sides enclosed by a stone wall and approached by a broad flight of steps. In the centre of the stone terrace, in front of the mosque, is a well and a fountain. The mosque is said to have been built in 1659 by a Bijapur princess, Aisha Bibi, popularly known as lady mother, ma sahibah. The real date is probably much earlier. [The local account is that the princess, with a retinue of 20,000 horse, arrived at Dabhol intending to go to Makka, but was kept back from fear of pirates. Determining to spend on some religious work the £150,000 (RS.15,00,000) she had with her, she, with the advice of the maulvis and kazis, began building this mosque and finished it in four years. The builder's name was Kamil Khan. It is currently reported that the dome was richly gilded, and the crescent pure gold. The gold and gilt have long disappeared, but much of the beautiful carving and tracery

remains. Eight villages, Bhopan, Saral, Isapur, Bhostan, Chivili, Modpur, Bharveli, and Pingari were granted for its maintenance. After the overthrow of the Bijapur kingdom, the grant was renewed by Shivaji (1670). The mosque still bears the name of its founder Masahibah. It is no longer used for worship. The local Musalmans are too poor to keep it in repair. Year by year it is crumbling into ruin. The minarets are tottering, and the loosened stones are falling from their places. In 1873 a small sum was granted by Government to carry out the most necessary repairs. Nairne in Ind. Ant. II. 280-281.] Dabhol has also a Jama mosque built in 1649 (1059 H.) in the beginning of Aurangzeb's reign, by Pir Ahmad Abd-ullah the chief officer, subhadar, of the district. [As much of the inscription on this mosque as has been read runs: ' In the name of God, the Just, the Merciful. Verily mosques belong to God, so be not co-sharers with Him. The rival of this mosque in colour does not exist in the world. The best of well born Governors Fir Ahmad (built this mosque) in the year 1059 (A. D. 1649) of the Hijra of the Prophet, on whom be peace and blessing.'] On the sea face of a third mosque a writing has lately (1879) been found cut in wood. It begins with the usual Shia blessing of the Prophet, his daughter, and the twelve Imams, and ends ' May God help Saadat Ali, king of kings, who raised this building in 1558 (987 H.)'. [Bom. As. Soc. Meeting, Septr. 1879. There is also a cenotaph, mukam, of Khaja Khizr the Prophet Elias, bearing the date 1579 (987 H.), and a tomb of Azamkhanpir.

DAPOLI

Da'poli, the head-quarters of the Dapoli sub-division, with, in 1872, 2595 people, stands on an open plain, about eight miles southeast of Harnai and seventeen north-west of Khed. The camp or, as it used to be, cantonment, is formed out of part of the lands of the fourvillages of Dapoli, Gimhavna, Jogla, and Jalgaon. In 1818 Dapoli was fixed as the military station of the southern Konkan. In 1840 the regular troops were withdrawn. A veteran battalion was kept till 1857, and when this also was abolished, [Nairne's Konkan, 129.] the cantonment was broken up and Dapoli has since been of no importance. The climate is throughout the year cool, healthy, and free from epidemic disease. The camp and market are well supplied with drinking water. Except a few articles brought for local use from Harnai and Khed there is no trade. A small well kept market contains native groceries and miscellaneous articles, and a Parsi and a Portuguese shop supply the wants of the European residents. The native population, many of them military pensioners, is mixed, Hindus, Muhammadans, and a few Jews. In the neighbouring village of Jalgaon, several wealthy Brahmans and Gujars, living in substantial houses, carry on an extensive moneylending business with the rural population. Dapoli has manufactures. Good coarse pottery and coarse cotton cloth are made at Jalgaon, and a few good carpenters, smiths, and shoemakers, trained in bygone days remain.

Management.

In 1862, the head-quarters of the old Suvarndurg sub-division were moved from fort Gova at Harnai to Dapoli. Besides the offices of the mamlatdar, the sub-judge, and the chief sub-divisional police offices, there is, to the north of the camp a civil hospital, a native library, a Roman Catholic chapel, a post office, a vernacular school, and a large rest-house. Here also are the remains of the former military lines and the old and still habitable quarter quard. In a corner of the open plain, and divided from the market by the Harnai-Khed road, stands one of the chief features of the camp, the picturesque old English church with a square tower and belfry. On the south side, of the camp is the office of the pension paymaster of the southern Konkan, and dotted here and there round the plain are the dwellings of the European residents. In 1878, the Society for the Propagation of the Gospel removed their Orphanage from Bombay to Dapoli, where, on a site near the church, school-rooms and buildings for the boys and girls and for the resident clergyman are being raised. The lately started municipality draws its income from a house-tax.

Graveyards.

There are two European graveyards, the first to the south of the camp containing only a few graves dating from 1818 to 1821, and a larger one to the north with the tombs and memorial stones of those buried since 1821. There is no grave of any special interest, In the centre of the plain, under a clump of mango trees, is the Jews' burial ground, with ten or twelve tombstones with inscriptions in English, Hebrew, and Marathi.

DEVGAD

Devgad, north latitude 16° 23½' and cast longitude 73° 21', the head-quarters of the Devgad sub-division, lying on a flat rocky peninsula about twelve miles south of Vijaydurg and 180 miles from Bombay, had, in 1872, a population of 894 souls. Its safe and beautiful land-locked harbour is at all times perfectly smooth. The cliffs, steep on the north, fall on the harbour side in steps with a slope varying from twenty-five to forty degrees. The entrance is broad, but the passage into the harbour, only three cables wide, lies close to the fort point. Here, in eighteen feet water, ships may lie sheltered during the south-west monsoon. [Taylor's Sailing Directory, 390. It is high water on full and change of the moon at eleven hours; the rise and fall is about nine feet at spring tides and fire feet at neaps.]

Trade.

Devgad, though a good port, is inconveniently placed, and has never had any but the most trifling local trade. For the five years ending 1877-78, the average yearly trade was valued at £24,611 8s. (Rs. 2,46,114) of which £8820 14s. (Rs. 88,207) were exports and £15,790 14s. (Rs. 1,57,907) imports. It has been joined by a good provincial cart road with the route over the Phonda pass. But the road has brought no traffic and is little used. During the famine year (1877)

555 tons of grain for the Kolhapur state were consigned to this port for carriage through the Phonda pass.

In 1875 the head-quarters of the sub-division were moved here from Kharepatan, and it has now a mamlatdar's office, a subordinate judge's court, a post office, a sea custom house, and a vernacular school. In 1538, Devgad, under the name Tamar, is mentioned as nineteen leagues from Goa and three south of Kharepatan. It was a beautiful round bay and good harbour with a clear entrance. Galleys could enter at low tide. [Prim. Rot. da Costa da India, 23. It has been thought to be Toperon mentioned both by Ptolemy (150) and in the Periplus (247). McCrindle's Periplus, 129.] When taken in 1819, it was a fine harbour, but a place of little consequence. [Malvan Resident, 31st May 1819; Bombay Revenue Diaries 141 of 1819, 2310.]

The fort on the south side, with an area of about 120 acres, said Fort, to have been built by the Angrias 175 years ago, and taken by Colonel Imlack in April 1818, The particulars of the capture are: A detachment of the IVth Rifles under Col. Imlack moved on Devgad, where it arrived on the afternoon of the 7th April 1818. During the night the enemy kept a very heavy but fortunately ill directed cannonade, and early the next morning left the fort in sailing vessels. It was then occupied by the detachment. Service Record of H. M.'s IVth Rifles, 23.] protects the harbour, but perhaps because there was no place of importance up the creek, only slightly commands the entrance. There seem to have been two forts, on the north and south ends of the hill between the harbour and the sea, joined by three or four round towers. [Low's Indian Navy, I. 296.] In 1862 the walls were in a ruined state and there was no garrison. Water was abundant but supplies scanty. There were forty-one old and unserviceable guns. [Gov. List of Civil Forts, 1862.]

DEVRUKH

Devrukh, since 1878 the head-quarters of the Sangameshvar subdivision, with, in 1876, 2660 people, stands on an open plain or tableland about twelve miles south of Sangameshvar, between the Kundi and Amba passes, at the foot of the Sahyadri range and below the fort of Mahipatgad. Besides a post office and a vernacular school, the town contains the mamlatdar's and chief constable's offices, and the court of the subordinate judge, which were moved to Devrukh in 1878 after the disastrous fire at Sangameshvar. [Details are given below, p. 372.] Devrukh, though at present with no trade, is on the old track between Sakharpe at the foot of the Amba pass and Sangameshvar. It is intended to make a cart road over this line as a subsidiary work to the Amba pass scheme. The town is held in-grant by Raja Sir Dinkar Rav. It is healthy, well wooded, and picturesque.

DHAMAPUR

Dha'ma'pur, a large village in the Malvan sub-division, on the Karli creek ten miles east of Malvan, on the road to Kudal and Savantvadi,

had, in 1872, a population of 2945 souls. It is chiefly interesting for a lake [For further description see Chap. I. p.11.] which waters a large area of rice and garden land both in Dhamapur and in the neighbouring village of Kalsa. The lake, one and a half miles long, and on an average a quarter of a mile broad, covers an area of about 120 acres, and on three sides is surrounded by well wooded hills. The narrow ravine between the steep hills on the south has been dammed by a solid earthen embankment faced with masonry, 450 feet long, and at its widest ninety-six feet broad. The lake having no sluice or other means for regulating the water discharge, the channel has every year to be dammed by the villagers with earth and faggots. On the level top of the dam, on a paved terrace with a broad flight of stone steps running to the water's edge, stands a temple of- Bhagavati and other minor buildings. The local story that the dam is 250 years old, is 'to some extent confirmed by the size and evident age of the trees growing on its top. The tradition is that in former years there was at the bottom of the deep stream a temple of Bhagavati. Pious Hindus, after praying to the goddess and casting flowers into the stream, had only to utter a wish for any ornament or jewel, and at the same time to lower an earthen vessel into the water, when it would be immediately returned with the wished-for gift. When the dam was constructed a temple of Bhagavati was accordingly built on it. A small yearly fair is held in the Hindu month of Chaitra (March-April). The hill slopes round the lake are now a Government forest. The village has a post office and a vernacular school.

DHOPESHVAR

Dhopeshvar, a well known temple, in a village of the same name, with, in 1872, 2725 people, stands a mile or so west of the town of Rajapur. The village revenues are alienated for the support of the shrine, and every year, attended by about 1000 people, a fair is held on *Maha Shivratra* (March). A procession is formed and the idol, covered with a gold mask, is carried round the temple in a palanquin.

PLACES FATEHGAD FORT

Fatehgad Fort. See Harnai. FORTS.

Forts. Ratnagiri forts are either inland or on the coast. Coast forts are of two classes, island and headland forts. Of island forts the chief are the Harnai fort of Suvarndurg and the Sindhudurg fort at Malvan. Of headland forts, most of them on the bank of some river, the chief are.beginning from the north, Bankot, Anjanvel or Gopalgad, Govalkot, Jaygad, Ratnagiri, Purangad, Satavli, Rajapur, Jaytapur, Vijaydurg, Kharepatan, Devgad, Bhagvantgad, Ramgad, Sidhgad, Nivti, Vengurla, and Redi. The sites of a few of these, such as Anjanvel or Gopalgad, Jaygad, and Rajapur, are very little raised above sea level. Inland forts, all much the same in character, are built on some natural post of advantage, if in the low country on some steep hill commanding a river or pass, if in the main ranges on some projecting spur or rock, or above a great natural scarp. All are built on the same principle. The hill top or the end of the spur or point is girt by a wall, strengthened by many bastions. On any slope or place likely to invite approach, an outwork is built and joined with the main fort by a passage between a double wall. The entrance, for there is seldom more than one, is generally the strongest and most noticeable part. The outer gateway, if the ground permits, is thrown far forward and protected by a bastion on each side, and often by a tower above. Entering this, a narrow passage winding between two high walls leads to the inner gate, in the face of the main wall, along an approach commanded by bastions. This arrangement, in a time when guns could compete with stone walls, rendered the gates unapproachable. Inside the main wall there was generally an inner fortress or citadel, and surrounding this the buildings required for the troops, magazines, reservoirs, and wells. In many of the larger forts, houses for the commandant, or massive round towers were built upon the wall of the main works on the least accessible side. The larger forts had generally a town, petha, clustered about or near the base of the hill.

The age of most forts is hard to fix. Some of them, as Mandangad, may be as old as the Christian era. But of this the evidence is very slight. [See below, "Mandangad" (p. 352).] Many are said to have been built by Bhoj Raja of Parnala in the end of the twelfth century. [Nairne's Konkan, 19.] But most are supposed to be the work of the Bijapur kings (1500-1660), raised in the sixteenth century, and in the seventeenth repaired and strengthened by Shivaji. [Shivaji more than any of its rulers attached importance to hill forts. Every pass was commanded by forts, and in the closer defiles, every steep and overhanging rock was held as a station from which to roll great masses of stones, a most effectual annoyance to the labouring march

of cavalry, elephants, and carriages. It is said that he left 350 of these posts in the Konkan alone. Orme's Hist. Frag. 93. One distinguishing mark of forts built or rebuilt by Shivaji is, inside the main gate, a small shrine with an image of the monkey god, Hanuman or Maruti. Mr. G. Vidal, C.S.] Like those of the north Konkan, the Ratnagiri forts were neglected by the Peshwas. [For twenty years not a day's labour or a rupee's wage had been spent on them. The defences were neglected and the water in many of them bad. Nairne's Konkan, 117.] In 1818, except for the labour of bringing guns to bear on them, they were easily taken by the British. Nothing was done to destroy the fortifications. But except' Bankot, Harnai, Vijaydurg, and a few others which have from time to time been repaired, all are now, from weather and the growth of creepers and wall trees, more or less ruined. There are said to be 365 forts in Ratnagiri. Details of only forty-three of these have been obtained. [These are: Ambolgad, Bahiravgad, Bahiravgad, Bharatgad, Bhavangad, Bhag-vantgad, Devgad, Fatehgad, Fort Victoria, Gopalgad, Gova, Govalkot, Jaygad, Jaytapur, Kamtekot, Kanakdurg, Kharepatan, Mahipatgad, Maimatgad, Mandangad, Nandos, Nivti, Palgad, Pandavgad, Purangad, Rajapur, Raikot, Bamgad, Rasalgad, Ratnagiri, Redi, Satavli, Sidhgad, Sindhudurg, Sumargad, Sarjekot, Suvarndurg, Uchitgad, Vengurla, Vetalgad, Vijaydurg, Vijaygad, and Yashvantgad.]

FORT VICTORIA

Fort Victoria. See Bankot.

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GANESH PULA

Ganesh Pula, near Neruvadi in the Ratnagiri sub-division, is a holy spring oozing from the rock. In a temple near is a small image of Ganpati with a yearly endowment of £120 (Rs. 1200). It is often enriched by free-will offerings. [Oriental Christian Spectator (1834),]

GOPALGAD FORT

Gopa'lgad Fort. See Anjanvel.

GOVA FORT

Gova Fort. See Harnai.

GOVAL.

Goval, the Chiplun landing place, a village on Map island, twenty-eight miles from the mouth of the Vashishti, and by cart road three miles from Chiplun, with, in 1872, 3439 people, has a custom office and a rest-house. Of its old fort, stone quays, and water scheme, details are given under "Chiplun".

GOVALKOT FORT

Govalkot Fort, [Tulaji Angria called this fort Govindgad and the Anjanvel fort Gopalgad, Gopal and Govind being generally used for any couple of things very closely alike. Mr. A. T. Crawford's MS.] in Chiplun, on a small bill rising from rich fields, surrounded on three sides by the Cbiplun creek and with a filled up ditch on the fourth, covers an area of about two acres. It has no garrison Water lasts till April and provisions can be bad in a village two miles off. In 1862 the walls and bastions were much rained. It bad then twenty-two old and unserviceable guns. [Gov. List of Civil Forts, 1862.] The place bas little natural or artificial strength. There are two doorways, one to the north the other to the east, and eight battlements. On the south wall is an image of Redjaiji.

According to local report the fort was built about 1690 by the Habshi of Janjira. The Habshi may have repaired the fort. But the position of the Redjaiji image seems to show that it was part of the original fort and that the builder or renewer was a Hindu king, probably Shivaji (1670). From the Habshi it was taken by Angria (about 1744), from him by the Peshwa (1755), and from the Peshwa by the English (1818). Within the fort are traces of buildings and dwellings, and a dry pond forty-seven feet long, forty-four broad, and twenty-two deep.

GUHAGAR

Guha'gar, a large village on the coast, six miles south of Anjanvel, had, in 1872, 3445 people, lodged in 576 houses. It was known to the Portuguese as the bay of Brahmans, a name that it still might very well bear. De La Valle's (1624), Letters, III. 143. It may perhaps be

Ptolemy's (150) Aramagara or Bramagara. Bertius, 198.] In 1812 the Peshwa Baji Rav, as a hot weather retreat and for certain religious rites, built a palace on the cliff to the south of the village. Most of the materials were (1823) used for Government buildings in Ratnagiri, [Waddington's Report in Nairne'a Konkan, 121,] but some of the palace ruins are still standing. The road through the village, a straggling street some three miles long, is throughout well paved. The houses are built close to the beach, and the whole length of the village is densely shaded with cocoa palms and other trees. The population is in great part Brahman. An open roadstead, with no anchorage or tidal creek to shelter even the smallest craft, Guhagar has never been a place of trade. From 1829 to 1873 Guhagar was the head-quarters of the Guhagar sub-division. In that year it was reduced to a petty division subordinate to Chiplun. It has now a mahalkari's office, a police station, a post office, and several temples. A fair bullock track runs to Chiplun.

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HARNAI

Harnai, north latitude 17° 47½' and east longitude 73° 5', about two miles south of Anjarla and fifteen north of Dabhol, with, in 1872, a population of 6193 souls, lies in a small rocky bay, a shelter for coasting craft in north-west winds. [Taylor's Sailing Directory, 387.] Under the Marathas, Harnai was the head-quarters of a sub-division, and here, in 1818, a station for British troops was established. It does not seem ever to have been a place of consequence. Harnai is connected by a third class cart road with Dapoli and Khed, and during the fair season coasting steamers call regularly. The population is mixed, Muhammadan, Koli, and Brahman. The ordinary trade is small, averaging for the five years ending 1877-78, £29,231 (Rs. 2,92,310), of which £14,118 2s. (Rs. 1,41,181) are exports and £15,112 18s. (Rs. 1,51,129) imports. During the famine year (1877), 150 tons of grain were landed at the port, and by Khed and the Ambavli pass sent to Satara. From September to June there is a brisk market for fish, thronged by buyers from many miles round. The only industry is, by workmen of the Sali caste, the weaving of coarse cotton robes. To improve the present scanty supply, a scheme has been started for bringing water by a masonry aqueduct, from Asud, three miles distant on the Dapoli road. The estimated cost is about £3000 (Rs. 30,000). There, is a post office, a police post, a custom house, and a fish and vegetable market.

Forts.

The chief objects of interest are, a little to the north, the well known island fortress of Suvarndurg or Jaujira, [This is not the famous Janjira on the Rajpuri creek in Habsan. Details of Suvarndurg are given below, p. 338.1 and the smaller forts of Kanakdurg, Fatehgad, and Gova. On the mainland opposite Suvarndurg, and separated by a narrow channel, are the forts of Kanakdurg and Fatehgad, of little value except as outworks to Suvarndurg. According to one account they were built by Shahu in 1710 to overawe Suvarndurg, but were soon after taken and held by Angria. [A. Hamilton, about the game time, speaking of it as Homey Coat, says it was fortified by Shivaji. New Account, I. 244.] According to another account they were built in 1700 by Khairat Khan, the Habshi of Janjira, soon after his unsuccessful attack on Suvarndurg, and remained till 1727 in the Habshi's hands. The names of the Governors of the forts during this time were, Dharamrav Savant Hibriv Dalvi, Sidi Masud Khan, Sidi Masud, Sidi Said or Amalgar, Sidi Said or Vadle and Sidi Yakub. Mr. A. T. Crawford's MS. In 1755, on the English capture of Suvarndurg, these forts yielded without a struggle.

Kanakdurg.

Kanakdurg, on rising ground, surrounded on three sides by the sea, has an area of not more than half an acre. In 1862 it was ruinous, and

had neither a garrison nor water. [Gov. List of Civil Ports, 1862.] Of the fort nothing is now (1879) left but two battlements, one at each end. Inside are nine small ponds, eight near each other, separated only by open cut-stone walls, and the ninth at a little distance to the west. They have water enough for a large garrison.

Fatehgad.

Fatehgad or Victory Fort is an utter ruin.

Gova Fort.

Gova Fort, on rising ground, surrounded by the sea on its north and west sides, has an area of about two acres. In 1862 it was in good order, and had a guard of nineteen constables and sixty-nine old unserviceable guns. Water. was scanty but food supplies were abundant. Surrendering to the British on the fall of Suvarndurg, it was (1757) restored to the Peshwa, and retaken by the British in 1817. Larger and much stronger than the other forts, it is still in fair repair, and has a traveller's and a district office's bungalow. Like Suvarndurg it, has an image of Maruti, the monkey god, on a Wall, and a tortoise before the threshold. The walls are about twenty feet high. The southern part of the fort is about, fifty feet, above sea level.

Besides those fortifications there are small remains on an isolated rock, an island except at low tide, that commands the bay of Harnai. There is an English graveyard, where some of the officers of the detachment stationed here in 1818 are buried. [The principal are the tombs of Capt. Vansittart of the 44th Regiment N. I. and Lieut. Skirrow, R, E.] The large tomb near the forts was raised in honour of one of the Angrias. There is also a Roman Catholic chapel and cemetery. The three chief Hindu temples are those of Eknath, Murlidhar, and Kama,-leshvar. A Small yearly fair is held in *phalgun* (February - March).

Suvarndurg Fort.

Suvarndurg, the Golden Fortress, with an area of eight acres, on a low irregular island, about a quarter of a mile from the shore, surrounded by a very high wall, is perhaps the most striking of the Ratnagiri coast forts. Great part of the fortifications are cut out of the solid rock and the rest are built of blocks of stone ten or twelve feet square. Relieved by bastions and broken by one rough postern gate just above high tide mark, the walls are so overgrown with trees and bushes, that, except at low tide, it is impossible to walk round them. Within the fort are several reservoirs and a small step well with water enough for a large garrison. On a stone at the threshold of the postern gate is an image of a tortoise, and opposite it on the wall towards the loft, one of Maruti. There are two guard rooms to the right and left, and rooms also under the bastions. At a little distance is a stone building plastered with mortar, said to have been the magazine. Some very extensive foundations are probably the sites of old palaces. In 1862 the walls and bastions were in good repair, but the gateway was

ruinous. There was no garrison, but the supplies' of water and food were abundant. There were fifty-six old and unserviceable guns. [Gov. List of Civil Forts, 1862.]

Suvarndurg, probably built by the Bijapur kings in the sixteenth century, and in 1660 strengthened by Shivaji, was in 1698 a station of Kanhoji Angria's fleet, and in 1713 was formally made over to him by Shahu Raja. Under Kanhoji's successor Tuhaji, Suvarndurg became one of the head centres of piracy. Such damage did its fleets cause, both to native and foreign shipping, that the Peshwa's government several times proposed that the English should join them in suppressing Angria. Early, in 1755 a joint attack on Suvarndurg, Bankot, and some other of Angria's forts was arranged. But the Bombay Government was very cautious, telling their Commodore not to attack the forts, only to blockade them, and let the Marathas besiege them from the land. Starting on the 22nd March, Commodore James, with the Protector of forty-four guns, a ketch of sixteen guns, and ten bomb vessels, was, after three days, joined off Chaul by the Maratha fleet of seven grabs and sixty gallivats carrying 10,000 troops. " In the afternoon news came that Angria's fleet was in Suvarndurg bay. The Commodore proposed to hurry on and blockade the harbour during the night. The Marathas agreed, but failing to move in time, in the early morning Angria's ships caught sight of them and fled down the coast. The Protector pursued, but his Maratha allies, though their vessels wore better sailers, lagged behind. The wind was light and Angria's fleet throwing out lumber, setting all sails, and hanging up their clothes and turbans to catch the breeze, kept their lead, till, as evening drew on, the Commodore gave up the chase. Landing near Suvarndurg he found Ramji Pant and his army two miles off and up to their chins in trenches, bombarding the three land forts with one four-pound gun. Seeing the helplessness of his allies the Commodore, in spite of his cautious instructions, determined to bombard Suvarndurg. [Suvarndurg had fifty guns mounted on the ramparts, and the three shore forts eighty among them. Milburn's Oriental Commerce, I. 295. On the 2nd April he opened fire from the sea side. Making little way with the solid rock of the sea wall he changed his station to the north-east. Here, anchoring within 100 yards, his musketry drove the enemy from their guns, and a fire breaking out and spreading to the powder magazine, the garrison fled to Fort Gova. Before Suvarndurg could be taken the governor with some of his best men came back and refused to surrender. Fearing that during the night help might come from Dabhol, the Commodore landed half his seamen, who, hacking down the sallyport with their axes, forced their way into the fort and the garrison surrendered. [Grant Duff, II. (85-86,) says the siege lasted four days without the loss of a single man.] On the 11th April, after his return from Bankot, Commodore James according to agreement made over Suvarndurg to the Maratha government. [Low's Indian Navy, I. 132.] In 1802, Bajirav Peshwa, flying from Yashvantrav Holkar, sought safety in

Suvarndurg. But the fort could not be defended and Bajirav was forced to leave his family and retire to Bassein. [Nairne's Konkan, 107.] Holkar following him took the island and the Peshwa's family. [Blue] Book on Maratha War (1803), 350, 463.] In 1804 Suvarndurg was, in the Peshwa's interests, [MS. Records in Nome's Konkan, 108.] captured by the English from a revolted Maratha officer. The fort was in bad repair and the garrison, about 800 Arabs and Musalmans, surrendered without fighting. [MS. Records in Nome's Konkan, 108.] In November 1818, it was taken by Colonel Kennedy with little resistance. [Blue Book, 128; Nairne's Konkan, 114, 116. The details of the capture are: In the end of November a detachment of Artillery and of the Marine Battalion (XXIst Regiment N, I), under the orders of Captain William Morison of the IXth Regiment, was employed in reducing the fort of Suvarndurg which surrendered on the 4th December 1818. The Governor in Council, in General Orders of the 20th December, was pleased to express his high sense of the conduct of the detachment upon the occasion. Though opposed by very superior numbers, the energy of this small force succeeded in surmounting every obstacle, escalading and taking in open day with a party consisting only of fifty sepoys and thirty seamen led by Captain. Campbell of the IXth Regiment and Lieut. Dominicette of the Marines, the fort of Kandah (Kanakdurg) notwithstanding the heavy fire of the enemy. This gallant and successful enterprise having completely intimidated the enemy, the two other forts, of Gova and Janjira, were abandoned during the night. Service Record of H.M.'s XXIst Regiment N. I. (Marine Battalion).]

The fort's area of seven and a half acres, plentifully supplied with water and overgrown with grass, weeds, and *bur* trees, has lately been made a Government forest reserve.

PLACES

JAYGAD

Jaygad, north latitude 17° 17' and east longitude 73° 15', a village near the fort of the same name, on the south shore of the entrance to the Shatstri or Sangameshvar river, about fourteen miles south of Guhagar and $99\frac{1}{2}$ south of Bombay, had, in 1872, 2442 people and a small trade in salt and fish. The average yearly trade, for the five years ending 1877-78, was valued at £54,677 8s. (Rs. 5,46,774) of which £23,241 2s. (Rs. 2,32,411) represented exports chiefly firewood and molasses, and £31,43(5 6s. (Rs. 3,14, 363) imports chiefly rice and salt. Jaygad seems never to have been a place of consequence, [In 1819 there was no town, only straggling villages. Lieut. Dominicette, 9th June 1819, Bombay Public Diaries, 432 of 1819, 1066.] and is now (1879) little more than a fishing village. The climate is healthy, and the water supply from some reservoirs close to the fort is excellent. It has a custom house and a post office.

Port.

From Jaygad point the river mouth stretches more than a mile north to Borya, forming a bay two miles deep and five broad. The chief entrance, with eighteen feet at low water, lies close under the Jaygad cliffs. Within the point is a deep harbour safe against all winds. [Taylor's Sailing Directory, 388. It is high water a full and change of the moon at 10 hours 37 minutes, springs rise 9 feet 8 inches, neaps 6 feet 6 inches.]

Fort.

Jaygad, [Jaygad has been identified with Strabo's (B,C. 54 -A.D. 24) Sigerdis, ' the rest of the coast besides Saraostus or Surashtra ' (Hamilton's Strabo, II. 253); with Pliny's (A.D.77) Sigeris on the Konkan coast, 'one of the chief ports of western India' (Bostock's Pliny, II. 50); with Ptolemy's (150) Melizigeris an island of the pirate coast; and with the Melizeigara of the Periplus (247). It secma better to refer these names to the island, jazira, and town of Meli of Melundi now known as Malvan. See below, p. 347.] or Fort Victory, with an area of four acres, stands close to the shore on gently rising ground not more than 200 feet above the sea. Except in a few places, the walls and bastions are in good repair. The fortifications consist of a strong upper fortress on the brow of the hill, with a lower line of defences on the shore immediately beneath it, joined to the upper works by a connected line of bastions down the steep slope of the hill, the whole enclosing a considerable space now occupied by a few native huts. The upper part, added by Shivaji, has several finely constructed wells of good water and a few habitable dwellings. There is a sallyport in the lower walls near the sea, but the main gate is at the top of a very steep flight of steps on the east side. The walls are covered with creepers, which are slowly but surely causing them to fall into ruin. Supplies are limited to fish and poultry, the latter being

difficult to obtain; water can be procured from two wells near the landing place. [Hydrographic Notice No. 20] In 1862 there was a guard of four police constables, and there were fifty-five guns all unserviceable. [Gov. List of Civil Forts, 1862.] Two miles distant, on a hill on the opposite shore, about a quarter of an acre in area, and with no garrison and no water, is the smaller fort of Vijaygad, protected by a ditch on three sides. In 1862, the walls were very ruined and it had only one entire gun. Supplies could be got from the neighbouring villages. Gov. List of Civil Forts, 1862. Jaygad fort is said to have been built in the sixteenth century by the Bijapur kings. [Jervis' Konkan, 92. Major Jervis says fifteenth. But see above, p. 195.] Towards the close of the sixteenth century, Jaygad seems to have passed into the hands of a pirate Hindu chief, the Naik of Sangameshvar, who, with seven or eight villages and 600 troops, was so strong that the combined Portuguese and Bijapur forces, twice, in 1583 and 1585, made expeditions against him. [DeCoutto, XII. 30; Faria in Briggs, III. 524. See Nairne's Konkan, 35.] Jaygad was (1713) one of the ten forts ceded by Balaji Vishvanath to Angria on his promising to renounce Sambhaji, release the Peshwa, restore all his conquests except Rajmaehi near the Bor pass, and maintain the cause of Shahu. [Grant Duff, 193.] With other Ratnagiri forts Jaygad was, in June 1818, made over to the British without a struggle. [Nairne's Konkan, 116.]

Within the fort two buildings in good repair are still used by district officers. To the west of the fort, on the sea slope of the cliff, protected from the sea by extensive outworks, stands the temple of Karteshvar or Shiv. There is also a reservoir of very pure water.

JAYTAPUR

Jayta'pur, where native boats discharge and load, a small town in the Rajapur sub-division, with, in 1872, 1801 people chiefly Musalmans, is situated four miles from the entrance of the Rajapur river. [Taylor's Sailing Directory, 389. The details of the river entrance are given under Rajapur."] It is the outlet for the sea traffic from Rajapur, and the place of call for coasting steamers, which stop three times a week for passengers going to and from Rajapur. The town' has a sea custom house, a post office, and a vernacular school.

History.

Objects.

Mandelslo (1638) mentions it under the name Suitapur as one of the best coast harbours, the island sheltering it from all winds. [Voyages, 221.] Ogilby (1670) calls it Cetapur, one of the chief Konkan ports, [Atlas, V. 248.] and at the beginning of the eighteenth century, Hamilton (1700-1720) speaks of Rajapur harbour as one of the best in the world. [New Account, I. 244.] It was burnt by the Sidi and Moghal fleet in December 1676. [Orme's Hist. Frag. 64.]

On the north bank of the river, on the opposite side of the estuary

lies the old ruined fort of Yashvantgad. [See p. 68.] Close to the edge of the cliff on the south point of Rajapur bay is the Jaytapur lighthouse. This, a small white masonry tower twenty-one feet high, shows' during the fair months (10th September to 10th June a fixed white light of the sixth order. It is ninety-nine feet above the sea, and in clear weather is seen from a- distance of nine miles. During the cyclone of the 15th January 1871, a small steamer, the General Outram, was wrecked off Ambolgad bay a few miles north of the Jaytapur light.



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KATEKOT FORT

Ka'mtekot Fort, in the village of Kamte in the Devgad subdivision, lowlying and with an area of two-thirds of an acre, had once a ditch now filled and under tillage. In 1862 the walls were ruinous. There was no garrison and rather a scanty supply of water. Near a temple of Bhagvati were four old useless guns. [Gov. List of Civil Forts, 1862.]

< KANAKDURG FORT

Kanakdurg Fort. See Harnai.

< KANKESHVAR

Kankeshvar, a small village on the coast in the Devgad subdivision, with, in 1872, a population of 713 souls, is noteworthy on account of the temple from which it takes its name. The temple, with granite foundations and laterite superstructure and dome, is said to have been, built by a Musalman trader. An inscription on a stone let in over the entrance, states that it was repaired and enlarged by the Kolhapur chief in 1680. A yearly fair, held on the last day of *Magh* (February - March), attracts about 10,000 people. Shops are opened, and during twenty days cloth and other miscellaneous goods to the value of from £1500 (Rs. 15,000) to £2500 (Rs. 25,000) are sold.

KELSHI

Kelshi, [Taylor's Sailing Directory, 386.] at the mouth of the Kelshi river three miles south-east of Bankot,' with, in 1872, a population of 3291 souls, had, during the five years ending 1877, a trade valued at £8987 (Rs. 89,870) of which £3570 (Rs. 35,700) were exports and £5417 (Rs. 54,170) imports. Betelnut is the principal export. The trade is in the hands of a few. resident merchants chiefly Brahmans. *History.*

Kelshi does not seem ever to have been a place of consequence. Dom Joao de Castro (1538) mentions it as a town with a mosque and Moors. [Primeiro Roteiro da Costa da India, 152.] De La Valle (1624) anchored here, but for fear of the Malabars, did not go on shore. De La Valle, III. 136. The Malabar pirates who, from their practice of lying in wait behind it, have given its name to Malabar Point in Bombay.] Ogilby (1670) mentions it as a town and river. [Atlas, V. 244; Dom'Joao de Castro was probably Ogilby's authority as they botl call the place Quelecim. See Prim. Rot. da Costa da India, 39. In 1819, it was a place of little trade with a few Vanjaris and a small export of grain. [Collector to Gov. 15th July 1819; Bom. Rev. Diaries, 142 of 1819, 2573.] The village, of well built houses, is thickly peopled and densely shaded by cocoa palms. The climate is considered unhealthy, the water supply from garden wells being scanty and sullied by subsoil drainage. The river is for a few miles navigable for small boats, and the hills on the north bank are well covered with trees. There are two temples one to the goddess Durga, the other to the god Shri Ramp. A yearly fair held in *Chaitra* (April-May) is attended by about 25,000 people.

KHAREPATAN

Kha'repa'tan, a town in the Devgad sub-division about twenty-five miles up the Vijaydurg river, had, in 1872, 2900 people. Of late years, by the silting of the river for some miles below the town, Kharepatan has lost- much of its value as a port. The present town has little trade, and its site is hot and confined. Through the Musalman quarter a very rough road leads to an open space, stretching for a considerable distance along the river bank, with Musalman tombs in every direction. This was the old Musalman town, and though there is not a house now standing nor anything except, the tombs and the walls of three or four mosques, it is easy to believe that there was once a large town, for there is a fine level space lying above a long reach of the river, and the hills behind slope very gently upwards. [Col. 286, 21st Nov. 1878.] The bulk of the people are Musahmans.

Trade.

The trade of Kharepatan is chiefly in fish and salt. It has direct communication with the Deccan by the phonda pass, and is on the main line of road from Ratnagiri to Vengurla., A market held every Monday is attended during the fair season by about 1000 persons, and during the rainy months by from 200 to 300.

Management.

From the beginning of British rule until 1868, the town was the head-quarters of a petty division under a mahalkari. In 1868 it became the head-quarters of the Devgad sub-division, and had a mamIntdar's office, a subordinate judge's court, and a post office. In 1875 Kharepatan was abandoned, and the mamIatdar's and subordinate judge's offices were moved to Devgad.

History.

At the beginning of the sixteenth century (1514) Barbosa mentions Kharepatan, *Arapatni*, as a small place where Malabar vessels took on board cheap rice and vegetables. [Stanley's Barbosa, 73, 74.] In the course of the same century it is mentioned as a place of trade and a resort of pirates. [De Coutto, VIII. 569, IX. 109.] In 1571 it was burnt by the Portuguese. [Briggs' Ferishta, IV. 540.] In the seventeenth century Kharepatan is more than once mentioned as the best port on the Konkan coast. But these references belong to Vijaydurg rather than to Kharepatan. [See below, p. 63.] In 1713 it was made over to Kanhoji Angria, held by him till his defeat by the Feshwa in 1756, and finally ceded to the British in 1818. In 1819 it was described as one of the most suitable places for trade in the district. The largest boat could work up to it, and it was only about fifteen miles from the Bavda pass. Still its trade was small. The exports were valued at £9070 (Rs. 90,700), and the imports, chiefly of salt, at £16,100 (Rs. 1,61,000).

[Gov. Res. 13th May 1819. in Bom. Rev. Diaries 141 of 1819, 2310.] *Fort.*

On a small hill overlooking the town, is a fort about an acre in area. The walls and bastions were taken down in 1850, and used to make the Vaghotan landing place. [Gov. List of Civil Forts, 1862.] The sites of twelve or thirteen mosques are shown, and the remains of one, the Jama mosque, prove it to have been a building of large size. Outside of the present town is a very large brick reservoir, ruinous and nearly dry, with an inscription seating that it was built by a Brahman in 1659. Near the middle of the present town is a half-buried stone believed to have been the boundary between the Hindu and the Musalman quarters. Among many tombs on the hill side a few not otherwise distinguishable, lying east and west, are said to cover the graves of Jews. And in the middle of the present town there is a colony of Karnatak Jains and a Jain temple said to be the only one in south Konkan. In the temple is a small black marble idol that was found three or four years ago in the bed of the river. [Nairne in Ind. Ant. 11.321. In Burgess' List it is stated that copper-plates were found here. Ind. Ant. II. 321.]

KHED

Khed, the head-quarters of the Khed sub-division, with, in 1872, 3817 people, stands at the head of the Jagbudi river. Surrounded by hills, the town is oppressively hot during March, April, and May. Its trade, in the hands of Vanis, is carried on during the fair season only. An indifferent cart road by Dapoli connects Khed with Harnai port twenty-six miles distant, and Satara is reached by a bullock track over the Ambola pass. The provincial cart road connecting it with Chiplun nineteen miles south, and with Poladpur twenty-three miles north, places Khed in indirect communication with the routes to the Deccan by the Kumbharli and Mahabaleshvar passes. Boats of light draught work up on the tide from Dabhol and Anjanvel to Khed. Besides the mamlatdar's and chief constable's offices, there is a post office, a vernacular school, and on the banks of a pond, a large rest-house with separate accommodation for European travellers.

History.

No references to Khed have been traced. Before 1873, when it was made a separate sub-division, it was the head-quarters of a petty division under Dapoli or Suvarndurg.

Rock

On the side of a low hill to the east of the town are three small rock temples.

Temples.

Of their origin nothing is locally known. At present they are used by a family of lepers. Among several temples, none of architectural beauty, is one dedicated to the goddess Khedjai. To this idol, every

third year, in the second fortnight of *Ghaitra* (April-May), a buffalo bull is sacrificed and a small fair held. Booths and shops are opened, and there is some little traffic in cloth and sweetmeats.

KOL

Kol, in the Dapoli sub-division, across the Savitri river south of Mahad, has in the river to the south-east of the hill behind the village two small groups of rock temples. The first to the north-east of the village consists of a few broken cells of no pretension as to size or style. The other group to the south-east has one cell rather larger than the others. All are apparently unfinished and are much damaged. In the second group are three short inscriptions. [Burgess' Rock Temples, 53.]



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LANJE

Lanje, in the Rajapur sub-division, on an old highway between Satavli on the Muchkundi and Vishalgad fort, though now a place of no importance, is said to have once been a large Musalman town. It had, in 1872, a population of 2532 souls, Hindus and Muhammadans.

The village, standing on a level plain, is well supplied with water and considered healthy. It is joined by a made cart road with Rajapur and Ratnagiri nineteen and twenty-two miles distant. Except in sandals, *rahanas*, which have a good local name, the village has no trade. It draws its supplies chiefly from Rajapur. From the time of the Peshwa up to the 1st August 1879, when Vengurla was made a subdivision, Lanje was the head-quarters of a petty division of Rajapur.

Tombs.

In the town is the grave of a Muhammadan saint named Syed Chand Bukhari Ali Fakir, said to have lived four hundred years ago. Yearly at the *Mayh* (January-February) full moon a fair is held, when the tomb is, with ceremonies and prayers, covered with a cloth and sprinkled with powdered sandalwood and cement. Hindus as well as Muhammadans join in the ceremony, and the fair is largely attended by people from Lanje and the neighbouring villages. Shopkeepers come from Rajapur and open temporary booths at which for about a month coarse country and imported cloth and miscellaneous articles arc sold. There is also a domed tomb near the town with no more definite history than that it marks the grave of a princess who died on a journey. [Nairne in Ind. Ant. II. 317.]

PLACES

MACHAL

Ma cha'l, a lofty hill in the Rajapur sub-division, a few miles south of the Ratnagiri-Kolhapur road through the Amba pass, is by a narrow gorge separated from Vishalgad Fort and the main Sahyadri range. Crowned with a level plateau three and a half miles long and one and a half broad, and freely supplied with water, it is well suited for a sanitarium. According to the local story, in a narrow-mouthed cave on the western side of the hill there lived before the present cycle the famous sage Muchkund.

MAHAPRAL

Maha'pral, in the north-east corner of the Dapoli sub-division on the Savitri river, eighteen miles from Bankot and ten miles from Mahad in Kolaba, was formerly an important Musalman town, and is still chiefly a Musalman settlement. It has a well attended weekly market for the sale of salt fish and vegetables. Vessels of sixteen feet draught can at all states of the tide run up the Savitri to Mahapral. Between Mahapral and Mahad the navigation is difficult, as the river narrows and shoals with many rocky ledges and reefs. [Collector's 4430, dated 12th Decr. 1877.] A cart road has lately been made from Mahapral to near Poladpur the meeting place of the two fine roads' through the Varanda and Fitzgerald passes. In connection with this new route a travellers' bungalow is being built at Mahapral.

MAHIPATGAD FORT

Mahipatgad Fort, about twelve miles from Khed, facing the Hatlot pass and Makrangad, the Mahabaleshvar 'Saddleback,' stands at the head of a high spur, that running parallel to the Sahyadris is crowned by the three forts of Mahipatgad, Sumargad, and Rasalgad. Reached by a very narrow difficult pass six miles long, [The most direct practicable route from the northward is by the main road as far as the Government bungalow at Poladpur, whence to the left a path leads over broken ground, and after sighting the fort, winds among and over steep hills. Pursuing this pathway southwards, it is necessary to pass, at a distance of one and a half miles, along the whole west side of the fort. Reaching the valley, the ascent is gained over projecting spurs on the west, and leading over the south continuation of the range, the path winds over spurs on the eastern side of it, and reaches two hamlets, whence a steep pathway leads to the top. It is about four miles from the beginning of the ascent on the west to the interior of the fort. Report on Mahipatgad, 1854.] Mahipatgad is a table-land 120 acres in area, with no surrounding wall, but with well-built battlements and gateways in six places where the approach is easy. The defences are in bad repair, the wood work is gone, and in many places the stone work is in ruins. On all sides the table-land is surrounded by the village of Beldarvadi. [Beldarvadi, bricklayers' suburb, is a strip of rugged land said to have been assigned to certain bricklayers brought

by Shivaji to build the fort.] There are six gates, to the north the Kotval gate formed by two battlements one on each side and joined with parts of the ramparts; to the north-east the Red gate, Lal Devdi; to the east the Pusati gate formerly entered by a ladder; to the southeast the Yashvant gate and a thirty feet high battlement; to the south the Khed gate with traces of the path by which the garrison used to receive its supplies; and to the west the Shivganga gate called after a ling at the source of a rivulet. At the entrance of the south or Khed gate, is the foundation of a temple of Maruti and Ganpati, its walls half standing half fallen. Here according to one account there were 360, and according to another 700 stables. [Foundations of this sort are found all over the fort.] Further on is a stone house forty-five feet long by fifty-four broad, and a temple of Pareshvar a very strong building about twenty feet long by thirty-eight broad. It enjoys a yearly grant of £1 10s. (Rs. 15). In the temple enclosure are two ponds, with, on their banks, some engraved stones. The local story that the fort was begun and left half finished by Shivaji is supported by the heaps of mortar piled in several parts of the enclosure. The rough and uneven ground within the fort is overgrown with thoxn bushes and other brushwood.

MAIMATGAD

Maimatgad, perched on the top of a very high and steep spur of the Sahyadrj range, in the village of Nigudvadi, about six miles east of the village of Devrukh and 2½ miles south of the Kundi pass, covers an area of about sixty acres. It has no garrison and no water. Provisions can be got from a village close by. In 1862, it was very ruinous and had four unserviceable guns. [Gov. List of Civil Forts, 1862.]

MALVAN, or SINDHUDURG

Ma'Ivan, [The name Malvan is said to come from the great salt marshes, maha lawn, to the east of the town. Mr. Gr. Vidal, C. S.] north latitude 16° 4' and east longitude 73° 31', a busy port, the chief town of the Malvan sub-division, had, in 1872, a population of about 14,000 souls. In a bay almost entirely blocked by rocky reefs, there were formerly three small islands, two of them about a quarter of a mile from the shore, and the third Separated from the mainland by a narrow channel. On the larger of the two outer islands stands the famous fort of Sindhudurg, and on the smaller the ruined fort of Padmagad, now, at low tide, connected with the mainland by a neck of sand. On what once was the inner island and is now part of the mainland, lies, almost hid in palms, the old town of Malvan. [This inner island was called Medha, but the channel separating it from the mainland has been long dried up. This island stretched from a point about a quarter of a mile to the north of the old Residency to the site of the custom house on the south, and in it stood the old fort of Rajkot. The modern town of Malvan has spread far beyond the limits of the former island.] The coast is very rocky and foul. Abreast the fort a large ship should not anchor in less than eight fathoms. With a south wind the landing is best in the little bay to the north of Malvan point, and with a north-west wind in the Malvan harbour. On a sunken rock now marked with a buoy, a quarter of a mile from the north end of Sindhudurg island, the small steamer Johnston Castle was totally wrecked in 1865. [Taylor's Sailing Directory, 390.] The course is marked by buoys, and by night is shown- by a red light fixed to a boat in the harbour and a green light on shore, which must be kept in one line by ships entering or leaving the port.

Population.

Of the total 1872 population of 13,955 souls, 13,285 were Hindus, 442 native Christians, and 228 Muhammadans. Of the Hindus there were 1125 Brahmans and Shenvis, 371 Vanis, 2056 Marathas, 1092 Gavdas, 231 Kumbhars, 253 Sonars, 166 Sutars, 2471 Gabits, 4331 Bhandaris, 354 Telis, 45 Bhavins or temple devotees, and 795 'Others'. Of the Muhammadans 183 were classed as Shaikhs, and 45 as Pathans.

Trade.

Till the new road from Belgaum to Vengurla by the Parpoli pass was opened, Malvan was a place of considerable trade. Since then Vengurla has become the chief outlet for the produce of Belgaum and the neighbouring districts. A new road has lately been opened between Malvan and the Phonda pass, and a branch road made in 1877 as a famine relief work, joins it with the Parpoli pass at a point twelve miles east of Vengurla. As yet trade has shown no signs of recovering. Formerly the chief imports from the Deccan were food grains and pulses, cotton and Shahapur cloth, with, in smaller quantities, molasses, tobacco, turmeric, chillies, oil nuts, and myrabolans. To a small extent these goods, excepting cotton, are still received. The chief imports by sea are rice, piece goods, and fresh and dry dates. Formerly Malvan was a place of call for Arab vessels who brought dates and umbrellas, and in return carried cotton, cocoanuts, and food grains to Bombay. The only exports by land are salt, cocoanuts, and cocoanut oil. [During the year 1877, 1200 tons of grain worth about £10,400 (Rs. 1,04,000) were forwarded from Bombay to the Deccan districts by Malvan and the Phonda pass.] By sea, molasses, salt, tobacco, cocoanuts, betelnuts, coir, and plaited palm leaves still go in small quantities to Bombay and other ports. The average yearly trade during the five years ending 1877-78, was valued at £67,695 (Rs. 6,76,950) of which £29,258 2s. (Rs. 2,92,581) were exports and £38,436 18s. (Rs. 3,84,369) imports. The leading local merchants are Bhatias and Shenvis, Kasars who trade in cloth, and native Christians who deal in Shahapur cloth and imported piece goods. The petty retail grocers and shopkeepers are Vanis. Shenvi merchants deal chiefly in cloth, and Bhatias in food grains and pulses, molasses, gallnuts, flax, chillies, tobacco, and cocoanuts. The main street, Somvar Peth, running parallel with the beach for about a mile,

and containing all the principal shops, is clean and well kept. The houses are substantial tiled buildings, mostly with two stories. In the fair season a canopy of plaited palm leaves is raised from end to end to shade the street from the sun. Every morning during the fair season, in one of the side streets near the landing place, a well attended fish market is held.

Manufactures.

Until quite lately (1880) salt was, for local use and for export, made at the pans to the east of the town. The pans, of which twenty-nine were the property of private individuals and two of Government, produced a yearly average of about 470 tons (26,350 *mans*). Good red pottery is also made from a rich clay found to the east of the town.

Health.

The water supply derived from wells is ample and generally good. There is no dispensary, but a private shop has lately been opened for the sale of common European medicines. Beyond occasional outbreaks of fever, and a prevalence of bilious complaints, the town is reputed healthy. [The natives say it agrees well with women, but badly with men, who lose flesh and vigour. This belief is to a great extent borne out by the look of the men and women.] The rainfall, averaging 73.52 inches, is lighter than that recorded from any other station in the district. Very strong northerly breezes prevail throughout the fair season, especially in March and April. The site of the old Residency, now the mamlatdar's office, is airy and open, and at all times cool and pleasant. The native town, nestled in dense groves and orchards of cocoanut, Alexandrian laurel [Calophyllum inophyllum.] and cashew tree [Anacardium occidentale.] is hot, close and relaxing.

There is no municipality. The project has always been received with disfavour by the people and has not been pressed. The town, the head-quarter station of the revenue and police officers of the sub-division, has a subordinate judge's court, a post office, a sea custom house, and three vernacular schools two for boys and one for girls.

History.

Though its chief interest is the fort of Sindhudurg, Malvan has for long been a place of considerable trade. [The similarity of the name Melizigeris, the island of Meli, and the fact that the chief export was pepper (Lassen Ind. Alt. I. 327) would seem to make it probable that Ptolemy's (150) island of Melizigeris, and the Periplus' mart of Melizeigara, and perhaps Pliny's (77) Zigerus, and Strabo's Sigerdis, were the island-town of Milandi or Malvan. Later on Ibn Khurdadba (900) mentions Mali, an island five days south of Sanjan in the north of Thina (Elliot, I. 15), and Al Biruni (1030) has Malia south of Saimur, that is Chaul in Kolaba (Elliot, I. 66). The Arab travellers may refer to Malvan or Milandi, but more likely to the Malabar coast. Compare El Idriai (1150) in Elliot, I. 85.] In the sixteenth century it is mentioned

as a centre of traffic, with a high road to the Sahyadri hills. [Bom. Gov. Sel New Series, X. 156. About the middle of the seventeenth century, when Shivaji fortified Sindhudurg, the creek about a mile and a half north of Malvan was navigable some miles up to Maland or Milandi then a place of considerable trade. [Naime's MS. Dom Joao de Castro (1538) mentions that at low tide gallies could enter the river of Malundi, Prim. Rot. da Costa da India, 22. In 1750, under the name Molundi, it is mentioned as a fortified town belonging to Bhonsle, from whom, in 1 746 and the two following years, it was taken by the Portuguese Viceroy, Pierre Michael Almeyda, who chased the pirates inland. [Tieffenthaler, Res. Hist, et Geog. I. 412.] In 1765, the English stipulated that they should be allowed to have. a factory at Malvan. [Grant Duff, 509,] After its capture by the English in 1766, Malvan, on payment of £38,289 12s. (Rs. 3,82,896) for loss and expenses, was restored to Kolhapur. [Graham's Kolhapur, 497.] In 1792, the English again arranged to have a factory at Malvan. [Grant Duff, 509.] Since its cession by the Kolhapur chief (1812) Malvan has remained under the British. At first it had a Resident and a civil and military establishment. [Mr. Hale, 31st May 1819 in Bom. Rev. Diaries 141 of 1819, 2299. In 1819, it was the centre of a trade valued at £28,579 (Rs. 2,85,790), of which £23,296 (Rs. 2,32,960) were imports' and £5283 (Rs. 52,830) exports. [Mr. Hale. These figures include small returns from Vengurla. The chief details are, of imports, cocoanut kernels £838, grain £1645, piece goods £2269, rice £12,855; of exports, coriander seed £502, clarified butter £554, hemp £1749, and piece goods £793. Mr. Hale, 31st May 1819 in Bom. Rev. Diaries 141 of 1819, 2319.] In 1834 it is said to have had a population of 10,000 souls. [Oriental Christian Spectator, V. 114 (1834).]

Sindhudurg.

The chief object of interest is Shivaji's fortress and coast capital, Sindhudurg, or the Ocean Fort. On a low island about a mile from the shore, though less striking than Suvarndurg, it is very extensive, The figure of the fort is highly irregular with many projecting points and deep indentations. This arrangement has the advantage that not a single point outside of the rampart is not commanded from some point inside. South Konkan Forts, 1828.] little less than two miles round the ramparts. The walls are low, ranging from twenty-nine to thirty foot. [On the sea side so low are the walls that at one place they seem almost below high water level, and inside of the fort are masses of wave-worn rock and stretches of sand. Nairne's MS.] They are on an average twelve feet thick, and have about thirty-two towers from forty to 130 yards apart. The towers are generally outstanding-semicircles with fine embrasures for cannon, with in most a flat seat on the parapet, and stones projecting inwards drilled with flag staff holes. Here and there narrow staircases load from the inside to the top of the walls. The entrance is at the north-east corner. [In 1828, the north and east faces were in very fair repair. A few fig trees had here and there made their appearance, but they were of no great size. The

state of the west and south faces was deplorable. In no part of either of them was the parapet entire, in most places it had been washed away by the beating of the monsoons so as to leave not above two feet remaining, and in many parts it was destroyed clear away from the level of the ground and the whole of the terreplein or cannon platform was also washed away leaving great blocks of rough stone. A large stretch of the west and smaller parts of the south wall were undermined. It was doubtful if the west wall would stand many years more. In spite of repairs the buildings of the fort were, except the magazine and gateway, in a wretched state almost falling down. (Southern Konkan Ports, 1828). Considerable repairs must have been carried out, as in 1862 the walls and bastions were, with few exceptions, in fair order. There was no garrison, water was abundant and supplies easily obtained. In the fort were nineteen old guns. Gov. List of Civil Forts, 1862. The area of the fort is forty-eight acres. Once full of buildings it is now a mere shell with nothing inside but a few small temples. [In the 1862 list the area is given at thirty-one acres and it was said to contain thirteen houses, three temples, and one rest-house. Gov. List of Civil Forts. To the Marathas Sindhudurg is Shivaji's cenotaph [Grant Duff in Nairne's MS.] and in its chief shrine Shivaji's image is worshipped. The image is of stone, and the head is covered with a silver, or, on high days, with a gold mask. In the stone of the walls prints of Shivaji's hands and, feet are held in reverence and protected by small domes. But for their exceeding smallness these imprints are very accurate representations of a hand and foot. Mr. R. B. Worthington, C.S.] Besides the temple buildings the fort contains the huts of a few Gabits who have rented from Government the numerous cocoa palms that grow within the walls. Inside the fort, near the temple stands a solitary Adausonia digitata, gorakh chinch, tree. The temple or shrine is supported by a yearly cash allowance of £152 4s. (Rs. 1522) assigned, in 1812, by the Kolhapur chief through his minister Ratnakar Appa. [Nairne's MS. Monday is the chief day for Shivaji's worship and the Kolhapur chief sends turbans and other presents. The shrine is seldom visited by pilgrims and is not honoured by a fair. Mr. G. Vidal, C. S.]

About the middle of the seventeenth century (1665), failing in his efforts to take Janjira from the Sidi, Shivaji chose Malvan with its rocky islands and reef-blocked harbour as his coast head-quarters. [The difficulty of the harbour entrance, and the care taken in fortifying the land approach raise the belief that Shivaji meant Malvan as a place of refuge should he be brought to extremities. Nairne's MS.] Besides the main fortress on the larger of the outer islands, at which he is said to have worked with his own hands, he fortified the smaller island Padmagad, and on the mainland opposite the town and at the mouth of the creek about a mile and a half north, built the forts of Rajkotand Sarjekot. [Grant Duff, I. 188 and Nairne's MS.] At the time (1713) of the division of Shivaji's dominions between the Kolhapur and Satara families, Malvan fell to the Kolhapur chiefs, and under them became

the headquarters of the most active and destructive of the coast pirates. [Grant Duff, I. 188 and Nairne's MS. Of the Malvan pirates Milbnrn (Oriental Commerce, I.296) gives the following details: In the seventeenth andearly years of the eighteenth centuries Malvan was the head-quarters of pirates known as Malvans, a very cruel race, according to Grant Duff, the most active and desperate of all the. coast corsairs. None but the Raja fitted out vessels which were of three kinds, galivats, shebars, and grabs. The galivat had generally two masts, was decked fore and aft, had square top sails and topgallant sails and was rigged mostly in European fashion. The shebar had also two masts the aftermast and bowsprit very short, no top masts, very little rigging and was not decked. Its Iargest sail was stretched on a yard of very great length running to a point many feet higher than the mast. They sailed well and were fine vessels in fair weather and smooth water. Many were more than 150 tons burden. The grab had instead of bows, a projecting prow, either two or three masts, and was decked and rigged in European fashion. Vessels of all kinds carried eight or ten small gang and about 100 men. Their favourite rendezvous was at Pigeon Island. They generally went on fifteen-day cruises, the common seamen at starting getting 4s. (Rs. 2) and the captains 16s. (Rs. 8). On their return they got grain and 6s. to 8s. or more, according to their rank and good fortune. Prizes were the property of the chief, but unless very well suited for service they were generally released. They sailed with no written commission and with instructions to take any vessel they could master except such as had English colours and passes. Sometimes they seized boats under English protection, evading the open assault by sending on some boats, who, examining the pass, contrived to steal or lose it and make off. noon after, the rest of the pirates came up and seized the trader. In many cases restitution was demanded by the British Government and made without demur. About, 1710 Hamilton New Account, I. 247.] describes the chief as an independent freebooter who kept three or four grabs to rob all whom he could master. In October 1715 his boats attacked two vessels, in one of which was Mr. Strutt, Deputy Governor of Bombay, but seven shots scared them away. [Low's Indian Navy, I. 92. In 1730 the pirates of Malvan seized on an English wreck. This caused much dispute, but at last a treaty was concluded with Shankar Pant the governor and commander-in-chief of Malvan. [Low's Indian Navy, I. 116.] In 1765 an expedition, under the joint command of Major Gordon and Captain John Watson of the Bombay Marine, was sent against Sindhudurg. They speedily reduced the fort, and intending to keep it gave it the name of Fort Augustus. But as it was unprofitable and very hard to dismantle, the fort was given back to the Kolhapur chief, on his promising not to molest trade, to give security for his future good conduct, to pay the Bombay Government a sum of £38,289 (Rs. 3,82,890), and to let the English establish a factory at Malvan. [Grant Duff, III. 99 -100.] In the beginning of the present century, the Malvan pirates were as troublesome as ever. Towards the close of 1812, Colonel Lionel Smith,

with a slight military force and a squadron of small craft helped by the fifteen-gun cruiser Prince of Wales, went to Malvan and completely rooted out the nest of pirates. [Low's Indian Navy, I. 278.]

Pandavgad.

Pandavgad, the other island fort, with an area of one acre, lies about half a mile from the mainland and within a mile of Malvan. This island, where Shivaji used to build ships, half reef half sandbank, with ruins and cocoanut palms, is the prettiest part of Malvan. [Nairne's Konkan, 72. It is said to have been once held by Mhars. Gov. List of Civil Forts, 1862.] In 1862 the walls were very ruinous, there was no garrison, and the supply of water was defective. [Gov. List of Civil Forts, 1862.]

Rajkot.

Of the two mainland forts Rajkot and Sarjekot, Rajkot Fort stands within the boundaries of the town of Malvan, on rising ground surrounded on three sides by the sea. In 1828, Rajkot was a mere enclosure of dry stone, open towards the bay and flanked at three corners by towers of cement masonry, then entirely ruinons. Inside it were several buildings in tolerable repair, and the walls appeared never to have been intended except as a slight protection to them. [Southern Konkan Forts, 1828.] In 1862 tho fort was in several places much broken down, there was no garrison and only one gun. [Gov. List of Civil Forts, 1862.] Near it are some buildings of interest, the barracks made in 1812, and the mamlatdar's office, the old Residency, and probably the factory established about 1792. [The 176S treaty had a provision for a factory. But as the stipulation was repeated in the 1792 agreement, the factory had probably not till then been started. Grant Duff, 509 in Nairne's Konkan, 105.]

Sarjekot Fort.

Sarjekot Fort, about 1¾ miles north of Rajkot in the village of Rundi on the coast, is washed on the north by the sea and protected on the three other sides by a ditch. In 1862 the walls were in bad repair and there was no garrison and no water. [Gov. List of Civii Forte, 1862.] Close to the town are a number of Christian graves, but only two with any writing on them. Of these one was raised by the officers of the station to Colonel Robert Webb commanding at Malvan, who died in 1815. The other is the tomb of a serjeant.

There is a small Roman Catholic chapel on the road leading to Achra. In the town are Hindu temples dedicated to Rameshyar, Narayan, Sateri, Dattatray, and Murlidhar.

MANDANGAD FORT

Mandangad Fort, on the high hill of the same name in Dapoli, about twelve miles inland from Bankot, has two forts and a triple stockade with an area of about eight acres. [Gov. List of Civil Forte, 1862.] Of the three fortifications, Mandangad proper, with two

reservoirs, lies to the south, Parkot is in the middle, and Jamba, with a dry reservoir, on the north. In 1862 the walls were in several places much ruined. [Gov. LiSt of Civil Forts, 1862.] The likeness of the name suggests that Mandangad may be Mandagora, a town of the Konkan coast, as mentioned by Ptolemy (150) and in the Periplus (247). At the same time it seems more probable that Mandagora was on the coast at the mouth of the Bankot creek, on the site of the present villages of Bagmandla and Kolmandla. [Ptolemy's Asia, X.; McCrindle's Periplus, 129. See above, p. 192. Though they are probably much older, local tradition ascribes Mandangad to Shivaji, Parkot to the Habshi, and Jamba to Angria. They were taken in 1818 by Col. Kennedy with the loss Of one seaman and nine or ten sepoys wounded. [MS. Records in Nairae's Konkan, 114. The reduction of the forte of Mandangad and Jamba was announced in General Orders of the 20th February 1818. In Colonel Kennedy's detailed report, he specially thanked Captain Farguharson, Lieuts. Domi-nicette and Capon, and the seamen and native officers for the intrepid and gallant manner in which they assaulted the triple stockades in front of the communication gateway and carried the forte by escalade. Service Record of H. M.'s XXIst Regiment N. I.]

The head-quarters of the Mandangad petty division have, since 1859, been in Durgavadi, a small village of 577 souls and no trade, at the foot of the hill. It has a mahalkari's and chief constable's office, a post office, and a vernacular school. [Mr. G. Vidal, C. S.]

MASURA

Masura, about half way between Malvan and. Maland or Milandi on the Kalavli creek, with, in 1872, 7308 people, has been identified with the famous Muziris of Ptolemy (150) and the Periplus (247), then one of the chief places of trade in western India. [Ind. Ant. II. 293.] It is now pretty generally agreed that Muziris was further south on the Kanara or Malabar coast. Muziris has by Forbes, 1783 (Or. Mem. IV. 109), and by Rennel, 1788 (Map of Hindustan XXXVII), been identified with Mirjan near Kumta in north Kanara; Dr. Caldwell's suggestion (Pravidian Grammar, Introd. 97), that Muziris is Muvir-katto, the modern Kranganor in Cochin, is, though this is much further south than Ptolemy puts it, now generally accepted (Balfour's Cyclopedia, Muziris; McCrindle's Periplus, 131), Yule (Cathay, II 374) marks it doubtful.] A place of very little trade, producing chillies and sugarcane, Masura is the headquarters of a petty division of eleven villages. It was in the possession of the Savants of Vadi up to about 1809 when a half share fell to Kolhapur. In 1811, the Kolhapur share came into the hands of the British, and in the same year the Vadi share was made over to Kolhapur. After remaining under Kolhapur till 1845, this half also became British property. [From local information.] In a hamlet close to Masura is a temple of Shri Dev Bharadi, in honour of whom every December a fair is held, attended by from 2000 to 3000 persons.

MIRYA

Mirya, north latitude 17° 1' 34" and east longitude 73° 18' 6", a high headland of bare laterite rock, lighter in colour than the surrounding land and from the north and south looking like an Island, lies in the Ratnagiri sub-division about two and a half miles north of Ratnagiri Fort. Its very steep sea face, covered with large laterite boulders, ends near the water edge in cliffs of varying height. Mirya peak at its highest part, on which there is an old flag-staff, is 475 feet above the sea.

Between Miyet, the south-west point of the Mirya hill and the Ratnagiri headland, lies Mirya Bay one and a half miles long and one mile deep, with depths of from four to five fathoms to within a quarter of a mile of the beach. The shore is a narrow sandy strip in no part more than six hundred yards across. It is covered with cocoa palms and fronted by a ridge of sand hills rising from twenty to thirty feet above high water. It connects the headland of Mirya with the mainland, and behind it is an extensive flat of mud and sand, in many places thickly overgrown with mangrove bushes and covered at spring tides. Through this the Shirgaon creek winds to the native town of Ratnagiri. The entrance to this creek is on the north side of the Mirya headland where it joins the Kalbadevi river, a large inlet, with, at the north side of its mouth, the village and temples of Kalbadevi. Large native craft come up the Shirgaon creek at high water, and lie off a landing place near the native town of Ratnagiri. Part of the new road from Ratnagiri to Mirya, which runs parallel to this creek, is also used as a wharf for native craft. In the north of Mirya Bay is a sunken rock called the Muddle Shoal, with, at low water, a depth of only five feet. On all sides shoal water stretches for one and a half cables, but at two cables there is a depth of six fathoms.

On the north side of Mirya headland is Kalbadevi Bay in whose south-east corner there is, in five fathoms mud, sheltered anchorage from south-west winds. Here, during the stormy season of 1857, troops were safely landed in smooth water. [Hydrographic Notice No. 17.] In connection with the Amba pass project a good cart road has lately been made from Ratnagiri to this landing place.

PLACES

NANDOS FORT

Na'ndos Fort, in Nandos village in the Malvan sub-division is not more than a quarter of an acre in area. In 1862 it was surrounded by a ditch and was in fair repair. There was no garrison. Water and supplies were abundant. [Gov. List of Civil Forts, 1862.]

NEVRA

Nevra, in the Ratnagiri sub-division, at the mouth of the Nevra creek, about ten miles north of Ratnagiri, had, in 1872, 3336 people. A little north is Ganpati Pol, where, about 150 years ago, one Govind Pant Bundela built and dedicated a temple to Ganpati. The temple and adjoining buildings stand on a site cut and levelled from the cliff, close to the sea beach. Besides the principal shrine there is a large resthouse and fresh water reservoirs. A yearly allowance of £120 (Rs. 1200) is made to the temple by the chief of Sangli. Fairs are held twice a year, with an attendance of from two to three thousand persons.

NIVTI FORT

Nivti Port, in the village of Kochra, six and a half miles south of Malvan and eight north of Vengurla, stands at the mouth of a small creek in rather a striking bay. Rennell (1788) suggested that Nivti was Ptolemy's (150) Nitra and Pliny's (77) Nitrias, ' where the pirates cruized for the Roman ships'. But this is very doubtful, and as far as has been traced, Nivti has never been of importance as a centre of trade. [Rennells Memoir of a Map of Hindustan, 31. Nitra or Nitrias is more commonly identified with the Periplus (247) Naoura and so probably with Honavar (Lassen's Ind. Ant. III. 67). In 1819 its trade was insignificant, Malvan Resident to Gov. 31st May 1819; Revenue Diaries 141 of 1819, 2299. The average yearly value of trade, for the five years ending 1877-78, was £3167 8s. (Rs. 31,674) of which £2604 16s. (Rs. 26,048) represented exports and £562 12s. (Rs. 5626) imports. [Nairne's MS. Tieffenthaler (Res. Hist et. Geog. I 513) described it (1760) as a very scarped rock strengthened with seven towers. It had a ditch on the land and was inaccessible from the sea.]

Nivti fort, on a very picturesque and well wooded headland about 150 feet high, is a complete ruin. [Nairne's Konkan, 105.] In 1786 it was taken by the Kolhapur troops and soon after restored to Savantvadi. [A wing of the 89th Regiment; 2½ battalions native infantry; 3 troops of native cavalry and artillery. Nairne's Konkan, 127.] In the early years of the present century (1803 and 1810), after being taken and retaken by these rival chiefs, it in the end remained with the Savants. In 1818, when British power was established, the southern villages continued to suffer from the raids of the Savantvadi garrisons of Nivti and Redi. Under Sir W. G. Keir a force [The details were: the head-quarters of the IVth Rifles, crossing the river at Karli,

arrived before Nivti. on the 2nd February 1819. On the 3rd the batteries opened and on the following day the fort capitulated and was taken. Service Record of H. M.'s IVth Rifles, 29.] was sent into the Konkan, and on the 4th February 1819 Nivti was invested and given up without resistance. [Gov. List of Civil Forts, 1862.]



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PLACES

PALGAD FORT

Pa'Igad Fort, about one and a half acres in area, stands on the crest of a high hill on the north-west boundary of Khed. In 1862, it was in ruin, with nine old useless guns. It is said to have been built by Shivaji and was taken in 1818 by Colonel Kennedy. [Blue Book on Maratha War, 1803. Nairne's Konkan, 116. Service Record of H.M.'S XXIst Regiment N. I. (Marine Battalion).] The attack was difficult and dangerous, as the assailants, a detachment of the Marine Battalion, had to climb a steep hill under heavy fire from two forts. On the north slope is a large temple grove, *devran*, and at the foot in Dapoli, lies the village of Palil, with, in 1872, 2596 people chiefly Chitpavan Brahmans.

PANDAVGAD FORT

Pandavgad Port. See Malvan.

PAVAS

Pavas, up a small creek six miles south of Ratnagiri, had, in 1872, a population of 2052 souls. In 1819 it was a small port with very little trade. [Collector to Gov. 15th July 1819; Revenue Diaries 142 of 1819, 2578.] The bold headland guarding the north entrance of the river is known as Pavas point.

PASSES

Passes. [For further particulars, see Chapter VI. p. 116.] The chief passes are, Hatlot, Ambavli, north Tivra, Kumbharli, Mala, south Tivra, Kundi, Amba, Vishalgad Shevgad, and Phonda.

PEDHE, or PARASHURAM

Pedhe, or Parashura'm, a Chiplun village on the north bank of the Vashishti opposite Chiplun and the island and fort of Goval, had, in 1872, a population of 1530 souls most of them Brahmans. On a high hill slope commanding a fine view of the river and close to the provincial road from Chiplun to Khed and Poladpur, the village is celebrated as the seat of the ancient shrine of the Konkan reclaimer Parashuram, and as the traditionary birth-place of the powerful class of Chitpavan Brahmans, whose head-quarters lie in the tract round Dapoli, Khed, and Chiplun. Of the Chitnavans, details are given above, p. 111.] Before the time of Parashuram, so Yuns the story, the sea washed the Sahyadri cliffs. Parashuram, who belonged to the priestly class, having subdued the Kshatriyas and given away all the lands above the Sahyadris, by shooting an arrow out to sea reclaimed the Konkan for his own use. The story Parashuram is that he was the son of the Brahman sage Jamadagni. Parashutram's mother and the wife of the great Kshatri king, Sahasrarjun, were sisters. The sage Jamadagni was poor, and his wife was forced to do all the household duties with her own hands. One day, fetching water, she thought of her sister's grandeur and her own poverty. As she was thus thinking the pitcher became empty. The sage asked her why her pitcher was empty, and when she told him how the water had leaked away, he blamed her for thinking her sister's state better than her own. She said;' If I want, to ask my sister there is hardly food for ten men.' ' I have,' the sage replied, ' food for ten thousand, but I do not think it wise to call a Kshatri to dinner'. She pleaded that they should be asked, and her sister and her husband came with a large following. From his wish-fulfilling cow and never-empty jar the sage satisfied the king and all his men. Learning the source of the sage's store of food, the king carried off the cow and the jar. and killed the sage, forcing him to lie on a bed of pointed nails. Grieved with the result of her. foolishness the sage's wife committed suicide. Thus orphaned Parashuram vowed vengeance on the Kshatris. Attacking them with his axe, parshu, he broke their power, slew all who did not forfeit their birthright by mixing with the Shudras, and gave the whole of their lands to Brahmans. Finding that he had left no land for himself, ho prayed the sea, which then washed the Sahyadri cliffs, to past him up a kingdom. The sea refused and Parashuram determined to drive it back. Standing on the Sahyadris he shot an arrow westward and before it the sea retired. But the sea god had sent a friendly bee to bore Parashuram's bowstring, and the arrow fell short reclaiming only a strip about forty miles broad. The chief temple, dedicated to Bhargavram or Parashuram, is a central shrine surrounded by two smaller buildings. At the back of the enclosure is a reservoir called in honour of Parashuram's shooting, the arrow spring, ban ganga. The temple, with a yearly income of about £250 (Rs. 2500) from cash allowances and the revenues of three villages, is visited by many pilgrims on their way from Benares, Dwarka, and other sacred places to the shrine of Rameshvar in the extreme south. Morning and evening at eight, when the idol is bathed and dressed, a gun is fired. A yearly festival on the third day of the first fortnight of Vaishakh (April-May) is attended by from three to four thousand people.

PORTS

Ports. The Ratnagiri seaboard, stretching north and south for 160 miles, contains twenty-nine ports and harbours. Of the whole number, nine, Bankot, Harnai, Chiplun, Sangameshvar, Ratnagiri, Rajapur, Kharepatan, Malvan, and Vengurla, are places of some trade and consequence; the rest are small, offering during the fair season more or less complete shelter to coasting craft, but with little or no trade.

Ratnagiri ports are of two classes, coast ports on sheltered bays and river mouths, and inland ports up tidal creeks generally at the point where navigation ceases. Dabhol in former times, and now Ratnagiri, Malvan, and Vengurla are exceptions. But from the ruggedness of the inland country, and in former times from their freedom from pirate attacks, trade has always centred at the inland harbours. The coast settlements have been little more than fishing villages with, in the fair season, some stranger merchants and a small traffic chiefly in salt and

PRACHITGAD FORT

Prachitgad Port. See Uchitgad.

PURANGAD

Purangad, a village, in 1872, of 512 souls, on the brow of a barren point at the mouth of the Muchkundi river, twelve miles south of Ratnagiri, used wrongly to be called Rajapur. [Taylor's Sailing Directory, 389.] In 1819 it was a small port with little trade. [Collector to Gov. 15th July 1819; Revenue Diaries 142 of 1819, 1578.] The average yearly trade, during the five years ending 1877-78, was valued at £13,245 10s. (Rs. 1,32,455), of which £7267 8s. (Rs. 72,6.74) were exports and £5978 2s. (Rs. 59,781) imports. On the top of the hill is the small square fort of Purangad without outworks, covering an area of twenty-two acres. Under the Peshwa's government no revenue was exacted from fields within the fort as they were brought into cultivation by fort men, gadkaris. In 1829, though freed from service, these men still continued to enjoy the land rent-free. [Lieut. Dowell, Survey Officer, 1st Nov. 1829; Rev. Rec. 225 of 1851, 254-255.] In 1862, except about thirty feet that had crumbled away, the walls were in good repair. It had seven guns and about seventy cannon balls all unserviceable. [Gov. List of Civil Forts, 1862.] Even at high tide, the river admits only very small coasting craft, which ply as far as Satavli about twelve miles inland. [Dom Joao de Castro (1538) calling it the river of Betel, because much betel grew on its banks, describes it as having good water and a large and open mouth. The roadstead on the north was a gunshot from the rock. Primeiro Roteiro da Costa da India, 38.]

PLACES

RAJAPUR

Raja'pur, north latitude 16° 37' 50" and east longitude 73° 22' 22", with, in 1872, a population of 5368 souls, the chief town of the Rajapur sub-division, is built on a slope rising from the water's edge, at the head of a tidal creek, thirty miles south-east of Ratnagiri and about fifteen miles from the sea. Rajapur is not now the port it once was. Vessels cannot ply within three miles of the old stone quay. [Collector to, Gov. 2861, 21st November 1878,] The bay, about threequarters of a mile broad, passes inland for about a mile between steep laterite cliffs. It is broken into several small coves and inlets, into the largest of which, Tulsanda, on the south side, small vessels caught in a south-west gale can run. Well sheltered from north-west gales, with westerly winds a heavy short swell makes it, except on the north side, a not very safe anchorage. [It is high water at full and change of the moon at 10 hours 45 minutes. Ordinary mean springs rise six feet five inches, neape rise four feet five inches. Bom. Gov. Gazette, 3rd July 1879,701.] Native vessels discharge and load at Jaytapur on the left bank of the river about four miles from the entrance, which among early European travellers shared with Rajapur the honour of naming the river. There is only seven or eight feet of water on the bar at low tide, but further in abreast Jaytapur are depths of from fifteen to twenty-four feet.

The oldest looking and best preserved town in the Konkan, its streets are steep and narrow and the markets paved and roofed. The old English factory, a massive stone building with an enclosure leading to the sea, now used as a Government office, and another equally large ruined European building probably the French factory, give the town a special interest. It is also peculiar as the one Ratnagiri port to which Arab boats still trade direct. [Nairne's Konkan, 121.]

Population.

In 1872, of a total population of 5368 souls, 3205 were returned as Hindus, 2156 as Musalmans, six as Portuguese, and one as a European. Of the Hindus 621 were Brahmans, 528 Vanis, 440 Bhandaris, 325 Telis, 144 Mhars, 144 Shindas, 149 Kunbis, 101 Guravs, 99 Sonars, 98 Marathas, and 556 'Others'. Of the Musalmans 838 were classed as Shaikhs, 38 as Pathans, 3 as Syeds, and 1277 as 'Other Musalmans'.

Trade.

During the fair season active communication is kept up between Bombay, the Malabar coast, and the Deccan. Every year a few Arab vessels from Zanzibar and the African coast bring fresh and dry dates to exchange for molasses and other produce. The average yearly trade, during the five years ending 1877-78, was £250,827 (Rs. 25,08,270), of which £122,558 (Rs. 12,25,580) represented exports

and £128,269 (Rs. 12,82,690) imports. From Bombay, piece goods, metals, and miscellaneous commodities, and from Malabar, cocoanuts and betelnuts are imported for local use and for through carriage to the Deccan. From the Deccan, to meet local wants and for export to Bombay, come food grains, cotton, molasses, turmeric, chillies, tobacco, clarified butter, oilseeds, and other products. Very little local produce is exported. The trade is almost entirely a through traffic. The system, of trade is similar to that at Chiplun and other old fashioned isolated Konkan towns. Business is in the hands of local merchants, chiefly Bhatias, Brahmans, and Musalmans. A few paid agents of Bombay firms come down for the fair season to buy cotton and other goads, and arrange for freight to Bombay. Goods from the Deccan and Bombay are consigned to the local merchants. On arrival they are sold and re-sold to petty dealers, continually changing hands until they are distributed amongst the consumers or re-exprted. The through trade is limited to the fair season (October - May), and as at Chiplun, during this busy time a large trading camp is formed, every available space near the market and the landing place being filled by temporary booths and warehouses. The chief streets are well kept and paved, and the permanent shops are substantially built. During the hot months, March, April, and May, the streets are shaded from the sun by a continuous canopy of plaited cocoanut leaves, stretching from house to house and making a temporary arcade. Transactions in exchange bills and sales of gold and silver are said 10 be larger here than at any town in the district.

Communication

There is direct communication with Kolhapur and the neighbouring Deccan districts by a provincial cart road through the Phonda pass towards Nipani, and by an easy bullock track over the Anaskura pass. By these two routes in 1877, 5540 tons of food grains, worth £46,400 (Rs. 4,64,000)., were carried through Rajapur from Bombay to the Deccan, During the same season 48,000 carts passed from Rajapur over the Phonda pass. The trade of the town will be greatly benefited by the proposed telegraph line, which will place it in communication with Bombay and the leading Deccan marts, as well as with Ratnagiri, Vengurla, and Chiplun. A cart road over the Anaskura pass, a work long under contemplation, will also do much to revive the ancient commercial importance of Rajapur.

There are no manufactures of importance. The red powder, *gulal*, thrown about at *Holt* time (February-March), is made in large quantities and sent to Bombay and other places. [This powder, the dried and ground pith of the root of the wild banana in form like flour, is imported from Malabar and dyed at Rajapur with *patang*, Cosalpinia sappan.]

Buildings.

The town has a mamlatdar's office, a subordinate judge's court, a post office, a vernacular school and a native library, and is the seat of

the chief police officer of the sub-division.

Municipality.

Rajapur was made a town municipality from. the 1st April 1876. The revenue, chiefly from octroi duties, house-tax including water rate, pound fees, and licenses for the sale of poisons, amounted in 1877 to £460 (Rs. 4600), and in 1878 to £475 (Rs. 4750). In 1879, in consequence of reductions in octroi duties it fell to £378 (Rs. 3780). The streets are well lighted, a small conservancy establishment is maintained, and a dispensary is about to be opened.

Water.

The town is built on the sides of steep hills at the meeting of the Rajapur tidal river and a large rainy weather torrent called the Kodavli river spanned by a picturesque Maratha bridge. The water of the Rajapur river is brackish, and that of the Kodavli is nearly lost in the river bed above the town. Water can be found by sinking holes in the silt bed of the Kodavli. But as the town drains into it, and the river bed during the fair season is used as a camping ground, the water is foul and unwholesome. During March, April, and May, the scarcity of good water was formerly much felt. Cholera, small-pox, and other epidemics were frequent, and bowel diseases, due to impure water, were always present. The town is laid out in very narrow paved streets, rising in tiers one above the other on the hill side, and though the roofs are mostly tiled, in the hot season when water was scarce, disastrous fires have been frequent.

As far back as 1826, an energetic native official, observing that the torrent of the Kodavli river was each year dammed by the villagers at a point three miles above the town, hollowed a rough earth channel, and succeeded in bringing a little water to the top of the hill behind Ratnagiri. The scheme was shelved for want of funds till the municipality, under the presidency of Mr. A. T. Crawford, C. S., adopted, and at a cost of about £3000 (Rs. 30,000), carried to completion the works which now supply the town. Half of the cost was met by popular subscriptions and current municipal income; the remaining £1500 (Rs. 15,000) were, with the sanction of Government, raised by a loan in the open market. The head works are a masonry dam 130 feet long and 171/2 high. The lake thus formed, upwards of half a mile long and with an average breadth of 250 feet, contains about 60,000,000 gallons of water. The draw-off for the present Rajapur population being only 100,000 gallons a day, the balance is applied to irrigation. On the north side a sluice one and a half feet square supplies the water required for the irrigation of the fields below the site of the dam, and on the south side are the outlet works and pipe for scouring the bottom of the lake. The supply pipe, six inches in diameter, discharges into a small reservoir, thus breaking the head of water. Its top is about four feet under the surface of the lake. Below the top are two openings fitted with plugs, and as the surface of the lake sinks, each of these is opened in turn, the discharge being

governed by a sluice. After passing from the lake through the pond, the water enters a slab-covered concrete-lined channel fifteen inches high and one foot wide cut in the hill side. The channel following the outline of the hill, with an average fall of nine feet a mile, and by syphons and aqueducts crossing several watercourses at a point where the hill slopes abruptly towards the town, flows through a filter into a service reservoir capable of holding three days water supply for the present population of the town. From the reservoir the water is distributed through the town by cast and wrought-iron pipes of various sizes from a half to four inches. In every convenient position, standpipes are raised for the use of the public. Fire plugs have also been fixed at every 200 feet along the various mains, and the necessary hose has been provided, the pressure being sufficient to throw water over the highest houses in the town without the aid of a fire engine. Small branch pipes for the supply of private houses are fitted up on the application and at the expense of the occupants. [Collector to Commissioner S. D. 3104, 1st December 1878.]

History.

At the time of the first Musalman conquest (1312), Rajapur was the chief town of a district. [Jervis' Konkan, I. 81. As so many names along the Konkan coast are Grecized, it seems probable that Ptolemy's (150) Turannosboas is Rajapur. See above, p. 308. In 1638 it is said to be one of the best Deccan maritime towns. [Mandelslo in Harris, II 130] In that year Courten's Association established a factory at Rajapur, and ten years later (1649), the Musalman governor offered the trade to the Presidency of Surat, and because of its pepper, cardamoms, and freedom from Dutch interference, the offer was accepted. [Brace's Annals, 344, 357, 368 in Nairne's Konkan, 120.] In 1660 and 1670 Shivaji plundered the town sacking the English factory. In 1673 it is mentioned as then a French and formerly an English factory. [Fryer's New Account, 59.] In the terms of a treaty with Shivaji the factory was again established, but it was never profitable. [Grant Duff, 118.] In 1686, after the unsuccessful expedition of Aurangzeb's son Sultan Muazzam, his brother Sultan Akbar, who had long been in rebellion against his father, hired a ship commanded by an Englishman, and embarking at Rajapur, sailed to Maskat, and from Maskat went to Persia. [Nairne in Ind. Ant. II. 320.] In 1713 Rajapur was handed over to Angria. [Grant Duff, 186.] About this time (1710-1720) Hamilton states that formerly both the English and French had factories, and that the country produced the finest batelas and muslins in India. Now (1720), he adds, 'arts and sciences are discouraged and the port deserted'. He noticed its fine artificial water cisterns and a natural hot bath within three yards of a cold one, both reckoned medicinal. [Hamilton's New Account, I. 246.] In 1756 it was taken by the Peshwa from Angria, [Nairne's Konkan, 92.] In 1819 Rajapur was, in the extent of its trade and in the number and wealth of its people, much ahead of any other south Konkan port. The river was not very good, large boats having at one-third of the way up to move their

cargoes into small boats. But trade was encouraged by specially easy rates. The inland trade was through the Anaskura pass to all the chief towns of the Maratha states. In 1818 the total value of the imports was returned at £52,688 4s. (Rs. 5,26,882) and of the exports at £23,217 2s. (Rs. 2,32,171). The chief items were, among exports, hemp £6101 10s. (Rs. 61,015), piece goods £5147 (Rs. 51,470), turmeric £2707 14s. (Rs. 27,077), molasses £1426 4s. (Rs. 14,262), cotton £1210 14s. (Rs. 12,107), salt £1086 14s. (Rs. 10,867); and among imports, cocoanut kernels £16,689 8s. (Rs. 1,66,894), dry dates £7611 2s. (Rs. 76,111), cocoanuts £2928 18s. (Rs. 29,289), grain £2505 (Rs. 25,050), and incense £1466 6s. (Rs. 14,663). [Malvan Resident to Gov. 31st May 1819.] In 1834, Rajapur was a great mart for goods to and from the Karnatak and Southern Maratha Country. The exports were cloth, clarified butter, and pepper; the imports dates and other dried fruits, and iron. The population, estimated at 1000 houses exclusive of strangers, was always numerous in the dry season. There was a great stir among the people, and a good deal of business in the hands of Gujars, Gutchis, and Musalmans, and a large number of Vanjaris. It had one Hindustani and three Marathi schools. [Oriental Christian Spectator, V. 110 (1834).]

Fort.

The only stronghold is a small fort, gadi, on the right bank over the river, now used as the mamlatdar's office. On slightly rising ground with a filled up ditch on the south side, the fort is a strong masonry building surrounded by a wall with two bastions. In 1818 it was taken possession of by the troops under Colonel Imlack. [Service Record of H. M.'s IVth Rifles, 28.] In 1862 the building was strong, but the wall, except one bastion, was somewhat broken. Water was plentiful and supplies could easily be obtained.

Factory.

There were four old and unserviceable guns. [Gov. List of Civil Porta, 1862. The English factory, now used as a Government office, seems to have been started in 1649 and closed in 1708. [It was here that the able but unfortunate Sir John Child, afterwards (1682-1690) President of the Company, spent several of his first year in India. The Factor at Bajipur was his uncle, and according to Captain A. Hamilton, who never lets a chance of abusing him pass. Child drew the notice of the Company to some irregularities on his uncle's part, and in reward, at the early age of twenty-four, got himself appointed his ancle's successor. New Account, 1.245. During this time the factory suffered greatly from the disturbed state of the country. It was sacked by Shivaji in 1661, and as a punishment for furnishing the Bijapur king with war stores, the factors were imprisoned until a ransom was paid. The factory was closed at a loss of £3718 (10,000 pagodas). In 1668 it was re-established, but after two years (1670) was again plundered by Shivaji and withdrawn. [Bruce's Annals, II. 399.] Restored in 1674 it was again closed in 1681. It was for a fourth time opened in 1702,

but after about ten years was finally withdrawn. [Nairne's Konkan, 120; Hamilton's New Account, I. 246.] Of the French factory, now in ruins, little is known. It was probably started about 1667, [On 16th October 1667, the first French factory was established at Surat. Milburn's Oriental Commerce, I 381.] and. was sacked by Shivaji in 1670. [Bruce's Annals, II. 399.] Whether it was again opened is not known. It was closed before 1710. [Hamilton's New Account, I. 246. Mr. Nairne (Ind. Ant. III, 319) mentions that the Dutch had at one time a factory at Rajapur.]

The hot spring mentioned by Hamilton at the foot of the hill about a mile from the town, is still, for its virtue in curing rheumatic and skin diseases, much frequented by natives. The water from the side of the hill, about 300 yards from the south bank of the river, flows into a ten feet square stonepaved cistern, and thence through a short pipe ending in a stone cow's head, pours in a full stream into the river. With a temperature of about 120° the water has no special taste or smell. [Trans. Bom. Geo. Soc. VII. 159 (1846).]

About a mile from the hot spring is a spring whose water flows at uncertain times, never more than once in two years. The usual season of its flow is in the hot months, rarely or never during the rains. It suddenly begins, flows for two or three months, and dries up without warning. It is held in great reverence and called a Ganga. Immediately the flow begins, Hindus from long distances come and bathe, first in the hot spring and then in the cold intermittent spring. A number of small ponds have been built for the use of the bathers. As in similar cases the spring is probably a natural syphon. In the middle of the town is a temple of Vithoba with a large rest-house used by travellers and religious beggars. Fairs in honour of the god are held twice a year in *Aahadh* (June-July) and *Kartik* (October-November), when a considerable crowd of people assemble.

The large Musalman population have a number of mosques built in different parts of the town. None are of any size or architectural beauty. The Jama or chief mosque is near the Kodavli bridge. No other old Musalman remains have been discovered.

RAJKOT FORT

Ra'jkot Port. See Malvan.

RAMGAD FORT

Ra'mgad Port, on a hill within the boundaries of Belebudruk village in the Malvan sub-division, is a citadel with an area of about eight acres. Except a towered wall leading to a reservoir, there are no defences. The walls about eighteen feet high, ten thick, and more than 700 yards in circumference, have fifteen small towers most of them with three embrasures. The west gateway is an eight feet wide and fifteen feet long passage, lined with stone steps between the fort wall and a tower about eighteen feet high and eighteen in diameter. Inside the fort are the commandant's house, and an interesting ruined

temple about thirty-six yards square. [Mr. R. B. Worthington, C.S.] In 1862 the walls were in a dilapidated state. There was no garrison and no water. There were twenty-one guns and 106 cannon balls all old and useless. [Gov. List of Civil Forts, 1862.] Ramgad surrendered on the 6th of April 1818 to a detachment of the IVth Rifles under Captain Pearson [Service Record of H. M.'s IVth Rifles, 23.]

RANDPAR

Randpa'r, a village of 500 souls, lies at the top of the snug and deep little cove of Pavas, about six miles south of Ratnagiri.

RASALGAD FORT

Rasalgad Port, in Khed, at the south end of the spur which further north is crowned by the Sumargad and Mahipatgad forts, has an area of about five acres. Less elevated than either of the above forts, Rasalgad is approached by an easy ascent which begins on the west and is about three miles from the village of Mandva. Narrow in the north, the fort gradually broadens, dividing in the south into two spurs, one running to the south-east the other to the south-west. The fort is entered from the north by a very massive gate guarded by a tower and high battlements. In a crevice in the wall opposite the gate is an image of Maruti the monkey god. About eighty yards inside is a second gateway also strongly guarded by a tower and battlements. Further south, where the ground broadens, there is a temple with some rich wood carving. This temple, dedicated to the goddesses Zolaya and Vaghaya, is of some local sanctity forming every year the gathering place of bands of worshippers from fourteen neighbouring villages. Both the spurs of the hill beyond the. temple are fortified. On the south-east spur is a roofless building once used as a storehouse. Beyond the storehouse are some pools, with near their banks several memorial stones with very dim weather-worn tracery. The spur after about 300 yards ends in a battlement known as the Pusati's Tower. The south-west spur is much more strongly fortified. The defences known as the upper fort, bala killa, about 186 feet by 126, are surrounded by walls, with, at each corner, an embrasured battlement. Inside are the ruins of a powder magazine and of the commandant's house. The temple of Zolaya and the image of Maruti show that the fort was built and for a time held by Hindus. The only trace of Musalmans is in the Upper Fort, a battlement known as the saint's tower, pir buruj, on which there are apparently three graves. Except at the north gateway and in the Upper Fort, the masonry defences are neither high nor massive. In 1854 the fort contained thirteen old iron guns dismounted and partly buried in the earth, some with a crown on one trunnion and E. R. on the other. One had the date 1720. Water, in hollowed reservoirs, was neither abundant nor good. On the east of the ridge below the gateway was a small village called the Petha. The fort was considered sacred and a yearly fair held in it. In front of the temple were several scaffoldings for hook swinging. [Report on Rasalgad, 1854. Mr. A. T. Crawford's MS.] In 1862, it is described as ruined, with no garrison, scanty water, and no supplies. [Gov. List of Civil Forts, 1862.]

RATNAGIRI

Ratna'giri, north latitude 17° and east longitude 73° 19', with, in 1872, 10,660 people, the administrative head-quarters of the district, lies facing the sea; 136 miles south-east of Bombay. Ratnagiri Bay, about two miles broad and one mile deep, has along its north shore a long flat fortified headland from 200 to 300 feet high, joined to the mainland by a narrow sandy neck. The south shore ending seawards in cliffs and boulders is rocky throughout. About half way between these two headlands a small river falls into the bay. On either side of the river mouth is a low shore fringed to the north with cocoanut trees, and to the south, sandy and flat, broken by occasional patches of palms. To the north of the river mouth, on a plateau about 150 feet high overlooking the sea, are the Judge's court-house and the dwellings and offices of the European residents. Behind this hill and between it and the fort, the town stretches about a mile and a half to the north-east. The present town consists of four originally distinct villages, Kille-Ratnagiri or the fort and the land round its immediate base, Jhadgaon, Rahatgad, and, Peth Shivapur. In 1822, on the transfer of the district head-quarters from Bankot to Ratnagiri, these villages were merged' in Ratnagiri town.]

Port Details.

During the north-east monsoon (October-June) the landing place is at the custom house, about half a mile from a small round tower at the foot of the headland under the fort. In landing, a good look- out must be kept for rocks, as large reefs stretch west almost as high as low tide level, rising in isolated patches. During fair weather westerly gales, which sometimes last for three days, a heavy swell rolls in and. landing is difficult, and in the south-west monsoon (June - October) it is generally impossible. Except at high water, [It is high water at full and change of the moon at 10 hours 52 minutes, ordinary mean springs rise six feet, and neaps four and a half feet. Bom, Gov. Gazette 3rd July 1879,699.] when if the sea does not break on the bay, it is passable for large native craft, the river entrance is not safe. At the south end of the bay, about half a mile from the shore, a reef rises above water, falling away in a rocky bank of from two to three fathoms that stretches west, its outer edge five fathoms deep, bearing south from the light-house.

Water.

In the village of Nachni, about two and a half miles east of the town, the rugged laterite plateau, which rises from the cliff with a gentle slope, is cut by a deeply scoured and picturesque ravine, through which a perennial stream of Very pure water falls abruptly into the creek below. Mr. A. T. Crawford conceived the idea of conducting this stream into the town of Ratnagiri. The rocky bed has

been dammed by a masonry weir, and the water is carried through a covered concrete channel for about three miles with a fall of about twenty feet, to the edge of the plateau overhanging the town. For the first 2000 feet of its course the channel is two feet and for the remaining section one foot wide. At the end of the channel is a reservoir 100 feet square. From this reservoir iron pipes are laid through all the chief quarters of the town. Stand pipes with spring cocks have been set up in all the streets at convenient distances, and house connections will be made for all who require them. The supply freely meets the wants of the people, and the water has head enough to rise to the highest parts of the station and native town. The work, estimated to cost about £3500 (Rs. 35,000), has been carried out almost entirely by convict labour. The works were opened on the 5th May 1880. Formerly the water supply, drawn entirely from wells, had during March, April, and May been scanty.

Population.

Of 10,614, its total (1872) population, 7154 were Hindus, 2997 Musalmans, 29 Europeans, and 74 'Others'. Of Hindu castes the best represented are the Bhandaris with 1755 souls, next the Brahmans with 1455, the Kunbis with 955, the Vanis with 790, the Marathas with 615, the Telia with 446, the Sonars with 214, and the Sutars with 164 souls. Most of the Musalmans are Daldis whose chief industry is fishing. There are besides a considerable number of Deccan Musalmans and a few Khojas.

Trade.

In 1878 the exports amounted to £13,222 (Rs. 1,32,220), and the imports to £60,567 (Us. 6,05,670). The yearly, average of trade, for the five years ending 1877-78, was £101,047 4s. (Rs. 10,10,472) of which £32,915 4s. (Rs. 5,29,152) were exports and £48,132 (Rs. 4,81,320) imports.] During the fine season (October - June) vessels of the British India Steam Navigation Company call weekly on Sundays, Bringing the Saturday's mails from Bombay, and thrice a week small steamers also run to the chief coast ports. During the south-west monsoon, the mail steamers land passengers and goods at Kalbadevi bay at the back of Mirya hill about five miles to the north, to which at a cost of £270 (Rs. 2700) a good road has been made. This road, passing through the market by a causeway or embankment, crosses the south end of the Shirgaon creek. Thence turning north, it skirts the low swampy flats between the sand hills of the Mirya bay and the creek, and passing through the salt works and groves of cocoa palms, winds over higher ground round the foot of Mirya hill to the landing place in Kalbadevi bay. In some places by the side of the Shirgaon creek the road is available as a wharf for loading native craft.

Manufactures.

There are no manufactures of any importance. Craftsmen trained at the school of industry work well in wood and iron, and at the jail factory, cotton cloth of fair quality is woven and good cane work done. At Juva, a village a few miles up the Ratnagiri creek, shell lime is calcined in considerable quantities both for local use and for export. Coarse pottery is also manufactured for local sale.

Management.

In 1878 Ratnagiri was constituted a town municipality. No octroi duties are levied; the income, which amounted in 1879 to only £55 8s. (Rs. 554), is chiefly derived from a house-tax. In addition to this a small conservancy establishment is kept up from the proceeds of a separate sweeper, halalkhor, cess, levied from the owners of private privies. The streets and the steamer landing place are lighted, and a travellers' or staging bungalow kept up. The municipality has taken over the water works and imposed a water rate which-yields about £280 (Rs. 2800) a year. On this security it is raising a loan to repay the cost of the works to the district local funds.

Buildings.

As the chief town of the district and the head-quarters of the subdivision, Ratnagiri has the offices of the Collector and his assistants, the Judge and his assistant, the superintendent of police, the executive engineer, and those of the mamlatdar, the subordinate judge, and the chief "constable. It has besides a revenue survey office, a custom house, a jail, a civil hospital, a leper hospital, a post office, a high school, three vernacular schools two for boys and one for girls, a school of industry, five private schools, one mission school, and one Vedic school. There is also a club for European officers, with library, reading room, covered racket court, swimming bath; gardens and recreation grounds, a native library and reading rooms. These buildings come in the following order: the revenue office, kacheri, on the top of the hill on the main road leading to the native town, contains the Collector's residence, the treasury, the registry English and vernacular offices, and in detached buildings within the same enclosure, the assistant collector's and the mamlatdar's offices. [The Collector's vernacular office, the registration, and the Collector's record rooms are in one detached building, the first and second assistant collectors' offices and the mamlatdar's are all three in another, and a third small detached building accommodates people waiting to transact business.] Opposite the Collector's residence and office are the high school, the subordinate judge's court, the civil jail, the principal offices of the Ratnagiri revenue survey, the native library, and about a quarter of a mile to the south, a staging bungalow. On the same plateau overhanging the cliff, are the Judge's court, adalat, including the Judge and assistant judge's courts and the Judge's residence. A little further inland stand, dotted about in an irregular group, the civil hospital, the post office, the Ratnagiri club for European officers, the executive engineer's office, the criminal jail, the police office and head-quarters lines, and the private residences of the European officers. The chief buildings in the native town below the ridge on which the houses of the European residents are built, are the machinery sheds and workshops of the school of industry, the Roman Catholic and American mission chapels, and the custom house. There is no Protestant church. The Roman Catholic church, a little to the south-east of the town, is forty-five feet by twenty-one, with a chancel thirty feet by fifteen, and a facade thirty-five feet high and thirty broad. Of the chancel and vestry, the original portions are supposed to have been founded on the introduction of the Catholic religion into Goa. In 1826, a Mr. Antonio Cabral added the body of the church and the priest's house. A freshly gilt wooden altar, brought a few years ago from the convent of St. Francis d'Assis in Goa, is dedicated to Our Lady of Miracles. The congregation, numbering sixty in the fair season and 150 in the rains, consists of public servants, shopkeepers, and the servants of Government officers. None of them are natives of the district. Affiliated to the church are two chapels, one at Harnai dedicated to Lady Saint Anna, and the other at Dapoli dedicated to Our Lady of Piety. At Harnai the parishioners, mostly labourers and natives of the place, number 230. At the Dapoli chapel, said to have been built by one Gabriel Baptista, the parishioners all Goanese, are only ten in number.

Burning and Burial Grounds.

The European graveyard is on the hill side, a little above the Ratnagiri creek, near the Musalman quarter of Rajivda. Dating from 1822 it contains a number of graves and memorial stones. Among them is a handsome white marble cross raised by his friends in memory of Mr. R. W. Hunter of the Bombay Civil Service, Judge of Ratnagiri, who died in June 1875. The Hindu burning ground is on some low sand hills at the foot of the fort, and at the south end of Mirya Bay. The Musalmans have four burial grounds in different quarters of the town, at Rajivda, Partavna, the fort, and near the fish market.

History.

Under the Bijapur dynasty, unlike most of the district which was held or farmed by hereditary superintendents, *deshmukhs*, Ratnagiri formed a state possession governed by state officers. No notice of Ratnagiri has been traced among the early European accounts of the coast. In 1731, on the partition between Kolhapur and Satara, Ratnagiri was given to Shahu the Satara chief. [Grant Duff, 223; Nairne's Konkan, 80.] In 1783 it was the head-quarters of one of the Peshwa's districts. In June 1818 it was quietly surrendered to the British, and in 1822, after weighing the advantages of it, Jaygad, and Vijaydurg, Ratnagiri was chosen to be the British head-quarters. [Nairne's Konkan, 129.] In 1819 it was a large village, but from the shallowness of the river had very little trade.

Fort.

The Ratnagiri Fort [Contributed by Mr. J. L. Johnston, C.S.,

Assistant Judge, Ratnagiri. is a series of fortifications on the high head-land which forms the west end of the north arm of the Ratnagiri harbour. This headland, in shape like a horse's foot with the toe pointing south, the sides each about 1320 yards long and the heel or broad north end about 1000 yards across, has a total area of about 120 acres. From its north-east end, where it is joined to the mainland by a low isthmus about 440 yards broad, the headland rises from about 200 feet in the north to 300 in the south. From the extreme south point, where there is a light-house, passing north along what may be called the west half of the foot, the hill, with very steep western cliffs, quickly falls to about 100 feet above sea level, and then at the north-west end of the heel, rises again as suddenly into ah isolated fortified hill 200 feet high, known as the citadel, bala-killa,. The broad north face of the headland, concave in shape, forms a bay with the citadel as its western, and the north end of the eastern face of the headland as its eastern arm. At the head of the bay is a large village with good water and many palm trees, and much dry crop and a little rice tillage. The villagers, of whom there are about forty households; are of many castes and classes, Brahmans, Parbhus, Marathas, Bhandaris, Musalmans, Daldis, Sutars, Telis, Nhavis, Kulvadis or tilling Marathas, Gruravs, and Arits the descendants of the followers and dependents of the old garrison.

The defences of the headland form an outer and an inner fort. Starting from the isthmus in the north-east, about the middle of the south-eastern side, facing Ratnagiri town, stands the main gateway of the outer fort, in very good order, with the usual massive iron boxes and spikes to ward off elephants. South from this gateway ' to the light-house point, the eastern ridge is crested by a very high and massive wall. Between the light-house point and the citadel, the west side, falling in sheer, sometimes overhanging cliffs, is fortified only at the extreme south and north ends. Passing north from the south or light-house end is a long stretch of cliff said to have been once topped by a wall, but of this no trace remains. At the extreme north-west are the isolated and very strong fortifications of the inner fort of citadel, bala-killa. Along the bay at the north end of the headland from the citadel fortifications, a very strong, wide and high wall runs along the shore with bastions at close intervals. Near the village at the head of the bay a massive gateway shelters the landing place, bandar. These low north-shore defences are, according to local story, the work of the Pratinidhi Dhondu Bhaskar (1790). From the gateway along the eastern arm of the bay, a wall runs up the north end of the eastern or isthmus face, and there, strengthened by a specially large bastion, turns at right angles south along the crest of the eastern ridge.

The citadel, bala-killa, with an area of six and a half acres, standing by itself on the flat isolated north-west point, forms a separate fortification, tenable against an enemy holding the outer fort without artillery. Enclosed by massive stone walls, it has one gateway in good order, and though the walls are broken in places, it is, from the sheer drop of the north and west cliffs, inaccessible except by this gateway. Inside are a temple of Bhavani or Bhagvati, with a yearly cash allowance of £5 4s. (Rs. 52), a pond, a very deep well dry in the hot months, and a *pimpal* tree strikingly large and fresh, though it rises from the laterite rock many feet above any possible store of fresh water. At the north-east and south-west corners of the foot of the citadel rock, cave-like openings, stretching for some distance inwards, are believed to be in communication with the citadel. They are supposed to have been posterns or sallyports prepared for secret flight in case of the capture of the fort from the land side. The fortifications are said to be partly Musalman partly Maratha. According to local accounts the oldest are the shore works in the north face of the headland, where, between the foot of the citadel, bala-killa, and the north landing place, killa bandar, a tower was built, and the citadel hill slightly fortified. According to the local story these defences were begun under the Bahmani kings (1343-1500). But the evidence of the Bahmani's hold of Ratnagiri is so slight that it seems more likely to have been the work of a Bijapur officer (1500 -1660). Shivaji, who is said to have gained possession of the fort about 1670, added or renewed the strong wall that crests the eastern ridge south to the light-house point, and built protecting towers on two commanding points, one to the south on the site of the present court-house, adalat, the other to the north on Mirya hill. The tower on the light-house point, known as the Sidda Buraj, is said to take its name from a captain of the guard who was killed in battle with Dhulap, the famous pirate chief of Vijaydurg. In the eighteenth century the citadel defences are said to have been improved by the Angrias (1710 -1755), and completed by the Peshwas (1755 - 1818). In 1862 the fort was out of repair, and its 117 guns were all honeycombed and useless. [Gov. List of Civil Forte, 1862.] In this state it has since remained.

Light House.

On the south bastion of the outer fort, 800 feet above the sea, a small white masonry tower, twenty-two feet-high, has a fixed red light of the sixth order, shining in clear weather from eight to ten miles.

REDI FORT, or YASHVANTGAD

Redi, [Contributed by Mr. R. B. Worthington, late Bombay Civil Service.] more properly YASHVANTGAD, is a very fair specimen of the forts built about the time of the, break up of Musalman power (1660). According to Grant Duff it was built by Shivaji about the same time (1662) as he built the great island fort of Sindhudurg at Malvan. But it is probable that Shivaji only repaired a fort previously held by the Savants for the Bijapur kings. In 1817, when it was in the hands of the Savant chiefs, the fort was besieged by the Goanese who planted their guns on Hasta Dongar hill, and though too far off to do it much harm, the marks of the battering still remain on the south walls of the citadel palace. Failing to take the fort they are said to have cut down

the neighbouring palm groves and decamped. In 1819, in accordance with an agreement made some years before (1812) with Phond Savant, [Mr. Courtenay's Memoir, 56. In 1812 this chieftain promised that if hereafter any Vadi subjects were guilty of piracy, the forte of Redi and Nivti should be given up to the Honourable Company.] the English came to Redi to take the fort from Sambhaji Savant. Their batteries opened on February 13th, and in the evening of the same day the outworks were carried by assault, and next morning the fort surrendered. [While the English ships were outside the mouth of the creek, the Savant's war vessels lay inside. This seems to show that the creek must since have silted a good deal, as at present no vessel of any size can enter. Mr. R. B. Worthington, C.S.] The marks of the English cannon balls are still visible on the north end of the west side of the palace.

Built on the south side the fort commands the mouth of the creek. The citadel stands on a hill, which, with a large piece of the surrounding plain, is enclosed by an irregular outer wall. A little above the fort the creek is joined by an estuary, the water of which protects the eastern, and a short branch of it washes close along the foot of the southern fortification. At the south-east corner of the wall is some ruinous masonry apparently quarding a sluice, by which probably the level of the water could be kept up at low tide. The land to the southeast was probably formerly under water at high tide and an impassable swamp at low tide, for the whole of the outer defences of that side of the fort seems to be much slighter than elsewhere, the wall ceasing to be fortified and becoming more like a dam than a fort wall. Along the south-west there are low fortifications and a small pass ending in a gate, from which a towered wall stretches to the sea. Thus the whole line of circumvallation, about 11/2 miles, intercepts a long strip of smooth sandy beach about a quarter of a mile in length. Of the whole space enclosed by the walls the eastern half is taken up by the hill and citadel, and the western half by a plain, now covered by a palm grove and a small cluster of houses. The outer wall is armed, with round towers, the strongest of them about twenty feet high and joined by a loopholed curtain about seventeen feet high. Through the gate of the outer wall a paved road, passing up the central citadel hill, is crossed by a wall that runs from the citadel to the outer fortifications. Through a gate in this wall is a square court, and up a flight of steps and through a third gate is the citadel. From their outer foundations the walls of the citadel stand about twenty-five feet high, and close under them circling all except the south-east corner of the wall, is a dry ditch or trench twenty-four feet wide and about thirteen feet deep, cut in the solid rock, its side opposite the wall being a sheer perpendicular. Towards the north-west the side of the moat opposite the wall is lined with masonry. In the south-east corner, where there is no moat, the wall is built rather to protect the besieged from distant artillery than to carry guns. It is not easy to see over, and the ground outside is divided by walls leading from the citadel to the outer fortifications. The square court in front of the citadel entrance is on a much lower level than the citadel itself, the top of its walls being about' seventeen feet lower than the top of the citadel. Its walls are ten feet thick and twenty feet high, and it has round towers at the corners twenty-five yards apart measuring from centre to centre of the towers. The whole court is enclosed within the moat. The walls of the citadel are about twelve feet thick at the top, with a semicircular tower at about every sixty yards, intended for great guns. The circumference of the citadel is about one-third of a mile. The plateau inside is almost perfectly level. The palace is a double square with oblong towers at opposite corners. Its timbers have-been carried away, and the only interesting point about its architecture is the question whether it may possibly be Portuguese. [See Bom. Gov. Sel. X. 157. It may be that the fort once belonged to the Portuguese and that the palace was a monastery.] The fort walls are in good preservation, and the buildings are still habitable. Some years ago the fort was occasionally used as a sanitarium for Belgaum troops. Within the fort walls is a police station.

Hasta Dongar Cave.

On the Hasta Dongar hill, where, in 1817, the Goanese planted their cannon, is a cave hollowed in the face of the rock. It is a square opening rather more than six feet deep, not six feet high, with a little terrace about ten yards long across its front. It commands a view of Akhali, a rocky island containing an image of the demon god Vetal. On the side of the same hill, under a bold overhanging black rock, is a larger cave about six and a half feet high, nine feet deep, and increasing in breadth from twelve feet at the entrance to seventeen inside. The local story is that the caves are sacred and were cut a thousand years ago when Redi was called Patan or Patna. Of the ruins of old Redi lying west and south of the outer wall of the fort, very little masonry is left. But the ground has been considerably dug as if for building stone. The ruins fill the angle formed by the continuation of the southern shore of the creek and the sea coast. Just at the point of this angle is a very singular island or promontory of solid rock, broken off from the mainland. It is a huge mass of stone so steep all round, as, except at one place to be most difficult to climb. It is covered with shrubs and trees of which one is very large, and with its ample foliage surmounting the steep rock, forms a most conspicuous object for many miles. On the flat top of this rocky island is a curious stone almost buried in the earth. It is about seven feet long, and in shape like the image of a man lying face downwards, the spine being represented by a projecting ridge along the middle. It might be the pillar of a temple, but is more like the top of a sarcophagus. Tradition calls it an image of Vetal, king of the ghosts or goblins, pishach. It is held in much local respect, and in Mr. Worthington's opinion, who visited it in 1878, well deserves careful examination.

Rock Temples. The Batnagiri rock temples are not of much importance, almost all of them are early Buddhist, cut probably between B.C. 200 and A.D. 50. The chief caves are at Chiplun, Dabhol, Khed, Kol, and Sangameshvar. At Vade-Padel and at Sagva both near Vaghotan, are some ruined cells probably Brahmanic. [Jour. B. B. As. Soc. V. 611. Mr. Burgess considers the Konkan caves the second in age of all the west India groups; the oldest are at Jundgad in Kathiawar.] To what class the Hasta Dongar cave belongs has not yet been fixed.



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SANGAMESHVAR

Sangameshvar, north latitude 17° 9' and east longitude 73° 36', a town on the Shastri river, about twenty miles from the coast, with, in 1877, 2475 people and 693 houses, has some trade in grain, piece goods, and salt fish. The river, within the last thirty years navigable for the largest vessels to the very Sangameshvar quay, is now impassable for six miles lower down.

Trade.

Sangameshvar's decline is chiefly due to the silting of the creek, and partly, since a cart road has been made through the Kumbharli pass, to the turning of the through Deccan and Bombay trade to Chiplun. The pack traffic through the Mala pass is, of imports, piece goods and other articles, and of exports, cotton. During the 1877 famine, 1440 tons of grain were forwarded from Bombay through Sangameshvar to the Deccan. The opening of a cart road through Devrukh to the Amba pass to the south-east will greatly benefit Sangameshvar. But till the Mala pass has been opened for carts, the town will not recover its past importance. The trade is entirely in the hands of local merchants, chiefly Vanis. On a much smaller scale, the system is the same as in Chiplun. Light booths are raised during the fair season, and a trading camp is formed, to be broken up at the first burst of the rains. The market on the hill side above the narrow river bank suffers almost every year from fire. Early in 1878 fifty-five houses were burnt, and a few weeks later (March 16th) a disastrous conflagration completely destroyed the mamlatdar's office, the treasury, the police lines and outbuildings, the post office, and seventy-five private houses. Up to the date of the 1878 fire, Sangameshvar was the head-quarters of the sub-division, and had, in addition to the ordinary revenue and police offices, a subordinate judge's court and a post office. On the destruction of the public offices the head-quarters of the subdivision were moved to the more central and convenient village of Devrukh.

History.

Sangameshvar, the meeting of the Alaknanda and Varuna, is a place of some sanctity and of high antiquity. According to the Sahyadri Khand it was originally called Ramakshetra and had temples built by Parashuram or Bhargavram. In later times, perhaps about the seventh century, a Chalukya king Kama, coming from Karavir or Kolhapur, made Sangameshvar his headquarters, and founding a city, built a fortress, temples, and palaces. [The date of this Kama, who seems to be the same as the founder of the Mahalakshmi temple at 'Kolhapur (Jour. B. B. Roy. As. Soc. XI. 100), has not yet been fixed. The style of building is supposed (Jour. B, B. Boy. As. Soc. XI. 107) to point to some time about the eighth century A.D. At the same time, according to some verses in the Kolhapur Mahalakshmi temple, Karna flourished

about A.D. 100 (30 Shalivahan) (Jour. B. B. Roy. As. Soc. XI. 104), and according to the Sangameshvar Mahatmya he became king in 178 (S. 100), Jour. B. B. Boy. As. Soc. XI. 99. Of the temples one, called Karneshvar after its founder, remains. Sangameshvar continued for some time the head-quarters of a Chalukya chief. It is mentioned in a Chalukya grant probably of the eleventh or twelfth century. [Jour. B. B. Roy. As. Soc. II. 263. In the twelfth century it was for long the residence of Basav, the founder of the Lingayat sect. [Wilson's Mackenzie Collection, II. 4, 10. In the sixteenth century it was the head-quarters of a Bijapur governor. Barbosa (1514) speaks of it as Singuicar, a town of much commerce and merchandise with many ships from divers ports. [Stanley's Barbosa. The Portuguese writers notice its exports of pepper and iron. DeCoutto, XII. 30.] It was also, though this was probably at Jaygad at the river mouth, a great stronghold of pirates. [Dom Joao de Castro (1538), apparently from the pirates infesting its mouth, calls Sangameshvar the road of the Malabars. Primeiro Roteiro da Costa da India, 39. In 1540 the Bijapur governor, scheming to make himself independent, asked for, but was refused Portuguese help. [DeCoutto, IV. 352.] In the seventeenth century (1670) it is spoken of as Zanguizara four leagues from Dabhol. [Ogilby's Atlas, V. 248.] Here, in 1689, Sambhaji the son of Shivaji was surprised during a drunken revel, and made a prisoner by Aurangzeb. Hamilton (1700-1720) calls it an excellent harbour, but adds that the country was frequented by Rabaris and was not inhabited. [New Account, I. 244.] In 1819, numbers of Vanjaris in the dry season gave Sangameshvar the look of a place of some importance. But it was in no way a town and had only a very small fixed population. [Collector to Gov. 15th July 1819; Revenue Diaries 142 of 1819, 2577. Some details of the present state of the Sangameshvar river are given under "Jaygad".]

Temples.

Two miles up the river, in old Sangameshvar, called the *kasba*, to distinguish it from the new town, *peth*, are several interesting temples. The chief of them is the temple of Karneshvar already referred to whose shrine is said to date from as far back as Parashuram. [Jour. B. B. Roy. As. Soc. XI. 100. According to Lieut. Dowell (1829) Karna repaired temples originally built by Parashuram. Mr. Dowell noticed that the chief temple was of the same age and style as the Kolhapur temple. There were then (1829) the remains of over a hundred ruined shrines. Bom, Rev. Rec. 225 of 1851,273.] Karna the Chalukya (634) is said to have built or repaired 360 temples and granted the revenues of many-villages for their support. Every year on *Magh Vadya* 30th (February-March) a fair is held attended by about 1000 persons. At the meeting of the rivers are several sacred places, *tirthas*, among them one known as the cleanser of sins, *dhuta papa*.

SATAVLI

Sa'tavli, a large village in the Rajapur sub-division with, in 1872, 1668 people, lies about twelve miles up the Muchkundi creek, surrounded though not shut in by high hills. Being the nearest point to the famous fort of Vishalgad the place has a small trade. It seems to be Dobetala to which Barbosa (1514) refers as having on its banks several small places, orchards, and betel gardens. [Stanley's Edition, 73, 74.] The Musalmans, of whom there are many, say that its former great trade was spoilt by the silting of the creek. There are old paved roads and other Musalman remains. [Nairne's Konkan, 33.] Close to the river is a small fort with six bastions and about a fifth of an acre in area. It has no garrison and no water, and the supply of provisions is very limited. In 1862 it was ruinous, and had only one old and unserviceable gun. [Gov. List of Civil Forts, 1862.]

SIDHGAD FORT

Sidhgad Fort, on a hill about sixteen miles north-east of Malvan, has an area of about two and a half acres. It is a place of no importance. In 1818 (April-May), when attacked by Colonel Imlack it resisted; but with the help of a detachment of the 89th Regiment, a second attack succeeded. [As. Journal, VI 320; Nairne's Konkan, 115.]

SINDHUDURG FORT

Sindhudurg Fort. See Malvan.

SUMARGAD FORT

Suma'rgad Fort, in Khed, on the same spur of hill as Mahipatgad a good deal lower and about four miles to the south of it, is about three-quarters of an acre in area. [Gov. List of Civil Forts, 1862.] Surrounded by walls from fifteen to twenty-two feet high, [Mr. A. T. Crawford's MS.] and with four corner battlements, the fort cannot be entered without the help of ladders. In 1862 it was in a ruined state without a garrison and with no guns. [Gov. List of Civil Forts, 1862.]

SUVARNDURG FORT

Suvarndurg Fort. See Harnai.

PLACES UCHITGAD

Uchitgad, or **Prachitgad, o**ne of the Sahyadri forts, stands on rising ground at Shringarpur in Sangameshvar between the Mala and south Tivra passes. It is between three and four acres in area and can be entered only by a ladder. [Burgess' provisional Lists of Architectural and Archaeologieal Remains, 34.] It has no garrison and no water. Provisions can be got from a village some miles off. In 1862 it was very ruinous and had four unserviceable guns. [Gov. List of Civil Forts, 1862.] It was taken by Colonel Prother in 1818 (January). [Nairne's Konkan, 114.] The fort is also called Rangua. [Clune's Itinerary, 149.]



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VAGHOTAN

Va'ghotan, in the Devgad sub-division, is a small village and port on the south bank of the Vijaydurg river about fifteen miles from the coast. The landing stage is joined with Vijaydurg by a cart road, and lies on the main route to the Deccan through the Phonda pass. Some thirty years ago, with stones taken from the Kharepatan fort, [Gov. List of Civil Forts, 1862.] quays, and a large district officers' and a travellers' bungalow were built. The houses are kept in repair, but the port has no trade, The river is navigable as far as Vaghotan for vessels drawing seven feet of water. [Hydrographic Notice No. 17.]

VELNESHVAR

Velneshvar, a village in Chiplun on the coast about six miles north of the Shastri river mouth, with, in 1872, 1513 people, is known chiefly on account of a large yearly fair held on *Maha Shivratra*. (March). From ten to twelve thousand people attend, shops and booths are put up, and goods to the value of about £1200 (Rs. 12,000) are generally sold.

VENGURLA

Vengurla, north latitude 15° 50' and east longitude 73° 41', the head-quarters of the vengurla sub-division, with, in 1872, 14,996 people, lies 200 feet above the sea, about a mile east of the mouth of a swampy creek. [Taylor's Sailing Directory, 391.] The camp lies about a mile inland. Hilly and dry with tall jack, cashewnut, cocoanut, and mango, trees, the country is very picturesque. A chain of low hills runs north-east to within 500 yards of the town, and outside of the camp stretches about nine miles south-west as far as Redi.

Port.

Except on the south, Vengurla bay is sheltered. When, which seldom happens, it blows fresh from the south, small coasting craft run before the wind eighteen miles north to Malvan. [It is high water on full and change of the moon at eleven hours. Springs rise eight and neaps five feet. Taylor's Sailing Directory, 392.] Overlooking the point and creek, 250 feet above sea level, is a white pyramid known as Vengurla Beacon Close to this, in the fair season when the port is open, two fixed lights twenty feet apart are shown 250 feet above the sea, and visible for nine miles. From mid-June till the end of August, the port is closed. [Taylor's Sailing Directory, 392.]

Population.

Of the total 1872 population of 14,996 souls, 13,970 were Hindus, 554 Christians, and 462 Muhammadans. Of the Hindus 2215 were Brahmans including 1631 Shenvis, 762 Vanis, 3064 Marathas, 558 Gavdas or Agris, 44 Gavlis, 126 Bhatias,138 Nhavis, 246 Sonars, 159 Sutars, 1975 Gabits, 3916 Bhandaris, 94 Kolis, 294 Telis, 45 Parits, 27

Devlis, 35 Bhavins, 56 Vanjaris, 27 Jains, 68 Lingayats, 173 Mhars, and 92 Chambhars. Of the Muhammadans, 434 were classed as Shaikhs and 28 as Pathans.

Trade.

Ever since the British conquest, Vengurla has been a rising place. It owed its importance, in the first instance, to its nearness to the military cantonments of Belgaum and Dharwar, with which it was formerly joined by a road crossing the Sahyadris at the Ram pass. The people are vigorous, enterprising and energetic, and take much after the Bombay traders in their liberal and comprehensive views. The opening of the splendid cart road over the Parpoli pass and the erection of a light-house on the dangerous rocks outside of the port, have given a great impetus to Vengurla, which now among Konkan towns ranks next to, though far below, Bombay. Even in the fair season the port is at times most dangerous and in the south-west monsoon it is closed. In spite of this it monopolises the traffic with Belgaum and the neighbouring districts almost from Nipani to Gokak. [Collector's 4430, 12th December 1877.] All troops pass through Vengurla to and from the Southern Maratha districts. The average yearly value of the trade for the five years ending 1877-78 amounted to £727,369 (Rs. 72,73,690) of which £303,308 12s. (Rs. 30,33,086) were exports and £424,060 8s. (Rs. 42,40,604) imports. The chief articles that pass through the town from the Southern Maratha Country to Bombay are cotton, gallnuts, molasses, hemp, grain, pulse, clarified butter, groundnuts, country cloth, and in smaller quantities tobacco, turmeric, chillies, and spices; The local exports are cocoanuts, betelnuts, cashewnuts, oil of kokam Garcinia purpurea, plaited palm leaves, coir fibre, and salt. From Bombay come piece goods, metals, military stores, and miscellaneous foreign articles. As a rule no grain travels eastward. But during the 1877 famine, within seven months no less than 52,000 tons of grain, valued at £429,688 (Rs. 42,96,880) were received from Bombay and forwarded to the distressed districts. Except a few local firms of long standing conducted by Shenvis and Bhatias, the trade is carried on between Bombay and Southern Maratha merchants, who employ forwarding agents, dalals, in Vengurla to receive and push on consignments by sea or land. Advices are sent by telegrams, and the sole duty of the agents is to arrange for freight and shipment to Bombay, or for land carriage to the Deccan. Bulk is seldom broken, and the goods coming in at one end of the town, pass out at the other within a very few days or hours. Supplies for local use are brought by petty Vani and Shenvi dealers, and European stores are provided by Parsis.

Communication.

Vengurla is connected with Belgaum by two routes, one of seventyfive miles by the new provincial road over the Parpoli pass, and the other a few miles shorter by the old Ram pass, from its steepness now used only by pack bullocks. A branch road from the Parpoli line, at Akeri eleven miles from Vengurla, connects Vengurla with Malvan, and also with the main road to Ratnagiri and the northern parts of the district.

Manufactures.

There are no manufactures of any importance. The eight salt pans near the harbour which formerly yielded an average yearly outturn of 2222 tons (60,000 *mans*) have all been closed.

Management.

The town was made a municipality in 1875. The income from octroi duties, house tax, wheel tax, and miscellaneous items, amounted in 1877 to £1379 12s. (Rs. 13,796), and in 1878 rose to £1468 (Rs. 14,680). In 1879, from a reduction in octroi duties, it fell to £848 6s. (Rs. 8483). In four years the municipality, besides thoroughly lighting the town, maintaining an efficient conservancy establishment and making roads and streets, has carried to completion a scheme for supplying the most populous part of the town with water, and has erected handsome public markets. The water works constructed by Mr. A. T. Crawford, costing £1600 (Rs. 16,000), of which £1500 (Rs. 15,000) were subscribed by the townspeople; consisted in repairing and strengthening the dam of the old Narayan reservoir, about threequarters of a mile north-west of the market, and laying a six inch iron main from the pond to the town. The pond is fed by springs, and the water is passed through a filter into the distribution pipe. On the sides of the principal thoroughfares, standpipes and open cisterns regulated by ball cocks have been set up at convenient intervals. The market is a two-storied central building with a clock tower. The basement hall is divided into stalls for the sale of fruit, vegetables, and miscellaneous stores, and the upper story contains the municipal offices. Round three sides of the main building are ranged shops for general dealers in grain and groceries, while at the back and separated from the other buildings is the fish market. The markets are conveniently placed in the busiest part of the town, on the side of the main road leading to the Parpoli pass. The cost of the buildings was about £3020 (Rs. 30,200), and the present monthly rent realised from shops and stalls amounts to £12 10s. (Rs. 125). Further extension of the buildings and a separate quadrangle with shops for cloth sellers are needed, and will be carried out when funds admit.

At the landing stage, a stone quay and steps have at considerable expense been cut from the hill side. Below the headland and beacon at the north of the harbour, are the custom office and a small dwelling built by the salt department. A mile or so inland, at the meeting of the roads, to the Parpoli and Ram passes, and surrounded by houses is the travellers' bungalow. Half a mile along the upper, or Paropli road, where stand the main market and the chief shops and warehouses, is the municipal market, a conspicuous white painted red building, with a square clock tower and gable roof. Between the travellers' bungalow and the markets, and to the north of the road is the telegraph office.

On the lower, or Ram road, are the offices of the mamlatdar and chief constable, and the court of the subordinate judge. To the south of this road and near the travellers' bungalow is the old factory or fort now used for commissariat stores and for the temporary accommodation of troops travelling to and from Belgaum. About two miles from the travellers' bungalow, by the side of the Ram pass road, is the camp, a fine open plain on which are built the civil hospital and a few houses for European residents and visitors. Here also is the camping ground for regiments on the march to and from Belgaum.

Education.

There are two vernacular schools for boys and one for girls, and a native library.

History.

In 1638, under the name Fingerla, Vengurla is mentioned as a very convenient haven, where the Dutch had a trade settlement and victualled their ships daring their eight months' blockade of Goa. [Mandelslo in Harris, II. 360. Before 1641 the Dutch had a fortified factory. Stavorinus, III 107. Baldaeus (about 1660) says the Hollanders have a stately factory at Vengurla a place very considerable, not only for its plenty of wheat, rice, and all sorts of provisions, but also for its situation near Goa. Churchill, III. 602.] In 1660, under the name Mingrela, it is mentioned as a large town stretching half a league along the coast, with one of the best roads in India, where all the vessels that came from Batavia, Japan, Bengal and Ceylon, and those bound for Surat, Ormuz, Bassora and the Bed Sea, both coming and going, anchored, because both the water and rice were excellent. It was famous also for its best of spices cardamoms, which not being had in other countries, were very scarce and dear; also for its great store of coarse calicuts spent in the country, and great quantities of coarse matting that served for packing goods. [Tavernier in Harris, II 360.] About this time Shivaji placed a garrison in the town and a few years later (1664), in punishment of a revolt burnt it to the ground. [Grant Duff, I. 200.] In the next year (1675) it was burnt by the Moghals, the Dutch defending themselves. [Orme's Hist. Frag. 53. In 1670 it was said to be the chief storehouse of the Netherlands East India Company, Ogilby, V. 253.] In 1683 Aurangzeb's rebel son Akbar, meaning to leave India for Persia, took refuge in the Dutch factory, [Orme's Hist. Frag. 125.] and in the next year Sultan Muazzam, to punish it for its support of his brother, sacked the town with fury, the Dutch defending their factory from the windows till they bought off the attack. [Orme's Hist. Frag. 133; Baldaeus in Churchill, III. 152. In 1696, off Vengurla, seven Dutch and five French ships had an indecisive fight. At this time it is described as once a place of trade, where the Dutch had a factory for cloth, both fine and coarse. In 1696 Khem Savant of Savantvadi [Hamilton calls him Kempason.] overran the country, and under pretence of visiting the Dutch chief, seized and plundered their factory. While held by Khem Savant, Vengurla is said to have been attacked and plundered by Angria. [Hamilton's New Account, I. 248, Khem Savant is described as a soldier of fortune fighting for the chief who pays him best, with 7000 or 8000 men and two pirate grabs.] In 1750 it was the head of 116 villages and yielded a yearly revenue of £2091 12s. (Rs. 20,916). [Tieffenthaler. Res. Hist, et Geog. I. 506.] In 1766 the Savantvadi chief mortgaged its revenue for thirteen years to the Bombay Government to raise the sum of £20,000 (Rs. 2,00,000) wanted to free Bedi, the English promising to establish a small factory with the British flag and a few sepoys to guard it. [Grant Duff, III. 100.] This factory was, in 1772, mentioned as collecting a small revenue. [Forbes' Oriental Memoirs, I. 293.] At the end of the thirteen years (1779) the Savants had failed to carry out some of the stipulations of the treaty and the English refused to give up Vengurla, but it was taken and plundered by the Savants. [Nairne's Konkan, 104. In 1800 Lieutenant Hayes appeared before Vengurla, landed his men, and taking the chief battery, dismantled it, threw the guns into the sea, and forced the pirate chief to give up all British property. [Low's Indian Navy, I. 204.] In 1812 Vengurla was finally ceded by the Rani of Savantvadi, [Hamilton's Des. of Hindustan, H. 221.] and has since remained in British hands. [In 1826 it had. 770 houses, 30 shops, a good landing place and a fort 180 feet square, Clune's Itinerary, 73.1

The fort or factory at Vengurla stands behind the swamp. It is a strong building slightly fortified, entirely European, and in appearance more Portuguese than Dutch. [Taylor's Sailing Directory, 391.] In 1862 it was in good order, garrisoned by a detachment, and with five small guns. Water was abundant, and it was used by the military department as an arsenal and storehouse. [Gov. List of Civil Forts, 1862.]

Nine miles west north-west of Vengurla lie the Vengurla rocks or Burnt Islands, a group of rocky islets stretching about three miles from north to south and one mile from east to west. The passage between the rooks and the mainland, about 234 miles from the shore, though deep, is dangerous from sunken rocks. Of the islands the highest is about 180 feet. On the outermost of the three larger rocks is a light-house with a white fixed light 110 feet high seen for fifteen miles. The stone and cement used in building this light-house were taken from the Sindhudurg fort. Nairne'a MS.] The three larger rocks are entirely metamorphic, and are composed of numerous varieties of quartzo-micaceous rocks mostly more or less ferruginous, and in many places a good deal decomposed and broken up. The rocks are quite bare, but the crevices everywhere and some few smooth places near their summits are filled and covered with quantities of a coarse tangled jointed grass. The largest of the three is pierced from side to side by a huge tunnel-like cave, and about the middle of the island, owing to the falling in of the roof, a shaft has broken down into the cave. Even in the fair season the landing is difficult. During the stormy months it, is rarely practicable. [Mr. A. O. Hume, Stray Feathers, IV. 418-420.]

Rocks.

These rocks are probably Ptolemy's (150) Heptanesia and the Sesikreienai of the Periplus (247). [McCrindle's Periplus, 129, 130; Vincent's Commerce of the Ancients, II. 433.] In 1540, Dom Joao de Castro under the name pf Ilheos Queimados, or Burnt Islands, describes them as many in number, but ten of them specially large, five at sea and five close to the land. They were called burnt islands because they were of bare rock without water or vegetation. [Primeiro Roteiro da Costa da India, 17.] In 1788 they were held by the piratical tribe of Malvans.

VETALGAD FORT

Veta'Igad Fort, on a hill in Pendur village in the Varad petty division of Malvan, has an area of about twenty-two acres. In 1862 the walls were in bad order and there was no garrison. Water and supplies were abundant. [Gov. List of Civil Forts, 1862.]

VIJAYDURG or GHERIA

Vijaydurg (Fort Victory), or **Gheria** (the Enclosure), north latitude 16° 32' and east longitude 73° 22', a port in the Devgad sub-division, with, in 1872, 2331 people, lies on the south shore of the entrance to the Vaghotan river, 170 miles south of Bombay. One of the best harbours on the western coast and without any bar, it may be entered in all weathers, and even for large ships is a safe south-west monsoon shelter. In the fine season vessels may anchor anywhere in the harbour, the best position being a mud and clay bottom with three and a half fathoms at low water. Between Vijaydurg fort and the fortified cliffs to the north-east, the channel is six cables wide, with, at low water, depths of from twenty to twenty-four feet. Inside it rapidly shoals, and two and a half cables further the low water depth is not more than twelve or thirteen feet. The deep channel, only one and a half cables broad, lies close to the left bank of the western shore, and except at high water spring tides, there is not room for large vessels to swing. [It is high water on full and change of the moon at eleven hours, mean springs rise nine feet and neaps five feet. Taylor's Sailing Directory, 390.] The village, small and poorly built, with little tillage and no industry but fishing, is connected with Vaghotan fifteen miles distant, and through the Phonda pass with the Deccan by a good but little used road. [By the early Europeans Vijaydurg, called Kharepatan from the town of that name twenty-five miles from its mouth, was thought one of the best of the Konkan ports. Com Joao de Castro (Prim. Rot. da Costa da India, 30) calls it (1538) the noblest and most favourite river in west India. The only big river without bar, or rocks, or other dangerous troubles. To enter wanted no skill, for whether you went by the middle or the side you always met with a kindly welcome and a good depth to anchor. About a century later (1660), Tavernier

(Harris' Voyages, II. 360) calls it the best port in Bijapur with fourteen or fifteen fathoms of water near the land. Ogilby, 1670 (Atlas, V. 246). also mentions it as one of the best Konkan ports. After it was Angria's capital, A. Hamilton (1710) mentions it as Gheria or Vizendruk, fortified by a strong oastle washed by the sea (New Account, I. 246). In 1756 Sir W. James, surveying before the English attack, speaks of a 'very large town betwixt the fort and a hill to the south. The town seems to have been nothing but a large collection of palm leaf huts. Low's Indian Navy, I. 133. Its great natural advantages make it probable that the mouth of Vaghotan river is one of the oldest coast settlements. There seems reason to suppose that it is Ptolemy's (150) Byzantium, a Greek corruption of Vijayanta. See Weber in Ind. Ant. II. 148. Rashid-ud-din's (1310) Karoba has been thought to be Gheria. Yule in Ind. Ant. III. 209.]

The population consists mainly of Muhammadans by whom most of the trade is carried on. There are in addition a few Brahmans, Bhandaris and other Hindus, and a small colony of native Christians, Some of them Abyssinians, who have built a small chapel.

Trade.

A little traffic passes between Bombay and the Deccan by the Phonda route. The average yearly trade, during the five years ending 1877-78, was valued at £50,643 6s. (Rs. 5,06,433) of which £21,565 2,15,658) represented exports and £29,07710s. (Rs.2,90,775) imports.' During the 1857 mutinies, troops, guns, and treasure were, in the stormy season, forwarded by this route to the Deccan and Southern Maratha Districts. During the 1877 famine, the Vaghotan road, originally made by the villagers, was out of repair and not open for cart traffic. In spite of this about 1000 tons of grain passed from Bombay through Vijaydurg to the Deccan. In the same year about seven and a half miles of the road were re-made as a famine relief work, and the rest has since been finished out of local funds. Coasting steamers call three times a week at Jaytapur at the mouth of the creek six miles off.

Manufactures.

The local carpenters make much admired bison-horn ornaments of various kinds. But the industry is very small and the craftsmen much indebted.

The village has a sea custom office, a post office, and a vernacular school. In the fort are two buildings for the use of travellers, and a large government shed made as a grain depdt during the 1877 famine.

Fort.

Never a place of much trade or wealth, the whole interest of the village centres in its fort. [The special interest of Vijaydurg is that its old Musalman buildings are. less than in most forts, hidden under Maratha additions. Nairne's Konkan, 38. There is also a mosque and

the tomb of a Musalman saint, the first in the centre of the fortress very near the flagstaff. Nairne in Ind. Ant. III. 320.] On the neck of rocky land that forms the south side of the bay, Vijaydurg, one of the best and, most Muhammadan of Konkan fortresses, though not very striking from the sea side, rises grandly about 100 feet above the river. The walls, of very great strength and protected by twenty-seven bastions, rise, at their highest point, into a great round tower. On the west breached in several places by the sea, they are over their whole length loosened and ruined by trees and creepers. Their triple line of fortifications encloses about twenty acres, [Gov. List of Civil Forts, 1862.] overrun with bushes, but with some good wells and several large habitable buildings. [Bombay Government Gazette, 3rd July 1879, 699. In 1862, except a part of the first and third outer walls, the fort was in good repair. Water was abundant and supplies easily obtained. There were 278 old unserviceable guns. Gov. List of Civil Forts, 1862.] The fort is probably old, enlarged under the Bijapur kings, and about the middle of the seventeenth century, much strengthened by Shivaji [Grant Duff, 85,; Nairne's Konkan, 63.] to whom it owes its finest features, the triple line of walls, the numerous towers, and the massive interior buildings. [Nairne in Ind. Ant. III. 320.] About forty years later (1698), the pirate chief Angria made it the capital of a territory stretching for about 150 miles along the coast and from thirty to sixty miles inland. For more than fifty years, Angria's pirates were a terror to all traders, and the English were forced to keep a special fleet to act against them. In April 1717 their ships of war, carrying a considerable body of troops, sailed against Gheria. An attempt to breach the wall failed, the storming party was driven back with great loss, and the fleet forced to withdraw. Three years later a joint Portuguese and English fleet under Mr. Walter Brown destroyed sixteen of Angria's vessels, but made no impression on the fort. [Low's Indian Navy, I. 100; Nairne's Konkan, 80.] In the same year (April 1720) the English ship Charlotte was attacked, and after a gallant defence, her powder having run down, she was caught and taken into Gheria. [Low's Indian Navy, I. 100.] In 1724 a Dutch fleet from Batavia attacked the place, but with no better success. [Grant Duff, 231. There is said to have been another Dutch attack in 1735. In 1786 Angria's vessels took the richly laden English East Indiaman Derby, the armed ship Restoration of twenty guns, and several other vessels of less note. In 1738, in an action between Angria's fleet and Commodore Bagwell, Angria's fleet fled up the Bijapur creek and escaped with little loss. [Low's Indian Navy, I. 107. According to another account (Bom. Quar. Rev. IV. 75) some of the Commodore's broadsides reached the enemy, causing much damage and killing the admiral. Besides several captures from the Dutch, Angria about this time took the French forty-gun ship Jupiter, with 400 slaves. In 1749, Mr., afterwards Sir William, James was attacked by Angria's fleet, and after a hard fight, drove them to Gheria, pursuing them and causing great loss. [Low's Indian Navy, I. 127.] Next year, in spite of their defeat, they were bold enough to attack Commodore

Lisle in command of a fleet of several vessels, among them the Vigilant of sixty-four and the Ruby of fifty guns. [Milburn's Oriental Commerce, I. 296. Again, in February 1754, attacking three Dutch ships of fifty, thirty-six, and eighteen guns, they burnt the two large ones and took the third. Elated with this success, Angria built several vessels, set two large ships on the stocks, and boasted he should soon be master of the Indian seas. For long the Peshwa and the Bombay Government planned Angria's ruin. At last, in 1755 it was settled that in the next fair season the Peshwa's troops should attack him from land and the British by sea. At the close of the year (1855, Dec. 22) Commodore James was sent to survey Gheria fort, then thought as strong as Gibraltar. He found that ships could get within point-blank shot; that on shore guns could be carried, and a diversion made from the tops of two hills; and that the fort was crowded with unprotected buildings. The place was surprisingly unlike what he had heard. [I assure yon, Sir, it is not to be called high, nor, in my opinion, strong. It is indeed a large mass of buildings, and I believe the walls may be thick. But that part of the works which fell under my observation and which was three-quarters of their circumference is quite irregular, with, round towers and long curtains in the eastern manner, and which discovered only thirty-two embrasures below and fifteen above. Commodore James, 21st Decr. 1755; Ives' Voyages, 80.] The Bombay Government were fortunate in having in their harbour a Royal squadron under Admiral Watson and a strong detachment of troops under Lieutenant-Colonel, afterwards Lord, Clive. On the 7th April 1756, the fleet of twelve men-of-war, six of the Royal and six of the Company's navy, with 800 European and 600 native troops, and five bomb vessels with a company of artillery, and four Maratha grabs and forty gallivats, sailed from Bombay. [The details were: Royal squadron, one 70 guns, one 66 guns, one 60 guns, one 60 guns, one 20 guns, and one 16 guns; Company's squadron, one 44 guns, four 28 guns, and one 16 guns. Of the native troops 300 were Portuguese and 300 sepoys. Low's Indian Navy, I. 134. These details differ slightly from those given by Orme. Hist, Frag. 408-417 in Nairne's Konkan, 92.] Sending a few vessels ahead to block the harbour, the fleet arrived off Gheria on the eleventh. The Maratha land force, for some time a-field, was camped against Gheria. Terrified by the strength of the British fleet, Tulaji Angria, leaving the fort in his brother's charge, surrendered to the Maratha general. Hearing that the Maratha general had extorted from Tulaji an order for the delivery of the fortress, Admiral Watson on the next morning (12th) summoned the fort to surrender. Getting no answer, the fleet, with the afternoon sea breeze, forming two divisions, sailed each in line of battle ship covering a bomb ketch, and protecting the column of smaller vessels from the enemy's fire. They passed the point into the river, and under a heavy fire, anchoring fifty yards off the north fortifications, battered them from 150 pieces of cannon. Angria's ships were drawn up under the fort, all fastened together, and a shell setting one on fire, the whole were burnt. One ship of 74' guns, eight grabs of from 20 to 30guns, and sixty gallivats. Low's Indian Navy, I. 136. Of Angria's ships Dr. Ives (1755) writes: 'They are not unlike the Tartans of the Mediterranean, only a great deal lower; they carry two guns in the bow and vast numbers of men. Their music is a plain brass tube, shaped like a trumpet at both ends and about ten feet long, and a drum called a torn torn, a skin stretched on a large shallow brass pan, on which they strike with two large sticks and make an amazing noise. Among them are two ketches which they call grabs' (Ives' Voyages, 43). Several of the gallivats had blue or green on white pendants like the Portuguese at their mast heads, and one had a white flag with a red cross in the middle. (Ditto, 80).] Another shell set fire to the buildings in the fort, and the tremendous cannonade silenced the fort guns. [According to another account the same fire which burnt the ships passed to a large vessel lying on the shore, and from her to several smaller craft that were building. From the building yard it was conveyed to the arsenal, storehouse, suburbs and city, and even to several parts of the fort, particularly to a square tower where it continued burning all the night with such violence that the stone walls appeared like red hot iron. Iver Voyages, 85.] Still the commander held out. Learning that the fort was to be handed over to the Marathas, Colonel Olive landed and held the ground between the Peshwa's army and the fort. Next morning the admiral again summoned the fort to surrender. The commandant asked for time to consult his brother. A respite was granted, till, in the afternoon, as no answer came, the bombardment was re-opened. By five o'clock the garrison surrendered, and Colonel Clive, marching in, took possession. [According to Dr. Ives (Voyages, 85), Colonel Clive making his approaches from land greatly annoyed the enemy. At a quarter after five he came to the Admiral's ship bringing an officer from the fort with the articles of capitulation, which being agreed to by himself and the two Admirals, an English officer was sent in to take possession of the fort and to hoist English colours. Captains Forbes and Buchanan were, next, with sixty men, detached to see the garrison lay down their arms, and on the 14th at sunrise the Colonel and the whole army marched into the place. Though the masonry was destroyed the rock defences were so perfect, that a determined garrison need not have yielded to any sea attack. Fifteen hundred prisoners were taken; eight Englishmen [Ives (Voyages, 88) gives the names of ten Englishmen.] and three Dutchmen were rescued; and plunder, amounting besides stores to £125,000 (Rs. 12,50,000), was divided among the captors. [Milburn's Or. Com. I. 296. In Gheria were found 250 cannon, six brass mortars, an immense quantity of stores and ammunition, £10,000 in silver rupees, and £30,000 in valuable effects (Ives' Voyages, 86). According to Dr. Ives (Voyages, 81-82), a council of sea and land officers, held before setting out on the expedition, had, to avoid disputes, settled that Admiral Watson as commander-in-chief of the King's squadron should have two-thirds of one-eighth of the spoil, and Rear-Admiral Pocock one-third of one-eighth, while Lieut. Colonel Clive and Major Chambers were to share equally with the captains of the King's ships. The captains of the Company's ships and captains of the army were to share equally with lieutenants of men-of-war and subaltern officers of the army, and lieutenants of the Company's ships with warrant officers of the navy. Afterwards the officers of the army, not liking that their Commander-in-Chief should share with captains of men-of-war, the Admiral to satisfy them gave his own security to make Colonel Clive's portion equal that of Admiral Pocock, making good the deficiency out of any moneys he himself might be entitled to. In this way, after Gheria fell, a sum of about £1000 was found due to Colonel Clive from Admiral Watson. This Admiral Watson sent with his compliments, but Colonel Clive was generous enough to refuse it, saying that he would not deprive the Admiral of the contents of his private purse, and that he had appeared to accept of the terms only for the good of the service. The ruin of Angria's navy was completed by the destruction of two sixty-qun ships on the stocks. Four of the Company's vessels and a detachment of 600 European and native troors were left to guard the harbour and fort. [Tulaji Angria remained till his death a prisoner first in a fort, according to one account, near Raygad in Kolaba, according to another in Vandannear Satara (Grant Duff, I. 66), and afterwards in Sholapur. Low's Indian Navy, I. 136. Grant Duff, I. 66. His tomb and those of his six wives, one of them a sati, are shown at Vijaydurg. Nairne'a Konkan, 95.]

The Bombay Government were very anxious to keep Gheria, and offered to give Bankot in exchange. To this the Peshwa would not agree, and Cheria was handed over in the following October. [Low's Indian Navy, I. 136.] The Peshwa made it the head-quarters of a district and the seat of his Admiral Anandrav Dhulap, whose descendants are still settled at Vijaydurg. Under the Peshwa piracy flourished as vigorously as ever. In 1780 Anandrav attacked and captured an English ship carrying despatches to the Court of Directors, and imprisoned an officer in Basalgad near Mahabaleshvar. Again in April 1782, in spite of a gallant resistance, he captured the Banger a ship of the Bombay Marine. [Grant Duff, 457 in Nairne'a Konkan, 105. In 1800 Lieutenant Hayes was sent to harass the pirates, but though he punished them severely, they were soon as troublesome as ever. In May 1818 Colonel Imlack, attempting to take Vijaydurg, was met by so heavy a fire, that his ships were forced to cut their cables and run. But the whole of the district had now passed to the British, and in June of the same year the commandants, two brothers of the Dhulap family, surrendered. In the river was taken the Admiral's ship, 156 feet long 33 beam and 430 tons burden. [Waddington's Report in Asiatic Journal, IX. 123. On their surrender the Dhulap family were, by the Bombay Government, given two villages near Vijaydurg. Here they are still settled, and though impoverished by mortgages, hold an honourable place among Marathas, their daughters being fit matches for the highest families. Nairne'a Konkan, 105.]

Two miles from the fort, on the same side of the river, is an old dock, hollowed out of the rock by Angria, 355 feet long and 227 in the

broadest part, and said to have been able to hold vessels of 500 tons. [Waddington's Report in Asiatic journal, IX. 123.] Though nearly choked with mud the stone face and entrance may still be seen. There was also a small building yard and a mast house. [In 1819 the bottom] of the dock, sloping gently upwards from the entrance, was thick with mud and sand. The gateway 23 feet broad below and 37 above, stood open without gates. Of the walls parts on the south and east were cut in the rock; the rest was of masonry' in good repair. From the southeast corner ran a stone-built water channel. Lieut. B cominicette, 9th June 1819; Public Diaries 432 of 1819,1055. On the creek two miles below the dock is (1862) a strong well built Martello tower called the Mitatya Buruj. A little way from the fort, on the Vaghotan road, is the temple of Bameshvar, probably 100 years old, built by Gangadhar Banu, a brother of Nana Fadnis (1720.1800,). An ordinary temple with a large rest-house lying deep in a glen, its chief interest is the approach about 250 yards long, cut through rock fifty feet deep. The idol, a four-armed figure seated on a bull, is of solid silver said to weigh a hundredweight.

VIJAYGAD

Vijaygad. There is a second Vijaygad fort on the north bank of the Shastri, about two miles across the river from Jaygad. [See above, p. 341.] A small fort, about a quarter of an acre in area, it is surrounded on three sides by a ditch. In 1862 the walls were ruinous and it had only one entire gun. There was no garrison and no water. Supplies could be obtained from neighbouring villages. [Gov. List of Civil Forts, 1862.]

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PLACES

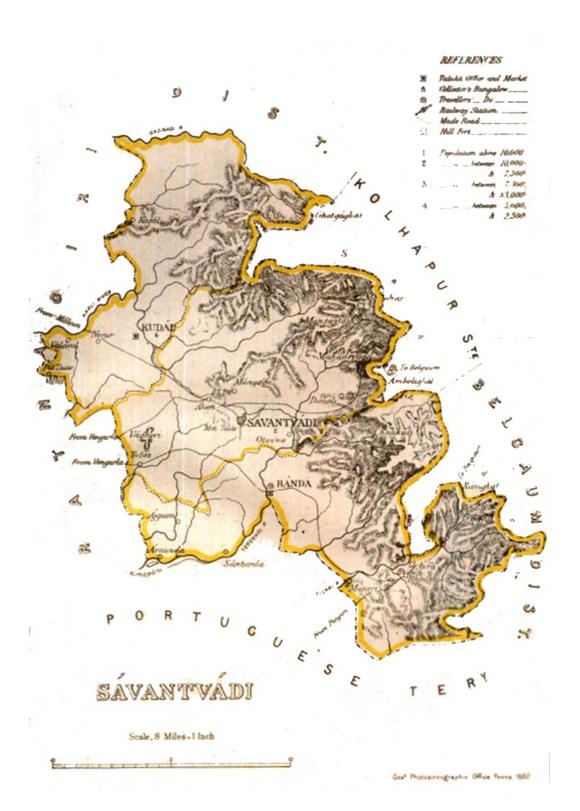
YASHVANTGAD FORT

Yashvantgad Fort, on the north entrance of the Rajapur creek, with the sea on the south and a ditch to the north and west, has an area of about seven acres. In 1862, the walls and gates with their seventeen bastions needed repair. There was no garrison, and only twenty-eight old unserviceable guns. [Gov. List of Civil Forts, 1862.] The supply of water and provisions was abundant.



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MAP



DESCRIPTION

THE state of **Sa'vantva'di,** lying between 16° 15' 30* and 15° 36' 33" north latitude and 74° 20' 51" and 73° 36' 11" east longitude, has a total area of about 900 square miles, a population, in 372, of 190,814 souls or 212.02 to the square mile, and in 1879-80, total revenue of £28,311 (Rs. 2,83,110).

Boundaries

Bounded on the north by the Malvan sub-division of Ratnagiri, it is separated by the line of the Sahyadri hills, on the north-east from the lands of Kolhapur, and on the east and south-east from the Belgaum and Bidi sub-divisions of the British district of Belgaum. To the south lie the Dicholi and Pedna sub-divisions of the Portuguese territory of Goa, and on the west and north-west the Ratnagiri sub-divisions of Vengurla and Malvan.

Administrative Sub-division

For administrative purposes the lands of the state are distributed among the three sub-divisions, or *petas*, of Vadi, Kudal, and Banda, each including several petty divisions, *tarafs*. The sub-divisions have on an average an area of about 300 square miles, containing the lands of seventy-five villages with a population of over 63,000 souls. The following summary gives their chief available statistics:

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NAME.	Area.	Village.	Population, 1872.	Revenue 1879-80.
Kudal	About 900	60	67,007	10,245
Vadi	square	64	73,397	10,981
Banda	miles.	101	50,410	7085

Aspect

Savantvadi, about fifty miles long and from ten to thirty broad, is a compact. territory unbroken by the lands of other states or districts. Cut off from-the sea by a narrow strip of Goa and Ratnagiri, it stretches along the foot of the Sahyadris, a land of hills and streams, broken, rugged, and picturesque. As the land rises rapidly from the coast its river mouths and backwaters are navigable only for a very short distance. A few miles from the sea, the land becomes wooded and uneven, rising into hills that gradually grow higher and bolder till they merge into the Sahyadri range. The open country to. the west, and the valleys that run eastward among the hills, are rich well-wooded rice lands, with, along the banks of rivers and at the foots of hills, groves of cocoa and betelnut palms. The lower hill slopes, though in many places cleared for tillage, have poor soil and grow only the

coarser hill grains. Near the Sahyadris the country is strikingly beautiful. Spurs from the main hills, detached groups and isolated peaks with bold and varied outline, rising from 800 to 8000 feet above the plain, form strong natural fastnesses, some of them, as Manohar and Mansantosh, forts famous in history. Besides Manohar and Mansantosh the chief peaks and forts are Mahadevgad on the Amboli pass about ten miles east of Vadi, Prasiddhqad or Rangna about twenty-one miles north of Vadi, Kupicha Dongar near Valaval, and in the west the isolated hill of vagheri. There are seven chief passes within Savantvadi limits, two of them, the Amboli and the Ram fit for carts, and five, the Ghotga, Rangna, Hanraant, Talkat, and Mangeli, fit only for foot passengers and pack cattle. Of the chief passes the Amboli pass, about fourteen miles east of Savantvadi, has a cart road. It is close to, and nearly on the same line as, the old Parpoli pass. The Ram pass, about thirty miles east of Banda, formerly the main highway for carts, has, since the opening of the new Amboli road, lost much of its traffic.

Maharashtra State Gazetteers

DESCRIPTION

Rivers

None of them of any considerable size, the Savantvadi river, rising from the western Sahyadri slopes and passing west to the sea, have much sameness of character. At first mountain torrents dashing over wild rocky beds down steep hill sides, as they pass into the plains they flow with gentle current between sloping and open banks, till the largest of them, about ten miles from the sea, end in tidal, navigable creeks. Of these streams the two chief, the Sarambal or Karli on the north and the Terekhol on the south, rise on either side of the Manohar hills and flow to the sea, the Karli with a westerly and the Terekhol with a southerly course.

The Karli.

The KARLI, or SARAMBAL, rising fit the village of Shivapur on the Sahyadri hills to the north of Manohar fort, after a south-westerly course of about thirty-five miles, falls into the sea at Malvan. At the village of Panvas and Pandur, about nineteen miles from its source, the Sarambal is, from the right, joined by the' Bel and Hateri. Three miles further, near the village of Anav, the other branch, also from the right bank, after a south-westerly course of about ten miles, joins the main stream. For the remaining fourteen miles below Anav, the river is tidal and navigable for craft of about 1½ tons (100 mans) burden. It is known as the Karli only for four or five miles from the sea. In its bed are several small islands, one or two in British territory between Nerur and Valaval, and one near the village of Sarambal. During the rainy season the Karli is nowhere fordable. There are ferries at Nerur, Sarambal, Yalaval, Chendvan, and Kavthi.

The Terekhol.

The TEREKHOL, also called the BANDA RIVER, rises in the Sahyadris to the south of Manohar fort, and flows-south-west by the villages of Sangeli, Vatvana, Insuli, Banda, Kas, Satosa, Kavthani, and Araunda. As far as Banda, or about fifteen miles from the sea, it is tidal and navigable for boats of about 1½ tons (100 mans) burden. Larger craft cannot pass further than Araunda about three miles from its mouth. The Terekhol has no important tributaries, but is joined by many mountain streams and rivulets, and during the rainy season it becomes a very formidable river. For the rest of the, year it is in many places fordable at low tide, chiefly at Banda, Pangyar, Kanki, Bhaip, Naik, Kajra, and Jhagadkhol. In the bed of the Terekhol near Kinla, about nine miles below Banda, an island of about 100 acres, occupied for about 200 years, contains a few huts and cocoanut trees. Near Araunda are four smaller islands, Dhonk, Karambal, Jagad, and Narayandurg.

Besides the Karli and Terekhol there are four leading streams, the Gadnadi in the north, the Talavda in the centre, and the Tilari and

Kalna in the south. Rising near the Ghotga pass, the GADNADI separates the sub-divisions of Kalsuli and Bordava from Malvan in Ratnagiri and empties itself into the sea four miles north of Malvan. The TALAVDA rises at Vajrat, passes Hodavda, Talavda, Tulas, and Matond, and falls into the sea at Mochemad in Vengurla. The TILARI, also called the KUDASI, rises at the Ram pass, twice crosses the great Imperial military road from Belgaum to Yengurla, and enters Goa territory at Maneri. The KALNA takes its rise at the Talkat pass close to the Ram pass, crosses the road at Kalna, and passes into Goa territory. There are a numbes of other small streams, which in the rainy season, owing to the heavy rainfall and the nearness of the Sahyadris, suddenly swell into considerable rivers most difficult and dangerous to cross. So sudden are these freshes that during the five years ending 1878, thirty-three persons have on an average lost their lives by drowning. [The details are, 1874, thirty; 1875, thirty-one; 1876, twenty-one; 1877, thirty nine; and 1878, forty-five.]

Lakes

Vadi, with no natural lakes, has thirty-eight reservoirs, seven in the Vadi division, nine in Banda, and twenty-two in Kudal. Of these the largest, the Pearl Lake, Moti Talav, at Savantvadi, with an area of about thirty-one acres and a mean depth of about six feet, is fed by many natural springs, and receives the drainage of about 550 acres of hill land. In 1874, in consequence of the leaky state of the retaining wall, the old dam of dry rubble masonry was removed, and in its place, at a cost of about £2000 (Rs. 20,0.00), a wall about 204 yards long was built of cut stone masonry secured with hydraulic cement, and furnished at each end with iron slice gates worked by rack and pinion, controlling the outlet of the lake, since this wall has been completed, instead of being dry in April, a large body of water remains throughout the year. On the north-west side a long flight of steps leads to the water. The lake is used for washing and bathing and for watering cattle, and to the south-east and south-west, for irrigating rice fields. Of the other reservoirs, all much smaller than the Vadi lake, the largest and best are those at Mangaon, Bambarda, Jharap, and Matond in Vadi; at Araunda, Talavna, and Kinla in Banda; and at Nerur, Valaval, Sarmbal, Pat, and Chendvan in Kudal. The Araunda lake is said to have been built in 1761 by Raghuram Paghe, a Gwalior noble, and the pond at Talavna, by the wife of a Raja of a dynasty older than the Bhonsles (1575). On the November-December (Margashirah) full moon, when a small fair is held, the Kinla pond is said, at the sound of the drum, to rise and overflow, and on the next day to fall to its former level. This rise is probably due to a specially high tide in the Terekhol which flows close by.

Geology

The succession of geological formations in Savantvadi [The geology of Savantvadi was worked out by Mr. J. C. Wilkinson, formerly of the Geological Survey of India. The present sketch has been compiled by

Mr. R. B. Foote, F. S.S., of the Geological Survey of India, from Mr. Wilkinson's MS, report and maps. A few of his notes have been published at page 44 of the 'Records of the Geological Survey of India.' These and other observations are also embodied in Mr. Foote's Memoir on the Geology of the Southern Maratha Country. (Memoirs of the Geological Survey of India, Vol. XII. Part I.)] may be conveniently tabulated in descending order as follows:

Post Tertiary or

6. Sub-aerial formations and soils.

Recent.

5. Alluvial deposits.

Tertiary

4. Konkan laterite.

Upper Secondary 3. Deccan trap and iron-clay (laterite).

2. Kaladgi (Kadapa) series.

Azoic

1. Gneiseic (metamorphic) series, with granitic and

trappean intrusions.

These formations are best described in ascending order, as with the exception of the volcanic rocks of the Deccan trap series, the later sedimentary rocks mainly consist of the debris of the older ones. Of the formations named above, the gneissic series holds by far the greatest area, chiefly in the centre of the state. The rocks of the Kaladgi series the scanty ruins of a once widespread formation, cover but a very small surface. The Deccan trap on the east and the Konkan laterite on the west cover about equal areas. The alluvial deposits, of small extent and little geological interest, form the small flats along the lower courses of the larger streams.

Gneissic Series.

The members of the Gneissic or Metamorphic Series, so largely and typically developed in southern India, occupy, as already stated, the greatest part of the surface of the state, and form not only the lower central parts of the area, but also the base of the great scarp of the Sahyadri mountains, and in the south the main mass of all the great branching spurs. Owing to the extremely hilly and forest-clad character of the country, the working out of its geological structure was specially laborious and difficult. The results also are far less conclusive and satisfactory than in a level country. Owing to the configuration of the ground, it is often impossible to trace for a distance any individual bed or set of beds, or with any certainty to correlate distant outcrops of similar rock which might reasonably be held to be parts of the same bed.

The run or 'strike' of the bedding varies considerably in different quarters, and the 'dip' or inclination of the beds is also very variable, showing that the rocks have been much crumpled and twisted by side pressure. It is probable, too, that by the same forces the beds were in many places broken and put out of place, and their relations much confused. The assumption of such breaks or ' faults,' though in metamorphosed rocks their existence is often very difficult to trace, is

from their frequency in other disturbed sedimentary rocks, legitimate, and helps to explain the present confused arrangement of the gneissic rocks.

The gneissic series in Savantvadi includes a greater variety of rocks than is usually met in the south-west Deccan or in other gneissic regions of similar extent. The areas occupied by the several varieties are also relatively much smaller. The prevalent dip of the rocks south of the Tilari river, in the extreme south of the state, is north-easterly. In the bed of the river and on the spurs south of Pargad and of the Ram pass, south-easterly dips are most common. The same dip was found most frequent in the great spurs west of Hanmantgad. South and south-east of the town of Savantvadi, the rocks have mostly an east to west strike, with obscure or uncertain dip. East, of Savantvadi the same strike and dip are again commonly seen, but near the base of the Sahyadri scarp they change, and the rocks acquire an easterly dip. North of Savantvadi, the rocks composing the great central spur that runs south-west from Manohargad, and the rocks on the southerly spurs of Prasiddhgad, have also the east to west strike, In the eastern part of the great spur, the strike becomes north-easterly with a dip 25° to 45° south-east. Immediately south-west of Savantvadi, the strike of the rocks trends from north-west and southeast to north-west by north and south-east by south, and finally north of the Kudal river-becomes nearly due north and south.

The chief varieties of the gneiss series are schistose forms, especially true gneiss and mica schist. Hornblendic schists appear to occupy the next place in extent of development. Granite gneiss, which occupies such great areas in the Southern Maratha Country and southwest Deccan, plays a comparatively unimportant part in Savantvadi. Talc schists are more, and chlorite schists are less frequently found in Savantvadi than in the adjoining gneissic district above the Sahyadris. Beds of quartzite and metamorphosed sandstone are very frequently mentioned in Mr. Wilkinson's notes as intercalated among the more typically gneissic schists. These may, perhaps, represent the haematite schist and quartzite beds of the Southern Maratha Country, which they resemble greatly in all but the presence of iron in large quantities in the form of red haematite, bat they appear to constitute, as a rule, much less striking objects in the landscape. So far as can be inferred from a cursory survey of the country, true gneiss and its subordinate varieties are very generally distributed over the state. Micaceous schists are almost equally widespread. The distribution of hornblendic rocks and schists is more circumscribed. They are commoner in. the southern and eastern central parts of the state than in the western central and north. The quartzites and altered sandstones occur most largely in the southern, central, and western parts. Talcose rocks and the granitoid and syenitoid massive varieties of metamorphic rocks are met chiefly in the west and west centre.

Of the most interesting and important sections that show gneissic rock, the Ram pass, one of the largest and most accessible, has the

following series from above downwards. At the head of the pass, lightcoloured highly felspathic gneiss dips south 20° east at. an angle of 50°; lower down appear quartzites, hornblende rock and mica schist alternating with gneiss, followed by pink felspathic rock, coarse mica schist, fibrous hornblendic rock, another felspathic rock containing a little mica and probably some free quartz, and a compact, finegrained, bluish hornblende rock, all dipping south-east from 20° to 50°. The strike of these beds, is very persistent through the spurs to the west of the Sahvadris, and where they fall off rapidly, a thick bed of hornblendic rock forms a very fine scarp with a slope of 35°, coincident with the dips of the bed. This scarp is specially conspicuous to the south of Pargad fort. The bed there consists of sparkling hornblende rock with foliated crystals of hornblende. Another good section occurs in the bed of the Tilari river, west of the ford at Permeg, where much hornblende rock and light-coloured felspathic gneiss are exposed, and show a dip of 50° south-west. Both fine and coarse-grained hornblendic rock occur here. Hornblendic gneiss and hornblende schist are very common all round Banda on the road between the Ram pass and Vengurla. Between Asnai and Fukeri, on the great spur crowned by the Hanmantgad fort, are 'platy' hornblende schists interstratified with sandstones (gritty siliceous schists?), the beds rolling with an easterly dip, apparently followed by vertical beds of white gneiss (resembling pegmatite), and at the top of the bill by a fine-grained schist. At Fukeri village white sandstones (gritty siliceous schists?) and green hornblendic schist appear. At Charathe, a little south-east of Savantvadi, is gneiss associated with micaceous and hornblendic schists, and between Charathe and Santuli, about four miles north-east, are schists, quartzites, and izenitoid gneiss. Gneiss and mica schists make up the mass of the hills south-west and north of Savantvadi. At Devsu, at the foot of the new Amboli pass, are mica schists in vertical beds striking east to west. A little higher up the pass are very crystalline hornblendic schists dipping south 30° east at an angle of 50°, and on these rest white fissile altered sandstones (gritty siliceous schists?) containing yellow mica. At Kalmist, a couple of miles north of Devsu, the river section shows the following rocks Gneiss, dark green coarse hornblendic gneiss, hornblendic and micaceous schist with interstratified beds of a white metamorphic rock, sometimes like sandstone but more frequently felspathic in character. Granitoid gneiss and quartzite beds occur on the flanks of the high and conspicuous Baravda hills. The beds are vertical or inclined at very high angles, having been apparently broken through and upheaved by the outburst of syenitic rock, which forms the main mass of the hills. Great outcrops of altered sandstone, or quartzite, the extension of the quartzite beds occurring on the Baravda syenite hills may be traced up to and beyond the Kudal river. Their strike is about north 30^0 west, with doubtful but probably westerly dip at a very high angle. West of Valaval, close to the left bank of the river, these outcrops form a conspicuous hill. At Bambarda, gneiss, quartzite, and talc rock occur, the latter forming a hill west of the village. The strike is about north to south, and the dip of the rock easterly, at a very high angle. East of Mulda occur gneiss, a pink quartzo-felspathic rock, and light-coloured banded mica schists. Further up the valley of the Kudal river are banded mica schist with garnets, granitic-gneiss, compact siliceous hornblendic rock, and darkcoloured contorted mica schists with bands of quartzite. The high hills south-east of Narur, which form the eastern part of the principal spur branching from the Sahvadri scarp at Rangna fort, show fine-grained micaceous schists, coarse syenitic gneiss, light grey gneiss and quartzites. These beds form an anticlinal fold with east to west strike. At Tulsuli, about four miles west of the above section, fibrous actinolite schist and bands of quartzite form hills immediately west of the village. To the east of Konda, which stands on the north side of a trap-covered spur some six or seven miles north-west by north of Narur, are micaceous schists, quartzo-felspathic schists, quartzites, and actinolite rock rolling north and south anticlinally at low angles, with an east to west strike. The last section requiring mention occurs in the Ashamat river, a little east of Harkul. Here may be seen excessively contorted beds of mica schist, hornblende schist, quartzofelspathic rock, gneiss and granitoid gneiss. The strike of the beds, which form an anticlinal fold, is about north 20° west.

Few instances are mentioned in Mr. Wilkinson's notes of specially striking or important exposures of the rarer rocks individually. Granitoid gneiss was noted by him cropping out of the south side of Kamberal hill in enormous masses, the beds dipping apparently into the hill at low angles.

Talcose rocks, though, as before pointed out, they occur far more frequently in Vadi than in the gneissic region above the Sahyadris, are by no means common. Besides at Bambarda, talc rock was observed only at about six places. At the crossing of the Tilari river by the Ram pass road and west of Kndasi it has the form of a hard compact blue rock, weathering into a light-coloured soapy wall. The same beds pass northward to the top of the spur between Sasoli and Kumberal. They are interstratified with dark green hornblende schist and mica schist. Similar blue compact talc rock occurs at Akeri, north-west of Savantvadi, as hard nuclei enclosed in a softer steatic mass formed by weathering. Both are quarried and used for masonry. A considerable development of talcose rock occurs around and to the south of Sherli, a little west of Banda on the Vengurla and Bam pass road. Talcose schists occur also at Vankda, a little south of the Ashamat, close to the north boundary of the state. Actinolite schist, a rock not met with in the gneiss country above the Sahyadris, was noted by Mr. Wilkinson in four places. Of these, two, Tulsuli and Konda, have been mentioned above, the other two are Kudal ten miles north-west of Savantvadi, and Bambarda three or four miles north-east by north of Kudal.

No metallic ores were noticed in the gneissic rocks in sufficient quantity to be of practical value, unless decomposed hornblendic schist be used in some cases as an iron ore to charge the small native smelting furnaces. But it is, on the whole, probable that the ore used is entirely derived from the much later deposits of Konkan laterite.

Intrusive Rocks.

The Intrusive Rocks associated with the gneissic series are of two kinds, trap dykes and granitic veins and bosses. Trap dykes are very few and of small size and importance. Almost all occur in or close to the Tilari valley near the foot of the Ram pass. From their position with reference to the gneissic rocks, there can be little hesitation in classing them with the numerous and important dykes so frequently met in the gneiss area above the Sahyadris. Mr. Wilkinson's notes do not specify their peculiar lithological constitution. One dyke of basaltic trap, which he describes as occurring close to Savantvadi, deserves special notice, as from its peculiar structure there is good reason for believing it to belong to a much later geological period, namely, that of the Deccan trap. It will be described more fully when treating of the Deccan trap. The granitic or syenitic intrusions are, with one exception, of small size and importance. The majority occur in the form of regular granite veins, crossing dark grey micaceous schists in the valley of the Kudal river, at Mandkol to the south-east, and at Mulda to the east of Kudal. At Mandkol the intrusive veins consist of grey granite and eurite, cut through beds of gneiss crossing the river bed. The one important syenitic intrusion occurs in the Vagheri, or Baravda hill group, five miles east of Vengurla. The main mass of these bold conical hills, which, towering high over the adjoining flat-topped laterite-capped tableland, are most striking and widely seen, is of porphyritic syenite and hornblende rock forced through beds of granitoid gneiss and quartzite, which appear to have been upturned to a considerable extent and in part to have taken an upright position. This syenite consists of dark green hornblende, white opaque quartz, and in general very little felspar. The porphyritic appearance is due to the peculiar coarse crystalline aggregation of the quartz. Small intrusions of compact syenite occur among the gneiss in the Majgaon hills south of Savantvadi.

Kaladgi Series.

Resting on the gneissic formations is another later series of rocks which has undergone a considerable degree of metamorphism, and which has hitherto proved barren of organic remains. This newer metamorphic series has, on the strength of the similar character of the rocks, been correlated with the Kadapa series on the eastern side of the peninsula, and through that with the Grwalior, or Bijavar, series in Central India. The rocks representing the Kaladgi series in Savantvadi can only be regarded as the fragmentary remains of former formations. Denuding forces at work at various geological periods, but chiefly before the outpouring of the Deccan trap flows, removed nearly the whole mass of the quartzite and shale beds which made up the series in this quarter. Judging from the thickness of the representative

beds of the series further east and north, in Belgaum and Ratnagiri, the mass removed must have been very great, certainly many hundreds, and possibly some thousands of feet thick. Only one small patch of the rocks has been mapped by Mr. Wilkinson. This is an outlier capping the lofty gneissic spur that runs south-west from the great angle made by the Sahyadri scarp about three miles west of the Ram pass. The outlier occurs at the southern end of the spur, and occupies considerably less than a square mile of surface. It consists of quartzite dipping east or north-east at a low angle. Other outliers, as near Maneri, on the left bank of the Tilari river, a few miles to the south-west, are too small to be mapped. In the north, between the spur south of Kusba and Bhadgaon, and in many other placed, great quantities of rounded lumps of quartzite (altered sandstone) are seen under trap which evidently flowed over the surface of a denuded metamorphic country.

Deccan Trap.

The great lava flows which make up the mass of the Deccan Trap, rest directly on the gneissic and Kaladgi series of metamorphic rock. No later set of beds, such as the infra-trappean or Lameta beds of Central India, were found in the southern Konkan. The unconformity of position between the older rocks and the trap flows is in most places extremely well marked. In many sections it is so great as to show that vast ages passed between the close of the Kaladgi and the opening of the volcanic era. From the study of the sub-trappean rocks in Central and Eastern India it has been ascertained that within the 3pace of time thus indicated, took place the accumulation of all the formations below the cretaceous series belonging to the great mesozoic period as known in India. This space of time includes also a considerable section of the palaeozoic period, the great Vindhyian series of azoic rocks being doubtless of palaeozoic age. The Deccan trap may be regarded as of upper cretaceous age. Whether the lowest trap flows found in Savantvadi represent the real base of the series, has not yet been determined. The probability is that a considerable thickness of lower flows occurs farther north in the Ratnagiri district, and especially near the Mahabaleshvar mountains, where the total thickness of traps exposed, far exceeds that seen in the most northerly part of the scarp lying in Savantvadi territory. As the Sahyadri scarp is followed in a southerly direction, the later flows will be found to overlap the older ones on to the gneissic rocks. Hence the beds, which form the basement of the trap series near the southern end of the trap area, really occupy a position near the top of the trap series considered as a whole.

The area occupied by trappean rock in the Savantvadi state is not great. It consists mainly of a narrow band, forming the upper and most precipitous part of the great Sahyadri scarp, along which runs the boundary between Savantvadi and Belgaum in the south and Kolhapur in the north. From the extremely precipitous slope of the mountain sides, and from the dense forest that covers them in many

parts, the sections are generally accessible only along the various passes which ascend the scarp. Only in the northernmost part of Savantvadi are the trap flows found at comparatively low levels. In the centre and south the trap outliers cap only the highest hills.

Owing to the tremendously wearing action of the heavy southwest rainfall, the softer trap beds have weathered away leaving great mural precipices of hard, compact, columnar basalt. Near Pargad three distinct and conspicuous beds occur, forming together one great clifflike scarp between five and six hundred feet high. Farther north on the Amboli pass two flows are specially prominent, and form a double mural scarp of much beauty. The striking spur on which stand the two remarkable hill forts of Manohar and Mansantosh, is capped by one of the great basaltic beds, and shows very fine mural scarps to which the two forts owed their strength. Still farther north, near Rangna another famous hill fort, the scarp shows six or seven great flows in the form of black bands, each pair of bands separated by partings of softer decomposing beds. Some of these are amygdaloid in character, as for example, near Girgaon and Narur, where a pink amygdaloid occurs, Whose cavities are full of zeolites and calcspar. The northernmost trap flows which cap the spurs running west into the low country, form generally flat-topped hills. The trap flows which have a slight westerly dip, consist of an olive green mass, breaking with uneven jointy fracture and sometimes containing olivine. The trap decomposes into a deep red earth. No distinct points of outlet of the great trap flows seem to have been met by Mr. Wilkinson, nor does he mention any dykes of later trap crossing the flows such as occur in more northern parts of the great trap area, as in the Rajpipla Hills. [See Mr. W. T. Blanford's Memoirs of the Geological Survey of India, Vol. VI.]

Two occurrences of trap noted by Mr. Wilkinson, suggest the idea of possible relationship with the Deccan traps, a point left undecided by his observation, but worthy of further examination. One of these two occurrences is the large dyke of columnar basalt at Savantvadi. The cleavage of the rock into five-cornered columns is a feature not met in the dykes of pre-Kaladgi age, which in large numbers cross the gneiss country above the Sahyadris. At the same time as this form of cleavage is very common in the Deccan trap basalts, it suggests the possibility that this Savantvadi dyke belongs to the Decan trap, though extensive denudation has made it impossible to trace any present connection between the two. A close comparison of the intimate structure of the basalt of this dyke with basalts of the Deccan age and with the rock, whether basaltic or dioritic, of the non-cleaved dykes in the Tilari valley and of other similar dykes above the Sahyadris, would be sure to throw some light on this point, which is one of considerable interest. The other case of interest occurs at Kasai, south of the Tilari river, about three miles, from Maneri. Here, at a little distance south of the road, east of the village, are masses of blue basalt, apparently part of an intrusion. The lithological character of this rock points strongly to its being of Deccan trap age. Its

situation suggests the idea of its being a volcanic 'neck' rather than a mere outlying patch of some denuded flow. Such a 'neck' would represent a mass of lava consolidated in a volcanic vent below the open crater by which the eruption reached the surface.

Iron Clay.

Iron-clay (laterite) formations of subaerial origin, such as occur so largely on the surface of the trap flows on the summit of the Sahyadris, are but very little developed in the Savantvadi territory. The denuding agencies at work on the scarps and spurs appear to have cut away the exposed rock too rapidly for the development of the peculiar argillo-ferruginous decomposition of the trap rocks. Such argillo-ferruginous deposits as do occur on the surface of the older and newer metamorphics, and to a very small extent on the trap flows, must be considered as produced by local and subaerial re-composition of the weathered materials. In the absence of included fossils, the age of such subaerial deposits is uncertain, and for all that is known to the contrary, many may belong to geological periods of Very recent date, and will therefore be again referred to when treating of the recent deposits. They must also be carefully distinguished from the iron-clay formation so largely developed in the Konkan, which there is good reason to regard as of sedimentary, and probably of marine origin, and which is therefore classed as a true laterite. The decomposition of traps into iron-clay may be well seen in some of the cuttings near the upper parts of the great Amboli pass road. Here the basaltic rock weathers gradually into a moderately hard yellow-brown or brown earthy mass enclosing many nuclei of the original rocks. The upper parts of the decomposed mass from which the nuclei have disappeared, have undergone a process of concretional solidification from infiltration of surface water holding iron in solution, and are assuming the ordinary lateritoid appearance and reddish colour. This change takes place, as a rule, only in traps in which columnar cleavage has not been developed, owing, in all probability, to the retention of water in the horizontal joints and planes of bedding. In the columnar traps, as water is able to percolate freely, the weathering process is different.

Konkan Laterite.

The south and west of Savantvadi are to a considerable extent covered by numerous outliers of a once continuous sheet of laterite, an extension of the great formation so largely developed in the Konkan. Laterite gives a monotonous look to the country, forming a waving, and in many places flat plateau, whose surface is a sheet of black slag-like rock. This laterite plateau, bare and black with a general height of between two and three hundred feet, supports no vegetation, except here and there scanty grass and stunted trees. It is cut through by numerous rivers, which, after flowing across a comparatively open country, enter the laterite by deep ravines which widen towards the sea, the rivers becoming broad tidal creeks.

This Konkan laterite, as it has been called, to distinguish it from the Deccan laterite or iron-clay, is in all probability a truly sedimentary formation, differing greatly in origin from the lithologically similar Deccan iron-clay, which is probably a subaerially altered trap rock. The evidence in favour of the sedimentary origin of the Konkan laterite as at present rather meagre. Mr. Wilkinson has offered no positive opinion on the subject, probably because he took the sedimentary origin for granted, and was unaware that Dr. Carter had, in his Geological Papers on Western India, advanced the idea that the Konkan laterite was an altered "volcanic rock. Still it may be gathered from Mr. Wilkinson's notes, that parts of the formation are unquestionably sedimentary. He mentions here-and there 'laterite sandstones,' 'laterite conglomerates' and ' shaley laterite,' and this when speaking of the undisturbed rook, and not referring to numerous patches of pseudo-lateritic rock the product of the denudation of older laterite, which as gravels, sandstones and conglomerates, occur at lower levels than the typical rock. These will be referred to further on. The evidence in favour of Dr. Carter's hypothesis of the trappean origin of the Konkan laterite is simply the lithological resemblance of this rock to the iron-clay occurring on the top of the Deccan trap flows above the Sahvadris. But an equal resemblance exists between the Konkan laterite and the Travankor laterite and the laterite of the Coromandel coast, both of which are of true sedimentary origin. Another great objection to the trappean origin hypothesis is that it involves a fresh outpouring of trap long after the conclusion of the Deccan trap period, a further outflow of which there is no other evidence of any sort in the Konkan. It is the general conclusion of the geologists who know the southern Konkan, that the Konkan has been formed by the removal, by denuding agencies, of the vast mass of trap forming the westward extension of the great flows now exposed in the Ghat scarp, and that such denudation began after the Deccan trap period was at an end. When this great denudation, which was doubtless the work of the sea, had been accomplished, a deposit of white and blue clay, containing lignite and plant remains, was formed. These clays are very probably of the same tertiary age as the lignitiferous clays underlying the truly sedimentary laterite in Travankor. The Konkan laterite at Ratnagiri overlies these plant beds, and if it represents, as Dr. Carter supposes, altered trap flows, there must have been a third period of trappean eruptions in the Indian peninsula, of which, as above remarked, no other indications are to be found.

Laterite outliers are found in the south of the state at points far more inland than in the north. They are mostly small, of irregular shape, and scarped round their edges. Konkan laterite is probably of later tertiary age.

The Alluvial Formations in Savantvadi are of very small extent and of no geological importance. They consist of the alluvium deposited by the various small rivers in their lower reaches, and are almost everywhere masked by extensive ripe cultivation.

Subaerial Deposits.

The Subaerial Deposits demanding most notice are patches of various argillo-ferruginous rocks occurring very commonly over the low-lying central part of the state, and in the valleys between the various ridges capped by the typical Konkan laterite. They have often a true lateritic appearance, but consist more frequently of gravels, sandstones and conglomerates, and have been formed by reconsolidation of the weathered debris of the true Konkan laterite or of ferruginous and other rocks in the metamorphic series. None of sufficient interest to deserve special notice are mentioned by Mr. Wilkinson. Similar deposits are in process of formation at the present time.

The Soils are mostly light-coloured, clayey or sandy as the case may be; clayey soils result from the decomposition of the felspathic varieties of the metamorphic rocks; sandy soils from the weathering of the quartzites and altered sandstones of both the older and newer metamorphic series. The soil is generally deeper than elsewhere in the Konkan, and the country in consequence more susceptible of cultivation. In the north of the state is a deep red soil the result of the decomposition of some of the lower trap flows.

Geology Economic.

Except for building purposes, the various rooks met with in Savantvadi are of little use, and none appear to be of exceptional value. In many places a little iron is smelted in small native furnaces, the ore used being ncematitic shale obtained from some of the laterite-capped hills. This shale probably belongs to the laterite formation. Mr. Wilkinson thinks that in some few cases the ore used is a decomposing ferruginous member of the gneissic series, possibly a hornblendic schist rich in iron.

Climate

Except that it is somewhat damper and cooler, the climate of Savantvadi is much the same as the climate of Malvan in Ratnagiri. The cold season begins about the middle of November, the weather very suddenly changing from damp warmth to dry cold. From February to the middle of May strong gusty winds blow from the north-west. The hot weather begins in March, when at times in the afternoon with a heavy cloudy sky, the thermometer-rises to 94°. In April, the hottest month in the year, mists and fogs are sometimes followed by thunder, lightning and rain from the north-east. May, though it has a higher average temperature than April, is freshened by a strong sea breeze, with sometimes, but less often than in April, a thunderstorm from the north-east. The rainy season begins early in June and ends about the 'middle of October. The fall is very heavy, varying, during the thirty-two years ending 1879, from 222 inches in 1874 to 93 inches in 1855, and averaging 143 inches. [The available details are:

Savantvadi Rainfall, 1848 -1879.

YEAR.	Inches.	Cents.	YEAR.	Inches.	Cents.	YEAR.	Inches.	Cents.
1848	135	17	1859	103	34	1870	131	40
1849	177	23	1860	117	77	1871	118	50
1850	131	82	1861	136	31	1872	167	6
1851	155	30	1862	176	15	1873	130	45
1852	155	90	1863	170	45	1874	222	8
1853	112	34	1864	96	75	1875	188	
1854	167	90	1865	126	65	1876	143	78
1855	93	61	1866	144	1	1877	111	92
1856	160	14	1867	129	60	1878	214	23
1857	156	20	1868	131	20	1879	147	28
1858	174	83	1869	119	60			

] Though well distributed over the whole rainy season the fall is generally greatest in June and July. Thermometric readings, registered during the five years ending 1879, vary from 91° in May to 69° in December and January. They give for the whole period an average mean temperature of 78.6°.

[Savantvadi Thermometer Readings, 1851-1857 and 1875-1879.

YEAR.	AVERAGES.								
	January.		May.		September.		December.		
Mahara	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	
1851-1857	66	86	70	90	77	82	67	85	
1876-1879	69	83	79	91	75	79	69	85	

PRODUCTION

Minerals

THE only minerals are stone and iron ore. At Valaval and Akeri stone guarries supply abundant building material. The Valaval stone is a sort of quartz or quartzite. The Akeri stone, a slate coloured talcschist extremely hard, compact and heavy, is unrivalled for building. [Near one of the quarries on the slope of a hill there is a bedstead 6 feet 3 inches long, 3 feet wide, and 1½ feet high with carved cornice and legs. The whole made of one solid piece of stone was about 1840 made to order by a Goa prostitute who died before it was finished.] Costing 4s. (Rs. 2) the cubic foot to quarry, it has hitherto been in little local demand. But large quantities have been sent to Bombay and much used in several of the public buildings. It can be dressed and carved as finely as marble. Laterite is quarried at many places, especially near Amboli and within a few miles of Vadi. Iron ore of good if not of superior quality is found in the Sahyadri hills near the Ram and Parpoli passes, and on a small scale is made into field and other tools. [In 1855 the outturn of iron was about 77 tons (230 khandis) worth £430.] Enterprise and capital are wanting to work the beds profitably on any large scale. Talc of inferior quality and in small pieces is found at Kadaval in Kudal. It is chiefly made into small sweetmeat boxes or used in decorating clay and wood idols.

Trees

As shade [Contributed by Captain Waller, V.C., Assistant Political Superintendent.] is thought to be hurtful to rice, except some palms and *bhirands*, Grarcinia purpurea, little field timber is grown. The largest trees, chiefly mangoes and jacks, are found near villages. Round the temple of some local demon, *vetal*, almost every village has its sacred grove, *devrai*, spreading over two or three acres, for generations untouched by the axe and crowded with stately trees woven together by festoons and wreaths of gigantic creepers.

The following is a list of the trees found within Savantvadi limits. The mango tree, amba, Mangifera indica, has valuable fruit and timber useful for doors, boxes, and other articles of furniture; amberi, Glycycarpus racemosus, a small tree the juice of whose petioles is used as a blister; anjan, Memecylon edule, bearing a small lilac flower in the hot weather, has very tough but crooked timber; ain, Terminalia glabra, has bark used in tanning and to make a dark red dye, and timber, especially the heartwood, of high value for building purposes; avli, Emblica officinalis, yields fruit made into conserves and pickles, leaves used by tanners, and wood that makes good charcoal; adulsa, Adhatoda rasica, has leaves used as a febrifuge; apta, Bauhinia racemosa, worshipped by Hindus at Dasra (October), has leaves used for making cigarettes, bidis; asht, Ficus cordifolia, yields indifferent

timber; dtak, Flacourtia montana, has an edible fruit; ambada, Spondias mangifera, the hog-plum or wild mango, has a fruit eaten when ripe and pickled when unripe; bava, Cassia fistula, yields a pulp used as a purgative and exported; biba, Semicarpus anacardium, the marking nut, has edible kernels; bakul or oval, Mimusops elengi, has sweet scented flowers sold for wreaths; bhendi, Thespesia populnea, yields excellent and close grained wood, used for wheel spokes and gunstocks; bhirand or ratambi, Garcinia purpurea, has a fruit with an edible pulp, a rind that when, dried is used as a flavouring acid in curries, and seeds yielding kokam oil; bokada, Ficus asperrima, has leaves used as fodder for cattle; bel, AEgle marmelos, yields a pulp very useful in dysentery; bach, Salix tetrasperma, found only on the Sahyadri hills, yields a wood which, containing much tonic and gallic acid, is a good substitute for log wood, and is valued as a dye wood; bhovarbet, Bambusa stricta, is a species of bamboo; bherla mad, Caryota urens, the bastard sago palm, is common, but being of an inferior quality, yields neither sago nor toddy, the stem of the leaf yields a fibre much used in making fishing lines; chinch, Tamarindus indica, has edible fruit and tough and good wood; char, Buchanania latifolia, has seeds which are made into confectionery, and largely exported to Bombay and elsewhere; chivar, Arundinaria wightiana, a small bamboo, is much used for making batons; chaval, Musa ornata, or wild plantain, the pith yields flour and the stem an excellent fibre; dhaman, Grewia tiliaefolia, yields wood used for building; dhup, Canarium strictum, yields an aromatic pale yellow gum burnt as incense; gela, Randia dumetorum, is a common tree with good timber; godderand (?) has oil-yielding seeds; helu, or alu, Vangueria edulis, its fruit is eaten and its timber occasionally used; hela, or gholing, Terminalia belerica, yields a largely exported fruit, and wood ashes much used in the manufacture of molasses; hed, Nauclea cordifolia, yields the light and close grained wood used in making the lacquered Vadi toys; harda, Terminalia chebula, the myrobalans of commerce, are largely exported; kateasan, Briedelia spinosa, yields a wood useful for building purposes; kalakuda, Wrightia tinctoria, has leaves that yield an indigo dye, and has very close grained and white timber excellent for turners; hasaq, or ashok, Jonesia asoca, yields a useful wood; jambha, Xylia dolabriformis, yields a strong red-coloured wood, excellent for rafters and making good charcoal; jambhul, Eugenia jambolana, has an edible fruit and a much used wood that stands water well; jamb, Eugenia vulgaris, yields wood used for building; japhar, or japhran (?), has an edible fruit and useful wood; jagam, Flacourtia cataphracta, has an edible fruit; jambal, Syzygium caryophylleum, yields wood used for building purposes; jasund, Antiaris innoxia, yields fair timber; karmal, Dillenia pentaphylla, a very common tree, yields inferior timber; kavthi, Hydnocarpus inebrians, the seed oil cures skin diseases and has been found useful in leprosy; karanj, Pongamia glabra,' the seed oil cures itch and mange, and the timber is good; kinai, Acacia procera, yields good timber; kinjal, Terminalia paniculata, yields good timber much used for building;

kumbya, Careya arborea, has bark that is used for slow matches, and yields useful timber; kadamb, Nauclea parviflora, yields wood used for making stacks and for building purposes; kher, Acacia catechu, a most valuable tree, yields the catechu of commerce; kajra, Strychnos nuxvomica, furnishes the powerful poison strychnine and yields a useful timber; karamb, Olea dioica, yields an excellent wood; kharsing, Bignonia zylocarpa, yields a wood-oil used as a cure for skin diseases; kharvat, Epicarpus orientalis, has leaves which for polishing wood are an excellent substitute for sand paper; kolam, Stephegyne parviflora, a fair building wood; kavas (?), a fairly useful timber; kaner, Nerium odorum, yields middling timber; kaju, Anacardium occidentale, the cashew tree, yields a largely exported oil nut and a fleshy fruit stalk from which spirit is distilled; kadal (?) yields middling timber; kharqul, Baehmeria ramiflora, the leaves are used as fodder; kanak (?), the leaves are used as fodder; kusba, or kusga (?), has useful timber; kalen (?), a useful wood; kala gonda (?), a useful wood; kalingan (?), the wood is very tough and used for hatchet handles; kalak, Bambusa vulgaris, the bamboo; khatkhati (?); kumbal, Sapota tomentosa, the fruit is used as a cure for diarrhoea; kudchapha, Plumeria acuminata; madan (?) has useful wood; motakarmal, Dillenia speciosa, a rare and inferior wood; mirjoli (?); malaya (f); maharukh, Ailanthies excelsa, yields useful timber; mad, Cocos nucifera, the cocoa palm, its nuts are largely exported; manga, Bambusa arundinaria, the common bamboo; naram (?) yields useful timber; nandrukh, Urostigma retusum, a shady tree planted on road sides; nana, Lagerstraemia parviflora, yields excellent heartwood; nagchapha, Mesna ferrea, yields a beautiful sweet scented flower; nagalkuda, Sterculia fetida, a decoction of the bark is used as a cure for coughs; nagin, or irai, (?) the wood is used for masts of country boats; nhiv, Nauclea cadamba, a handsome tree with edible fruit, believed to be an exotic; nisalbonda, Salacia prionoides, yields timber; palas, Butea frondosa, the flowers are used and exported as a dye; pangara, Erythrma indica, its light wood is used for making sword scabbards; payar, Ficus cordifolia, a useful tree for road sides; pasi, paniculata, useful for building purposes; Stereospermum chelouoides, the leaves are used as a febrifuge, the wood is very tough; padoli, Tricasanthes anguisa, a decoction of the leaves is used in puerperal fever; parijatak, Nyetanthes arbortristis, bears fragrant flowers; pimpal, Ficus religiosa, worshipped by the Hindus; paleasan, Briedelia montana; pedhri (?), the fruit is eaten as a vegetable, a few of the leaves intoxicate a horse; posva (?), a large handsome tree with inferior wood; panijala (?) yields fair timber; pophal, Areca catechu, the areca nut largely exported; phanas, Artocarpus integrifolia, the jack tree, yields valuable fruit and timber, excellent for tables, boxes, and cupboards; phanshi, Caralia integerrima, useful for timber; patphanas, Artocarpus hirsute; a wood useful for building; patang, Caesalpina sappan, its wood yields a red dye; phalya. Buchanania latifolia, its leaves are given as fodder; ringi ritha, Sapindus laurifolius, the soapnut; raykala (?), a useful wood;

rama rameta, Lasissiphon speciosus, yields a fine fibre, its bark intoxicates fish; ranbiba, Semecarpus sp. (?), the juice is used as a blister; rumad, Covellia glomerata, has a wood that makes good cattle troughs; sajan, Terminalia glabra, yields useful timber; savar, Salmalia malabarica, the silk cotton tree; satvin, Alstonia scholaris, the bark is a good febrifuge, but the timber worthless; saila or sagvan, Tectona grandis, the teak tree; saykanda, Sterculia villosa, the leaves are given to cattle and good cordage is made from the bark; sivan, Gmelina arborea, yields a light and strong wood; sisva, Dalbergia latifolia, the blackwood tree; siras, Albizzia lebbek, an excellent wood; sugran (?), the bark is used as a medicine, and the wood for its oil and sometimes as timber; surang, Calycassion longifolium, the flowers are largely used and exported; segul, or sevga, Moringa pterygosperma, the pods are eaten as a vegetable, the bark is like radish in taste, and the seeds yield ben oil; sidam (?), a large tree yields poor timber; sonchapha, Michelia champaca, is valued for its sweet scented flowers and timber; taman, Lagerstrcemia reginas, has useful timber; tirphal, Xanthoxylon rhetsa, the fruit is used as a medicine, to flavor fish curries, and to poison; tivar, Aveicennia tomentosa, the wood is of very little value; undag or pumag, Calophyllum inophyllum, the seeds yield oil and the wood is excellent timber; vet, Calamus ratang, the common thorny cane; khirni, Mimusops hexandra, yields good timber; vomb, Nephelium langanum, has close grained and useful wood; vavala, Holoptelaea integrifolia, is a small tree with middling wood; the banian, vad, Urostigma bengalense, is common; and the India rubber tree, Ficus elastica., introduced some twenty years ago, flourishes well.

Roadside trees are easily grown. The most useful kinds are the jack and mango, and the best way of growing them is to sow the seed in pots in nurseries during one rainy season and plant them out at the beginning of the next, cracking but not removing the pot.

Forests.

Savantvadi is a forest country, but until the revenue survey has been completed, the exact forest area remains unknown. Roughly it is about 300 square miles or one-third of the whole state. Revenue-yielding trees grow on the slopes and along the base of the Sahyadri range, and on many isolated hills lying between the Sahyadris and the sea. All teak, *kher*, and blackwood are considered the property of the state. In 1878, to put a stop to underhand wood-cutting and for the better protection and improvement of the forests, an establishment of one head officer, two deputies, one clerk, twelve rangers, and four *nakedars*, selected from the Brahman, Maratha, and Musalman classes, was organised at a yearly cost of £234 (Rs. 2340).In Kudal waste hill lands not useful for forest have been separated from the forest reserves; and in some Vadi villages above the Sahyadris and in some of the forests bordering on Vengurla, boundary marks have been set up.

Savantvadi Forests, 1874-75.

YEAR.	Receipts.	Charges.		
	£	£		
1874-75	583	103		
1875-76	425	103		
1876-77	438	102		
1877-78	801	103		
1878-79	328	158		

The marginal table shows the forest receipts and charges for the five years ending 1878-79. Timber is cut on the payment of fees. It is sent from Vengurla by sea to Bombay, or carried in carts over the hill tracts to Belgaum and other inland districts. There are no particular castes who work as woodcutters.

Animals Birds

The avifauna differs little from that of Ratnagiri. Compared with Ratnagiri, Savantvadi is well wooded. The hill sides are every where covered with dense forests and the country generally is less barren and rugged. The difference in the species appears to depend solely on these physical conditions. In Savantvadi forest-loving birds, such as thrushes, black birds, hill bulbuls, and others are more numerous, while plain, dry upland, and shore birds are scarcer than in Ratnagiri. A detailed list of the birds found in Ratnagiri has been given in the statistical account of that district. With few exceptions this list probably applies to Savantvadi. The following species have not yet been recorded from Ratnagiri.

The CRESTED SERPENT EAGLE, Spilornis cheela (Lath. 38), replaced in Ratnagiri by its smaller congener the Lesser Indian Harrier Eagle, Spilornis melanotis (Jerd. 39 bis). The ALPINE SWIFT, Cypselus melba (L. 98); the MALABAR TROGON, Harpactes fasciatus, (Forst. 115), recorded by Dr. Fairbank; the BLUE-TAILED BEE-EATER, Merops philippinus, (L. 118); the CHESNUT-HEADED BEE-EATER, Merops swinhoii (Hume 119), recorded by Dr. Fairbank; the JUNGLE GREY HORNBILL, Tockus griseus (Lath. 145), recorded by Dr. Fairbank; the CRIMSON-THROATED BARBET, Xantholaema malabarica (Bly. 198), recorded by Dr. Fairbank; the RED-WINGED CRESTED CUCKOO, Coccystes coromandus (L. 213); the NILGHIRI FLOWER PECKER, Dicceum concolor (Jerd. 239), apparently, replacing Tickell's Flower Pecker, Dicoeum erythrorhynchus (Lath. 238), found in a Ratnagiri; the VELVET FRONTED BLUE NUTHATCH, Dendrophila frontalis (Horsf. 253); the DARK GREY CUCKOO SHRIKE, Volvocivora melaschista (Hodgh. 269); the HAIR CRESTED DRONGO, Chibia hottentota (L. 286); the MALABAR GREEN BULBUL, Phyllornis malabaricus (Gm. 464), recorded by Dr. Fairbank; and the FAIRY BLUE BIRD, Irene puella (Lath. 469). [Contributed by Mr. G. W. Vidal, C.S.]

Fish

The chief salt water fish are the *air*, *bhuyari*, *dangala*, *dhenkla*, *dodai*, *gargata*, *ghol*, *ghur*, *kadi*, *kdpay*, *karli*, *khadas*, *kharchi*, *kharva*, *khavla*, *kolindra*,' *lep*, *maliya*, *maral*, *mori*, *muddashi*, *palu*, *ped*, *saranga*, *shevta*, *tambosi*, *tigu*, *tonki*, *vagul*, *valai*, *vatu*, and *visvan*. The fishermen are Gabits. They number 850 souls and live in Chendvan and Kavthi on the Karli, and in small villages near the mouth of the Terekhol. As there is no local fish curing, a large quantity of cured fish, estimated at about £250 (Rs. 2500) worth, is brought for sale from Vengurla and other sea-coast towns.



Maharashtra State Gazetteers

POPULATION

[This Chapter owes much to additions and corrections made by Mr. Sakharam Baji Bavdekar, Judicial Assistant, Savantvadi.]

IN 1843-44 an attempt was made to take a census. The results were imperfect and untrustworthy. [According to the returns, the Vadi division contained 40,628 (males 21,143, females 19,485) souls; the town of Vadi, 8621 (males 4256, females 4365); and the Banda division, 44,087. The total number of houses was 1413. The Kudal returns have been destroyed.] A second attempt, made eight years later (1851), was more successful.

According to the 1851 census, the total population was 150,065 souls (males 76,956, females 73,109) or 166.73 to the square mile. Of the whole number 144,112 or 96 per cent were Hindus, and 3986 or 2.5 per cent Musalmans, that is at the rate of thirty-seven Hindus to one Musalman. There were, besides, 1959 native Christians and eight Jews.

1872.

1851.

The 1872 census showed a population of 190,814 souls or 212.02 to the square mile, an increase in twenty-one years of 40,749 souls or 27.15 per cent. Of the 1872 population 182,688[This number includes about 450 strangers who happened to be within the state limits during the census night.] or 95.64 per cent were Hindus, 4152 or 2.18 per cent Musalmans, 3954 or 2.08 per cent native Christians, and twenty 'Others'. Of the whole number 48.9 per cent were returned as males and 51.1 per cent as females.

The following statement gives the chief comparative details:

Savantvadi Population, 1851 and 1872.

YEAR.						
	Hindus.	Musalmans.	Native Christians.	Jews.	Others.	TOTAL.
1851	144,112	3986	1059	8		150,065
1872	182,688	4152	3954		20	190,814

Religion.

The 1872 returns, arranged according to religion, show that of the Hindus 142 or 0.07 per cent were Madhvachari Vaishnavs, 13,345 or 7.30. per cent Shaivs, 199 or 0.10 per cent Shravaks, and 169,002 or 92.50 per cent worshippers of gods and spirits without belonging to any particular sect. Except one Shia, all the Musalmans were Sunnis. The three Parsis were Shahanshais. Of the Christians, 3945 were

Catholics and nine Protestants, including six Episcopalians two Presbyterians, and one native Christian. Under the head 'Others' seventeen persons remained unclassified.

Health.

The total number of infirm persons was returned at 408 (males 265, females 143) or twenty-one per ten thousand of the whole population. Of these fifty-one (males thirty, females twenty-one), or two per ten thousand, were insane; twenty-nine (males' twenty, females nine), or one per ten thousand, idiots; 139 (males eighty-eight, females fifty-one), or seven per ten thousand, deaf and dumb; 120 (males seventy-three, females forty-seven), or six per ten thousand, blind; and sixty-nine (males fifty-four, females fifteen), or three per ten thousand, lepers.

Occupation

Under occupation, the 1872 returns divide the population into seven classes:

- I.—Employed by the state, 1334 souls or 0.71 per cent.
- II.—Professional persons, 1018 or 0.53 per cent.
- III.—In service or performing personal offices, 1415 or 0.74 per cent.
- IV.—Engaged in agriculture and with animals, 73,627 or 38.58 per cent.
 - V.—Engaged in commerce and trade, 2652 or 1.39 per cent.
- VI.—Employed in mechanical arts, manufactures, and engineering operations, and engaged in the sale of articles manufactured or otherwise prepared for consumption, 13,777 or 7.22 per cent.
- VII.—Miscellaneous persons not classed otherwise, (a) wives 24,121 and children 68,767, in all 92,888 or 48.68 per cent; and (b) miscellaneous persons 4083 or 2.14 per cent; total 96,971 or 50.82 per cent.

Dwellings.

Of houses there was in 1872 a total of 44,823, or on an average 49.80 houses to the square mile. Of the whole number 1511, lodging 15,565 persons or 8.16 per cent of the entire population at the rate of 10.30 souls to each house, were of a better, and the remaining 43,312 houses, accommodating 175,249 persons or 91.84 percent, with an average house population of 4.04 souls of a poorer, class.

The houses of the richer classes, one, two, or three stories high, have walls of stone or mud, and tiled roofs. According to the means and the size of the owner's family, they contain from eight to fifteen rooms. In front there is a porch, *ota*, and settle, and a verandah behind. Inside are the central room, *majghar*, and the cooking-room, and according to the means and size of the family, from six to twelve

other rooms. The chief articles of furniture are a carpet, *jajam*, a brass betel-leaf plate, *tabak*, a hubble-bubble, *gudgudi*, a brass lamp, brass drinking and cooking vessels, a few silver plates, some cots and cupboards, and very rarely small tables and chairs. Except that it is smaller, almost never more than one story high, a middle class house does not differ from a rich house. It seldom has tables, chairs, or silver plates, but in other details the furniture is much the same. A few earthen vessels and copper pots, and one or two sitting boards, *pats*, are all that can be found in a poor man's house.



Maharashtra State Gazetteers

POPULATION

Introductory Details

Food.

The food of a rich household is for every day, rice, pulse, vegetables, pepper, [All classes are fond of red pepper and spices.] clarified butter, oil, salt, and dried fish, and once or twice a month, mutton or fowls and eggs. On special occasions they eat fried cakes of rice and udid flour, vadas; wheaten cakes staffed with gram flour and sugar, puran-polis; and though rarely, sugared and buttered wheat balls, ladus. Brahmans, Lingayats, and Gujarat Vanis, whether Vaishnavs or Shravaks, are an exception to this, as except the Gaud Brahmans or Shenvis who eat fish, they touch no animal food. The food of a middle-class household is rice, nachni bread, curry, and vegetables, for every day, with vadas on special occasions. The every day food of a poor household is nachni bread, and occasionally rice and curry with vadas. Those who drink liquor and milk, and have not a supply of their own, buy their liquor daily from a Bhandari or Christian liquor-seller, and their milk from the milkman generally a Gavli. Except dried fish, which is usually bought in October, stores of rice, pulse, salt, and red pepper, enough to last from four to six months, are laid in during March and April. The well-to-do pay in ready money, and the poorer re-pay at harvest with twenty-five or thirty per cent interest. The supply of animal food is bought when wanted.

Dress.

Dress varies to some extent according to caste and creed. Except that the state servants wear a bright, The favourite colours are red, pink, white, purple and black, and sometimes green or yellow.] tightly wound three-cornered turban of the Sindeshai or Sindia pattera, both among high and low caste Hindus the ordinary head-dress is the handkerchief. rumal, wound loosely once or twice round the head. The ordinary dress of upper class Hindus is, for the men in-doors, a waistcloth and under-jacket with or without a coat, and head scarf, rumal; out-doors a waistcloth, a waistcoat, a coat, a head scarf or turban, and a cotton shouldercloth, and Deccani shoes and sandals, vahanas. On great occasions he wears, in addition to his ordinary outof-door clothes, a specially rich turban, and round his shoulders a woollen shawl. Upper class Hindu women wear in-doors a robe and bodice. Their ordinary out-door dress is the same, only of rich materials, and on great occasions they add a woollen shawl drawn over the head. Boys, except when very young, have a waistcloth, a coat, and a cap or turban, and girls under four have a shirt angda, a cap topi, a petticoat parkar, a bodice choli, and sometimes a robe sadi. After four years old they dress like, grown women. Among middle class Hindus, such as husbandmen and craftsmen, the man wears in-doors a loincloth, a waistcloth, and sometimes a waistcoat; out-of-doors he wears a waistcloth, a waistcoat or sleeveless smock,

kanchola, with or without a head scarf, rumal, and in cold or wet weather, a blanket, kamli. On great occasions, instead of his smock, he wears a coat, angarkha, and a turban instead of the head scarf. Middle class women wear in-doors a robe, sadi, out-doors a robe with or without a bodice, and on special occasions a richer or fresher robe and bodice. Boys and girls are, for a year or two, allowed to go naked. Then for two or three years the boy has a loincloth and the girl a bodice or robe, and after five or six, they have, at least for festive occasions a suit much the same as grown men and women. Among the poorest classes, field and town labourers, men generally wear indoors a loincloth and blanket, out-doors a waistcloth, and blanket or head scarf, and on festive occasions a waistcloth, jacket, and fresh head scarf. The women, except that fewer of them wear the bodice and that their robes are of coarser and plainer cloth and in worse repair, dress like middle-class women. The children of the poor are later in getting clothes, and less often have complete suits. Otherwise their dress does not differ from that of middle class children.

Ornaments.

Of ornaments, among men the rich wear gold earrings, bhikbalis, finger rings, angthis, and a necklace, kanthi; and middle class men wear gold earrings, mudis, a silver necklace, gop, and a wristlet, kada. Among women the rich wear, for the head, muds, rakhdis, kegads, phuls, shevtiche phuls, and chandrakors; for the neck, thushis, galsaris, putlis, saris, and tikas; for the ears, bugdis, karabs, kudis, kaps, and ghums; for the nose, naths and motis; for the upper arm, vankis and bajubands; for the wrist, bangdis and patlis; and for the ankles, todas. A middle class woman wears almost all the ornaments worn by the rich. And a poor woman wears only the galsari and the moti, and round silver or lead and lac bangles and rings. A boy's ornaments in a rich family are gold or silver wristlets, kadas and todas, and silver anklets, valas or jhanjris; and in middle class and poor families, mudis, gops, and kadas. A girl's ornaments in a rich family are, for the head; muds, rakhdis, chandrakors, kegads, venis, and kalepattis; for the ears, bugdis, karales, and kaps; for the neck, galsaris, thushis, saris, putalyacha hars, and javachi mals; and for the ankles, todas, valas, and jhanjris: in middle class families they are muds on the head, karalis in the ears, naths in the nose, and tikas and galsaris on the neck; and in a poor family, bugdis for the ears, galsaris for the neck, and round silver or lead and lac bangles for the wrists.

Holidays.

Besides the last day in every Hindu month, which all except the labouring classes keep as a day of fasting and rest, there are fourteen chief yearly holidays, nine of them feasts or days of rejoicing, and five fasts or times of penance. The chief feasts are, in January (12th), *Makar Sankrant*, when the sun enters the sign of Capricornus; in March - April, *Holi*, in honour of the spring equinox; in April, *Padva* or

new yearns day; in July, Kark Sankrant, when the sun enters Cancer; in August, Nagpanchmi, the cobra's fifth day, in honour of snakes, and Narli Purnima, or the cocoanut full moon; in September, Ganesh Chaturthi, or Ganpati's fourth day, in honour of the god of wisdom; and in October, Dasra and Divali. The fasts are, in February, Shivratra, or Mahadev's night; in April, Ramnavmi or Ram's ninth, in honour of Ram's birthday; in July, Ashadhi Ekadashi, when the yearly sleep of the gods' begins; in August, Gokul Ashtami, in honour of Krishna's birthday; and in November, Kartiki Ekadashi, when the gods' yearly sleep is over.

Character.

The bulk of the people, the Marathas, Bandharis, and Mhars were formerly famous, both by land and sea, for their fierce cruelty. Even since the establishment of order under the British, Savantvadi has more than once been the scene of revolt and disturbance. But now for nearly thirty-five years peace has been unbroken and the old pirate and freebooting classes have settled as quiet husbandmen. The only remaining signs of special enterprise and vigour were, till a few years ago, their readiness to cross the sea to Mauritius in search of work, and the fondness that still remains for military and police service.

Condition.

With little trade, few local industries, and hardly any early or unsettled tribes, Savantvadi is wanting both in the extreme of wealth and in the extreme of poverty. The Chief, some of the state servants, and a few traders in Vadi and Kudal, are the only persons who possess considerable wealth. Except traders and goldsmiths, the bulk of the people, both husbandmen and craftsmen, depend for their living either partly or entirely on the soil. Very many of them are in debt, but almost all have some property and some credit. Among the labouring classes there has of late years been a considerable improvement. The demand for labour in Bombay and other trade centres, and the local rise in wages have made it unnecessary for them to go to Aden or Mauritius in search of work, and in their food, clothes, and house gear, there has been a distinct advance towards comfort.

Race Divisions

Hindus.

Priests.

Among Hindus there were, according to the 1872 census, two main divisions of Brahmans, Dravids and Gauds, with a total strength of 12,979 souls or 7.11 percent of the whole Hindu population. Of Dravid Brahmans there are four sub-divisions, Deshasths, Karadas, Chitpavans, and Devrukhas. Of Deshasths there are only three or four houses in the village of Banda, priests and religious beggars, all fairly well off. Karadas are distributed over the whole state. Each village, or group of two or three hamlets, has its Karada priest or religious beggar. Chitpavans, a comparatively small class, are found chiefly in

the towns of Vadi, Kudal, and Banda, in some villages near the Sahvadris, and in the Ajgaon sub-division. Some till and rear cocoa and betelnut plantations, others are religious beggars, and others are in government employ. Like Deshasths they are fairly well off. The only house of Devrukha Brahmans is at Kudal, where the head is a pleader in the civil court. The four divisions eat and drink together, but do not intermarry. Petty caste disputes are settled by a committee presided over by Devasthali the state Shastri, who refers serious cases for the decision of Shankaracharya Svami. Of Gaud Brahmans or Shenvis, immigrants, it is said, first from Bengal and then from Goa, there are four divisions, Shenvis, Shenvis are either Smarts or Vaishnays. The latter are also known as Sashtikars. Bardeshkars, Kudaldeshkars, and Pednekars. In almost every village the accountant is a Shenvi, and in the towns of Vadi, Banda, and Kudal, the number of their houses is comparatively large. Many of them are landowners and government servants, and as a class they are well-to-do. The number of Vaishnav or Sashtikar families is very small. They are chiefly found in the town of Vadi, and in the Vadi villages of Talavda, Hodavda, and Tulsali. They are traders, generally keeping grocers' shops. Bardeshkars, also traders, are a very small class. A house or two are to be found in the Vadi villages of Tulas and Bambarda; in the Banda villages of Ajgaon, Araunda, and Talavda; and in the Kudal villages of Pinguli and Bibavna. Kudaldeshkars are found in the Pat and Haveli villages of Kudal, in the Ajgaon villages of Banda, and in the Mangaon villages of Vadi. Most of them are husbandmen, very few are in Government employ. One family of Pednekars are hereditary headmen in the Banda village of Santarda. Except between Shenvis and Sashtikars, marriage among the different classes is forbidden. Among the Shcnvis and Sashtikars caste disputes are settled by a caste committee, presided over by members of the two old and respectable families of Sabnis and Chitnis. Serious cases are referred to the spiritual heads, svamis, who live in Goa. Kudaldeshkars, Bardeshkars, and Pednekars have caste committees of their own, who decide caste disputes.

Priests, state servants, traders, cultivators, and landholders, the Brahmans are on the whole the most prosperous class in the state. Of their family expenses and style of living the following estimates have been framed. In honour of the birth of a son, Brahmans spend from 2s. to £10 (Re. 1 - Rs. 100) on dinners and charity. These expenses are optional, and are seldom incurred in honour of the birth of a girl. On the occasion of putting on the sacred thread from 10s. to £50 (Rs. 5 - Rs. 500) are spent in clothes, religious ceremonies, charity, and caste feasts. Betrothal and, marriage ceremonies are performed at the same time. The bridegroom's betrothal charges are entirely devoted to charity and religious observances, and rarely exceed £1 (Rs. 10). His marriage expenses range from £20 to £100 (Rs. 200 - Rs. 1000), three-fifths of the whole being spent in ornaments for the bride, and the rest, as the local phrase is, on such fly-away, *udau*, items as

clothes, charity, caste feasts, fireworks, musicians, and dancers. The bride's father, under the name of a gift to the bridegroom, vardakshna, pays the bridegroom's father from £5 to £100 (Rs. 50-Rs. 1000). This dowry is invested in ornaments to be worn by the bride on her marriage day, and except under heavy pressure or family misfortune, the bridegroom's family cannot take them back. Besides this he has to spend more than three-fourths of what he gives as vardakshna, in presenting clothes, cooking vessels, and food to the bridegroom and his relatives, as also in caste dinners, religious ceremonies, and charity. Of late the people have become alive to this draip of capital, and have grown more provident and careful than they used to be. The expenses on the occasion of a girl's reaching womanhood vary from 10s. to £20 (Rs. 5-Rs. 200), one-half going in clothes and ornaments, and the other half in charity and in food and other presents. The only ceremony connected with pregnancy is that in the seventh or eighth month the woman's female friends and relations go to her house, each bringing a present of flowers and sweetmeats. Except a few shillings for the musicians there is no expenditure. Death charges, including religious ceremonies, charity, and gifts of clothes and food to relatives and friends, range from £1 to £50 (Rs. 10 - Rs. 500).

Writers.

Under Winters come Prabhus with a strength of nineteen souls. Descendants of men in British employ when the state came under their management, they are outsiders from Ratnagiri and Thana. Since 1872 all the Prabhus, except one family, have left Savantvadi.

Of Traders there are five classes, Vanis 9600; Lingayats 508, Jains 199, Bogars 70, and Jangams 25, with a strength of 10,402 souls or 5.69 per cent of the Hindu population. Of these the Vanis, settlers from North Kanara about three hundred years ago, are found in the towns of Vadi, Banda and Kudal, and in the villages of Mangaon, Akeri, and Pavas. Of clean and neat habits, they are as a class sober, thrifty, hardworking, and well behaved. Their chief occupation is trade, selling piece goods and groceries. They eat animal food. Most of them are Shaivs, worshipping Shiv, Ram, Ganpati and Vithoba. Widows do not marry and they employ Brahman priests. Caste disputes are settled by a mass meeting of the caste presided over by members of three or four leading families, who refer serious questions to Shankaracharva Svami. They have lately begun to educate their boys but do not seem to be a rising class. The Lingayats, coming from above the Sahyadris some two hundred years ago, are distributed in the towns of Akeri, Salgaon, Valaval, Bambuli, Nerur Kudal, and Mat. Dissenters from the Jain religion, they have now become Shaivs, and some of them are professional idol worshippers in Hindu temples. The Bogars have sixteen houses, four at Vadi, four at Naneli, two at Kudal, and six at Bordava and Varos. Originally from Belgaum and Kolhapur, some of them have, for more than fifty years, been settled in Vadi. They follow the Jain religion, but except that they never eat animal food, they are

not very strict in its observance. They worship such gods as Ganpati, Krishna, Bhavani, Khandoba, Bhairoba, and Jaitoba. They have a priest of their own caste who lives at Kharepatan and occasionally visits Savantvadi. They dress like Marathas and deal in brass and copper vessels, and glass bangles, hawking their wares in towns and villages and yearly fairs and sometimes opening stalls in markets. Caste disputes are referred by them to a deputy of their religious head, *svami*, who lives at Kharepatan in Ratnagiri. Of late, where schools are available, they have begun to teach their boys.

Among traders, the store of clothes generally includes a rich turban worth from £1 to £2 10s. (Rs. 10-Rs. 25), and lasting for five or six years; a loosely folded cotton scarf, rumal, worn on the head, worth about 6s. (Rs. 3); four waistcloths, dhotars, worth from 8s. to £2 (Rs. 4-Rs. 20); three cotton or linen coats, angarkhas, worth about 8s. (Rs. 4); two under-jackets worth about 4s. (Rs. 2); two waistcoats of the value of 2s. (Re. 1); two small waistcloths, panchas, worth 3s. (Rs. 1-8); and several silken waistcloths worn while at meals or prayers, and varying in value from 10s. to £2 (Rs. 5-Rs. 20), according as they are of inferior silk, mugtas, or of pure silk, pitambars. Besides these, for marriage and other special occasions, a very rich trader will have a cotton shoulder-cloth worth from about £1 to £20 (Rs. 10-Rs. 200), and a woollen shawl worth from £5 to £10 (Rs. 50 - Rs. 100), and lasting with care for sixty years. A trader's wife's wardrobe includes two robes, lugdis, worth from £1 12s. to £2 (Rs. 16-Rs.20), four bodices each worth 6s. (Rs. 3), a cotton scarf and woollen shawl worn over the head on marriage and other great occasions, and if she is a Brahman, a silk robe for dining and praying in. The monthly food charges of a well-to-do trader, his wife, and two children, amount to about £2 (Rs. 20). Those in middling circumstances, doing without vegetables, mutton, milk and clarified butter, and using less oil and betelnut and leaves, spend about £1 4s. (Rs. 12); and the poor, living on such coarse grains as nachni and vari, do not spend more than 8s. (Rs. 4). Besides a clerk, karkun, paid from 12s. to 16s. (Rs. 6-Rs. 8) a month, a well-to-do trader has two servants to help him in his business, and one for the shop paid about 6s. (Rs. 3) a month, sometimes in cash and grain, and sometimes in cash only. For household work he keeps a female servant who receives one and a half pounds (1 sher) of rice a day, and once a year a robe, lugda, worth about 6s. (Rs. 3). If he owns cattle, he has a cowherd, rakhan, who, besides food, has a monthly allowance of 1s. to 1s. 6d. (annas 8annas 12), and once a year gets a blanket, kamli, a pair of native shoes, champals, and a waistcloth worth about 6d. (annas 4). A small trader has only one female and one male servant each paid about 6s. (Rs. 3) a month; and a poor trader has no servant at all. They open their shops about seven and stay in them till noon, when they take their midday meal and sleep till two. After two they re-open their shops, and serve in them till eight.

Husbandmen.

Under Husbandmen come three classes with a strength of 127,370 souls or 69.71 per cent of the whole Hindu population. Of these 105,000 were Marathas, 19,750 Bhandaris, and 2620 Devlis. The Marathas, some of whom are soldiers as well as cultivators, are fairly well off. [All Marathas following agriculture are called Kunbis.] The Bhandaris are poor, some of them in service and some employed as toddy drawers. Devlis, the descendants of Bhavins or temple prostitutes, besides cultivating, perform some temple service.

The husbandman's common food is a little boiled rice, cakes of nachni and vari, fish, and some vegetables. The monthly food charges of a family of five persons varies from 12s. to 16s. (Rs. 6-Rs. 8). For burden and field purposes they have bullocks and buffaloes, each of the former worth about £1 10s. (Rs. 15) and of the latter about £2 (Rs. 20). Their keep costs very little, as when not left to graze, they are fed with cut grass only. A large landowner has a servant for field work paid about 2s. (Re. 1) a month, besides his daily food. In busy seasons he hires about ten male and twenty or twenty-five female servants, kameris, each of the men getting his daily food, and at the end of the season $\frac{3}{28}$ of a ton of unhusked rice, and each of the women six pounds of unhusked rice a day. A less prosperous farmer has one permanent servant, and in the busy season two or three extra workmen. A small landholder works with his own hands, and is helped by his wife and sometimes by his neighbour. Among the poorer husbandmen it is a general practice to plough with a joint, varangula, pair of bullocks, that is with one bullock of their own and one of their neighbour's. Rising very early in the morning, and eating some *nachni* bread and gruel, the husbandman goes to his field and works till noon. If his house is far off his wife brings him the midday meal, and if work is not pressing, they rest an hour or two and then work till evening, when they return home to sup and go to bed about nine.

Craftsmen.

Of Craftsmen there are nine classes with a strength of 11,330 souls or 6.20 per cent of the whole Hindu population. Of these 2100 were Mithgavdas, saltmakers; 175 were Koshtis, weavers, found only in the villages of Tulas and Kasal; 1380 Telis, oilmen; 1210 Sonars, goldsmiths; 2100 Kumbhars, potters; 475 Dhavads, blacksmiths; 3760 Sutars, carpenters; 30 Shimpis, tailors; and 100 Chitaris, painters. Rising early in the morning they are soon at work and keep working till noon. After a meal and a two hours' rest they begin again and continue till the evening, when after supper they go early to bed. All except the goldsmith are poor, and most of the saltmakers, oilmen, and weavers, and some carpenters and potters eke out their earnings by field work. Getting little help from their wives and children they carry on their work on the humblest scale with no stock in hand, and making articles only when ordered. The estimated monthly charges of a family of four persons, a man, his wife and two children, are, for a goldsmith, about £1 10s. (Rs. 15); for a carpenter from 16s. to £1 (Rs. 8-Rs. 10); and for a mason from 10s. to 12s. (Rs. 5-Rs. 6). Bards and Actors.

Of Bards and Actors there are two classes with a strength of 220 souls or 0.12 per cent of the whole Hindu population. Of these 170 were Gans and fifty Vaiantris. The Gans are well off. The men play the fiddle, *sarangi*, and the drum, *tabla*, and the women, *kalavants*, act as singing and dancing girls. The Vajantris, belonging to the Ghadsi caste, are inferior both to Gans and Marathas. Coming originally from above the Sahyadris they have about five houses chiefly in the town of Vadi. With idle and unclean habits they are poor and given to liquor drinking. They eat meat, and their ordinary food is rice, curry and fish. They have a caste meeting which decides all disputes. Both at Hindu and Musalman weddings the shrill music of their flutes, *sanais* and *surs*, is indispensable.

Servants.

Of Personal Servants there are three classes with a strength of 3200 souls or 1.75 per cent of the whole Hindu population. Of these 1900 were Nhavis, barbers; 1225 Parits, washermen; and 75 Mashalchis, torch-bearers. They are all poor.

Shepherds.

Of Shepherds there are two classes with a strength of 1940 souls or 1.06 per cent of the whole Hindu population. Of these 1750 were Dhangars, shepherds, who own cattle and goats, and move from place to place; and 190 Gavlis, milkmen, new comers from Kolhapur, who are settled in villages and towns. Both these classes are poor.

Fishers.

Of Fishers and Sailors there are two classes with a total strength of 1125 souls or per 0.61 cent of the whole Hindu population. Of these 850 were Gabits, and 275 were Bhois, palanquin-bearers, some of whom eke out their living by tillage.

Leather Workers.

Of Leather Workers there are two classes with a strength of 1765 souls or per 0.96 cent of the whole Hindu population. Of these 1625 were Chambhars, tanners and leather workers, and 140 were Jingars, saddlors, some of whom prepare finely embroidered leather work.

Depressed Classes.

Of Depressed Classes there are two with a strength of 9854 souls or 5.28 per cent of the whole Hindu population. Of these 104 were Berads and 9750 Mhars.

Berads.

BERADS, found only in the village of Chaukuli in the Sahyadris, have caste-follows scattered over the neighbouring Belgaum villages. According to their own story they are of the same caste and creed as

the Ramoshis; with whom they eat, but do not intermarry. A comparatively well-to-do Berad has a house with three rooms, the back room for cattle, the middle for the women and for dining, and a front room for the use of the men. Except two or three brass and several earthen vessels, worth about 6s. (Rs. 3), they have few household goods. For a man, his wife, and two children the entire wardrobe is worth about 14s. (Rs. 7), of which about 7s. (Rs. 3-8) is the worth of the man's, 5s. (Rs. 2-8) of the woman's, and 2s. (Re. 1) of the children's clothes. All women, both rich and poor, wear a neck ornament, [All women, except widows, wear their lucky thread, mangalsutra, as a pendant to this ornament.] galsari, worth about a shilling (8 annas). Their food, coarse grain with occasionally a fowl and the flesh of sheep, goats, buffaloes, and cows, costs from 8s. to 10s. (Rs. 4 - Rs. 5) a month. Some of them are very badly off, living in a one-roomed hut, eating roots and leaves with grain only occasionally, and with difficulty earning 2s. (Re. 1) a month. They are a guiet harmless people, with the help of their wives growing rice, nachni, and vari, and little inclined to leave their villages in search of work. The assessment of lands held by them at Chaukuli amounts to about £7 10s. (Rs.76).]

They worship their ancestors, but keep no images in their houses. Their favourite god is Ganpati. Like other Hindus they fast on the 11th Kartik Shuddh (November-December) and 11th Aghadh Shuddh (June-July), and feast on the Nag Panchami (July-August), Ganesh Chaturthi (August-September), Dasra (October-November), Divali (October-November), and Holi (March-April). They have no special fasts and festivals. They worship the cobra, nag, holding it sacred and never destroying it. Except two shrines, chavathas, at Chaukuli, the one called *naikovas* and the other *kerkovas*, they have no special places of pilgrimage. They never visit Musalman saints' tombs, and no saints, sadhus, of their tribe are worshipped by other Hindus. They have no priests of their own. The village Brahman, bhat, The bhat never enters, a Berad's house, but eats of the food provided for him at a little distance. On the marriage day he enters the booth, mandva, and performs the ceremonies. At the consecration of a house, though he officiates; he never, sprinkles water, but asks the master of the house to sprinkle it.] performs all religious ceremonies connected with birth, marriage, and death. They have no ceremonies at naming. When a son is born, they wait on the bhat and pay him a copper pice. He asks the father the names of his ancestors, and after consulting a paper tells him what to call his child. There are no ceremonies at betrothal or puberty. As the Berad community in a village is more or less connected by blood, brides are sought in the neighbouring Belgaum villages. The marrying age for girls varies from five to ten, and for boys from ten to twenty. When his first wife is barren, a man may take a second or even a third wife. But if he has children by his first wife, he seldom marries a second wife in the lifetime of the first. There is a caste rule that if a man suspects his wife of unfaithfulness,

he may bring the matter before a caste meeting at Vagotar, and if the caste committee find the woman guilty he may marry another wife. But divorce on the ground of adultery is almost unknown. Widow marriage is allowed, but a widow falls in public esteem by marrying a second time. The Berads never intermarry with any other caste or tribe. The marriage charges in a well-to-do family are, for the bridegroom, a sum of £2 6s. (Rs. 23) to be paid to the bride's father, and about 6s. or 8s. (Rs. 3 - Rs. 4) more for caste feasts. For the bride's father the cost is about £1 (Rs. 10), of which 2s. (Re. 1) go to buy a turban for the bridegroom and the rest is spent in caste feasts. Caste dinners are given on marriage and death occasions, and on the fifth day after the birth of a child. On all occasions the food is mutton and rice, prepared by the women of the host's family and served in earthen vessels and eaten off stitched leaf plates. In marriage feasts the men and boys eat first, and then the women and girls. At their feasts there is no wine, and no singing or dancing. The Berads bury the dead. Nothing is spent on the burial of children and unmarried persons. In the case of an adult, the death charges for grave clothes and a feast to the mourners amount, in a well-to-do family, to about 10s. (Rs. 5). They have an hereditary headman, gavda, the oldest male in a certain family at Chaukuli. He settles all petty caste disputes and transfers the more serious to the caste meeting at Vagotar, where he brings the parties and helps to dispose of the matter. Should the parties be dissatisfied with this award, the village headman is called in and his judgment is final. The person against whom the decision is given is required to pay the caste a fine proportionate to his means. Marriage with a Mhar is punished by expulsion from caste, and a woman of bad character may be excommunicated. The village Brahman, bhat, is never consulted in such matters. The social position of the Berads is said, perhaps because they are now much quieter and better behaved, to have of late considerably improved. They rank themselves under Musalmans, but much above Mhars, never touching or mixing with them. They have no liking either for games of chance or athletic exercises, and except at Dasra (October-November), when they collect outside of the temples to hear old stories, kathas, they care little for listening to tales or music. Partly from bad seasons, but mostly owing to their extravagance on marriage occasions, about twothirds of the Chaukuli Berads are sunk in debt. The advances they require are generally repaid after six months at twenty-five per cent interest.

Mhars.

MHARS, [The Mhar and Nath Gosavi accounts have been compiled from materials supplied by Mr. Hari Bhikhaji Vagle, Head Master Anglo-Vernacular School, Savantvadi.] with a strength of 9750 souls, are of two sub-divisions; Pan Mhars and Bele Mhars, who neither eat together nor intermarry. In every village a separate quarter called Mharvada, generally on the outskirts, is set apart for the Mhars' dwellings. These are small huts, thatched or tiled according to the

owner's means, and divided into one, two or three rooms. Mats, sleeping and sitting boards, a few earthen and brass or copper vessels, a tobacco pipe, a billhook or axe, and if he is a cultivator, a plough and other field tools form the chief part of a Mhar's household gear. A Mhar dresses like a Maratha in a loincloth, waistcloth, and headscarf. The food charges are nearly the same as those of a Berad. As village servants they hold allotments of village lands. Some serve as guides and messengers, some enlist in the native regiments of the British army, and others serve as grooms and day-labourers at from 3d. to 41/2d. (annas 2 - annas 3) a day. The women are skilled in cane and bamboo plaiting, and in making umbrellas from the leaves of the bondgi, Pandanus odoratissimus. As a class they are quiet and hardworking. Marriage and other ceremonies are performed by a priest, guru, of their own caste. Unlike the Berads, Mhars do not worship their ancestors, but have deities in the shape of cocoanuts or betelnuts, called Brahmans and Purvas, whom they worship on every Monday, applying sandalwood powder, burning incense, and offering flowers. In every village, close to the chief temples, there is a Mhar shrine where they worship a stone idol of Talakhba. They sometimes visit the Hindu temples at Pandharpur, but never a Musalman saint's tomb. There is no local Mhar saint, sadhu, who is worshipped by other Hindus. The marrying age, the marriage and death charges, and the caste dinners, except that women and children eat at the same time as men but in a different place, and that men freely indulge in country liquor, are nearly the same as those of the Berads. They do not marry outside of their own caste, and re-marriage and polygamy are allowed only when the first wife is barren or faithless.

They have no recognised headman, but the Mhars of certain villages have for generations been regarded as arbitrators in settling caste and other disputes. Taking food in the house of a saddler *Jingar*, a painter *Chitari*, or a Musalman, and adultery are punished by expulsion from caste. They have no games of chance or skill, and seldom practise any athletic exercises. Their great delight is to listen to the stories recited in temples by their priests, *gurus*, whom they also call *Hardas* or servants of Krishna. Want of care and forethought has sunk most of them deep in debt to the landholders and village accountants, *kulkarnis*. Still, within the last forty years their state has greatly improved. They have tiled cottages instead of thatohed huts, brass and copper vessels instead of earthen pots and cocoanut shells, clothes instead of rags, and good wholesome food instead of scanty pickings.

Beggars.

Of Religious Beggars there are five classes with a strength of 2033 souls or 1.11 per cent of the whole Hindu population. Of these 23 were Bharathi Gosavis; 960 were Nath Gosavis, some of them husbandmen; 100 were Bhats; 800 were Thakurs; and 150 were Votari Gosavis who appear to be new comers, some of whom prepare and deal in stone pots.

NATH GOSAVIS, [Closely allied to the Nath Gosavis, but differing from them in caste and ceremonials, are the Gorakhs, who, are also called Kanphatas or slit-ears from having their ear lobes slit.] NUMbering 960 and probably of Maratha origin [Among their family surnames are Patel, Jadhav, Shirke, Todkar, Lad, and Rajput.], are dark, beardless, and of middle stature, with nothing to mark them from ordinary peasants. They are found in the villages of Kankavli Ashamat and Kamta in Ratnagiri, at Ajra in Ichalkaranji, at Goa, and at Malvan. They seldom own houses. Their brick-coloured, bhaqva, dress consists of a loincloth, a cap, a blanket, and a waistcloth. From their left arm hangs a wallet, and when they go begging, they carry a stick in the right hand and a pale-coloured gourd in the left. The ornaments worn by the men are a silver chain, gop, silver armlets, kadis, and silver or pewter earrings, mudras, the distinguishing mark of their sect. The women's dress is in no way peculiar. A well-to-do woman's ornaments include a gold nose-ring, a necklace of glass and metal beads with a small central gold brooch, galsari, and three sorts of earrings, bugdis, balis, and kaps. They understand ordinary Marathi, but among themselves use a peculiar patois. Worshipping the ordinary Hindu gods, particularly the gold or silver image of Ranubai, and employing Brahman priests, they believe in witchcraft and spirits, tying amulets to their children's arms, and sacrificing fowls to propitiate male demons, devchars. Some of them are settled, but most are wanderers stopping in village temples in the rainy, and camping under trees in the fair, seasons. They generally stay within Savantvadi limits,, but sometimes pass to the neighbouring districts and to Kolhapur. They move in bands or families of from twelve to fourteen men, and sometimes take with them a bull, and one or two goats and dogs. Among those who are settled, some take to fishing, but most make vessels, dagadia, from the stone of the Ramgad quarry, and the women sell very popular glass-bead necklaces', pirdukas. [This necklace is a sign that the wearer is married and unwidowed.]

The child is named on the twelfth day after birth. On the fifth, the goddess. Ranubai is worshipped, rice and fish are offered, and the caste people feasted. The next ceremony is ear-slitting, by which a man publicly assumes his calling, and becomes eligible for marriage. The ceremony is performed by a priest, guru, belonging to the Dorevike Gosavi sect, who fixes a trident, [An emblem of Shiv, as both of these sects are Shaivs.] trishul, in the ground, and after worshipping it and offering it a hen, with a sharp knife pierces the lobes of the young disciple's ears. The blood is allowed to fall on the ground while the disciple repeats the words, 'Shri Gorakh, Shri Gorakh'. A wallet with a pot in it is tied to his left arm, and the priest enjoins him henceforth to live solely by begging. He starts at once on his new calling, collecting from the guests plantains, dates, and cocoanuts. The ceremony ends with a dinner. They marry at a very

early age. On betrothal, the father of the bridegroom invites the bride's father and their friends to a dinner. The intended marriage is declared, sugar and betelnuts are distributed among the guests, and the bride's father is presented with a sum of £4 (Rs. 40), called *dej*. On a lucky day fixed by a priest, the female relations of the bridegroom cany a piece of cotton cloth and turmeric to the bride's house, and rub her all ever with it. Then the women of the bride's family bringing turmeric apply it to the bridegroom. The bridegroom then repairs to the bride's house and the marriage is performed by a priest, the ceremony ending with a feast to the son-in-law. The pair then proceed to the bridegroom's house where a feast is given to the bride's family. Consummation of marriage, *phale-shobhan*, takes place when the girl reaches womanhood.

When a man dies, his body is washed with hot water, and if he has left a widow, a black dentifrice, dantvan, is rubbed on his teeth, and betel leaves and nuts are placed in his mouth. The body is carried to the grave sitting, and in that position is buried. On the third day the corpse-bearers are feasted, and on the eleventh, when the mourning ceases, they are purified by drinking a mixture of the five products, panchgavya, of the cow, urine, milk, butter, whey and dung. On the twelfth two goats are sacrificed, and a small cloth is spread with pieces of bread, plantains, rice, and molasses; bits of boiled flesh are laid at the corners, and in the centre a burning wheat-flour lamp is set with a small water vessel, and on each side a bunch of rui, Calotropis gigantea, flowers. The day ends with a feast. On the morning of the thirteenth the ceremonies are brought to a close, the chief mourner throwing the offerings into water and presenting each of the caste people with a pipe of tobacco. The caste headship is confined to certain families and is hereditary. The heads settle all caste disputes with the aid of the other leading men. At caste gatherings they are first served with the hubble-bubble, gudgudi, and betel leaves and nuts, and at marriages they receive a small sum of money. Of late the Gosavis are said to have greatly improved, giving up their untidy drunken habits and beginning to settle as husbandmen.

Thakurs.

Coming from above the Sahyadris some four hundred years ago, Thakurs number about 800 souls. They are found chiefly in the Kudal villages of Ambadpal and Mudla. Inferior in rank to Marathas they are idle and of unclean habits. Though some of them till and twist woollen threads for blankets, they live chiefly on begging and ballad-singing. At times they perform plays representing events mentioned in the *Purans* and *Ramayan*, and showing wooden puppets moved by strings. They keep dogs and have no scruple in eating animal food. Widow marriage is allowed, and all religious ceremonies are performed by a priest of their own caste. Caste disputes are settled by their own headmen.

Musalmans.

Musalmans, numbering in all 4152 souls or 2.18 per cent of the whole population, have four sub-divisions, Shaikhs, Syeds, Moghals, and Pathans. All of them are Sunnis, and according to their own account are of foreign origin. Most of them are employed in the Savantvadi Local Corps; the rest are traders, husbandmen, grooms, water-carriers, and drum-beaters. As a class they are poor, idle, and improvident.

Christians.

In 1872, the Christians had a strength of 3954 souls. The descendants of natives converted by the Portuguese, most of them are found in the south of the district. They are not settled in separate villages, but scattered about chiefly as masons and palm-juice drawers. The males have a head scarf, a shoulder cloth thrown loosely over the body, and a waistcloth girt round the loins. Except that it is somewhat costlier, their church dress is the same. The women wear robes and bodices, and in church, above their robe, a white cloth with one end drawn over the head. As a class they are poor. They differ from other middle class natives chiefly by eating pork.

Villages

According to the 1872 census, there were 221 towns and villages or about one village to every four square miles, containing an average of 840 inhabitants and about 197 houses. Of the 221 villages, 36 had less than 200 inhabitants; 57 from 200 to 500; 64 from 500 to 1000; 41 from 1000 to 2000; 18 from 2000 to 3000; four from 3000 to 5000; and one, Vadi, over 8000.

Communities

None of the villages are walled; none of them are settlements of aboriginal tribes; and in none of them do all the villagers belong to the same caste. Except at Amboli, where caste and other petty disputes are settled by committees, panchayats, the settlement of village quarrels is in the hands of the village headman. The village establishment includes the village headman, gavkar, the police officer, faujdar, the village accountant, kulkarni, the banker, potdar, and village servants, called *ghadis*, *devlis*, *bhavins*, and *mhars*. The village headman, gavkar, chosen in some villages from the Maratha, in others from the Bhandari, and in a few from the Gaud Brahman, castes, is the [His authority in this respect is called *purva-satta* as opposed to his authority in revenue matters called *raj-satta*. hereditary village headman and revenue collector. He was formerly consulted on every occasion. And though he has of late lost some of his influence, he has still a special position of honour at the celebration of village ceremonies, at fairs, and at such holidays as Holi, Ramnavmi, and Dasra. Generally badly off, he never lends money, nor helps moneylenders in recovering their dues from his villagers, nor acts as a mediator between debtors and creditors. He is not expected to feast the whole village. But on marriage occasions, if his means allow, he sometimes asks most of the villagers and feasts them for one or two days, Brahmans getting uncooked food, and low caste villagers eating by themselves.

The practice of having a village police officer, faujdar, dates from 1835. He generally belongs to the same caste as the headman, and in most cases is chosen from the same family. The accountants, kulkarnis, keep the village papers, and are associated with the headmen in all village revenue matters. Except in the village of Tolas, there is no office of banker, potdar. The servants, ghadis, devlis, bhavins, and mhars, receive from the people an allowance of grain and garden produce. They are required to help the headman and the police officer in gathering the revenue and in other village matters. Among Hindus there are no religious village officers. On minor points the people consult a learned Brahman of their village, and on important points their town priests. The Musalmans consult the Kazi or his deputy. Of craftsmen, carpenters alone have any claim on the villagers. [These claims are known by the same of adav.] Their claim consists of forty-eight pounds (4 kudavs) of grain on each pair of bullocks, and in return for this they make ploughs and other field tools.

No lands are set apart as village pasture grounds. The villagers graze their cattle on their own fields, or on neighbouring hill and waste lands. All villagers are without charge allowed to bring dry faggots and firewood from the village and state hill lands and forests. When the forest lands of two villages join, the landholders of both divide the produce among them. In most villages some of the people are known to be later comers than the rest, but the difference does not seem to have any effect. on their rights and position as villagers. Ponds, temples, and other works of general use are carried out by the villagers' contributions in money and labour. To water their fields all have an equal right to the water of the village pond. But if the pond is kept for drinking, the depressed classes are not allowed to draw water from it.

Movements

Between 1851 and 1861 a large number of husbandmen, chiefly Marathas and Bhandaris, went as labourers to the Mauritius. Most of them returned after saving from £20 to £40 (Rs. 200 - Rs. 400). One of them, a Vani who had learned some French, after about twelve years' service, brought back a fortune of £400 (Rs. 4000). Since 1861, by the rise of local and Bombay wages and by the decline in the demand from the Mauritius, emigration has ceased. Though the people are poor, it is estimated that not more than three in a thousand leave Savantvadi in search of work. Some of these, belonging to the upper classes, go to Bombay and other large towns in the hope of finding employment as clerks in Government and mercantile offices. They generally leave their families behind, and if they succeed in finding employment, return after a time and take them away. A second body,

chiefly Marathas and Mhars, getting service in the native army and in the police, generally take their families with them. They visit their native villages from time to time, and generally settle there when they have earned a pension. The third class are labourers, who in October, after the harvest is over, move to Bombay or other labour markets, and working there as carriers during the fair season, go back to their villages in the beginning of June before the rains set in. Within the limits of the state there is a certain amount of movement among the cultivating and labouring classes, whoso time is divided between the growth of the coarser grains in hill lands and of rice near the coast. As there is little waste land, and nothing either in the trade or the industries of the state to attract capital or labour, there is no immigration.



Maharashtra State Gazetteers

AGRICULTURE

Soil

AGRICULTURE supports about 127,370 souls, or sixty-nine per cent of the whole population.

The soil is chiefly a light sand full of stones and gravel and unable to yield the better class of crops.

Arable Area

Until the revenue survey is finished the area of land under tillage cannot be exactly known. It may (1878) be put down approximately at 355,000 acres. Near the village of Araunda is a tract of reclaimable land, but to fit it for cultivation would cost more than the probable return appears to warrant. Poor uplands and hill slopes, known as *varkas*, are allowed to lie fallow from three to ten years. Two or three crops are then grown, and for a term of years the land is again left fallow.

Irrigation

During the rains rice lands are watered by mountain streams, and in the dry season, fields are watered by lifts from brooks, wells and ponds. The water from the brooks is carried through fields and gardens by narrow water-courses. The water of the wells and ponds is drawn by a lever lift, *lat*, worked by a single man, the bucket emptying into a channel at the mouth of the well.

Tillage

The average plough of land varies from three to four acres. The steps taken to prepare the ground for sowing the wet weather, sharad, crop vary greatly in different soils. Moist, shel, lands are broken up with the plough as early as December, and between December and April when sowing begins, are re-ploughed nine or ten times. In the drier lands the ploughing does not begin till April or May. The soil is then harrowed, manured by burning tree branches, and again harrowed.

Holdings

For a peasant, land paying from £15 to £20 (Rs. 150 - Rs. 200) a year is considered a large holding; from £2 10s to £5 (Rs. 25 -Rs. 50) a middle sized holding; and from 6d. to £2 10s. (annas 4 -Rs. 25) a small holding. A man with four acres of rice land and one acre of hill land, bharas, yielding three tons (7 bharas) of produce valued at £11 4s. (Rs. 112), is better off than a man drawing 16s. (Rs. 8) a month. A pair of oxen can till from two to three acres of land yielding about 1 5/7 tons (4 bharas) of grain worth about £6 8s. (Rs. 64).

Stock

The husbandman's live stock generally includes bullocks valued at from £1 10s. to £4 (Rs. 15 - Rs. 40); buffaloes worth from £1 to £5

(Rs. 10 - Rs. 50); cows worth from £1 to £3 (Rs. 10 - Rs. 30); and goats worth from 1s. to 4s. (annas 8 - Rs. 2). The field tools are the plough, axe, spade, billhook, crowhar, and harrow. The amount of capital represented by the tools and cattle is about £5 (Rs. 50).

Crops

There are two seasons for sowing, and the crops are distinguished as the dry weather, gimvas or vaingan, and the wet weather, pavsali. The dry weather crops are sown in November and December, and harvested in March and April. These crops are grown only on marshy land watered from rivers. They are rice, bhat, Oryza sativa; nachni, Eleusine corocana; Kulith, Dolichos uniflorus; udid, Phaseolus mungo; mug, Phaseolus radiatus; chavli, Dolichos sinensis; pavta, Dolichos lablab; and tar, Cajanus indicus. The wet weather crops, sown in June and July, are reaped in September, October, and November. They are rice, vari Panicum miliare, nachni, udid, sava, harik, kulith, mug, and tur. The staple grain crop, representing about one-half of the whole tillage area, is rice. The remaining fifty per cent is divided among fourteen different kinds of produce. The chief of the commoner grains, and the proportion they bear to the entire tillage, are nachni or nagli, Eleusine corocana, 12.50 per cent; harik, Paspalum frumenfaceum, 9.37 per cent; kulith, Dolichos uniflorus, 6.20 per cent; vari, Panicum miliare, 6.25 per cent; udid, Phaseolus mungo, 3.13 per cent; mug, Phaseolus radiatus, 3.13 per cent; sava, Panicum miliaceum, 3.13 per cent; other crops, as til Sesamum indicum, chavli Dolichos sinerisis, kang Panicum italicum, rala Panicum, pilosum, tur Cajanus indicus, us Saccharum offcinarum, pavta, coffee bund, pepper miri, and hemp, 8 per cent.

Rice.

Rice, Oryza sativa, holds the first place with about fifty per cent of the whole tillage area. For the wet weather crop, in June, after a few showers, the field, if in high moist soil, is sown with rice and ploughed. The plants shoot up after a few heavy falls of rain. They are then allowed to grow for a month, and when the soil has become soft, they are pulled up in bunches and planted eight or ten inches apart, in land previously ploughed and cleared of grass. In some villages the seed is sown in nurseries, and when ready to set out, the young plants are in due time carried two or three miles. The field is afterwards weeded from time to time, till, in October or November, the crop is ready for cutting. After being cut it is spread out to dry. [The names of rice in the various stages of its growth are, (1) bi, seed; (2) rov, the early green shoots; (3) tarva, when ready for transplanting; (4) posavle, when seed pods begin to form; (5) dudhgile, when the seed has a milky consistency; and (6) bhat, when it is ready to be gathered in.] It is then tied in sheaves, after a month thrashed by beating the sheaves against a well cleaned threshing floor, and finally winnowed. If the soil can bear a second crop, it is again prepared in November, and the same course of labour is gone through. The soil does not require a

second manuring nor are the clods of earth broken after ploughing. One crop in the best, *shel*, rice lands, which are never used for a second crop, yields from 6/7 tons to 1 1/14 tons (8 -10 *khandis*) the acre; and the second sort from ⁹/14ths to ³/4 of a ton (6-7 *khandis*). Rice [Of thirty varieties of rice, seven are of the better and twenty-three of the poorer sort. The seven better sorts of rice are, *kothambire*, *khirsal*, *gajvel*, *tavsal*, *patni*, *vatsal*, and *sal*; the twenty-three inferior are, *avchite*, *kalinavan*, *kalabela*, *kalikudaya*, *kedal*, *khochri*, *chimsal*, *taykala*, *damga*, *dongre*, *tambikudaya*, *navan*, *bilaval*, *bela*, *mudge*, *varangal*, *vaksal*, *valya*, *shirai*, *semane*, *sukal*, *sorti*, and *sonphal*.] is of two kinds, coarse *ukde*, and fine *surai*. Before separating the seed from the husk, coarse rice is first boiled a little and then dried, a process which fine rice does not require.

Nachni.

Nachni, [There are eight varieties of nachni; kere, kharemuthle, dongre, dudhmogre, pavnephutane, mutle, lhovi, and shendre.] Eleusine corocana, holding the second place with 12.50 per cent of the tillage area, is sown on the hill slopes. The husbandmen visit the hill lands in April and cut down the trees to be Used as manure. They then go home, and returning in May burn the cut branches and trees, and while the ashes are still warm, sow the seed. They are back again in June to cut off the shoots that have sprouted from the roots of the trees that were cut down, and then going home again return in July to weed. In September another visit is paid to lop off any fresh shoots that may have sprouted from the stumps. Then, after the rice harvest is over, they come back to the hill lands in November and house their crop. [The cultivation of *nachni* during the rainy season on the Sahyadri slopes is called hill breaking, dongar todna. Nachni is also grown on the plains in the fair season. This kind of tillage, known as bhava, yields so small a surplus that it is very seldom resorted to.] With all this trouble the hill harvest does not yield each man more than 3/28 of a ton (one khandi) worth about 8s. (Rs. 4).

Coffee.

In 1878-79 there were about 30,000 coffee plants in the Tamboli estate four miles south-east of Vadi. [This estate was, in 1867, bought by the Savantvadi state from the widow of Mr. Spencer, Assistant Surgeon.] About half of them were raised from seed brought from Curg. Siberian coffee seed was tried but without success. The site of the garden is not high enough, and the rainfall not well enough distributed for the successful growth of coffee. The cost has been a good deal more than the proceeds. In 1878-79, the expenditure was £274 (Rs. 2740) and the returns £133 (Rs. 1330). In 1879, an experiment in coffee tillage was made on the spurs of the Sahyadris. The ground is well suited for coffee. But the want of rain, in all but a few months in the year, forms a great, if not an unsurmountable, bar to its successful growth.

Hemp.

Manilla hemp grows abundantly in the Sahyadris during the rainy season. More than 4000 plants were introduced into the Tamboli estate. In 1876 a newly invented fibre-cleaning machine brought from New Zealand, was successfully worked on the aloe leaf, but was believed to have injured the health of the men who worked it. An attempt to use it in extracting Manilla hemp fibre failed.

Bad Seasons

1791-1879.

The only two years of scarcity of which record remains were 1791 and 1821. In 1791-92, a drought, coming on the top of the plunder of the country by the Kolhapur chief, caused such scarcity that rice was sold at from three to $7\frac{1}{2}$ pounds for 2s. $3\frac{1}{2}d$. (two to five shers the pirkhatni rupee), [87 pirkhani rupees being equal to £10 (Rs. 100) of British currency, and the sher being 60 tolas or $1^{1}/3$ English pounds.] nachni at twelve pounds, and jvari and udid at $13\frac{1}{2}$ pounds. To relieve the distress, the Vadi chief waylaid rice ships and doled out their cargoes.

1821-22.

In 1821-22, a sudden and unusual fall of rain destroyed the grain, and a storm that accompanied it ruined the garden crops. Rice rose to seven pounds the rupee. The chief opened the state granary, *kothi*, and distributed supplies.

The state is liable to floods caused by the rapid filling and overflowing of its mountain streams. The damage done is never on any very large scale. Within the present generation there have been no serious droughts. During the last twenty-five years, with an average yearly rainfall of 130 to 135 inches, the nearest approach to a drought was in 1864, when the rainfall amounted to only 96 inches. In 1875 and 1876, the state suffered from a scarcity of hill and garden produce, caused not by a deficiency in the rainfall, but by its abruptly ceasing in September instead of going on till October. In 1876, in a portion of the Banda sub-division, there was a failure of the hot weather, vaingan, crops. But in no instance was the failure so great as to call for remissions, though in some places the dates for levying the revenue instalments were postponed. In 1877-78, the delay of the break of the rains till the middle of July caused a short rice harvest, and the scarcity of grain was increased by exports to the Deccan and Southern Maratha districts, and by the arrival of immigrants from the famine-stricken parts of the country. Locusts are very seldom heard of in Savantvadi. Some swarms appeared but did no harm in 1865, and in 1879, in eighteen villages close to the Sahyadris, they destroyed crops Worth about £600 (Rs. 6000).

Cultivators

The chief cultivating classes are, Gaud Brahmans with a total strength roughly estimated at 2000 souls, Marathas with a strength of

about 53,000, Bhandaris with 10,000, native Christians with 1000, Musalmans with 2000, and other castes with 3000. Marathas are found all over the district; Gaud Brahmans chiefly in Pat, Valaval, Tendoli, Nerur, Pinguli, Jharap, and Salgaon; Bhandaris in the Santarda and Ajgaon sub-divisions of Banda and in Talavda of Vadi; native Christians in Majgaon, Insuli, Charatha, and other Banda villages; Musalmans in Jharap, Mangaon, Naneli, Kolgaon, Banda, and Kudal; and other castes, such as Vanis, Sutars, Sonars, Devlis, Nhavis, Gosavis, and Mhars, over almost all the state. Gaud Brahmans and others of the better class of cultivators generally live in onestoried mud houses, with tiled roofs and five or six rooms, in orchards of cocoa, jack, and mango trees. The houses of the poorer peasants, with only two or three rooms, are thatched with dry grass and palm leaves plaited or plain. Gaud Brahmans and a very few others have metal pots, the rest have only clay pots; and these with their stock of field tools, a pipe, a bamboo mat, and a cot or two form the whole household gear. The farm stock is generally one or two pairs of bullocks or buffaloes, one or two cows, and sometimes half a dozen goats. Except a few of the richest none of the husbandmen store grain. As a class the husbandmen are mild, orderly, and sober, and except a few of the richest, are thrifty even in wedding expenses. They manure their fields by burning grass, stubble and branches, but except a few who have gardens, they are not skilled cultivators. Their chief tools are a plough, a rake, data, and a clod crusher and furrow filler, guta. The holdings are much sub-divided, and nearly two-thirds of the husbandmen are tenants or field labourers. The well-to-do employ hired labour at sowing, transplanting and harvest time, and the poor landholders get their fields ploughed by lending their bullocks to each other. [So common is the practice, that there is a special local name varangula for a pair of bullocks one of which in borrowed.] Fowlrearing goes on to a limited extent. But except by labour the husbandmen add little to their profits as farmers. Though not hopelessly involved, all are in debt and generally require grain advances both for sowing and for food. The cause of indebtedness is not so much extravagance as heavy rents and poor crops. In small transactions the yearly rate of interest varies from eighteen to thirtysix per cent a year. Though there is no marked change in the husbandmen's state within the last twenty years, grain prices and wages have risen and the value of land has increased. Land is a favourite investment among all men of means. Of late, much has changed hands at rates that do not yield the buyers a yearly profit of more than three or four per cent. [Contributed by Mr. Sakharam Baji Bavdekar.]

CAPITAL

IN towns, landholders, state servants and a few Vanis, and in the rural parts, the village headmen, village accountants, and some of the larger landholders save money.

Investments

Among those who save, the cost of living may be roughly put down at about thirty per cent of their income. Of the remaining seventy per cent, about twenty-five may go in buying ornaments, twenty-five in money-lending, and fifty in buying land. Except in the through grain traffic from the Southern Maratha districts to Bombay, people do not invest their savings in trade. They never buy shares in joint-stock companies, nor do they invest their capital in savings banks or in Government securities. When they cannot profitably invest it in land they lend their money at interest. Except that among townsmen, money-lending, and among countrymen, land, is the favourite investment, there is little difference in their way of disposing of savings.

Money Lenders

Almost the whole money-lending business is in the hands of three classes, well-to-do Vanis, cultivators, and land proprietors, vatandars. As a rule cultivators borrow from one man only. Where they are indebted to more than one, they generally settle with each creditor independently. In cases decided by a civil court, preference is given to the creditor who first applies for the execution of a decree. The judgment-creditor generally waits the utmost time allowed by the court before putting a decree into execution. He does this hoping that the debtor will come to terms, and by settling the debt privately save him the cost of executing the decree. Meanwhile he induces his debtor to mortgage his cattle, house or land. Except under the authority of a civil court, a creditor has no right to take possession of a debtor's crops or of any of his property. A debtor's land may be sold, but his dwelling house, one pair of bullocks, and some field tools and cooking vessels must be left untouched. A judgment-debtor's property is sometimes bought in by his friends, sometimes by the judgmentcreditor, and sometimes by an outsider. A fair price is generally paid. No one is liable to imprisonment for debt.

A *patel*, or rich cultivator, seldom lends money to poor villagers; when he does, if the borrower has no credit, the lender generally takes a house or field in mortgage. Grain for seed and food is largely

advanced to the poorer husbandmen. Payment, is generally made in kind and sometimes in money. In *khoti* villages, the *khots, who* as a class are badly off, do not lend money to any great extent. Craftsmen, though well able to hold their own with the money-lender, are as a role unthrifty, given to drink, and sunk in debt.

Interest

In money loans interest is generally charged for the calendar, and in land mortgages and grain loans, for the Arabic or revenue year, [The samvat year, beginning from 1st Kartik, November, is not used.] beginning from the mrig (5th June) when the first burst of the rains is due. When grain is lent, interest is nominally charged for six months, but at so high a rate as really to be equal to twelve months' interest. The usual rates are, in small transactions of less than £5 (Rs. 50), from eighteen to thirty-six per cent a year; above £5 (Rs. 50) and under £100 (Rs. 1000), with a mortgage on movable property, twelve per cent, and on immovable property from five to nine per cent; and in petty agricultural transactions on personal security twenty-five per cent.

Currency

Up to 1839, the *pirkhani* rupee first struck by the Bijapur minister Pir Khan, and valued at about 2s. $3\frac{1}{2}d$. (Rs. 1-2-4), was the standard coin. Since 1839 it has been replaced by the Imperial rupee.

Exchange Bills

As there is little local and almost no foreign trade, exchange bills, *kundis*, are very seldom used. A money order office opened since 1807,issued in 1878, 533 orders of the value of £2200 (Rs. 22,000). The business of, this office was in the beginning of 1880 made over to the post department.

Land Transfers

Of late years, except in a few cases where it has been sold in satisfaction of civil court decrees, land has not to any great extent been thrown up. Husbandmen are very seldom unable to pay the government demand. In former unsettled times the husbandmen gave up their lands, and they lapsed to the head of the village who was responsible for the payment to government of the whole village rental. Originally the headman had full power to sell or otherwise dispose of such deserted, *gatkul*, lands. But since 1853, though he can till,

sublet, or mortgage them, he is not allowed to alienate them by sale. Lands are now seldom thrown up. A man in money difficulties makes over his land for a time to some well-to-do friend, who engaging to take his place as landlord, pays the government demand. Where the original holder is unable or unwilling to recover it, a civil court decree is obtained, and the land permanently changes hands. Land is seldom sold to outsiders. But of late a large area has passed from peasant-holders to village money-lenders, the former holders continuing to till the land as tenants.

There has also been a considerable increase in the amount of land mortgaged. When land is mortgaged, the owner, if, as is almost always the case, he is a cultivator, often becomes the mortgagee's tenant, and pays him rent, the mortgagee being responsible for the government assessment. The mortgagee has no other power over the land. He cannot interfere in any way with the cultivation or the crops. After satisfying the mortgagee, the tenant has the right to dispose of the crops in any way he pleases.

Labour Mortgage

The practice of mortgaging labour for a term of years prevails both among cultivators and labourers, but chiefly among labourers. It is commoner in small outlying villages than in large towns. Labour contracts are generally for terms varying from one to three years. The mortgagor's services are generally pledged to rich cultivators and sometimes to merchants. The money is paid in advance, the labourer, besides food and some scanty clothing, working off the amount at from 18s. to £1 4s. (Rs. 9-Rs. 12) a year. While fulfilling his engagement the mortgagor is absolutely the mortgagee's servant, and is not allowed to work for his own benefit. In return the master is bound to feed and house him. He cannot whip or otherwise punish him, or make over his right to a third person. The master has no claim on the mortgagor's wife and children, or on children born during the father's term of service.

Besides servants who have pledged their labour for a term of years, there is, chiefly in large landholding families, a distinct class of hereditary bondsmen, bandas, the children of the proprietor's handmaids or kept women. These bandas, though the morals of the women are by no means strict, are generally married to people of their own class. When a bondswoman marries a man who is a servant in another family, she leaves her old master, and she and her children become her husband's master's dependents. There is no law against a bondsman leaving his master's house, nor if he does leave, is there any law helping his master to recover him. But as they lead easy lives, are well fed, trusted, and treated with kindness, bondsmen seldom leave so long as their masters can keep them. When a proprietor's family divides, the bondsmen are distributed among the different

members, so that bondsmen and masters have in many cases been connected for generations.

Labourers

There is no large class of landless or day labourers. Almost every one not an artisan or a trader is to some extent a husbandman. The few labourers who work in the field are paid in kind. During the last two generations there is said to have been little change in the labourers' state. The bulk of the poorer classes earn enough to support themselves by tillage. Even in the slack time the poorest will not, except under pressure, come as day labourers on roads, buildings, and other public works. Cultivators' and landholders' women and children are largely employed in fields without wages. When at work for a stranger, they are paid daily from three to $4\frac{1}{2}$ pounds (2 shers-3 shers) of rice.

Wages

The daily money wage of an unskilled labourer varies from 3¾d. to 4½d. (annas' 2½ - annas 3), a woman's wage is 3d. (2 annas), and a boy's from 1½d. to 2¼d. (annas 1 - as. 1½). Field labourers are paid in kind, the average daily wage of, a man being six pounds (4 shers) of husked rice, of a woman 4½ pounds (3 shers), and of a boy three pounds (2 shers). A day labourer, who thirty years ago (1850) used to get 3d. (2 annas) in Vadi and Kudal, and 2¼d. (1½ annas) a day in Banda, now gets 4½d. (3 annas) and 3¾d. (2½ annas). The daily wage of a bricklayer has during the same time risen in Vadi and Banda from 6d. to 9d. (annas 4 - annas 6), and in Kudal from 9d. to 1s. 6d. (annas 6-annas 12). A carpenter's daily wage has also during the same time increased in Vadi and Banda from 6d. to 9d. (annas 4 - annas 6), and in Kudal from 7½d. to 1s. (annas 5-annas 8). There are no smiths; carpenters always do smiths work as well as their own.

Prices

In 1888-39, fine rice, *surai*, of the common sort was sold at thirty-six, coarse rice, *akde*, at thirty-nine, and wheat at forty-five pounds for 2s. (Re. 1). Twelve years later (1850), the price of fine rice had fallen to $43^1/8$ pounds, and that of coarse rice, *ukde*, and wheat to fifty-one. In 1860, the price of fine rice had risen to $24^3/4$, of coarse rice to thirty-three, and of wheat to thirty-six pounds. In 1870 prices were still higher, fine rice selling at $18^3/4$, and coarse rice at twenty-four pounds. For several years after 1870 prices continued to fall, till, in 1874, they were almost as low as in 1838. Since then, chiefly on account of the famine in 1876 and 1877, prices have again risen, and

in 1878, fine rice stood at sixteen and coarse rice at twenty-one pounds.

The following statement gives the chief available price details:

Savantvadi Grain Prices, 1862-1879.

DDODUCE	POUNDS FOR TWO SHILLINGS.								
PRODUCE.	1862.	1863.	1864.	1865.	1866.	1867.	1868.	1869.	1870.
Rice (unhusked)	26%	21	15 ¾	15¾	16	19%	23%	18¾	19 1/8
Eleusine corocana, nachni	60	40½	30 ¾	30	341/2	42	57	46 1/8	48
Dollohoa uniflorus, <i>kulith</i>	42	33¾	21	21¾	33¾	39¾	42	40½	43½
Phaseolus mungo, <i>udid</i>	34%	28½	201/4	201/4	24	33	36	30	32¼
Cajanus	24¾	15½	12	11 %	111/4	16 1/8	21%	18 %	161/8
indicus, <i>tur</i> Wheat	30¾	21	123/4	131/8	137/8	18¾	29 %	25 1/3	161/8
Peas	29	21	14 1/4	175⁄s	13%	19½	243/8	21	15¾

POUNDS FOR TWO SHILLINGS. PRODUCE. 1871. 1872. 1873. 1874. 1875. 1876. 1877. 1878. 1879. 25 Rice (unhusked 21 15 161/2 25½ 251/2 161/2 15 15 1/3 Eleusine 51 48 42 60 63 57 281/2 36 39 corocana, nachni Dolichos 371/2 221/2 281/2 51¾ 48 33 45 24 461/2 uniflorus, kulith Phaseolus 36 36 33 31½ 341/2 36 221/2 27 221/2 mungo, *udid* Cajanua 17 % 221/2 24 27 36 39 27 25½ 251/2 indicus, tur Wheat 16% 161/2 161/2 151/4 161/2 161/2 131/2 191/2 161/2 15 Peas 201/4 15 15 15½ 15 13½ 18 18

Weights

In [Contributed by Mr. Vinayak Vithal Sabnis.] weighing gold and silver the unit of measure is a tola or 2/5ths of an ounce. The weights are either round, flat or square [There are other weights in use, made of zinc in Goa, called 'mark' from the Portuguese 'marco,' meaning a weight of sixteen ounces or forty tolas of gold or silver. A set of seven weights fitting in each other, the mark is in the form of a tumbler, and varies in circumference from one inch to four inches and in height from 1¼ to 2 inches.] pieces of copper, brass, and zinc, or silver rupee pieces with 1/120 of an ounce (2 gunjs) added to each rupee. The table of measures is four udids, one gunj; eight gunjst one masa; twelve masas, one tola; twenty-four tolas, one sher; and forty tolas, one rat or pound. For copper, brass, zinc, and iron, flat round weights are used made of stone for quantities of less than four shers, [European iron weights of half an ounce, one ounce, two and four ounces, half a pound, one pound, and two pounds, have lately been introduced.] and for larger quantities, of iron. For these metals the table of measures is; eight *qunjs*, one *masa*; twelve *masas*, one *tola*; seventy tolas, one sher; and sixteen shers, one man. Instead of the usual sher of thirty two tolas, the unit of measure is, for cotton, a bandari of twenty-eight, and for tobacco, a patgavi of twenty-four tolas. For coffee, drugs, spices, molasses, and sugar, six or eight cornered iron weights are used. They are weighed according to the following table: four tolas, [Forty tolas are equal to one pound.] one navtak; two navtaks, one pavsher; two pavshers, one ardhsher; two and shers, one sher; five shers, one pasri; two pasris, one dhada; and four dhadas, one man.

Measures

Grain and salt are sold by wooden capacity measures, of a round lumbler-like form, varying from six inches to two feet in circumference and in height from three inches to one foot. They are measured according to the following tabled three three-fourth tolas, one chivtak; two chivtaks, one navtak; two navtaks, one pavsher; two pavshers, one ardhsher; two ardhshers, one sher; four shers, one payli; two paylis, one kudav; twenty kudavs, one khandi; and four khandis, one bhara. Oil is sold by copper capacity measures in tumbler or jar form according to the following table: thirty-two tolas, one sher; five shers, one pasri; two pasris, one dhada; two dhadas, one ardhman; and two ardhmans, one man. Clarified butter, lup, is in the market sold by weight, but at private sales, by capacity, measures, the sher being twice that used in measuring oil. Milk is sold by capacity measure, the sher being two and a half times that used for oil. Sometimes in quart and pint bottles, and sometimes in tumbler or pitcher-like copper or earthen measures, liquor is sold according to the following table: thirty

tolas, one sher, and sixty shers, one man. The length measure in use is an iron, brass, or wooden yard marked with inches. Cotton, silk, and woollen goods are Sold, as a rule, by length and by number. For masonry, timber and earthwork, the unit of measure is a foot and sometimes a cubit, and for land the unit is a bamboo rod, kathi, of about 8¾ feet. The table is: twenty kathis, one pand, and twenty pands, one bigha. For road metal a wooden box, phara, of 2½ cubic feet is used. The table for measuring time is sixty pals, [2½ pals make one. minute.] one ghatka; seven and a half ghatkas, one prahar; eight prahars, one day, divas; seven and a half days, one week, athvada; two athvadas, one fortnight, paksh; two pakshas, one month, mahina; six mahinas, one ayan; and two ayans, one year, varsh.



Maharashtra State Gazetteers

TRADE

Roads

Two main lines of road from Vengurla to Belgaum, one in the centre the other in the south of the district, pass through Savantvadi. Of these the southern or Ram pass road, running south-east and crossing Banda and Bhedshi, is forty-eight miles from Vengurla to the top of the Sahyadris. This road, with a general breadth of thirty feet, was finished in 1821. In 1826 it was the great highway to the upper country from Goa in the south-west, and from Vadi, Vengurla and Malvan in the west. The approach to the pass above and below was a made road, and the ascent was fit for every kind of wheeled carriage. The tract of country below was wild, hilly, and covered with large trees, clumps of bamboos and thick underwood with partial cutivation in the valleys. [Clune's Itinerary, 149.] Until, in 1869, the new road by Amboli was made, this was the main trade line from Vengurla to the Deccan. Steep and crossed by several streams, unbridged and unfordable during the rainy season, this road is very difficult. The portion that lies in Vadi is kept in order by the state at an average yearly cost of £250 (Rs. 2500). Except in the very steep ascent of the Sahyadris, which is difficult to keep in repair, the whole length of the road is in fair order. It is now little used except by traders from Goa and by pack-bullock Vanjaris carrying grain between the sea coast and the Deccan. The other main pass across the Sahyadris is known as Amboli, from a village at the top, or as Parpoli, from a village at the bottom. At the time of the British conquest (1821) several zigzags made the passage very difficult for heavy ordnance. It was shortly after made passable for small guns, and in 1826, though stony was in no part very steep. It was used by merchants passing from Goa to the Deccan. [Clune's Itinerary, 149.] It is now crossed by a first class cart road that was thrown open to traffic on the 1st of November 1869. Passing about two miles north of Vadi, through the villages of Akeri and Danoli, it crosses the Sahyadri range by an easy rise leading to Amboli at the crest of the pass, and thence to Kanur and Belgaum. Of its total length of seventy-eight miles the thirty-six in Vadi are bridged, and except half a mile where laterite is used, are metalled with trap. This road, built by the British Government at a cost of £139,975 (Rs. 13,99,750), is kept in good order at a yearly cost of £220 (Rs. 2200). So great were the advantages of this road that cart hire between Vengurla and Belgaum tell from £1 108. to 10s. (Rs. 15-Rs. 5).] Four toll-houses along the line of road yielded in 1878 a revenue of £1198 (Rs. 11,980). In the twelve miles from Akeri to Danoli at the foot of the pass, there are five iron girder bridges built of blackstone and limestone, having from one to four spans each of from thirty to sixty feet. The pass, ten miles long with a gradient of one in twenty-eight, rises at the crest to a height of 1900 feet. The roadway

from top to bottom is protected by parapet walls, mounds of earth, and an earth-backed laterite wall. Breast-walls have been put in wherever there were any signs of slipping. Of the five minor hill routes the Talkat and Mangeli are little used, and the Ghotga, Rangna or Prasiddhgad, and Hanmant have lately been improved and have a considerable pack-bullock traffic.

Besides the above, two short lines each of about 2½ miles, bridged and metalled throughout, form junctions between the town of Vadi and the main Vengurla and Amboli trunk road. They were built and repaired by the Vadi state.

In addition to the above, a number of unmetalled roads form lines of communication with towns and villages within and without the Vadi state. Of these the chief are: (1) An excellent cart road about eight miles from Vadi to Banda, bridged except in two places where broad shallow streams are crossed by paved ways. Until these are bridged this road is during the rains unpassable for carts. (2) A cart road from Vadi to Kudal, a fair road in the dry season but difficult in the rains. From Kudal this road leads thirty-three miles to the Phonda pass by which the Sahyadri range is crossed by Kolhapur into the Deccan, and in fair weather a considerable grain and cotton traffic passes along it from Kolhapur to Vengurla. About half a mile from KudaJ on the Vadi side, a branon, passing through the villages of Varavda and Mat, joins the Vengurla and Amboli trunk line, and by it reaches Vengurla, a distance of fourteen miles. The increase of traffic over the Phonda pass has made a toll at Kasal necessary. Another branch of this road, except in the monsoon practicable for carts, breaking off about three miles from Kudal, leads to Malvan. (3) A road from Vadi about nine miles to Tamboli, though not bridged, is an excellent fair weather cart tract. Near Otavna about six miles from Vadi, it is crossed by the Terekhol. Besides these, many other roads connecting nearly all the principal towns and repaired every year by the state at an average cost of £400 (Rs. 4000), are all in fair weather more or less practicable for carts. In 1878, at a cost of £150 (Rs. 1500), thirteen and a half miles of road were made between Amboli and the Ram pass. If is of much use for forest purposes and has increased the traffic down the Parpoli road to Vengurla. In 1879 a new line of 9½ miles was opened between Danoli at the foot of the Amboli pass and Banda. This will be an important line of traffic when the new Goa canal between Thi and Kolval is finished. This canal now being made by the Portuguese government will bring water communication within ten miles of Banda and shorten the journey between the Amboli pass and Panjim in Goa.]

Tolls

The cost of public works including roads is met partly from the state revenues and partly from the proceeds of tolls and local funds. There are tolls at Kasal and Ajgeon, and on the Amboli, Ram, and some of the old passes. The Amboli pass toil yielded, in 1878, £1198 (Rs. 11,980), and the tolls on some of the old passes £202 (Rs. 2020), the charges on account of these tolls being £130 (Rs. 1300) and £369 (Rs. 3593) respectively. [During the ten years ending 1873 the average yearly sums of £645 (Rs. 5450) and £473 (Rs. 4370) were realised from the Amboli and Ram Ghat tolls.]

Bridges

On the portion of the Vengurla and Belgaum trunk road within Savantvadi limits are five iron bridges. Three of these bridges are of considerable size, one of four sixty-feet spans, over the Terekhol river at Danoli; one of three spans, of the same size, over the Kajarkand river near where the trunk road meets the branch line leading to Savantvadi; and one of two spans, each of thirty feet, over the Phugichaval near the village of Nandkhol There are also some small masonry bridges on the roads from Savantvadi and Vengurla to the Phonda pass, and two very old masonry bridges, built during Muhammadan rule, over small streams at Banda close to the Goa frontier.

Rest Houses

There are six rest-houses, *dharamshalas*, one at the foot of the Parpoli pass, built in 1871 at a cost of £120 (Rs. 1200); one at Banda, built in 1872 at a cost of £103 (Rs.1030); one at Akeri, built in 1874; one at Dukanvadi, built in 1877 at a cost of £50 (Rs. 500); one at Vadi; and a sixth at Amboli, built in 1880. Besides these there are travellers' bungalows at Banda, Bhedshi, Amboli, Ram pass, Akeri, and Danoli.

Boats

In the sea coast villages of Arunda, Kalna, and Chendvan are small native craft used chiefly for fishing at the mouths of the rivers, and for carrying passengers and such goods as rice and cocoanuts. Varying in size from 3/7ths to 1 3/7ths of a ton, carrying from four to twenty passengers, and costing from £1 to £20 (Rs. 10-Rs. 200), some are fishing boats, machhvas, with a lateen sail, and others are rowing boats, donis and hodis, the hodi dug out of a mango tree and the donis built of planks by village carpenters. Except ropes, which are brought from Bombay, the sails, masts, and other parts of the boats' gear are locally manufactured.

Post Offices

Under the supervision of the inspector of post offices Konkan division, there are seven post offices at Vadi, Banda, Kudal, Amboli, Akeri, Nerur, and Kasal. Of these, those at Vadi and Kudal are head offices; that at Banda a sub-post office; and those at Amboli, Akeri, Nerur, and Kasal branch post offices. The yearly salary of the deputy postmasters in charge of the head offices varies from £36 to £60 (Rs. 360-Rs. 600), of the sub-postmasters from £18. to £24 (Rs. 180-Rs. 240), and of the branch postmasters from £12 to £18 (Rs. 120 - Rs. 180). The branch office at Amboli is in charge of a schoolmaster who is yearly paid £6 (Rs. 60). For delivery of letters at important stations there are four postmen, each with a yearly salary of £9 12s. (Rs. 96). Village letters are delivered by seven village postmen, four of whom with yearly salaries varying from £9 12s. to £12 (Rs. 96 - Rs. 120) are paid from the Imperial post establishment, while the remaining three, divided into two grades, the first with a yearly salary amounting to £10 16s. (Rs. 108) and the second to £12 (Rs. 120), are paid from provincial services. In 1878 the collections on this account amounted to £195 (Rs. 1950), and the amount of postage stamps sold was £126 (Rs. 1260).

Trade

Before the establishment of Portuguese power (1510), Savantvadi was the highway of a great traffic, and Banda was a place of much trade and wealth. During the sixteenth and seventeenth centuries trade suffered much from the rivalry of the Portuguese, and in the disturbances of the eighteenth century it almost entirely disappeared. Since the establishment of order under the British (1818), though it is still a place of small commerce, local trade has greatly developed, and merchants have it is said increased fivefold. The bulk of the trade is a through traffic in hemp, cotton, and grain from the Southern Maratha Country to Vengurla. Cotton, gram, and wheat are brought from the Southern Maratha Country on pack bullocks by caravans of Lamans, who pass down to the coast. [In 1868 the bullock traffic down the old Parpoli pass road yielded from £200 to £300 (Rs. 2000-Rs. 3000) from a toll of 3/4d. levied from each bullock.] Groceries and spices brought from Bombay by steamers touching at Vengurla, are in considerable demand, but the import trade is small. In wholesale transactions all purchases are for ready money. In retail dealings the sellers keep a running account with their customers which is settled at short intervals.

The ordinary course of trade, the export through Savantvadi of the grain and other field produce of the Deccan and Southern Maratha districts, was, during the famine of 1876-77, changed into a great import of food grains from Bombay and Kathiawar through Vengurla. The details are:

Amboli Pass Trade, 1875-76 and 1876-77.

DESCRIPTION.	U	P.	Down.					
	1875-76.	1876-77.	1875-76.	1876-77.				
Laden Carts	10,661	40,181	11,992	5577				
Empty "	1039	1085	91	39,517				
Laden bullocks	12,460	10,250	12,774	10,417				

Exports

The local exports; are cocoanuts, flax, betelnut, myrobalans, cocoanut fibre, cashewnuts, black pepper, kokam, and a little coffee.

Imports

The imports are metals and Europe piece goods from Bombay; sugar, dates, spices of all kinds, salt-fish, and cocoanut oil from the coast; wheat, millet, Indian millet, tur, Cajanus indicus, mug, Phaseolus radiatus, udid, Phaseolus mungo, molasses, garlic, onions, tobacco, snuff, opium, cotton, indigo, and all kinds of native cloth from the Deccan; and fruit, paper, poultry, and candles from Goa.

Industries

The town of Savantvadi is well known for the manufacture of fancy articles, such as embroidered or simple caskets, fans, and baskets of vala or khaskhas grass, Andropogon muricatum. The roots only are used.] hornwork, lacquered toys and furniture, playing cards, ganjiphas, and smoking hubble-bubbles, gudgudis. Of these the grass caskets, fans, and baskets are prepared by men of the Jingar caste, who forty years ago were employed as saddlers, sheath-makers, and arm-polishers. The articles are tastefully ornamented with gold or silver thread, spangles, talc, green beetles' wings, satin, velvet, and peacock's feathers. The ornamental lace and feather work was introduced about thirty years ago, perhaps at the suggestion of some British officers stationed in Vadi. The caskets, of different shapes and about two feet long 1¼ feet broad and ¾ of a foot high, cost from £2 10s. to £15 (Rs. 25 - Rs. 150) a pair; fans, with or without handles, cost from 3d. to £10 (annas 2 -Rs. 100) a pair; and baskets, also with or without handles cost from 1s. to £1 (annas 8 - Rs. 10) a pair. Table lamp-stands, also of vala grass, cost from 4s. to £1 10s. (Rs. 2 -Rs. 15) a pair. Except velvet which is brought from Panjim in Goa, and talc, peacock's leathers, and vala grass, which can be had in Vadi

territory, all the materials required for this industry are imported from Bombay. The Jingars, about seventy-five in number, are not well-to-do. They work only for about eight months in the year, as in the rains the articles cannot be easily dried, and communication with Bombay and other places is almost stopped. The demand is limited chiefly for export to Europe.

Horn Work.

Horn work is prepared by a few Hindu carpenters. Formerly horns were used only for dropping water over idols and for keeping gunpowder. Improvements were made about thirty-years ago, and from thirty to thirty-five different articles The chief of these articles are: polished horns, from 3s. to £1 (Rs. 1½ - Rs. 10) each; lotuses, kamals, from 6s. to £1 10s. (Rs. 3 - Rs. 15) each; caskets for keeping idols, sampushto, from 4s. to 14s. (Rs. 2 - Rs. 7) each; other caskets from 2s. to 10s. (Re. 1 - Rs. 5); oops from 2s. to 10s. (Re. 1 - Rs. 5) a pair; trays, from 4s. to 14s. (Rs. 2 - Rs. 7) each; small boxes, from £1 to £3 (Rs. 10 - Rs. 30) each; handles for walking sticks, from 1s. to. 14s. (annas 8 - Rs. 7); small lamps, niranjans, from 2s. to 12s. (Re. 1-Rs. 6) a pair; stools, from 8s. to £1 4s. (Rs. 4-Rs. 12) each; writing boxes, kalamdans, from £1 10s. to £5 (Rs. 15 - Rs. 50) each; knife handles, 3d. to 2s. (annas 2-Re. 1) each; wrist chains, from 10s. to £1 10s. (Rs. 5 - Rs. 15) a pair; neck chains, from £1 10s. to £3 (Rs. 15 - Rs, 30) each; watch chains, from 8s. to £2 (Rs. 4- Rs. 20) each; combs, from 1s. to 4s. (annas 8 - Rs. 2) each; spoons, 6d. to 2s. (annas 4 - Re. 1) each; tumblers, from 2s. to 10s. (Re. 1-Rs. 5) each; buttons, from $1\frac{1}{2}d$. to 1s. (annas 1 - 8); flower stands, from 10s. to £2 (Rs. 6 - Rs. 20) each; antelopes, goats, cows, oxen, and buffaloes, from 12s. to £3 (Rs. 6 - Rs. 30) a pair; and elephants, from £1 to £3 (RS. 10 - Rs. 30) a pair.] are now offered for sale. The horns are partly found in Vadi and partly brought from Malabar. Their price varies from 1s. to 4s. (annas 8 - Rs. 2). The left horn is more useful than the right as a water-horn in religious ceremonies, and fetches a higher price. The demand for the articles is less than it was ten years ago.

Toys.

The making of lacquered toys and furniture was introduced about forty years ago. by men of the Chitari caste. A full set of toys, costing from 14s. to £2 (Rs. 7 - Rs. 20), is generally, in the month of *Shravan* (August - September), sent with other articles, as a present to newly married girls by their fathers-in-law. Low wooden stools, *pats*, used especially at dinner time, and cradles, *palnas*, are also prepared in large numbers.

Cards.

The stools cost from 2s. to £1 (Re. 1 - Rs. 10) and the cradles from 10s. to £1 10s. (Rs. 5-Rs. 15). *Hed,* Adina cordifolia, and jackwood, generally used in making these articles, are found in abundance in

Vadi, and the lac and colouring stuff is brought from Bombay. The demand for this lacquered work is small.

Round playing cards, *ganjiphas*, are also prepared by the Chitaris. These are of two kinds, *hukumi* or *changkanchani*, with ninety-six and *dashavtari* with 120 cards. They were first prepared in Vadi about the year 1760, and cost from 2s. to £2 (Re. 1 -Rs. 20) the set. Another kind, with fifty-two cards, costs from 2s. to 10s. (Re. 1 -Rs. 5). The paper required is brought from Kolhapur. Besides. the Chitaris, who are about twenty-two in number and who have been doing the work for many years past, a few Marathas, Shimpis, and Vanis have also taken to it. Some of these have small capitals, and some are hired workmen. Though a good many are sent to Bombay and to the upcountry districts, the demand falls short of the supply.

Hubble Bubbles.

Smoking hubble-bubbles, *gudgudis*, consist of four parts, the cocoanut shell, *bela*, the standing tube, *meru*, the tobacco bowl, *chilim*, and the pipe, *nali*. The cocoanut shell, *bela*, is polished and ornamented sometimes with silver; the standing tube, *meru*, and pipe, *nali*, are made of wood and show considerable skill. The whole apparatus costs from 10s. to £1 10s. (Re. 1 -Rs. 15).

Salt.

Till February 1880, when they were closed by an arrangement with the British Government, there were salt pans at Ajgaon and Araunda about fifteen miles south-west of Vadi. The supply was small, hardly enough to meet the local demand.

Fairs

Yearly fairs are held at Akeri in March, at Talavna in February, and at Tulas in May. They are on a small scale, attended only by people from the neighbouring villages.

HISTORY

EARLY HINDUS

500-1500

AMONG the materials for the early history of the Konkan, the inscriptions that belong specially to Savantvadi and its immediate neighbourhood show that during the sixth, seventh, and eighth centuries, the Chalukyas ruled over Savantvadi. The Chalukya inscriptions are, the grant of the Kochra village by Pulikesi I., probably about the middle of the sixth century (Bom. Gov. Sel. X., New Series, 233); (2) the grant of the village of Kundivatak by Mangal, the second son of Pulikesi, probably about 580 (Ind. Ant. VII. 163; Bom. Gov. Sel. X. 195); (3) a grant, probably about the beginning of the seventh century, by the Queen Consort of Chandraditya, the elder brother of Vikramaditya I. (Ind. Ant. VII. 163 and VIII, 45, Bom. Gov. Sel. X. 183); (4) a grant dated 705 (S.627), by Vijayaditya, the son of Vinayaditya (Bom. Gov. Sel. X. 206).] In the tenth century (933, S. 855), the rulers were Yadavs. [The inscription is a metal plate grant by the Yadav prince, Govind Raj, of the village of Lohugram in the district of Rampur (Bom. Gov. Sel. X.249). The village and district named have not been identified. According to Jervis konkan, 81), in the twelfth century the Desai of Savantvadi, the most northern of the Paligar chiefs, overran the whole of the Konkan. In the thirteenth century (1261), the Chalukyas, ruling from Kalyan, were again in power. [Bom. Gov. Sel. X. 250.] At the close of the fourteenth century (1391), Vadi was under an officer of the Vijayanagar dynasty, whose head-quarters were at Goa, Bom. Gov. Sel. X. 251. The grant was of the village of Kochra within Savant-vadi limits. According to Jervis (Konkan, 63), in 1347, all except the south districts of Phonda, Maneri, Pedna, Dicholi, and Sankhli were nominally under the Behuaris (1347 -1512). The extreme south was under Vijayanagar.] and about the middle of the fifteenth (1436), it formed part of the territory of a powerful local Brahman dynasty. [Ditto, 298. A king of Savantvadi, a very learned Jain, is mixed up with a Belgaum legend (Ind. Ant. IV. 140). The story gives no clue to the probable date.]

Bijapur Rule, 1500-1627

On the establishment of their power at the close of the fifteenth century, Savantvadi became part of the territory of the Bijapur kings. Under a chief styled the Desal of Kudal, the district was distributed among five divisions, parganas, [The five divisions were, Phonda, Maneri, Pedna, Dicholi, and Sankhli.] two extra divisions, karyats, [The two extra divisions, karyats, were Narur and Patgaon.] one sub-

division, *vilayat*, [The sub-division, *vilayat*, was Banda.] twelve petty divisions, *tarafs*, [Of the twelve petty divisions, *tarafs*, three, Manohar, Talavda, and Mangaon were in Vadi; two, Ajgaon and Santarda in Banda; four, Pit, Haveli, Kalsuli, and Bordav in Kudal; and three, Maland, Varad, and Masura in the territory transferred to the British Government in 1812-13.] and one port. [The port was Venarla.]

Mang Savant, 1554

About the middle of the sixteenth century (1554), one Mang Savant, revolting from Bijapur, tried to establish himself as an independent chief. Making Hodavda, a small village six miles from Vadi, his head-quarters, Mang Savant defeated the Bijapur troops sent against him, and till his death maintained his independence. So great a name did he gain for courage and skill, that on his death he was deified, and his shrine, *math*, is still to be seen at Hodavda. Mang's successors, unable to maintain their independence, again became feudatories of the Bijapur kings.

Khem Savant I., 1627-1640

On the decline of Bijapur power in the early years of the seventeenth century (1627), Phond Savant's son Khem Savant, who held part of the Vadi country in grant, jaghir, made himself independent.

Som Savant, 1640 -1641

In 1640, Khem was succeeded by his son Som Savant, who, after ruling for eighteen months, was succeeded by his brother Lakham Savant.

Lakham Savant, 1641-1665

This chief, in a predatory incursion, made captive the Kudal Desai, [From this time till in about 1670 they made Vadi their head-quarters, the Savants were styled chiefs of Kudal.] put him to' death, and seized his lands. [According to the Hindu codes, Brahman murder being a very honour crime, the present ruling family has been, ever since the Kudal Desai's death, considered obnoxious to the vengeance of the spirit of the murdered Desai. As the Desai's spirit is particularly excited by the use of the Kudal seal, the Savants have always employed a Brahman to seal their state papers. Bom. Gov. Sel. X. 154.] Shortly after, when Shivaji's power seemed in the ascendant (1650), Lakham Savant tendered him his allegiance, and was

confirmed as Sar Desai of the whole south Konkan. In a second treaty (1659) it was settled that one-half of the revenue should belong to Shivaji and be collected by his agents, and the other half, exclusive of his rights as deshmukh, should remain to Lakham. Under the terms of this treaty Lakham became bound to garrison the forts and to keep a body of 3000 infantry ready for service. Repenting of this alliance and not abiding by the terms of the treaty, [Grant Duff, 75, 76.] Lakham renewed his allegiance to Bijapur. In May 1660, Baji Phasalkar, one of Shivaji's earliest followers, fought a drawn battle with the Vadi commander Kay Savant, in which both were slain. [Grant Duff, 81.] In 1662, Shivaji defeated Lakham's army, overran Vadi, and forced the chief to throw himself on his mercy. [Grant Duff, 84.] From political and family motives, for the Savants like himself belonged to the Bhonsla family, Shivaji reinstated Lakham under promise that he would always live at Kudal, neither build nor repair forts, and entertain no large body of troops.

Phond Savant, I., 1665-1675. Khem Savant II., 1675-1709

Dying in 1665, Lakham was succeeded by his brother Phond Savant, who, after ruling for ten years, was (1675) succeeded by his son Khem Savant. This chief by helping the Moghals in their struggles with Shivaji, and making frequent raids across the Goa frontier, considerably increased his territory. Afterwards (1707), supporting Shivaji's grandson Shahu in his contest with the Kolhapur chief, he was continued in his possessions. About this time he is described as a soldier of fortune, with 7000 or 8000 men and two pirate grabs, fighting for the chief who paid him best. [Hamilton's New Account, I. 208.]

Phond Savant II., 1709-1737

Dying in 1709 without male issue, Khem was succeeded by his nephew Phond Savant. Though a lover of peace Phond Savant's rule was much disturbed by land wars with Kolhapur and Goa, and by sea fights with Angria.

British. Treaty, 1730.

In 1730, so much did their commerce suffer from Angria's attacks, that the British Government formed an offensive and defensive alliance with the Savants. [He is styled Ponde Saunt Sar Desai of Kudal. Aitchison's Treaties, IV. 439.] They agreed that neither should attack the ships of the other; that British weeks should receive all aid and assistance; that their ports should be open and free to each other for trade; that they should join to attack the sons of Kanhoji Angria; and that the British should supply the Sar Desai with warlike stores and artillery. [The treaty is given in full in Aitchison's Treaties, IV,

439-440.] About this time (1730), Nag Savant, Phond Savant's second son, taking the Hera and Chandgad [The Chandgad district was afterwards lost.] districts above the Sahyadris, established a post at Chandgad, and built the fort of Gandharvagad. Phond Savant's latter years were full of troubles. His eldest son Nar Savant rebelled and was slain in a skirmish. And so keenly did Phond Savant feel his son's death, that appointing his young grandson Ramchandra Savant his heir, he retired into private life and died in 1737.

Ramchandra Savant I., 1737-1755

During Ramchandra's minority, the state was managed by his uncle Jayram Savant, a man of great strength and courage.

Jayram Regent, 1737-1753.

In spite of his good equalities, Jayram Savant's management was at first unsuccessful. Angria took Bhagvantgad and Bharatgad, crossed the Kudal river, defeated him at Bambardi, captured Shivram Savant his brother, and compelled the Vadi state to cede two-fifths of the Salshi revenue. At the same time the Portuguese seized five of the southern districts, together with the fort of Yashvantgad. Jayram's reverses did not last long. In 1745 the five districts were recovered, and for a time Bardes also was taken. Three years later (1748), Tulaji Angria was defeated with heavy loss at Kudal, [In remembrance of this victory his state kettledrum, nobat, is still beaten in the palace at Vadi.] pursued as far as Sangva near Ratnagiri, and his country laid waste. Bharatgad and the districts between the Kudal and the Garnar rivers were recovered, and a third raid of Angria's was successfully beaten off. Shortly after, Jayram quarrelled with his nephew, and retiring in disgust to Kudal, died there in 1753.

Khem savant III. 'The Great', 1755-1803

Two years later (1755), his nephew Ramchandra died, and was succeeded by his son Khem Savant the Great. In 1763, Khem married Lakshmibai, daughter of Jayaji Sindia and half sister of Mahadaji Sindia, and through their influence received from the Emperor of Delhi the title of Raje Bahadur. [According to Grant Duff (40), the Savants got this title from the Bijapur kings, in whose wars against the Portuguese they distinguished themselves as command era of infantry.] About this time British commerce suffered severely from the attacks of Vadi and Kolhapur pirates.

British Treaty 1765.

In 1765 (7th April), an expedition under Major Gordon and Captain Watson of the Bombay Marine, captured the fort of Yashvantgad or Redi, and changed its name to Fort Augustus. Khem Savant, 'the

Bhonsla,' agreed, on receiving back Redi fort, to cede the lands between the Karli and Salshi rivers, from the sea to the Sahyadris; to pay £10,000 (Rs. 1,00,000) for war expenses; to let British merchants pass freely; to keep no navy; and in the event of a war with the Marathas, to help the British. [Aitchison's Treaties, IV. 440.] This treaty was broken almost as soon as it was signed, and next year (1766) the Bombay Government sent Mr. Mostyn to make a fresh settlement. A second treaty was concluded, which, among other terms, bound the chief to furnish two hostages, and to cede the fort of Vengurla to the British for thirteen years, or during such further time as the war indemnity amounting to £20,000 (Rs. 2,00,000) remained unpaid. [Aitchison's Treaties, IV. 443.] Soon after the treaty was concluded the hostages escaped; and the Vadi chief successfully frustrated all attempts to collect the Vengurla revenue. In 1780, at the end of the thirteen years, the Vadi government demanded Vengurla, and on its being refused, the fort was attacked and taken. Two years before (1778), the Kolhapur chief, envious of Khem Savant's honours independence, overran the state; captured the fort of Gandharvagad; and forced from Khem Savant the cession of one-third of the Maland and Varad revenue, and of a fixed yearly sum from Pat and Haveli. Shortly after (1783), through the influence of Sindia, the Delhi Emperor granted the Vadi chief the peacock's feather, the symbol of independence. Enraged at this further advancement, the Kolhapur chief sending an army against Vadi, assaulted, but failed to take the post of Akeri.

War with Kolhapur, 1776-1787.

Three years later (1787), another attack from Kolhapur was more successful. The forts of Narsinggad, Nivti, and Vengurla fell, and to save it, Sidhgad had to be made over to Madhavrav Peshwa. Getting help from the Portuguese, for which he had to pay by the cession of the Phonda district, Khem Savant drove back the Kolhapur troops, and recovered Nivti and Vengurla. In 1793, the Peshwa restored Sidhgad, and about the same time, through Sindia's influence, Kolhapur gave back the fort of Bharatgad. Further reverses were in store for Khem Savant.

The Portuguese, 1803.

In 1803, the Portuguese overran and permanently annexed the districts of Dicholi, Sankli, Pedna, and Phonda.

Phond and Shriram Savants, 1803-1805

On Khem Savant's death in 1803, as he left no male heir, [Grant Duff (244) says that he had only one son by his third wife Devibai.] the succession was disputed by his two cousins, Som and Shriram Savant. Open hostilities went on for about a year, when (1804) Som Savant and all his sons, except Phond Savant, were blockaded at Vadi,

and the fort catching fire, perished in the flames. Phond Savant, the surviving son, unable to cope with Shriram Savant, retired to Kolhapur. Here he was treated with much respect, and with the help of a body of Kolhapur troops, seized the town of Kudal and laid the country waste. On this the regent Lakshmibai, one of Khem Savant's widows, agreed that Phond Savant should return to Vadi and be restored restored to his father's rights. On his return Phond Savant had so much influence with Lakshmibai, that Shriram Savant, after securing Hanmantgad and Banda for his two illegitimate sons, was forced to leave Vadi. Two years later (1805), defeating a joint attack by Phond Savant and Durgabai, Shriram Savant entered Vadi in triumph, imprisoned his opponents, and forced Lakshmibai to adopt his son Ramchandra as chief. Shriram Savant died in 1806.

Ramchandra Savant II. 1805-1808

After his death the Kolhapur chief, seeing the distracted state of Vadi, attacked and carried the forts of Bharatgad and Nivti, and established the port of Nandugad. In 1807, Phond Savant, who, since 1805, had taken refuge at Kudal, returned to Vadi. The government directed by Ramchandrarav, Durgabai's brother, carried on incursions to the gates of Malvan, laid in ashes the village at the Malvan pass, and recovered the forts of Yashvantgad and Nivti. To repel these depredations the Kolhapur chief took the field in person, defeated the Vadi army at Chaukuli, and blockaded the capital. In 1808, the Vadi government called in the aid of Appa Desai Nepanikar, who sent a force to raise the siege of Vadi, and by invading Kolhapur, forced the chief to retire. On his withdrawal, the Nepani general took possession of the whole Vadi territory, placed Lakshimibai and her adopted son under surveillance, and took the forts of Yashvantgad, Vengurla, and Nivti. Still Phond Savant by no means gave up hopes of recovering his power.

Phond savant III., 1808-1812

Conspiring with Lakshmibai and Durgabai, he procured the murder of the young chief, and shortly after, by ill-treatment, caused the death of Lakshmibai, and rejecting Durgabai's claims to be regent, attacked and defeated the Nepani army, and established himself as ruler. During these years of disorder the Vadi ports again swarmed with pirates. So severely did British commerce suffer, that in 1812 (October 3), Phond Savant was forced to enter-into a treaty, ceding Vengurla fort to the British and engaging to give up all his vessels of war. [Supplementary articles, absolutely ceding Redi and Nivti, abstaining from hostilities with other states, and submitting all disputes to the arbitration of the British Government, which in return guaranteed the chief's possessions against all foreign powers, were

intended to be inserted. But as these terms were thought to interfere with the Peshwa's authority over Vadi, they were abandoned. Aitchison's Treaties, IV. 436, 447.]

Khem Savant IV., 1812-1867

Soon after the conclusion of this treaty, Phond Savant died and as his son Khem Savant or Bapu Saheb was a minor, Durgabai was appointed regent.

Durgabai Regent, 1812-1819.

In 1813, Durgabai seized the forts of Bharatgad and Narsinggad, which some few years before had been wrested from Vadi by Kolhapur. The British had, meanwhile, guaranteed to defend Kolhapur territory against all attacks, and as Durgabai obstinately refused to give up the forts, a British force under Colonel Dowse recaptured them and restored them to Kolhapur. In consequence of Durgabai's refusal to cede the Kolhapur forts and to exchange some districts north of the Kudal river for the lands. held by the British south of that river, war was declared and the districts of Varad and Maland seized. At this time the widow of Shriram Savant caused fresh troubles by putting forward a person who claimed to be Ramchandra Savant, who, she alleged, had not been murdered in 1807. Her cause found many supporters who moved about the country plundering on their own account. Such mischief did they do that many of the people, leaving their homes, sought safety in British and Portuguese territory. [Hamilton's Des. of Hindustan, II. 21.] Durgabai, now brought to great straits, offered to adjust all causes of quarrel, if the British Government would interfere on her behalf. Her proposals were declined. But even without British help her party were again successful, and order was for a time restored. In 1817, in consequence of a Portuguese raid into Usap, the Portuguese fort of Tirakol was plundered. In revenge the Portuguese attacked Redi, but after a fruitless siege of twenty-seven days, were forced to withdraw. About this time the Vadi nobles who held the forts of Banda, Nivti, and Redi, became unmanageable, set the chief's authority at naught and plundered in all directions, including the surrounding British territories.

British Treaty, 1819.

During the final British war with the Peshwa (1817), Durgabai threatened to invade British territory, and tried her best to aid the Peshwa's cause. Even after the Peshwa's overthrow her raids into British territory did not cease. War against Savantvadi could be put off no longer, and in 1819, a British force, under Sir W. Grant Keir, took the forts of Yashvantgad and Nivti. At this time Durgabai died, and the regency was divided between the two surviving widows of Khem Savant III. The new regents gladly accepted the British terms. A treaty was concluded in which the British promised to protect

Savantvadi, and the regency acknowledged British supremacy, agreed to abstain from political intercourse with other states, to deliver to the British Government persons guilty of offences in British territory, to cede the whole line of sea coast from the Karli river to Portuguese boundaries, and to receive British troops into Savantvadi. [Aitchison's Treaties, IV. 436, 448.]

In 1820, Captain Hutchison was appointed Political Agent, and except Redi and Nivti, the whole district ceded in 1815 was restored to Vadi. [Aitchison's Treaties, IV. 450.] In the same year the Political Agent settled a dispute with Kolhapur about the Manohar division, deciding that ownership vested in the Vadi chief, and fixing the Kolhapur claims to share in the revenue. [Aitchison's Treaties, IV. 451, 455.] In the latter part of 1820, the Agency was transferred to the Ratnagiri Judge, from whom, in 1822, it went to the Collector. In 1822, it was settled that the Kolhapur chief, instead of making collections from different parts of the state, should receive a yearly sum of £783 (Rs. 7830). In 1822, the regency was abolished and Khem Savant was installed. He soon showed himself weak and incompetent, unable to check, his turbulent followers or fulfil his engagements with Kolhapur.

British Aid, 1830.

In 1830, and again in 1832, a British force had to be called in to put down rebellions caused by the chief's oppression and injustice. On the second occasion, Khem Savant was required to execute a treaty by which he bound himself not to remove his minister without the sanction of the British Government; to adopt such measures of reform as the British Government might approve; and to pay the cost of any troops required for the settlement of his affairs. [Aitchison' Treaties, IV. 437, 455.] Even with British help, Khem Savant was unable to keep order. His nobles were practically independent, and in 1836, broke into a revolt to put down which British troops had again to be called in. In this year (1836) the customs leviable on the military road from Vengurla to the Ram pass were transferred to the British, and two years later (1838) transit duties were abolished and the whole of the Vadi customs made the property of the British Government. Meanwhile Khem Savant's affairs went; from bad to worse. His carelessness and misrule provoked another outbreak. The British were called in, and deposing Khem Savant, took the management of the state into their own hands. [Aitchison's Treaties, IV. 456, 458.]

British Management, 1838.

A Political Superintendent was appointed and a military force known as the Savantvadi Local Corps, under the command of British officers and maintained at the expense of the state, was organized. The turbulent nobles several times rebelled. In 1839, some malcontent state servants, losers by reductions in public expenditure, went to Goa, and from Goa twice invaded Vadi. succeeding on one occasion in surprising Vadi fort and carrying off the chief and his family. These

disturbances were soon repressed, and order was established, grievances redressed, and public expenditure curtailed. So successful was the management that before long the British troops were entirely withdrawn.

Disturbances, 1844-1850.

Order and progress lasted for a few years only. In 1844, the Political Superintendent heard from Belgaum that a serious disturbance had broken out in Kolhapur. Measures were taken to prevent the insurgents from tampering with Vadi malcontents, and to watch the people of Manohar fort who were suspected of being ready to join the disturbance. In spite of these precautions, the people of Manohar openly espoused the rebel cause, made raids into the country round, burnt houses and villages, and. had a skirmish with the Savantvadi Local Corps. A detachment under Major Benbow, sent against the insurgents at Manohar, was threatened on all sides by a large body of rebels. The enemy's strength increased; the insurgents attacked the village of Dukanvadi, carried off a large quantity of grain, and threatened the people with violence. As disorder was now widespread, help was sought from Lieutenant-Colonel Outram, then on special duty at Kolhapur, and a detachment of four companies of the Xth Regiment N. I. was sent to Vadi. They were met by a body of insurgents in the Akeri pass, and after a few days' skirmishing, succeeded in driving them out. [Service Record of Xth Regt. N. I. 13.] Phond Savant, one of the leading nobles, a man highly respected by the British Government, with his eight sons, joined the rebel cause. His example was followed by Anna Saheb the heir apparent, who, joining the rebel camp under a salute of guns, began to issue orders, and in spite of the efforts of the British officers, succeeded in collecting revenue from the villages round. The secret cause of Anna Saheb's joining the rebels was Jankibai, youngest wife of Phond Savant. Her object was to get Anna Saheb to commit himself, and thus clear the way for her son's succession to the chiefship.] Emboldened by their success, the rebels marched against the capital but were soon dispersed. They next tried, but without success, to win over the native officers of the Tenth Regiment. So far the efforts to put down the revolt had failed. In 1845, the whole country was in disorder, even close to military forts there was no security of person or property.

Disturbances, 1845-1850.

The wild wooded character of the country made the arrest of offenders most difficult. Martial law was proclaimed, and three strong detachments, one of them under Colonel Outram, were stationed in different parts of the district. In spite of these vigorous measures, the insurrection for a time made head. In Malvan, Subhana Nikam, a notorious leader, escaping from Belgaum, raised a revolt; in the north, Daji Lakshman, a personal servant of Anna Saheb's, headed a party of insurgents, collected the rents, and sent emissaries to realise the

revenue even in the British districts of Varad and Pendur; and in the east, on the Ram pass road, one Har Savant Dingnekar, heading the discontented Desais of Usap and Havelkar, threatened the Bhedshi outpost. These successes did not last long. Near Rangna fort a detachment of troops surprised and routed a body of insurgents; at Patia the rebels met with another severe reverse; and Colonel Outram, attacking and taking Manohar fort, closely pursued the insurgents into Portuguese territory. The spirit of the revolt was broken. The common people, on promise of pardon, deserted in numbers and returned to their homes, and the leaders sought safety within Portuguese limits. Several applications were made to the Goa government to prevent the rebels from taking shelter in their territory. But the government refused to give them up. At last, in 1847, ninetytwo of the fugitives joined in petitioning the Bombay Government, to grant them a pardon and allow them to return to their homes. In 1848, on the recommendation of the Political Superintendent, about forty-five of the rebels, among them Anna Saheb, the Usap and Havelkar Desais, and four sons and a grandson of Phond Savant were, on furnishing good conduct security, allowed to return. All Anna Saheb's claims on the Vadi state were declared forfeited. He was settled at Vadi with a monthly pension of £10 (Rs. 100), and shortly after the sons and grandson of Phond Savant were each allowed a monthly pittance of 10s. (Rs. 5).

In 1850, when order was restored, the Court of Directors decided that though the conduct of the Vadi chief justified the British Government in annexing his dominions, he and his family should be supported by a fixed allowance, and that for a time the management should remain in British hands. During the Mutinies (1857),the chief and his son, Phond Savant or Anna Saheb, showed themselves loyal to the British Government. But the rebel noble Phond Savant and those of his sons who were not included in the amnesty, and who were in Goa under surveillance, caused disturbances all along the forest country from Savantvadi to Kanara. They attacked several of the Belgaum villages and burnt custom houses.

In 1861, on condition of paying £55,000 (Rs. 5,50,000), the charges of the 1844 revolt, [In 1862, the debt amounting to about £55,000 (Rs. 5,50,000), was paid off.] and a succession fee of one year's revenue, and of promising to protect his subjects and meet the expense of a British Resident and his establishment, Phond Savant or Anna Saheb was pardoned and recognised as heir.

Phond Savant IV. 1867-1869

In 1867, on the death of his father, Phond Savant succeeded. [The prescribed present, nazarana, was levied from him.] His feeble character and fondness for opium made it unsafe to trust him with power. To prevent mismangement, he was required to accept the

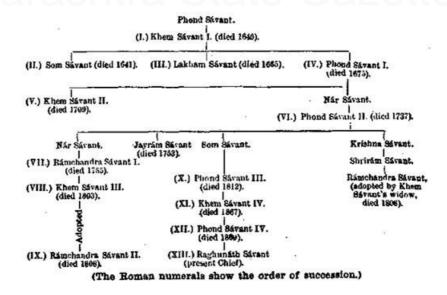
scheme of administration introduced by the British Government, to refrain, except with the previous sanction of the paramount power, from making any organic changes, and to submit for approval the name of any one whom he wished to appoint minister.

Raghunath Savant, 1869

In 1869, before these terms were formally concluded, Phond Savant died, leaving the present chief Raghunath Savant a child six years old. During his minority the administration has been in the hands of the British Government. In 1877, the young chief, who had before been studying with the Kolhapur Raja, was sent to the Rajkumar College at Rajkot. In the same year (1877), Savantvadi was included among the minor states of the Bombay Presidency that were placed under the control of the Commissioner of the Southern Division. The appointment of a judicial assistant was made permanent, and the post of native assistant, daftardar, was abolished and his duties transferred to a minister, karbhari, whose office was revived. In 1878, the young Sar Desai received in full Darbar the Delhi banner sent by the Viceroy in commemoration of the assumption of the title of Empress of India. In 1879, he was married to the daughter of the late Khanderav Gaikwar of Baroda.

The chief, a Hindu of the Maratha caste, is entitled to a salute of nine guns. The family have a patent allowing adoption, and in point of succession follow the rule of primogeniture. Besides an infantry corps 436 strong, he maintains three guns and twenty horsemen.

The family tree of the Vadi chiefs is as follows:



LAND ADMINISTRATION

Staff, 1879

FOR fiscal and other administrative purposes the state lands are distributed among the three divisions, *petas*, of Vadi, Banda, and Kudal. Under the supervision of the Political Superintendent, the revenue and magisterial charge of each of these fiscal divisions is placed in the hands of an officer styled *kamavisdar*, with a yearly salary varying from £60 to £84 (Rs. 600 - Rs. 840).

Village Headmen.

In revenue and police matters, the charge of the 223 state villages is entrusted to hereditary headmen, gavkars, chosen from the Maratha, Bhandari, or Gaud Brahman castes, and paid on an average about £3 (Rs. 30) a year. The pay varies from 10s, to £7 (Rs. 5 Rs. 70) and averages about £3 (Rs. 30).] Bach village has generally more than one gavkar, who exercise their powers by turns fixed according to their share, each sharer, after one or two years, resigning office in favour of the next claimant. Bach headman is responsible to the state for a fixed yearly sum on account of his village. Until 1853 he had power to dispose of abandoned, or gatkul, holdings. Since then his power has been restricted to making such arrangements, with respect to their cultivation, as will enable him to pay the revenue during his term of office. The reason of this restriction is, that as thrown up lands become the property of the state, if they are alienated or permanently settled at a rental less than their assessment, the state revenue suffers. Under the old system, when the alienating headman's term of office ended, his successor might object to pass the agreement for the full amount of revenue, and the village might have to be managed direct by the state.

Village Constable.

The village constable, faujdar, is not an hereditary officer. He is generally chosen from the family of the village headman, and is equal in rank to a police patel in a British village. His office is honorary and has no pay' attached to it. Under the headmen the accountants, kulkarnis, keep the village papers and draw up statistical and other returns. There is one accountant for every peasant-held, kulargi, village, containing on an average 850 inhabitants, and yielding a yearly average rental of about £90 (Rs. 900). Their yearly salaries, paid in cash, varying from 10s. to £7 (Rs. 5-Rs. 70) and averaging £2 10s. (Rs. 25), represent a total yearly charge of £466 (Rs. 4660). Under the headmen, the village accountants and the village constables are the village servants or virtika, styled ghadi, devuli, bhavin, and mhar. Besides for revenue and police duties these men are liable for miscellaneous public business. They receive a certain share of grain, baluta, from the people, but enjoy neither money nor land grants from the state.

The yearly cost to the state of village establishments amount's to £695 (Rs. 6950), of which £229 (Rs. 2290) are paid to village headmen and £466 (Rs. 4660) to village accountants. This represents a charge of £3 (Rs. 30) on each village or $2\frac{3}{4}$ per cent of the entire land revenue.

Administration.

The earliest revenue system of which record remains is that of the Bijapur kings (1500-1670). Under their system the amount of the government demand depended on the quantity of seed used in sowing the different kinds of land. The crops were divided into wet *pavsali*, after-crops *vidal*, and irrigated *gimvas*. Other lands were hilly, *bharad*, *dongar* or *varkas*. The government share is said to have been originally one-fifth or one-sixth of the whole produce. The assessment on garden, *bagayat*, lands planted with cocoa and betel nuts was fixed on the number and productiveness of the trees. The money rate or assessment on each cocoanut tree represented about one-half of the gross produce. Betelnut or *supari* trees, of much more delicate growth, yielding from twelve to twenty *shers*, were taxed at one-third and in some cases as low as at one-fourth of the whole produce. [Jervis' Kcmkan, 101 -103.]

Early in the eighteenth century (1715) the former rates were revised by a clerk named Ganoram. Under his arrangements wet rice land was divided into four classes. Of these, land of the first quality, shel, was taxed at one-sixth of the produce; land whose crops required transplantation, lavni, at one-eighth; poor land, bharad, at one-tenth; and hill lands and those which after one or two crops required to be left fallow, varkan, at one-twelfth of the produce. Irrigated, gimvas, lands yielding one crop were taxed at one-eighth; those yielding two crops at one-tenth of the produce; and *lhovi* lands yielding a dry season crop of nachni, Eleusine corocana, at onetwelfth. Of cocoanut lands the sea shore, relagar, gardens were rated at two-fifths of the produce, and river bank, thalagar, gardens at three-tenths. Irrigated, kulagar, lands paid one fourth, and lands watered by manual labour, adagar, about one-seventh. On betelnut lands the rates varied from one-sixth to one-eighth of the produce. Besides the assessment certain cesses which are still in existence were levied. There are cesses on all lands including the chief's private, sheri and khasgi, lands, and on goldsmiths, carpenters, blacksmiths, native Christians, shopkeepers, painters, milkmen, shepherds, sellers of opium, liquor, honey, wax, and fireworks, the producers of flax and catechu, and the rearers of piga. In 1791, in part payment of the rice assessment, such articles as clarified butter, oil seeds, and pulse were taken. The object of this change was that those articles might be stored in the state granaries or supplied to the stud or to ships, or be available for the use of the chief's family. In 1849, Major Jacob substituted cash for kind payments, and fixed rates of commutation on the average of prices for seven years (1842-1849).

Land Tenures.

There are four land tenures, state, alienated, rented, and peasantheld. State lands are of two kinds: crown lands, *sheri thikans*, and private, *khasgi*, lands, the personal property of the chief.

Grantees.

These are managed by the district revenue officers, and are by them let to the highest bidder for a fixed term of years. Alienated lands are classed under three heads, grant *inam*, rent-free *dastibad*, and religious *devsu*. Grant, *inam*, lands, including *dumala* or lands belonging to the chief's relations, are held under deeds, *sanads*, either in perpetuity or during the lifetime of the holder, free of all state claims. Rent-free, *dastibad*, lands are rare. Though free from assessment they may be liable to the payment of certain cesses. Religious, *devsu*, lands, assigned to temples and temple servants, are of two kinds, *inam devsu*, absolutely alienated, and *devsu kumle*, held subject to the payment of the government assessment. These lands are cultivated sometimes by the proprietors and sometimes by the state, and after deductions their produce is assigned for the use of the temple.

Renters.

The very few rented, khoti, lands are similar to those in Ratnagiri. The khots, or nadkarnis as they are locally called, belong to the Gaud Brahman caste and are hereditary holders. They are revenue farmers, and in some villages which contain rice lands they are peasantholders. Very few of them have groups of villages. The khots hold villages under a right locally known as palav, a term supposed by the Political Superintendent to be a corruption of the English word plough. Under this tenure, though there may be no grant confirming it, the khot is allowed to till a certain area of land as his own. They let hilly, varkas, lands to their tenants-at-will, kevikuls, from whom they receive 2s. on every 240 pounds (Re.1 the khandi) of the produce, the amount of which is settled by estimate. The rent recoverable from peasant-holders is fixed. In khoti, villages there are no under-holders between the peasant-holders, khatelis, and the tenants-at-will, kevikuls. Khots are allowed to recover only very limited and trifling cesses. They are accountants in their villages, and their estates are not divided among the co-sharers, but held in turn. They are not well off, but in good seasons their profits vary from ten to fifteen per cent above the government demand.

Peasant Holders.

Under-cultivators are of two classes, peasant-holders, *khatelis*, and yearly tenants, *kevikuls*. The peasant-holders, who belong to almost all castes, are responsible to government for the assessment on their lands. Failing to pay they are ousted and their lands are sold. There are many *khatelis* in *kulargi* villages, but no village is entirely cultivated by them. Some of the *khatelis* are hereditary holders,

vatandars, who live in towns and villages and pay their assessment direct to the revenue officials. Some of them have large holdings, which they till by the help of tenants engaged from the peasantry of the village. But as a rule their holdings have been greatly reduced by sub-division. In khoti villages, though older than the khots, the peasant-holders, khatelis, are very few and badly off. The other class of under-holders are yearly tenants, kevikuls, who every year make an agreement with the superior holder, either khot or khatedar, to pay a certain quantity of grain. They generally belong to the Maratha and Bhandari castes, but a few are native Christians and Musalmans. Most of them were originally peasant-holders, who have alienated their occupancy rights and rent lands from the alienees or others. Beyond a fixed rent, which is in kind on rice lands and in money on hilly and garden lands, they do not pay any extra cesses. Varying according to the soil and the labour and manure used, the rent is sometimes onefourth, sometimes one-third, and sometimes one-half of the whole crop. They do not wander from place to place, and seldom have any disputes with their landlords about rent. There is not enough competition among them to enable the upper holders to exact rackrents.

Survey Rates

The revenue survey, begun in 1872, has been introduced into the Kudal and Vadi sub-divisions. Up to 1st April 1880, 361,530 acres were surveyed, and 803,770 acres classified. In the Kudal division survey rates, guaranteed by the state for fifteen years, have been introduced and the villages classed into four groups. In the first group the maximum acre rates are, for rice land 13s. (Rs. 6½), hilly 6d. (annas 4), and garden, bagayat agri, £1 4s. (Rs. 12); in the second group, for rice land 11s. (Rs. 5½), hilly 4½d. (annas 3), and garden, bagayat agri, £1 4s. (Rs; 12); in the third group, for rice land 9s. (Rs. 4½), hilly 3d. (annas 2), and garden, bagayat dongri, 16s. (Rs. 8); and in the fourth group, for rice land 8s. (Rs. 4), hilly 1½d. (anna 1), and garden, bagayat dongri, 16s. (Rs. 8). These assessment rates gave a yearly increase of £205 (Rs. 2050) to the state revenue. The total cost of the survey up to 31st March 1880 was £22,177 (Rs. 2,21,770).

Rent How Realised.

According to the present system of collecting the revenue, except in survey settled villages where the amount is fixed for a term of years according to the position of the field and the character of the soil, at harvest time a state officer comes to each village and with the headman and accountant he goes to the different crown hill lands, estimates their total produce, fixes a half of the whole as the state due, and commutes this share to a certain sum of money. The value of the grain is then either paid to the state by the tenants at fixed market rates or it is sold to the highest bidder by public auction. If the husbandman refuses to pay, part of his grain is taken and sold for the

benefit of the state. Village renters and peasant-holders seldom fail to pay the state demands. When they fail their property is seized and sold. If this is not enough, and if the defaulter is a peasant-holder, *khateli*, the occupancy right is sold, but this rarely happens. Superior holders are helped by the district revenue officers in recovering rent from their tenants. The rent is collected by four instalments, in November, January, March, and May. The tenants pass bonds for arrears, and remissions are rarely granted.

Wards.

In 1878, seventeen estates were managed by the Political Superintendent on behalf of minor proprietors, sardars. [These minors are now being taught in Government schools.] The aggregate income of thirteen of these estates, which were too poor to supply the minors with the necessaries of life, amounted in 1878 to £54 (Rs. 540). The income of the four remaining estates, most of which are unencumbered, was £1913 (Rs. 19,130) and the expenditure £927 (Rs. 9270).

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JUSTICE

Civil

BEFORE 1842, including revenue courts empowered to hear rent suits, there were two civil tribunals, the Chief's court and the magistrate's, mansabdar's, court. The Chief's court, with a bench of three judges, [It was, for this reason, known as the *Tirait* court.] decided all cases after consulting a council, panch, of persons of rank and influence. The magistrate, mansabdar, was a police officer who received petitions and forwarded them to the chief for disposal. In 1842 the Chief's court was abolished, and a new court established under a single native judge, nyayadhish, with jurisdiction over the Banda and Vadi divisions, and the town of Vadi Some thirteen villages in the Vadi division were not under the jurisdiction of this court.] All suits were first brought before the Superintendent who referred them to the *nyayadhish* for investigation. Unless appealed against within thirty days his decree was final. In cases worth £50 (Rs. 500) and upwards where he reversed the original decree, and of £100 (-Bs. 1000) and upwards where he confirmed it, an appeal, if made within ninety days, lay from the Superintendent's decision to Government. A fee was levied when payable by the plaintiff in proportion to the amount claimed, and when payable by the defendant in proportion to the amount decreed. On suits withdrawn, one half, and on suits struck off, from one-half to two-thirds, of the regular fee were levied. In 1858, a court, with jurisdiction over the whole of Kudal and thirteen villages of Vadi, was established under a native subordinate judge, munsif.

In 1878, three civil courts exercised original, and one, that of the Political Superintendent, exercised appellate jurisdiction. The original courts were the court of the *nyayadhish* at Vadi for the disposal of regular suits; the court of the subordinate judge, *munsif*, at Kudal for regular suits and small causes not exceeding £2 (Rs. 20) in value; and the court of the judicial assistant political superintendent who, besides settling small cause suits [The court of the judicial assistant political superintendent, temporarily opened in 1874 for disposing of arrears of appeals, was converted into a court of small causes.] up to £50 (Rs. 500), hears such appeals from the *nyayadhish* and the *munsif*, as the Political Superintendent may transfer to him.

Civil Statistics

The average distance of villages from the nearest courts is eight miles, and the average number of suits filed during the five years ending 1878, was, including small cause suits, 2585; during the same period the average number of cases, including arrears, disposed of was 2655. The highest number of cases tiled was 2824 in 1877, and the lowest 2142 in 1878. Of cases disposed of the highest was 2933 in 1877, and the lowest 2545 in 1878. The average number of appeals filed during the same five years was 130; of appeals decided either by

the Political Superintendent or his judicial assistant, 217; and the average value of suits £4 8s. (Rs. 44). During the same period, 374 applications for the execution of decrees were on an average disposed of. In 1878, the average duration of suits was one month in the judicial assistant's court; two years in the court of the *nyayadhish;* and in the *munsifs* court, nine months in the case of regular suits and two in small causes. In 1878, the total sum realised from these courts amounted to £2065 (Rs. 20,650), and the charges to £1378 (Rs. 13,780). The proportion of suits to population was one suit to every eighty-nine persons.

Registration

There is registration [In 1875, the registration department] established by Khem Savant Bhonsle in 1833 was remodelled. Under the old registration system, sale deeds at the rate of five per cent, and mortgage deeds at the rate of 21/2 per cent, of the aggregate value of the property, were compulsory. Under the new system compulsory registration extends to deeds of gift, sale, partition, adoption, and wills. The registration of bonds is optional. enough to employ two sub-registrars and one chief registrar. These officers are distributed one at each of the three sub-divisions of Vadi, Banda, and Kudal. The duties of the chief registrar, formerly performed by the secretary, daftardar, are now assigned to the state minister, karbhari, whose office is at Vadi. In 1878, the registration receipts amounted to £974 (Rs. 9740) and the charges to £157 (Rs. 1570), leaving a balance of £817 (Rs. 8170). The number of documents registered was 3088, and the value of the total immovable property transferred was £32,029 (Rs. 3,20,290).

Criminal Justice

In 1790 there were two magisterial tribunals, the court of the Chief and the court of the magistrate, mansabdar. In 1842 the state was divided into three parts, and each placed under a manager, kamavisdar, who, besides hearing land and rent suits, was invested with magisterial powers of simple imprisonment up to twenty days and of fine up to £1 10s. (Rs. 15). The constable, kotval, of the town of Yadi had like powers within its limits; serious cases were transferred to the Political Superintendent, who decided them by the help of three assessors chosen from among the state officers or nobles, sardars. In 1870 the number of criminal courts was raised from six to eight. At present (1878) there are seven criminal courts, that of the Political Superintendent exercising the powers of a Sessions Judge; of the assistant political superintendent having the powers of a first class magistrate; of the state minister, karbhari, invested with the powers of a district magistrate; and of the second class magistrates of the Vadi, Banda, and Kudal sub-divisions, and of the town of Vadi. In 1878, the Political Superintendent decided thirteen original and seventeen appeal cases, the district magistrate fourteen, and the second class magistrates 369. The most common offences are theft,

hurt, housebreaking, criminal assault, and breach of trust.

Police

In 1834-35, village headmen performed the duties of village constables. As all were unpaid they showed little energy, and the Groa territory afforded every facility for criminals to avoid arrest. In 1839, for the maintenance of order, the British Government raised a local corps for service within the limits of the state. Besides this corps, the only police was a militia of grant-holding, sanadkari, sepoys who were required to serve one month in the year. In 1842, the state was divided into three districts, and each placed in charge of a police officer with a number of peons who acted as constables. In 1870, the corps was recognised as a police force, and a number of men were placed under the police officers of the several districts, for duties previously performed by messengers whose services were dispensed with. In 1874 three chief constables were appointed, and each placed in charge of a division, peta, with a suitable number of head constables and constables stationed in twelve different posts, six in Vadi, three in Banda, and three in Kudal. At each station the party has eight or ten villages allotted to it.

Cost, 1878

In 1878, the total strength of the Vadi local corps was 437, of whom seven were officers and 430 non-commissioned officers and privates. Of the total number of men in the local corps 152 were continuously employed on police duties. Except a small detachment furnished from the Sar Desai's bodyguard, there is no mounted police. Taking 900 square miles as the area of the state and 190,814 as its population, the strength of the Vadi police is one man to every 5.92 square miles and 1255 souls. In 1878, the total cost was £2957 (Rs. 29,570) or £3 (Rs. 30) a square mile, or nearly *3d*. (2 *annas*) a head of the population.

Working 1878

In 1878, the proportion of crime to population was one offence to every 370 persons, and the percentage of persons convicted was 023 of the population. Of 640 accused persons, 453 or 70.7 per cent were convicted, and of £373 (Rs. 3733) worth of property alleged to have been stolen, £155 (Rs. 1549) or 41.5 per cent were recovered.

Jail

Besides the lock-ups at Banda, Vadi, and Kudal, for prisoners sentenced to terms of imprisonment for a week, there is only one jail in the state. The Vadi jail, an old cramped native building of stone and mud, roofed with tiles and bamboos, is situated on the lowest level of the fort, and by the fort walls is almost entirely shut out from currents of air. The enclosure, containing six cells with one or two double-grated windows in each and fronted by an open space is 188 feet by 87. In 1878 it had a total population of 207 prisoners and a daily average of fifty-six. The prisoners are employed partly in out-door

labour, in carrying out local public works, and partly in-doors, in basket, cane, coir and matting work, and the tinning of copper vessels. The total cost in 1878 was £680 (Rs. 6800), and the cost per head £12 (Rs. 120). The proceeds of the jail manufactures amounted to £140 (Rs. 1400).

¹ This does not include the cost born by the British Government for men station at Doramarg to collect the customs revenue.



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REVENUE AND FINANCE

THE earliest year for which revenue figures are available is 1790, when the receipts amounted to £24,284 (Rs. 2,42,840) and the charges to £26,218(Rs. 2,62,180). Sixty years later (1850) the receipts had risen to £27,424 (Rs. 2,74,240) and the charges fallen to £17,938 (Rs. 1,79,380). The earliest available balance sheet, that for 1860-61, shows a total revenue of £23,158 (Rs. 2,31,580), and a total expenditure of £28,636 (Rs. 2,86,860); the total revenue for 1878-79 amounted to £35,300 (Rs. 3,53,000), or, on a population of 190,814, an incidence per head of $3s. 3\frac{1}{2}d.$, and the charges to £30,375 (Rs. 3,03,750).

Land Revenue.

Land revenue receipts, forming 57.3 per cent of £35,300 (Rs. 3,53,000) the entire state revenue, have risen from £16,354 (Rs. 1,63,540) in 1860-61 to £19,280 (Rs. 1,92,800) in 1878. The rise in land revenue is owing to increased produce consequent on improved modes of tillage, and to the partially introduced revenue survey. The increase in charges, from £2124 (Rs. 21,240) in 1860-61 to £4997 (Rs. 49,970) in 1878, is due to a rise in the salaries of revenue officers and to revenue survey operations, which, in 1878, cost £1926 (Rs. 19,260).

Stamps.

Stamps are a new head since 1860-61. The 1878 stamp receipts, including court fees, amounted to £71 (Rs. 710).

Excise.

Excise receipts, which in 1860-61 were £997 (Rs. 9970), have risen to £1918 (Rs. 19,180) in 1878.

Justice.

Law and Justice receipts have risen from £973 (Rs. 9730) in 1860-61 to £1813 (Rs. 18,130). The 1878 charges were £3217 (Rs. 32,170) against £2391 (Rs. 23,910) in 1860-61.

Forest.

Forest receipts have risen from £209 (Rs. 2090) to £328 (Rs. 3280), and forest charges, owing to the increased strength of the establishment, from £78 (Rs. 780) to £158 (Rs. 1580) in 1878.

Customs.

The compensation paid yearly to the state for customs collected by the British Government is fixed at £2027 (Rs. 20,270).

Salt.

Salt receipts amounted in 1878 to £566 (Rs. 5660) against £340 (Rs. 3400) in 1860-61, and the charges to £82 (Rs. 820) against £60 (Rs.600).

Registration.

Registration receipts amounted in 1878 to £939 (Rs. 9390) against £391 (Rs. 3910) in 1860-61 and the charges to £122 (Rs. 1220).

On account of the increase in the number of schools and scholars, education receipts have risen from £13 (Rs. 130) in 1860-61 to £139 (Rs. 1390), and the charges from £176 (Rs. 1760) to £882 (Rs. 8820).

Military and Police.

Military and Police charges have fallen from £57,60 (Rs. 57,600) in 1860-61 to £4457 (Rs. 44,570) in 1878.

Jail.

Jail charges have risen from £317 (Rs. 3170) in 1860-61 to £380 (Rs. 3800) in 1878.

Balance Sheet.

The following statement gives a detailed comparison of the 1860-61 and 1878-79 balance sheets:

Savantvadi Balance Sheet, 1860-61 and 1878-79.

R	ECEIPTS			CHARGES.								
Heads.	1860-61. 1878-7				Heads.	1860-6	1.	1878-79				
	£	s.	£	s.		£	s.	£	s.			
Land Revenue	16,353	16	19,280	0	Land Revenue	2123	4	4997	10			
Stamps			71	4	Law and Justice	2391	6	3217	8			
Excise	997	8	1918	8	Forest	78	2	158	6			
Law and Justice	973	10	1812	14	State Expenses	3196	2	6862	16			
Forest	209	4	328	8	Military and Police	5759	16	4456	18			
Customs	2027	4	2027	4	Jail	317	2	379	18			
Salt	339	2	565	16	Education	175	18	882	8			
Registration	391	6	938	14	Medical	372	2	736	18			
Education	12	14	139	2	Charitable Allowances.	1565	10	1252	6			
Interest			684	0	Salt	60	4	82	8			
Advances and Loans			1810	4	Registration			122	6			
Local Funds			2508	0	Payments to States (a)	1158	2	1211	14			
Miscellaneous	1854	6	3215	14	Public Works	513	4	1463	3			
	aor i			Advances and Loans 44 79 16		1152	18					
				Local Funds	2700	8						
				Miscellaneous	4	751	2					
Total	23,158	10	35,299		23,636	12	30,375	8				

(a) These are yearly payments to Kolhapur and Ichalkaranji for certain rights they formerly held on some Vadi villages.

Local Funds

Local Funds collected since 1877 to promote education and works of public use, amounted in 1878 to £2508 (Rs. 25,080). The 1878 expenditure was £2700 (Rs. 27,000). The revenue is derived from five sources,, a local cess of one-sixteenth of the land revenue, the proceeds and cash balance of the tolls, except those paid to the British Government or to Kolhapur, and the receipts from ferries, cattlepounds, and village school fees. The local cess, of which two-thirds are

set apart for a road fund and one-third for a school fund, yielded in 1878 a revenue of £1600 (Rs. 16,000). The receipts from toll and ferry funds, cattle-pound fund, and school fee fund amounted to £695 (Rs. 6950), contributions yielded £155 (Rs. 1550), and miscellaneous sources £57 (Rs. 570), making a total of £2508 (Rs. 25,080).

For administrative purposes the local funds of the state are divided into two main sections, one set apart for public works and the other for instruction. Under these two heads the receipts and disbursements during 1878-79 were as follows:

Savantvadi Local Funds, 1878-79.
PUBLIC WORKS.

RECEIPTS.	EXPENDITURE.							
	£	s.		£	s.			
Balance, 1st April 1878	4630	4	Establishment	155	14			
Two-thirds of the Land Cess	1064	12	New Works	475	0			
Tolls and Ferries	593	5	Repairs	1443	4			
Cattle Pounds	42	12	Miscellaneous	145	11			
Contributions	155	0	Balance, 1st April 1879	4323	4			
Miscellaneous	57	0						
Total	6542	13	Total	6542	13			
viairaraoriti	INST	RUC	ΓΙΟΝ.					
RECEIPTS.			EXPENDITURE.					
	£	s.		£	s.			
Balance, 1st April 1878	237	6	Inspection	26	2			
One-third of the Land Cess	535	18	School Charges	418	18			
School-fee Fund	59	4	Prizes and Furniture	13	10			
			Miscellaneous	21	14			
			Balance, 1st April 1879	352	4			
Total	832	8	Total	832	8			

The chief local fund works carried out since 1877, are a road $13\frac{1}{2}$ miles long, six new shops, a toll-house, and two staging bungalows.

Municipality

In 1877 a municipal committee was formed for the town of Vadi. The town duties and taxes on trade previously collected by the state, and the proceeds of the local cess were made available for expenditure on town improvements. No new taxes have been imposed. In 1878, including the balance at the beginning of the year, the total municipal revenue amounted to £222 (Rs. 2220) and the charges to £174 (Rs. 1740).

The following table gives the 1878-79 receipts, charges, and incidence of taxation:

Savantvadi Municipal Details, 1878.

	DODLII A	RECEIPTS.													
NAME.	POPULA- TION.	Bala	Balance		Town Duties.		Trade Taxes.		Drug Fees		cal ss.	Miscel- laneous.		Total.	
		£	s.	£	S.	£	S.	£	s.	£	s.	£	s.	£	s.
Vadi.	8017	59	2	64	10	44	8	18	4	9	16	25	4	221	4

continued

Vla	DODLII A	CHARGES.												INCI	
NAME.	POPULA- TION.	Estab me	stablish- ment.		Safety.		Health.		Repairs.		Miscel- laneous.		tal	INCI- DENCE.	
		£	s.	£	s.	£	s.	£	s.	£	s.	£.	s.	£.	
Vadi.	8017	10	18	7	4	43	18	104	2	7	12	173	14	6	

INSTRUCTION

Schools, 1878-79.

IN 1878-79 there were forty state schools, or an average of one school for every six inhabited villages, with 1869 pupils on the rolls and an average attendance of 1341.5 or 1.35 per cent of 99,082, the entire population of not more than twenty years of age.

Cost.

Including superintendence and scholarship charges, the total expenditure on education on account of these forty schools amounted in 1878, to £1525 (Rs. 15,250). Of this £889 (Rs. 8890) were received from the state; £35 (Rs. 350) from public subscriptions; £187 (Rs. 1870) from fees and fines; and £414 (Rs. 4140) from local funds.

Staff.

Under a state inspector drawing a yearly pay of £30 (Rs. 300), the schooling of the state was conducted by a local staff of masters and assistant masters with yearly salaries ranging from £6 to £30 (Rs. 60-Rs. 300).

Instruction.

Of forty, the total number of state schools, one was an Anglovernacular school teaching English and Marathi up to the standard required for the University entrance test examination; thirty-six were vernacular schools in which Marathi was taught; and three in which Hindustani was taught. Besides these there was a school for girls.

Progress, 1850-1877.

The following figures show the increased means for learning to read and write offered by the state to the people during the last twentyseven years. In 1850 there was one Marathi school in Vadi with 200 names on the rolls or 0.27 per cent of 73,481, the total population of not more than twenty years of age. [This number is based on the census returns of 1851.] The school was maintained by the state at a yearly cost of £37 (Rs. 370). In 1854 there were two vernacular schools, one at Vadi paid by the state, and the other at Banda, paid partly by the state and partly by the inhabitants, with 228 pupils on the rolls. In 1856, besides a vernacular school attached to the local corps, there were four schools with 352 pupils on the rolls, the Vadi school teaching as far as algebra, geometry, and history. In 1860 there was one English school with a roll-call of twenty-three pupils or about 003 per cent; and five Marathi schools, The English and three of the Marathi schools were supported entirely by the state and two received state aid.] including, the local corps school, with a roll-call of 636 pupils or 09 per cent of the total population of not more than twenty years of age. In 1870 the number of schools was raised from six to twenty-three, with a roll-call of 1367 pupils or 14 per cent of the total population of not more than twenty years of age. The figures for 1878-79 were, as shown above, forty schools with a roll-call of 1869 names with an average daily attendance of 1341.5 or 1.35 per cent of 99,082 the total population of not more than twenty years of age. A comparison with the 1850 returns gives therefore for 1878 an increase in the number of schools of from one to forty, and from 200 to 1869 in the number under instruction.

Girls' Schools.

In 1878 the number of girls' schools was the same as in 1870. But the attendance has considerably increased, the total number on the rolls rising from twenty-nine in 1870 to seventy-seven in 1878, and the average daily attendance from 406 to 55.06. The school is under the management of a mistress.

Readers and Writers, 1872.

The 1872 census returns give, for each of the chief races, the proportion of persons able to read and write. Of 33,486, the total Hindu male population of not more than twelve years, 1191 or 3.56 per cent; of 14,659 above twelve years and not over twenty 1115, or 761 per cent; and of 41,202 over twenty years 3284 or 7.97 per cent were able to read and write or were being taught. Of 32,013, the total Hindu female population, 47 or 0.15 per cent; of 14,344 above twelve years and not over twenty, 12 or 0.08 per cent; and of 46,785 over twenty years, 35 or 0.08 per cent were able to read and write or were being taught.

Musalmans.

Of 858, the total Musalman male population not over twelve years, 61 or 7.11 per cent; of 307 above twelve years and not over twenty, 32 or 1072 per cent; and of 888 over twenty years, 77 or 8.67 per cent were able to read and write or were being taught. Of 818, the total Musalman female population not over twelve years, 25 or 3.06 per cent were able to read and write or were being taught.

Village Education.

In 1854 there were forty-seven private schools, sixteen in Vadi with 164 pupils, eleven in Banda with 103 pupils, and twenty in Kudal with 322 pupils. These schools are supported from fees and are not regularly kept up.

Library.

In 1877, the native general library in the town of Vadi, established in 1852 with a commodious building erected partly at state expense and partly by subscriptions, contained 1097 volumes and had fifty-six subscribers. The total amount realised in 1878 was £118 (Rs. 1180), besides funds to the amount of £250 (Rs. 2500) invested in Government four per cent securities. In 1874 a reading room supported chiefly by state officials was opened at Kudal. The yearly subscriptions amounted to about £10 (Rs. 100). Sayantvadi has no newspaper, and only one press for lithographing official papers.

HEALTH

[Contributed by Mr. Barjorji Ardesar, Assistant Surgeon.].

Diseases.

THE prevailing endemic diseases are malarious fevers, stomach and bowel complaints, coughs, intestinal worms, itch, dysentery, and diarrhoea. To some extent chicken-pox, sporadic small-pox, measles, and venereal disorders are common among the people. Fevers are said to be commonest during the rains, intermittent fevers in May, June and July, and remittent fevers in August. In many cases fever is combined with cough, pneumonia, dysentery, and diarrhcea, and in some with enlarged spleen. The generality of fever cases are simple intermittent, quotidian, tertian, quartan, and remittent. Of the stomach and bowel complaints, more frequent in July, the chief are dyspepsia, colic, worms, constipation, dysentery, and diarrhoea. The last two, common among sepoys, prisoners and townsmen, and prevailing mostly in the rains; are mild, yielding to treatment and seldom fatal. Constipation, colic, and dyspepsia, common among the people, are traceable to their unwholesome diet, and in some measure to their dull and sedentary life.

The epidemics known to have prevailed within the past fifteen years, are cholera, fever, and dysentery. In 1859 cholera made its appearance, breaking out in July and continuing till October. Sixty-six of the town people appear to have died during the prevalence of the epidemic. Its chief feature was its resemblance to colic. A person attacked with it first complained of acute and severe pain in the abdomen, then he felt prostrated, the pulsation ceased, the skin grew cold and clammy, and two or three purgings and vomitings ended in death. It re-appeared in 1865 and lasted for about three months, but was confined to the town and its suburbs. About 137 cases occurred of which sixty-four or forty-seven per cent were fatal. The rainy months in 1863, 1864, and 1865 were characterised by a great, prevalence of malarious fever. The tract of country to the south and east was the most affected. From the south the fever gradually spread as far north as Shivapur and the foot of the Hanmant pass, apparently increasing at the opening of each rainy season and falling off at its close. Though the type of fever was mostly simple intermittent, it was of a greater strength than had ever before been known. It yielded to quinine and had no special peculiarities, but when the treatment was not long enough continued, relapses were common. The unseasonable fall of rain in these years had caused a scarcity of food, and the mass of the hill population, from want of proper nourishment, were pre-disposed to disease. The number of deaths in 1865 in the division of Vadi was 1672 or two per cent of the population, in Banda 260 or three per cent, and in Kudal 623 or one per cent. By some the fever was attributed to the ripening and subsequent decay of the bamboo brakes, which was said to have been one of the chief causes of the

fever epidemic in north Kanara in 1862. In the opinion of the Political Superintendent it was a Kanara fever, and was. introduced into Vadi by the labourers who went to Kanara for employment, when large public works were being carried out. In the 1873 rains, there was a great and general prevalence of dysentery and diarrhoea. About 850 cases were reported in the town of Vadi from June to September. Of these fifty-three, or about six per cent were said to have died. The disease was traceable to atmospheric causes, the monsoon being unusually unsteady.

Hospitals.

In 1877 there were three hospitals and one dispensary. No dispensaries have been established in the district. But medicines, such as quinine and chlorodyne, are supplied to the chief constables, faujdara, who sell them in the outlying villages. During 1879; 4935 persons, 672 of them in-door and 4263 out-door patients, against 6512 in 1878, were treated in the civil hospital. The average daily sick was of in-patients 2.4 per cent and of out-patients 58.9 per cent. The chief forms of sickness were malarious fevers, worms, diarrhoea, skin disease, bronchitis, and venereal affections. Nine major and 111 minor surgical operations were performed with success. The total cost was £679 (Rs. 6790) or 2s. 10d. to each patient. In the jail hospital, an upper-storied, boarded, and windowed building, with patient wards in the upper and lower stories, 216 convicts were treated in 1878 against 144 in 1877.

Vaccination.

The total number of operations in 1879 was 3862, compared with 5181 primary vaccinations and 1077 re-vaccinations in 1873-74.

The following abstract shows the sex, religion, and age of the persons vaccinated:

Savantvadi	Vaccination	Details	1873-74	and	1870-80
Savaritvaui	vaccination	Details,	10/3-/4	ariu	10/9-00.

YEAR.	SEX.		RELIGION.				AGE.		
	Males.	Females.	Hindus.	Musal- mans.	Chris- tians.	Others.	Under one year.	Above one year.	TOTAL.
1873- 74	2661	2520	50 72	54	50	5	1247	3934	5181
1879- 80	2050	1812	3447	81	73	261	1043	2819	3862

Cattle Disease.

There are two chief forms of cattle disease, mouth and foot disease, lag, and cholera, musla or bulki. In the mouth disease, frequent in autumn, the mouth is swollen, sore, and ulcerated with a fetid discharge. Food and water are taken with difficulty. It is cured by

rubbing the tongue with pepper and turmeric, ambahalad. In foot disease, the feet swell, the hoofs rot and drop off, and the parts are worm-eaten. The disease is common in summer, but in autumn is more serious. Though contagious it is not very fatal. The treatment is to give internally the slough of a serpent with plantains, while kharsing oil, lime, tobacco, tar, damar, and palkand are externally used to the feet ulcers. The choleraic disease, from the dysenteric purge called musla or bulki, and also known as maharog and patki, is of the same type as rinderpest. It is generally met with in summer and autumn. Originating partly from atmospheric influence and partly from bad food and water, its chief symptoms are refusal of food, shivering, and increased temperature of the body, enlargement of the papittoe at its root, a blue or black line on the tongue and the margins of the gums, fetid breath, husky cough, hanging down of the ears and running of the eyes and nose. These symptoms last for two or three days when diarrhoea sets in. In unfavourable cases, the purgings last for two or three days, the prostration increases, cramps in the legs follow, and the animal dies in a week, while in favourable cases the purgings cease in one or two days. In less serious cases the animal is branded in the dorsal regions and forehead, and is given the tender spike of the betelnut tree, cloves, mace, nutmeg, and brandy. In serious cases, the juice of the kovala creeper and of the bulb of vachnag or churka is given in a pound of whey.

Births and Deaths.

The total number of deaths in the five years ending 1878-79 was returned at 19,488 or an average yearly mortality of 3897, or, assuming the figures of the census as a basis, of 2.05 per cent of the total population. Of the average number of deaths 2611 or 67.8 per cent were returned as due to fevers; 217 or 5.5 per cent to bowel complaints; 82 or 2.1 per cent to cholera; 19 or 0.04 per cent to small-pox; 192 or 4.9 per cent to dysentery; and 725 or 1 8.6 per cent to miscellaneous diseases. Deaths from violence or accidents averaged 47 or V2 per cent of the average mortality of the state. During the same period the number of births is returned at 18,678 souls of whom 9805 are returned as male and 8873 as female children, or an average yearly birth-rate of 3735 souls, or, on the basis of the census figures, a birth-rate of 1.9 per cent of the entire, population of the state.

AKERI

A'keri, about six miles north-west of Vadi, formerly a fortified post of some consequence, [It was unsuccessfully attacked by the Kolhapur chief in 1783, and successfully defended by Phond Savant III. in 1805.] has a yearly fair on the 14th of *Magh Vadya* (January-February), when about 5000 people assemble and drag a car, *rath*, round the temple. There is a quarry of hard purple or slate coloured stone much used for building. It has a post office.

AMBOLI

A'mboli, about thirteen miles north-east of Vadi, is being much improved as a sanitarium. Two roads, one leading to the Ram pass and the other to Mahadevgad, have been made, a flourishing market is springing up, and a residence and stables for the Sar Desai, a school house, police station, rest-house, post office, and a large well are built or are under construction. When some more houses are ready, it is hoped that Amboli will be a favourite sanitarium for Belgaum as well as for Savantvadi.

AVRA FORT

A'vra Fort, about fifteen miles south-east of Vadi and about 300 yards north of the Vengurla road, built of stones and mud, was, in 1843, surrounded by a dry ditch overgrown with brushwood and bamboo. [Bom. Gov. Sel. X. (New Series), 35,36.] On the north was an outwork connected with the fort by a very thick bamboo hedge on the east, and a wall on the west. There was a strong but poorly sheltered gateway. The fort was dismantled in 1845. >

PLACES OF INTEREST BANDA

Banda, on the right bank of the Terekhol near its mouth, about six miles) south of Vadi and twenty from the sea, had, in 1872, 2126 people and 472 houses or 45 persons to each house. Up to Banda the river is tidal, and navigable for boats of about 1½ tons (100 mans). Under the Bijapur kings (1489-1686), Banda, then known as Adilabad, was the chief town of a district, subha, under a minister, vazir. In the beginning of the sixteenth century (1514), it was a town of Moors and Gentiles, with merchants who dealt with traders from the Deccan and from the Malabar coast. Many ships from different quarters brought rice, coarse millet, and vegetables, and took away cocoanuts, spices, pepper, and other drugs to Diu, Aden, and Ormuz. There was also much export of goods and provisions from the interior. [Stanley's Barbosa, 74.] In 1538, Banda was described as better and nobler, both from traffic and size, than Vengurla, admitting galleys at low tide. [DeCastro's Primeiro Roteiro da Costa da India, 221.] Nine years later (1547) it suffered much by a treaty between the Portuguese and the rulers of Vijayanagar, which provided that all Vijayanagar goods should be sent to Ankola and Honavar in the Kanara district instead of to Banda, and that all horses imported by the Portuguese should go to Vijayanagar instead of to Bijapur. [Col. de Mon. Ined. VII. 256.] In the seventeenth century (1638), it is described as strong and fairly large with very beautiful streets, and a great trade with the Portuguese in paper and European stuffs. [Mandelslo, 215, 223.] About thirty years later (1670), it was said to be a mighty city, two leagues from Goa and two from Vengurla, built near the Dery, Tereh, with broad streets, many fair buildings, and several temples. [Ogilby's Atlas, V. 248.] In 1804, when the feuds between Shriram Savant and Phond Savant III. were at their height, Banda was handed over to Chandroba, Shriram Savant's illegitimate son, who soon after (1817) became so powerful as to hold it successfully against the Vadi ruler. In 1826, it was a small port with 105 houses and five shops on a river navigable for large boats. [Clune's Itinerary, 73.] At present (1880) it has about 100 shops and a Monday market, where cattle, cloth, and earthen vessels are sold. It has a well attended vernacular school, a post office, a custom house, and a travellers' rest-house.

Fort.

On a mound about seventy-five feet high, within musket range of the left bank of the Terekhol, stands a ruined irregular fortress built partly of good masonry and partly of loose stones and mud. Measuring 100 yards by fifty, it is built of roofed and loopholed towers joined by curtain's. On the south-east angle is a gateway approached by an easy ascent and of no strength. On the west is a sallyport leading to the river by a flight of narrow steps. The fort is of no strength and has only a few unserviceable guns. In the fort are the sub-divisional

revenue and magisterial offices.

Besides the fort there are the remains of some mosques, wells, and tombs. To the south of the river, built of laterite covered with cement, is the Jama mosque measuring forty feet by eighteen. The walls are damaged and the roof is gone, but some handsome cornices and an entrance flight, of steps remain. Outside the mosque is a cenotaph of Syed Abdul Kadir Jilani, the Piran-Pir or chief saint of Baghdad, where Muhammadan marriage parties usually come to pray. [This is doubtful. According to the local account Abdul Kadir was a Bijapur general.] Close by is a pond, seventy-one feet by sixty, used for bathing purposes. Near it, in fairly good repair, is a travellers' home, musafarkhana, a lofty octagonal tower with domed roof. The door posts are formed of solid blocks of stone. Inside there are traces of two tombs and some very neat laterite carving in the arches. The building is surrounded by a groin-roofed gallery 110 feet long and ten wide. About 150 yards further is another roofless and ruined mosque fifty-four feet by twenty-eight. It has two rows of octagonal plastered stone-pillars with carved capitals and fine tracery about the arches and windows. Outside the building is a pond, sixty-one feet by fifty, with twenty-four stone steps leading to the water, and small cells all round. A few hundred yards further is the Redi Gumhaj or buffalo mosque which has lately been restored. Besides the above there are many small tombs and ruins.

KINKERI

Kinkeri, a village about six miles north-east of Vadi, has a yearly fair on the seventh of *Phalgun Shuddh* (March). At the fair time four men climb up a tall teakwood pillar, and the people standing round throw stones at them, but it is said, by the favour of the deity, none of them are ever hurt.

KUDAL

Kuda'l, on the Karli, thirteen miles north of Savantvadi had, in 1872, 2639 people and 445 houses or 6.9 persons to each house. Every Wednesday a market is held chiefly for cattle, fish, pottery, and vegetables. It is connected with Vadi, Malvan, and Vengurla by a good road, and with Kolhapur by the Phonda pass, and has a post office and a good Marathi school. As far back as the sixth century (about 578), Kudal was the head-quarters of a branch of Chalukyas. [Ind. Ant. VII. 161.] In the twelfth century it was the seat of a Maratha baron, Paligar, [Jervis' Konkan, 81.] and continued to be the chief town of the district up to the. Musalman conquest (1500). [Jervis' Konkan, 81.] Under the Bijapur kings its Brahman ruler was, with the title of Desai of Kudal, continued as the head of twelve sub-divisions, each governed by a *naile*. [Bom. Gov. Sel. X. 154.] In modern times (1748) Kudal was the scene of a severe defeat of Tulaji Angria by Jayram Savant And a few years later, Jayram, quarrelling with his nephew Ramchandra Savant (1737-1755) the Vadi chief, retired here and exercised independent authority. In 1804, in the dispute between Phond Savant III. and Shriram Savant, the Kolhapur chief, coming to Phond Savant's help, seized Kudal and laid the country waste.

Fort.

On rising ground to the west of the town is a ruined fort of loose stone and mud, with bastions and connecting curtains. It is said to have been built or repaired by the Bijapur kings. Irregular in shape it covers an area of about 160 square yards, and is encircled by a ditch. In the south-east corner are three gateways of no great strength, and on the west is a sallyport with a narrow ruined gateway. Its few guns of different sizes are all unserviceable. Within the fort are a ruined mosque, still sometimes used, and a fine cut masonry well called ghoda bav, forty feet deep and 100 round. It is called the horse's well, ghoda bav because the path to the water is broad and slanting enough to allow a ridden horse to go down and drink. A building, finished in 1877, holds the sub-divisional revenue and judicial offices, and a detachment of police.

KUPICHA DONGAR

Kupicha Dongar is an unfortified hill, about 1000 feet high, near the village of Valaval on the banks of the Karli river in Kudal. Its quarries yield good white granite.

PLACES OF INTEREST MAHADEVGAD

Maha'devgad is a small weak fort, on an outstanding peak of the Sahyadris, about a mile and a half from Amboli at the top of the Parpoli pass. In 1830 it was entered from the east by two narrow gateways, flanked with three small towers and secured by wooden bars. The approaches to the entrance were narrow and difficult. Within gunshot of the fort, in an open space with some water, were two smell hillocks which commanded the fort. At present (1880) the walls, which stood on the eastern side, have fallen down and fill the moat. There are no remains of any gateway or entrance to the fort. The ground inside has been turned into a meadow, and along a road from Amboli carriages can be driven to the end of the spurs. From the top there is a fine view of the Konkan, and in clear weather the sea is seen at a distance of about thirty miles. The height is about 2500 feet and the space covered by the fort about twenty acres. In 1830, when taken by Lieutenant-Colonel Morgan, the approaches were for about a mile and a half defended by breast works of loos'e stones and wood, and inside were two small guns in fairly good order. [Lieut-Col. T. Morgan, commanding XIVth Regt. N. I. (14th Dec. 1830).]

MANOHAR FORT

Manohar Fort, fourteen miles north-east of Vadi and on the south of the Rangna or Prasiddhgad pass, is a solid mass of rock about 2500 feet high, joined to the Deccan by a narrow ridge about two miles long. It is said to have been fortified since the time of the Pandavs, [Clune's Itinerary, 78.] and in good hands is almost impregnable. Triangular in shape, 440 yards long by 350 broad, it has a single entrance approached by a flight of rock-cut steps and guarded by two gateways.

In the 1844 disturbances, the garrison, gadkaris, of the fort, numbering between 400 and 500 men, espoused the cause of the Kolhapur insurgents. [See above, p. 445.] On the night of the 10th October, a band of them entered the house of the sabnis of Grothos, and burnt all his public and private papers. On the following night (11th October) a detachment of them, 200 strong, came out of the fort and attacked the detachment of the Savantvadi Local Corps stationed at Dukanvadi. The attack was repulsed, and two days after (13 th October) Major Benbow, with a detachment of the VIIth Regiment N. I., came from Vengurla to strengthen the Dukanvadi post. But with the aid of the Rangna garrison, the Manohar rebels attacked Dukanvadi, and placed the troops there in great peril. Reinforcements were pushed forward from Savantvadi, and Colonel, afterwards Sir James, Outram, the Political Agent at Kolhapur, taking the direction of military operations, pressed and harassed the rebels and destroyed their power in the open country. Still, for two months they continued to hold Manohar. About the close of the year 1844,

Captain Popham, with three companies of the VIIth Regiment N. I., advancing against Manohar, attacked, and after a severe contest drove the enemy from a strongly stockaded post on Targol hill. After this defeat the insurgents abandoned the fort and it was taken (27th January) by General Delamotte. When the rebellion was quelled the fortress and its revenues were made over to Vadi. The garrison were allowed to keep their lands on certain conditions, but were declared to have forfeited all money claims; and those who lived in Kolhapur were forced to quit Vadi, and settle above the Sahyadris.

MANSANTOSH

Mansantosh, a small angular fort about fifteen acres in area, is an offshoot of, and about the same height as, the celebrated fort of Manohar, from which it is separated by a chasm 200 yards wide. Access is now almost impossible, as the old path, which must have had steps near the top, has completely disappeared.



PLACES OF INTEREST NERUR

Nerur, on the Karli river, three and a half miles west of Kudal, has a population of 4461 souls and 990 houses. Near the village are two ponds, the larger of which was, in 1877, examined with the view of enlarging it by replacing the earth embankment by a strong masonry dam. The idea had to be given up as the soil proved too weak to bear the weight of the masonry.



PAT

Pa't, a large garden village in the west of Kudal, ten miles north of Vengurla, and eighteen miles north-west of Vadi, has 2923 inhabitants and 859 houses, scattered over a large area, and including several hamlets, *ovats*. It has a fine natural lake bordered by betelnut and palm groves, and is said during the rains to cover an area of about eighty-three acres. For many years its water has, during the cold, season, been used to irrigate land in the neighbouring Ratnagiri villages of Mhapan and Kochra. There is an embankment with sluice gates on the north-east. Arrangements for repairing this embankment and building a new sluice gate have (1880) been made. In the village is a Marathi school supported partly by the state and partly by the people.

PRASIDDHGAD

Prasiddhgad, or **Ra'ngna Fort,** on the Savantvadi and Kolhapur boundary, stands on a peak of the Sahyadris, about eighteen miles north of Mahadevgad, and is 2600 feet high. Rangna was one of fifteen forts built by a chief of Panhala near Kolhapur, who seems to have lived at the close of the twelfth century. In the beginning of the eighteenth (1709), Tarabai took refuge in the fort and was unsuccessfully besieged by Shahu the grandson of Shivaji. [Grant Duff (13), 187.]

SARAMBAL

Sarambal, a village on the Karli about four miles north-west of Kudal has 1500 inhabitants and 347 houses. It has a large lake covering an area of about seventy-two acres, whose water is used chiefly for field irrigation.

SAVANTVADI

Savantvadi, Vadi, or **Sundarva'di,** that is the Beautiful Garden, in 15° 54' 15" north latitude and 73° 51 36" east longitude, with, in 1872, a population of 8017 souls, stands 367 feet above the sea, about nineteen miles west of the base of the Sahyadris, and seventeen miles east of Vengurla. Founded by Phond Savant in 1670, the town, almost buried in palm groves, stretches round the border of a lake, over rocky uneven ground seamed by ravines and watercourses. Well wooded hills rise on all sides, the highest, Vadi Peak on the west, rising 1200 feet above the sea.

Population.

Of its 8017 inhabitants, 6364 (males 3169, females 3195) were Hindus; 873 (males 441, females 432) Musalmans; 776 (males 354, females 422) native Christians; and four 'Others'.

Trade.

Except on Saturdays, the market day, when numbers come in from the villages round, Vadi is a place of little trade. Besides the office of the police superintendent, *kotval*, the market street or *bazar*, has an Anglo-vernacular school, a library, a post office, a vernacular school, and several upper-storied tile-roofed buildings, the houses of well-to-do traders. Savantvadi manufactures are almost all ornamental. They are lacquered toys, *khaskhas* grass fans, mats, boxes and, baskets ornamented with beetle wings and gold embroidery, velvet and embroidered saddle-cloths, small tables and other ornaments of bison and buffalo horn, round and rectangular playing-cards, and pipe bowls of the inner shell of the cocoanut polished and inlaid with quicksilver.

Lake.

The lake, a beautiful sheet of water, hemmed in by well wooded hills and girt with a belt of palm, jack, and mango trees, is known as the Pearl Lake, *Moti Talav*. Covering about thirty-one acres, and with a mean depth of six feet, it was, in 1874, at a cost of about £2000 (Rs. 20,000), improved by replacing the old retaining dam by a cut-stone wall 204 yards long, secured by. hydraulic cement, and with, at each end, iron gates worked by rack and pinion. On the north-west a long flight of steps leads to the water, and on the south-east and south-west are some rice fields watered from the lake. Besides for irrigation the water is used for bathing, cattle-drinking, and washing clothes.

Fort.

On the east shore of the lake, separated from it by a roadway and sloping bank, stands a ruined stone and mud fort, surrounded on the north-east and south by a ditch dry in the fair season. Irregular in shape, 350 yards by 150, and consisting of roofed loopholed towers and bastioned curtains, it has three entrances, the chief to the north, a gate of no great strength flanked by two towers. The fort contains two brass and some other guns all unserviceable. On the banks of the lake, an arched gateway, known as the Mus, or Sluice Gate, between two large circular towers, leads to an inner fortress whose walls stand on the brink of deep natural ravines. The entrance towers, with handsome castellated battlements, are being made into a post office, and the west face is to be furnished with a clock With a three feet dial. A block of buildings inside of the gateway, formerly used as a show place for wild beasts, now holds the offices of the Political Superintendent and his assistant. Close to these offices is a large quadrangular two-storied building, the eastern side taken up by a onestoried reception hall. The rest contains the offices of the manager kamavisdar, the secretary daftardar, the registrar, the judge nyadhish, arid the treasurer. To this square, a new front, with a clock tower over the central entrance gate, is being built at an estimated cost of £2200 (Rs. 22,000). Very near to this are the jail, the state stables, and the palace. About 280 yards north of the fort are the lines of the Local Corps, with a range of huts, on rising ground, accommodating about 200 families.

South of the town and close to the lake stands a double-storied building, now used as the Political Superintendent's residence. The station hospital, on a high airy site, an irregularly shaped red-stone building plastered with cement, with room for twenty-four patients, has out-offices, a small space in the front, and an enclosure behind with room for twelve female patients. As few people seek admission it is used by the sick of the Local Corps.

Sub-divisions.

Though not surrounded by a wall, Vadi is fenced on most sides by ditches, ravines, stone walls, and bamboo thickets. Covering an area of about two miles, the town is divided into seven wards, vadas. On the south-east corner of the lake lies the Salai or frankincense tree ward. East of the lake is the Private, Khasgil, ward, where the personal servants of the Chief's family live. West of the Khasqil-vada and north of the lake lies the Sabnisvada or head-clerk's ward. This, no longer used as a title, is still borne as a surname by a family, who, with their relations, hold a great part of this quarter. North-west of the Sabnisvada and beyond the outer fortification lies the Bhatvada or Brahmans' quarter. West of the Sabnisvada lies the Panjar or Paniarvada, the head-quarters of the native Christians, most of whom are masons. South-west of the Panjar-vada lies the Matavada, containing the tombs of the chief's family, and to the south-east of the Matavada at the base of the hill, lies the Junabazar, the oldest part of the town, said to date from the time of Lakham Savant (1641 -1665).



PLACES OF INTEREST TULAS

Tulas, about thirteen miles west of Vadi on the Vengurla. road, has, on the last day of *Vaishakh* (May-June), a yearly fair in honour of Jaiti Parab, a village headman looked upon by the people as a saint. About 5000 persons assemble.



PLACES OF INTEREST VAGHERI

Va'gheri, a hill about five miles east of Vengurla, is a well Known landmark for seamen. The height is about 1200 feet, and the area at the top about forty acres. There are no signs of fortification.

VALAVAL

Va'la'val, a village about four miles west of Nerur and thirteen miles north of Vengurla, contains 507 houses and 2334 inhabitants. It has a large pond.

