







W.B. L. Hawkins





PLATE XXXVI.



SULTAN MOHAY UD DEEN,

Eldest legitimate Son of Tippor Sultan!

## JOURNEY FROM MADRAS

THROUGH THE COUNTRIES OF

## MYSORE, CANARA, AND MALABAR,

PERFORMED UNDER THE ORDERS OF THE MOST NOBLE THE MARQUIS WELLESLEY, GOVERNOR GENERAL OF INDIA,

FOR THE EXPRESS PURPOSE OF INVESTIGATING THE STATE OF

AGRICULTURE, ARTS, AND COMMERCE; THE RELIGION, MANNERS, AND CUSTOMS; THE HISTORY NATURAL AND CIVIL, AND ANTIQUITIES,

IN THE DOMINIONS OF

### THE RAJAH OF MYSORE, AND THE COUNTRIES ACQUIRED BY

THE HONOURABLE EAST INDIA COMPANY. IN THE LATE AND FORMER WARS, FROM TIPPOO SULTAUN.

#### BY FRANCIS BUCHANAN, M. D.

FELLOW OF THE ROYAL SOCIETY, AND OF THE SOCIETY OF ANTIQUARIES OF LONDON; FELLOW OF THE ASIATIC SOCIETY OF CALCUTTA; AND IN THE MEDICAL SERVICE OF THE HONOURABLE COMPANY ON THE BENGAL ESTABLISHMENT.

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#### ERRATA TO VOL. III.

	220000000000000000000000000000000000000
Page.	Line.
25,	5, for Bahadary, read Bahadury.
25,	11,12,16, } for Hunas, read Hanas
26,	2, 3,
33.	16. for Inams, read Enams.

33, 10, for 1 nams, read Lindins.
35, 23, for 1 \(\frac{1}{10\sqrt{0}\sigma}\), read \(\frac{1}{17\sqrt{0}\sqrt{0}\)}.
41, second marginal note, for grams, read grains.
139, 9, for Is, read I.
284, first marginal note, omit Manday Gudday.
398, second marginal note, for abour, read labour.
463, second marginal note, there should be no point at Anavun.

# IOURNEY FROM MADRAS, &c.

## CHAPTER XIV.

JOURNEY THROUGH THE SOUTHERN PARTS OF CANARA.

REFORE I proceed to give an account of my journey through CHAPTER the province of Canara, I shall prepare my reader, by detailing the answers which were sent to my queries by Mr. Ravenshaw, the Jan. 15. collector of the southern division; a young gentleman who does shaw's ancredit to the school of Colonel Read, and to Mr. Hurdis, under swers to my whom he was formed to business.

Mr. Ravenqueries.

Query 1st. What proportion of your district consists of land that has always been uncultivated? Of this, what part might, with proper management, be converted into rice-ground? what part into coconut or Betel-nut gardens? What proportion of this waste land is now cleared for grass, what is under forest, and what is enclosed for plantations of timber trees, firewood, &c.

Answer. No account of the extent of jungles (forests) has ever been taken. All the surveys that have been made only went to ascertain the cultivated lands, and those capable of culture, but not at present cultivated, and which are 111,965 Morays. Of this, 24,181 Morays are cleared for grass, 7,043 have a capability of being converted into rice ground, and 1,789 are fit for gardens. No

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Jan. 15.

CHAPIFR account is kept of the quantity enclosed for timber, but all the remainder would answer for the purpose. N. B. The average Moray is 45 Guntas, each 33 feet square, or 49,005 square feet, and is therefore nearly 1 1 3 acre.

- Q. 2d. What proportion of your district consists of rice-land? Of this, what proportion has been cultivated last year, what has been waste or unoccupied?
- A. 247,218 Morays; of which 225,782 were cultivated, and the remainder was waste, owing to a want of tenants. Of that which was cultivated, 1,591 Morays were overflowed, and the crops destroyed.
- Q. 3d. What proportion of your district consists of garden grounds? In these, how many coco-nut or Betel-nut-trees, and trees for supporting pepper vines, are planted? Is the estimate of these founded on any recent survey, or from an old valuation?
- A. The number of trees contained in the gardens, according to the public accompts, are, coco-nut 695,060, Betel-nut 1,155,850, Mangos 59,772, sundries 54,362, pepper vines 368,828. This estimate is formed from an old survey made in the year 1793. The number of trees, of each description, is at least double of what is here mentioned.
  - Q. 4th. How many ploughs are there in your district?
  - A. 71,716.
  - Q. 5th. How many slaves of all ages, and both sexes?
  - A. 7924.
  - Q. 6th. How many houses?
  - A. 71,856.
  - Q. 7th. Of these, how many are inhabited by Christians?
  - A. 2,545.
  - Q. 8th. How many by Mussulmans, including Moplays?
  - A. 5,223.
  - Q. 9th. How many by Bráhmans, including Namburis?

A. 7,187, exclusive of Kankánies, the Bráhmans of which nation CHAPTER are confounded with the other casts.

- Q. 10th. How many by Jain?
- A. 2,700.
- Q. 11th. How many by those who wear the Lingam?
- A. 880.
- Q. 12th. How many by Nairs?
- A. 788.
- Q. 13th. How many by Massady Buntars?
- A. 7,123.
- Q. 14th. How many by Jain Buntars?
- A. 1,060.
- Q. 15th. How many by Kankánies?
- A. 2,434.
- Q. 16th. How many animals of the cow kind are there in your district?
  - A. Cows 62,130, males 98,860, calves 59,109.
  - Q. 17th. How many animals of the buffalo kind?
  - A. Females 12,129, males 43,596, calves 6,882.
- Q. 18th. What quantity of seed rice is sown annually? As the Hany differs in different districts, it will be necessary to state this in Morays of Mangalore, or at least to state the proportion which the Hany of each district has to that measure.
- A. 2,36,374 Morays of 60 Mangalore Hanies. N. B. This Moray contains 3,847 cubical inches; the seed therefore is about 423,000 bushels
- Q. 19th. What goods are exported by the sea from your portion of Canara, and to what annual amount?
- Q. 20th. What goods are imported by sea, and to what annual amount?
- Q. 21st. What goods are exported from your division of Canara by land, and to what annual amount?

#### A JOURNEY FROM MADRAS THROUGH

CHAPTER XIV.

Q. 22d. What goods are imported by land, and to what annual amount?

A. Annexed are statements of the exports and imports by sea, from the revenue accompts, for two years during the government of the Sultan; and for one year, since the country has come under the government of the Company.

General statement of commerce by

The particulars of this commerce will be seen by consulting these: I shall, however, state the general result.

Account of the exports and imports into Mangalore Taluc (district) by sea.

	Imports.	Exports.
Fusly or revenue year 1203 Ditto 1205 Ditto 1210	Pagodas Fans. Anas. 39,118 5 143 13,641 6 2 84,461 7 19	

From this will be evident, the immense benefit that the country has received by a change of government.

Commerce by land. No custom-house 'accompt has been forwarded of the exports and imports by land; but Mr. Ravenshaw states the former to consist chiefly of salt, salt-fish, Betel-nut, ginger, coco-nuts, coco-nut oil, and raw-silk, to the annual amount of 20,388 Pagodas. The imports are chiefly cloths, cotton, thread, blankets, tobacco, and black cattle, with a small quantity of pepper, and sandal wood, to the amount of 37,455 Pagodas. The balance, in favour of the division of the province under Mr. Ravenshaw, is therefore 70,899 Pagodas, each worth at the mint price very nearly 8s.  $0\frac{3}{4}d$ .

Along with these answers to my queries, Mr. Ravenshaw most obligingly sent me some valuable statements relative to the quantity of seed required for rice lands, and to the quantity of produce,

# ACCOUNT of SIe Talook of Mangalore.

-		X	PO	RT	ED.		_			_			
					Pric	ce.	1	Custo	ms.		Total	Custo	oms.
No.	° ARTICLES.		Pieces.	Parcels.	Pugodus.	Fanams.	Anas.	Pagodas.	Fanams.	Anas.	Pagodas.	Fanams.	Anas.
	Chawl, or Rice				56677	7	8	11142	_	14	11164	_	3
	Suparee, or Betle-Nut				781	8	9	302		5	303 19	3 4	1 7
	Neshpany Dagah, or Silk Thread Chinni Sacar, or Sugar	H	_		-	-	-	-	_	-	102	2	2
	Kahdy Sacar, or Sugar Candy				_					-	25 21	7 4	5 9
	Hachy, or Kismess, or Plums				_	-	_		_		17	8	4
8	Jeera, or Cummin Seed				_	-	-	-			17 5	8	4
9	Hing, or Asafætida				_		_		_	_	22	6	4 2
	Badam, or Almonds	H			_		-	-	-	-	6	6	7
12	Ganja, or Flowers of Hemp				46			3	5	15	19 110	. 9	10 5
13	Cajure, or Dates.	1				1-1-	-		-1	-1	4	- 9j1	12
93	Cagath Regnee, or Paper Reams	-				_ -			_ -		-	7	8
	Jarick Ranaray, Goat	- -			45		-	2	_		1	5	_
96	Mingurry Cutt, or Fish Fins				45 21			1	8	2	1	8	2
	Adody, or Leather	- -	-		-	- -	-	-	- -	-	_	2	8
99	Cirkah Pitty, or Vinegar Pipes				90			3	7	8	1 3	4 7	11 8
	Coodveh, or clean Rice Bags	- -			75	9-	-	3	3	-	34	í	14
	Cutcha Sufeth Rumall, or Handkerchiefs	-	-		_	- -	-		- -	-1	8	8	9
103	Kunghi, or Combs											2 2	3 13
104	Kengany Ricab, China Ware Lakly Kinarah Babut Hyna, or Looking	- -	-	-	_		-	-	- -	-	-	4	3
106	Hynuck, Spectacles										1	1	15 4
107	Mushooru Topi	- -	_		-	- -	-[		- -	-1	-	5	1
109	Virrannah, or Fans	1	l-		_	- -	-		_ -		_	2	4 12
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111	Suhi, or Needles	-	-		-		-	-	- -	-	-	-	15
113	Chapli Joddah, or Malabar Shoes	-										3	15 6
114	Path Cothaday	-				- -	-	-	- -	-	-	3 2 1	4
116	Bilawara Sishaw											1	2
117	Taftha Chattery, or Silk Umbrellas Pingany Kattora Chotti, and Badda	- -			-	_ -	-		- -	-	6	9	6
119	Anchorage Duties for Boats	-				- -			_ -	-	9	6	4
120	Ditto for Sibadey						4		-[-		3	6	11
121	Ditto Munchoes	-			-	- -	-	-	- -	-	7	6	4
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#### A JOURNEY FROM MADRAS THROUGH

CHAPTER XIV. Jan. 15.

Q. 22d. What goods are imported by land, and to what annual amount?

A. Annexed are statements of the exports and imports by sea, from the revenue accompts, for two years during the government of the Sultan; and for one year, since the country has come under the government of the Company.

General statement of

The particulars of this commerce will be seen by consulting commerce by these: I shall, however, state the general result.

> Account of the exports and imports into Mangalore Taluc (district) by sea.

	Imports.	Exports.
Fusly or revenue year 1203 Ditto 1205 Ditto 1210	Pagodas Fans. Anas. 39,118 5 14\frac{3}{4} 13,641 6 2 84,461 7 19	

From this will be evident, the immense benefit that the country has received by a change of government.

Commerce by land.

No custom-house 'accompt has been forwarded of the exports and imports by land; but Mr. Ravenshaw states the former to consist chiefly of salt, salt-fish, Betel-nut, ginger, coco-nuts, coco-nut oil, and raw-silk, to the annual amount of 20,388 Pagodas. The imports are chiefly cloths, cotton, thread, blankets, tobacco, and black cattle, with a small quantity of pepper, and sandal wood, to the amount of 37,455 Pagodas. The balance, in favour of the division of the province under Mr. Ravenshaw, is therefore 70,899 Pagodas, each worth at the mint price very nearly 8s.  $0\frac{3}{4}d$ .

Along with these answers to my queries, Mr. Ravenshaw most obligingly sent me some valuable statements relative to the quantity of seed required for rice lands, and to the quantity of produce,

ACCOUNT of SEA CUSTOMS collected in Anundasumaswara Fusly 1203 in the Talook of Mangalore.

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# ACCOUNT ofe Tallook of Mangalore.

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				Pri	ce.	Custo	ms.	Total	oms.	
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# ACCOUNT of Mangalore.

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# ACCOUNT (contine Tallook of Mangalore.

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		ED.	Price.	Customs.	Total Customs.
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in the Year

Rowdry or Fusly 1210,

in the Tallook of

Mangalore.

ACCOUNT (continued) of SEA CUSTOMS collected

Morny. IMPORTED Pieces, Maunds. Marings, Hunnes Extra Articles. EXPORTED. Pieces. Parcels. Pugodas.

JOHN G.

RAVENSHAW.



### MYSORE, CANARA, AND MALABAR.

of which I shall hereafter avail myself. He also favoured me with a statement of the population made up about this time; and reliance may be placed on its accuracy with respect to numbers. I have taken the liberty of altering the orthography, to make it conformable to the other parts of my account. The different casts are detailed in the usual confused manner, with which they are spoken of by the native officers of revenue.

Jan. 15.
Population.

Kaneh Shumareh, or statement of Casts, Men, Boys, Women, and Girls in the ten Talucs or districts of the Southern division of the province of Canara.

No.	Casts or Trades.	Houses.	Men.	Boys.	Women,	Girls.	Total.	
740.	Casts of Trades.	nouses.	MCH.	Boys.	Women,	Gills.	I Otal.	
	,							
1	Brahmans. Nearly all but that of holding the							
	plough	6867	12677	6932	13192	4080	36881	
2	Coochastully. The same	320	762	450	799	275	2286	
	Kankánies. Bankers, shopkeepers, and traders	2434	4724	2419	4495	1436	13074	
	Pennecar a 2d sort. Same, but in a lower line	152	242	112	281	82	717	
	Novaisgar. Cultivators, and shopkeepers	277	544	269	542	140	1501	
	Stanicas. Employed in low offices at heathen							
	temples	880	1466	744	1396	450	4029	
7	Guijer. Merchants from Guijerat	4	38		8	5	51	
	Hurry Chitties. Merchants	161	293	129	291	83	796	
	Lingabantar. Merchants, usually called Banijigar	328	573	205		151	1464	
10	Rajputs. Messengers, soldiers, and robbers -	47	91	38	79	23	231	
	Satanies. Adorn the idol Vishnu	6	10	3	9	4	26	
12	Daseris. Religious mendicants	114	181	67	154	74	476	
13	Vairágis. Ditto	6	11	4	7	5	27	
14	Jainas. Cultivators	2700	5108	2307	4763	1914	14092	
15	Bunts. Ditto	8183	19349	7775	19041	6654	52819	
16	Davadygar (Devagaica). Musicians	1583	2893	1079	2968	918	7853	
17	Nairs. Farmers	788	1718	748	1800	620	4886	
18	Moplays. Farmers and merchants	3835	6383	3402	6776	2582	19143	
19	Moylar. Similar to the Stanica, No. 6	160	206	111	318	87	722	
20	Carwar. Generally seamen	28	33	8	36	5	82	
	Mussulmans. Exclusive of Moplays, and artists	1388	2276	1200	2377	832	6685	
22	Cunians. Fortune-tellers, exorcists	145	234	118	233	83	668	
23	Chuplygur. Day labourers (a Mussulman word)	43	72	2+	73	20	189	
24	Pomebut. Attendants on the idols of destructive							
	spirits	224	414	147	367	124	1052	
25	Coilaury. Cultivators, and servants	523	1037	410	1052	417	2916	
	Carda Kankunies. Ditto	719		598		399.	3718	
27	Kankuny Walleygar. Messengers, &c	275	511	205	517	125	1358	
	Chuptagar. Carpenters, woodcutters, &c	259	406	176	439	126	1147	

CHAPTER XIV.

Jan. 15.

, .								
ί	No.	Casts or Trades.	Houses.	Men.	Boys.	Women.	Girls.	Total.
	29	Buat. Persons employed by the great to sing their						
	20	praises	8	16 6218	11	6061	12	56
		Gauda Barla Wocul. Cultivators Biluaras. People who extract the juice of palms	3271 11397		3587 8087	6264	2708	18777 53764
	39	Marattahs (Súdras of that Désa). Cultivators	1943	3298	1689	19376 3152	6079 1285	9424
		Bedor. A savage race, who eat cats, and with		3290	1009	3132	1200	9424
	00	great propriety are called murderers	16	29	13	23	14	79
	34	Kshatriyas (pretenders to the 2d. cast). Messen-		~3	-			13
		gers, robbers, &c	289	657	295	640	170	1762
	35	Mogayar. Fishermen, boatmen	2410	4017	1530	4166	1349	11062
		Parsis. Merchants	1	. 8	_	-		8
	37	Tælics. Oil-makers	755	1266	553	1283	506	3608
		Garludda Kankúnies. Gardeners, and cultivators	114	193	65	167	40	465
	39	Christians. Cultivators, merchants, &c	2545	3701	1968		1605	10877
		Cancgeyer. Cultivators	63	89	58	97	31	275
		Cabbadi. Sellers of butter, and milk	23	31	12	33	16	92
		Currey Cudemdacr. A low cast of cultivators -	206	437	261	393	182	1273
		Mulayala Biluaras. (Tiars) Toddy-sellers -	128	219		219	62	583
		Mar, Marattahs. Cultivators Malay-cudis. Cultivators living on the hills -	41	74	55 404		22 247	2399
		Hola Davaru (Halypecas?). Cultivators -	579 155	885 330	150		124	938
		Bhyru. Day labourers	265	402			175	
		Cundlagar. Farmers	57	106	71		38	317
		Upar. Pioneers	6	9				18
		Garwady. Snake-catchers	1	4				7
		Govaygar (natives of Goa). Merchants -	46	115	77	94	44	
		Autgar. A sort of actors, who represent the						
		ancient wars of India	3	7	1	5	2	15
		Conchittigar. Farmers	18	21	18	21	10	70
	54	Comutty (Vaisyas). Merchants of the 3d pure						
		cast	12	18	6		5	56
		Pacanat. Collectors, and venders of drugs -	12	17	18	17	8	60
		Dumbar. Tumblers	5	20	10	25	8	63
		Bardsegar. Labourers, and cultivators	31	46	26		38	
		Baylall. Farmers	18	47 8	11	52 8	19 3	129
		Ruchewar. Messengers, soldiers, robbers	_	٥	~	٥	J	21
	00	Gursar. A set of people living in forests, on what they can procure wild there	6	6	_	6	2	14
	61	Rarney. Day labourers	14	18	7	14	5	44
		Barsagur, Farmers	24	54	35	56	18	163
		Mar Daerd (Whalliaru?). Day labourers, Mes-						-00
	**	sengers, &c	1198	1634	833	1594	603	4664
	64	Cundacar. Land measurers	5	12	9	10	5	83
		Buy. Palanquin-bearers	171	284	134	278	98	794
	66	Mally Buy. Fishermen	7	11	8	10	4	33
		Coomaru Marattahs. Farmers - "-	5	13	3	10	8	34
	68	Telinga Bulgewars. Traders, and labourers. Teliga					0.0	
	_	Banijigaru of Karnata	32	48	30	55	22	155
	69	Cunabi. Farmers of pure Súdra descent -	179	447	200	361	136	1144
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No.	Casts or Trades.	Houses.	Men.	Boys.	Women.	Girls	Total.	CHAPTER XIV.
								Jan. 15.
								Jan. 10.
70	Mocarey (Mogayar No. 35.). Boatmen -	135	218	124	247	98	687	
	Gollors. Various services	173	299	146	291	106	842	
	Jogies. Religious mendicants	200	332	160	319	102	913	
73	Bundarey. Shopkeepers, servants	112	229	89	213	67	598	
74	Curubaru. Cattle-drivers, and dealers	49	68	24	70	21	18	
75	Busive (Baswa). Prostitutes of the sect who wor-		7.6	- 4	,	16	1	
76	ship the Linga	33	16 166	14	71 148	16 38	117 435	
	Jotugur, Gardeners	75 16	21	83	23	4	55	
78	Neckar (Nuccal). Jugglers, &c Buda Budiky. Beggars	15	21	25	30	11	87	
	Lingawer. Ditto	12	14	7	13	10		
	Teling as. Merchants from Telingana -	19	34	30		15		
	Polut. Cultivators	48	83	37	92	25	1	
	Savunts. Ditto	2	4	2	3	1	10	
	Carady. Various services	18	33	10		9	36	
	Mooshgey. Farmers	6	8	3	7	8	26	
	Ambigor. Boatmen	12	22	16	22	6	66	
86	Duckey. Beggars, worshippers of Buddha	11	15	5		5		
87	Seddar. Ditto	36	66	17	66	14	163	
	Veor. Ditto	14	23	9	24	13	69	
	Mistries. Head carpenters	14	26	13	23	4	66	
90	Chowdeky, Beggars	1	1	2	2	_	5	
	Ruddi. Farmers	7	14	2	13	_	29	
	Mallewar. Farmers, who wear the Lingan -	689	1376	623	1257	472		
93	Puroo. Merchants' servants	16	28	13	23	9		
	Cunnucungal. Day labourers	1	4	3	4	3	1	
95	Sopucoragur (Corar). Ditto	158	267	118	258	106	749	
96	Dererd (Whalliaru). Slaves employed in culti-							
0=	vation	12278		7528		6446		
	Dobe, Washermen	517	912	352		284		
	Hujam. Barbers	517	912	352		284		
	Chummar. Workers in leather -	193	386	187		149		
	Sungtrash. Stone-cutters	27	48	16		16		
101	Sunar. Gold and silver smiths	1329	2714	1194		1017	1 .	
	Cassar. Workers in brass Lohar. Blacksmiths	127	234	95	1	73		
	Julai. Weavers	127	210	101	1	95 543		
	Cunara Kumbhara. Pot-makers	847	1367	707	0.0	1350		
106		2188	3892	1570		382		
107	Rungary. Dyers	1 002	986	529	1027	362	2924	
108	Borudir. Mat-makers	65	111	55		39		
109	Tambutgars. Coppersmiths	5	13	9		5	1 .	
110	Chitrigar. Painters -	5	9			4		
111	Pinjar. Cotton-cleaners	16	27	12		4		
112	Shiculdars. Cutlers	10		16		7		
113	Zeendar. Saddlers	32	62			25		
114	Dirzi. Taylors	125	252			87		
115	Toipha. Dancers and musicians -	156						
116	Jetty. Wrestlers	. 2	5	3	1	1		
								~

## A JOURNEY FROM MADRAS THROUGH

CHAPTER XIV. Jan. 15.

No.	Casts	or Trades.		Houses,	Men.	Boys.	Women,	Girls.	Total.
118 119 120 121	Killabund. Architect forts Tapegar. Jewellers fidligar. People who lost money . Moothaley. 4dagathur Mogayar. Corchey. Day laboure	search wells, and	tanks for	4 1 5 26 31 3 79856	3 2 7 35 51 11 141681	2 5 21 18 4 64952	7 2 4 27 61 7 140302	4 1 2 24 14 11 49737	14 7 18 107 144 33 396672

The general result is, that in the southern division of Canara there are 79,856 houses, inhabited by 396,672 persons; of whom

Polygamy not owing to an excess of females. This excess of males above the female population, which also has been found to prevail in the *Bara-mahal*, and other parts of the peninsula where an accurate census has been taken, entirely overthrows the doctrine upon which some ingenious reasoners have attempted to account for the prevalence of polygamy in warm climates.

Jan. 16. State of the country. 16th January, 1801.—I went about two miles, said to be two cosses and a half, to a place called Urigara, or the bank. Immediately beyond Carm I was ferried over a very wide inlet-of the sea, which separates the province of Malabar from that of Canara; but the country called Malayala by the natives extends a considerable way farther north. My road all the way led along a narrow bank of sand, between the sea and the inlet. The surf, although larger than any that I have seen on this coast, is by no means so violent



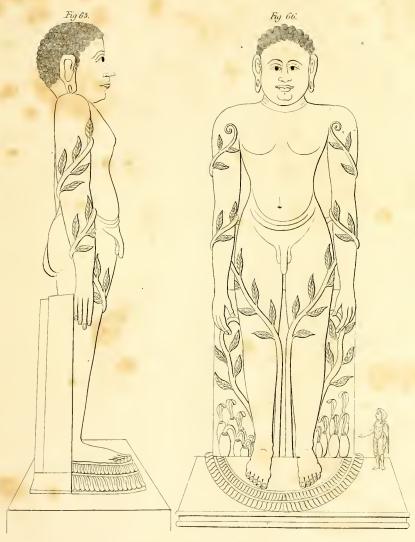
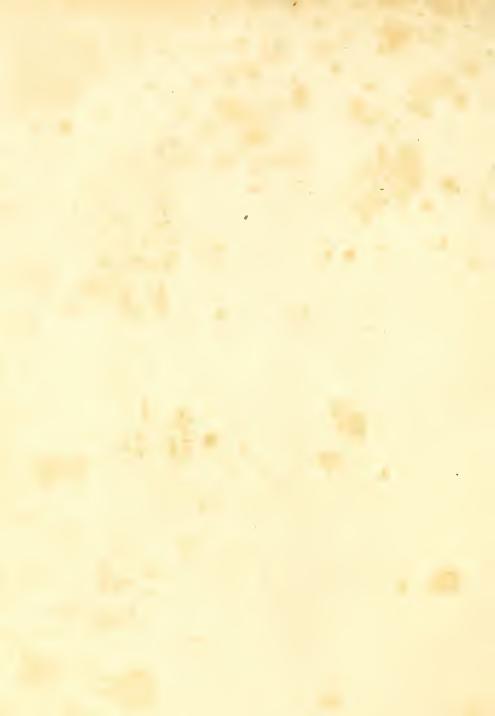


Image at Carculla in Canana



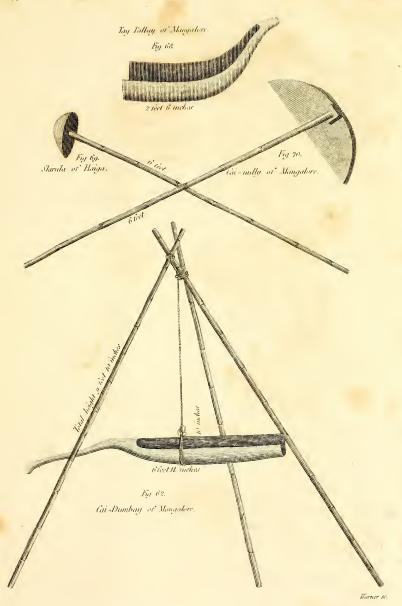
Vet .III. p. 109.

Image of Sankara Q Narayana at Gankarna.

PLATE XXIV.

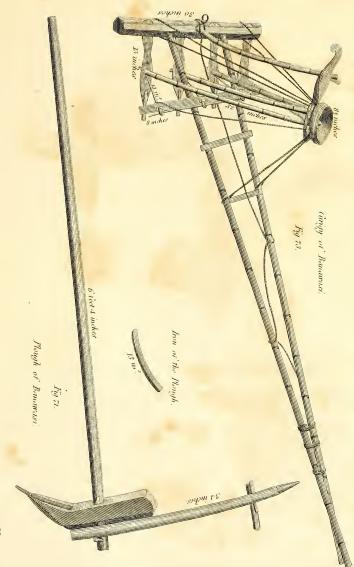








Vol. III. p. 236. PLATE XXVI



Wirmer se



Small mill for deaning cotton at Hari-hard.

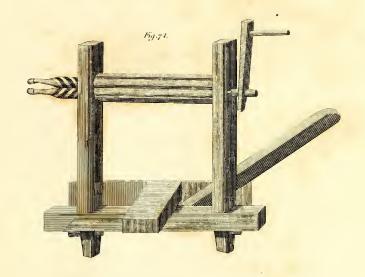
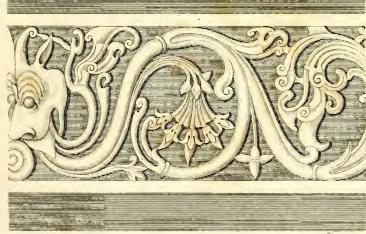


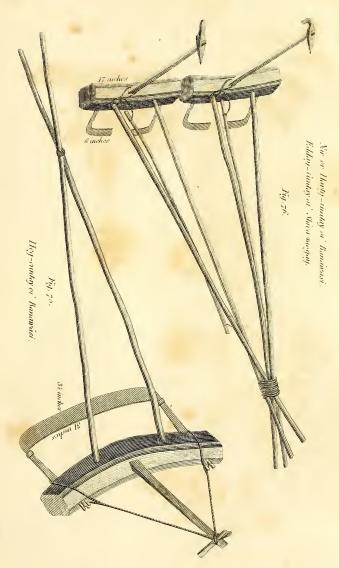
Fig. 83.



Hana a:

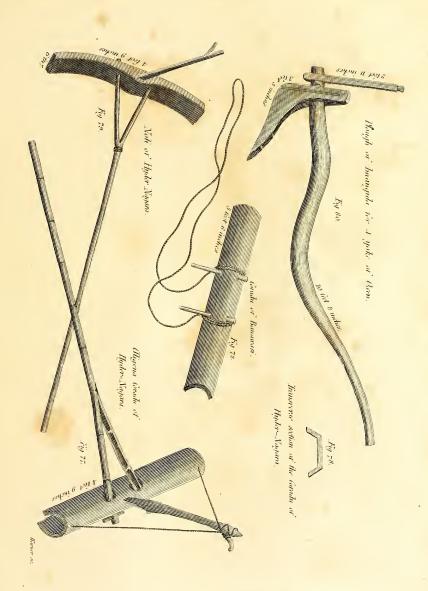


Tol. III.p. 322.

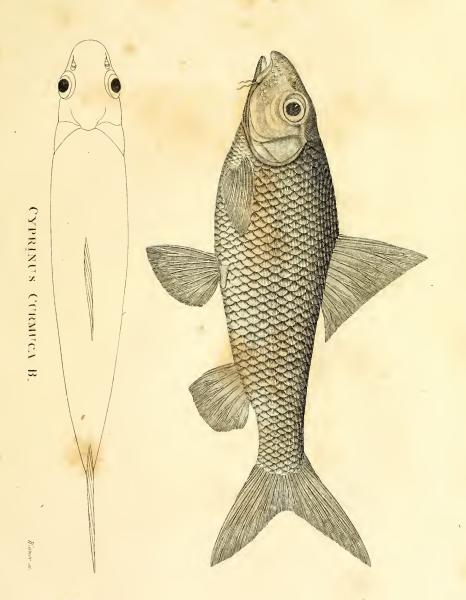


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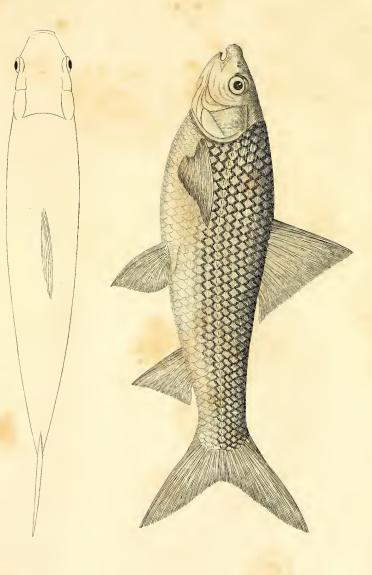




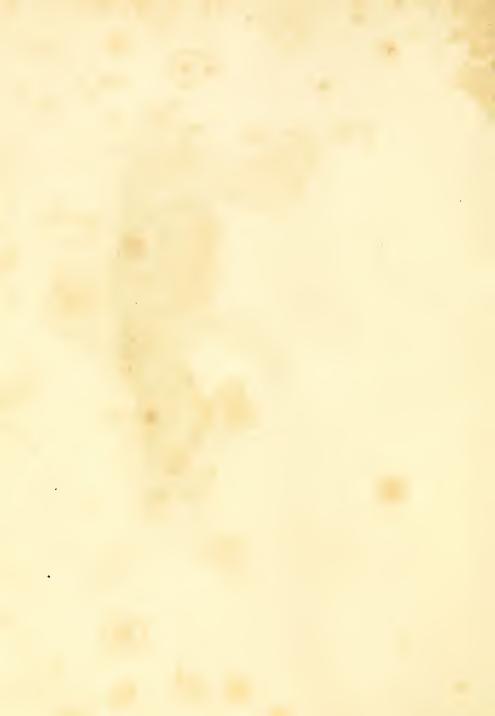






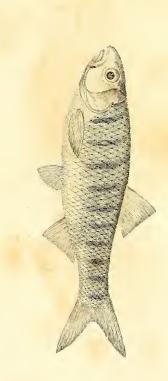


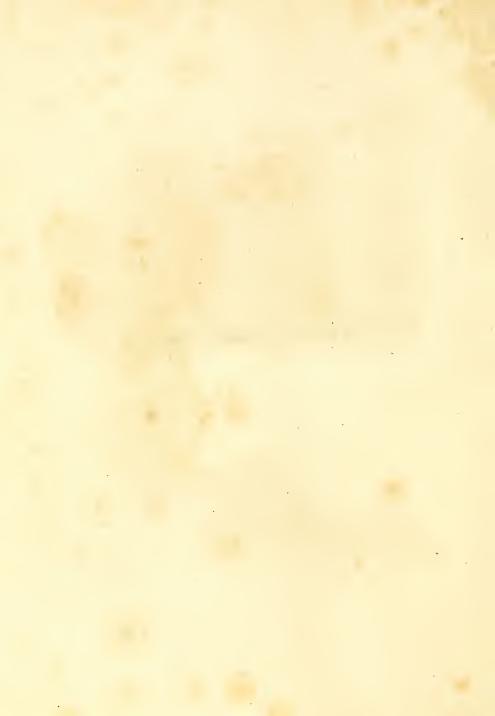
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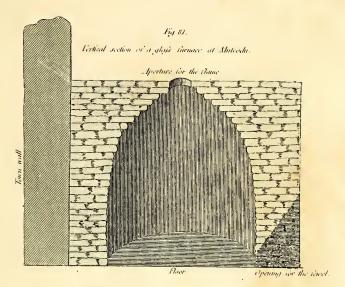


CYPRINUS BENDELISIS.

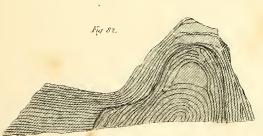










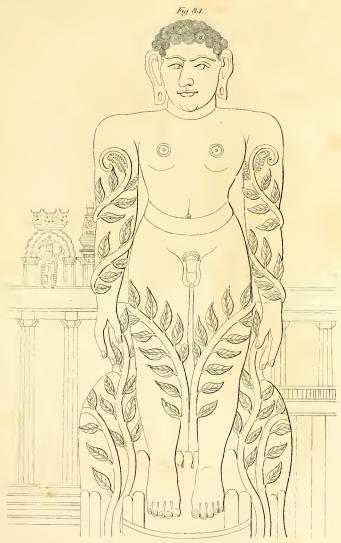


Disposition of the layers of ore within the matrix at Doda Raday Mine.

Fig 85
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Plan of the channels in a sugar field. at Kellanningulum.





Colofsal image at Sravana Belgula.



PLATE AXXVIII.



MOIZ UD DEEN,

Second legitimate Son of Tippoo Sultan?







as at Madras; and small fishing canoes go through it with ease. CHAPTER At Urigara the sand bank increases in width, and admits of some rice fields, and plantations of coco-nut trees. There is here no Jan. 16. village; but there are a few huts inhabited by Moplays, who now possess the sea-coast of this part of Malayala, as the Nairs do the interior. On the side of the inlet, opposite from Urigara, is Niléswara, now a Moplay village, but formerly the residence of a Rájá, who derived his title from the place, which is called after one of the names of the god Siva. Although the Nairs are still more numerous than the Moplays, yet during Tippoo's authority, while not protected by government, the Hindus were forced to skulk in the woods, and all such as could be caught were circumcised. It must be observed, that however involuntary this conversion may be, it is perfectly effectual, and the convert immediately becomes a good Mussulman, as otherwise he would have no cast at all; and, although the doctrine of cast be no part of the faith of Muhammed, it has in India been fully adopted by the low ranks of Mussulmans. On entering Canara, an immediate change in the police takes place. No person is here permitted to swagger about with arms: these may be kept in the house for protection against thieves; but they must not be brought into public, for the encouragement of assassination.

17th January .- I went about ten miles to Hosso-durga, or Pungal- Jan. 17. cotay; both of which signify the new fort, the former in the dialect Appearance of the counof Karnáta, and the latter in the Malayala language. The country try. near the sea, most of the way that I came to-day, is low and sandy; but much of it is rice-land, intermixed with which is much sandy land, too poor, the natives say, to produce coco-nut palms.

The whole appears to be much neglected, owing to a want of inhabitants.

Towards Hosso-durga, the dry-field rises into gentle swells; yet it is too hard and dry for plantations. It is now waste; but, when there were plenty of people, it was cultivated for Ragy (Cynosurus

Vol. III,

CHAPTER
XIV.
Jan. 17.
Hosso-durga.

corocanus), Horse-gram (Dolichos biflorus), Sesamum, and different pulses. The hill-rice is here unknown; the soil, however, is exactly the same as that which is used to the southward for this grain.

The fort is large, and well built of the Laterite common all over Malayala. The bastions being round, it is more capable of defence than the native forts in general, in which the defences are usually square. It occupies a fine rising ground, looks well at a distance, and commands a noble prospect. The only inhabitants are a few Puttar Bráhmans, who serve a temple, and whose ancestors were placed there by the Ikeri Rájá, who built the fort.

History of the Niléswara Rájás.

According to the report of the Nairs here, all this part of the country originally belonged to Colata-nada; but from the river of Cavai to that near Beäcul had been long alienated, from the house of Colastri, to the Niléswara Rájá, a chief of the Tamuri family. In the year 905 (A. D. 1725), Ráma Varmá Rájá of Niléswara was invaded by the Ikeri Rájá, who in the following year built the fort. After a struggle of twelve years, the Nair prince was compelled to become tributary. His country was divided into three Nadas, or districts, for each of which he agreed to pay annually 530 Ikeri Pagodas, or 2131. 12s. 3d. On paying this sum the Rájás were allowed to retain the entire management of their country, and seem at least so early to have established a regular land-tax in lieu of their claims on the moveable property of all persons dying in their territory. These claims they entirely relinquished, and took one half of the landlord's (Jenmear's) profit on rice-lands, and one fifth of his profit on gardens. On the destruction of the Ikeri family, Hyder took possession of this country, and increased the tribute to 1500 Pagodas for each district; but allowed the Rájá, as collector, an establishment of 650 Pagodas a year; so that, in fact, each district paid  $1283\frac{1}{3}$  Pagodas, or 517 l. 2s.  $4\frac{1}{2}$  d. Some time afterwards, some landlords (Jenmears) having made complaints of violent oppression against the Rhia, he resisted the people sent by Hyder to investigate the matter, and a war ensued, which ended in the

Rájá's being forced to an exile in Travancore. Hyder then took the CHAPTER country under his own management, and increased the rate of the land-tax; but, as usual, he made this more palatable by granting Jan. 17. considerable allowances to the temples and Bráhmans. As soon as Tippoo obtained authority in the country, these were stopped; but, since the province was conquered by the Company, a part of the allowances have been given to the priests (Pújáris) who officiate in the temples. When General Mathews took Bangalore, the Rájá came back from Travancore, and seized on the country. After the Sultan had triumphantly made the peace of Mangalore, he was opposed with such success by this petty Rájá, that he was forced to consent that the Rájá should manage the country, and pay only the same tribute which had been exacted by Hyder. In the year 961 (A. D. 1785), the Rájá, having been lulled into security, was inveigled, by repeated promises of safety and friendship, to visit Budr' uz Zamánkhán, governor of Beäcul, who hanged him instantly, and, having marched all his forces into the country, before any measure could be taken to resist him, reduced the whole to the obedience of his master. The younger brother of Ráma Varmá made his escape to Travancore, and remained there until Lord Cornwallis invaded Seringapatam. He then came to Tellichery, from whence he received supplies of arms. In the year 966 (A. D. 1792), he returned with these to Niléswara, raised an insurrection, and compelled the Sultan to allow him the management of the country, on condition of paying the former tribute. After the fall of Seringapatam, when Major Monro arrived to take charge of Canara as collector, the Rájá was sick, but sent his sister's son, or heir, to wait on that gentleman; who very prudently told the Rájá, that his case would be laid before the government for their decision. In the mean while, the country was put entirely under the management of Tahsildars, exactly on the plan introduced by Colonel Read, under whom Major Monro had been instructed in civil affairs. The Rájá has thus been deprived of all power; and the favourable time

Jan. 17.

CHAPTER was chosen, when the terror inspired by the fall of Seringapatam rendered this easy to be done. The Rájá has been allowed, for his support, a remission of the land-tax on all his Cherical lands, or private estate. The Nairs, however, complain of a want of good faith in the British officers. They allege, that General Hartley, on his return from Seringapatam, promised the Rájá that he should be continued in the management of the country.

> The dominions of the Niléswara Rájá extended from the sea to the Ghats; and, according to the report of the same Nairs, are exceedingly depopulated by war, and by a famine that ensued while they were forced to retire into the woods to avoid circumcision. The inner parts of the country are much overgrown with woods, and are very thinly inhabited. Like the other parts of Malayala, they consist of alternate low hills and narrow vallies. In cultivation, more slaves than free men are employed.

Jan. 18. Appearance of the country.

18th January.-I went an easy stage to Beäcul. From Pungalcotay, to a river bounding the country of the Niléswara Rájá to the north, the road leads along a ridge, sloping very gently towards the sea, and rather steeper towards a narrow valley now covered with the second crop of rice. Beyond this are low hills. The soil of the ridge is extremely sandy, and the country is very bare. The river is not wide, and has at its mouth some low land well planted with coco-nut trees.

Between the river and Beäcul the low hills come close down to the sea side, and are very little intermixed with rice land. In the whole way I crossed only one narrow field. The hills, however, are not steep, and seem all to be capable of being laboured by the plough; but no traces of cultivation are visible.

Beäcul.

Beäcul is a strong native fort, placed, like Cananore, on a high point projecting into the sea towards the south, and having within it a bay. The town stands north from the fort, and contains forty or fifty houses scattered about in great confusion. The inhabitants are chiefly Moplays and Mucuas, with a few Tiars, and people of

Kankána, who have been long settled in Canara as shop-keepers. CHAPTER The country extending between the river south from Beäcul, and that near Chandra-giri, was divided into two districts (Nadas), Jan. 18. which continued subject to the Cherical Rájás, as representatives of the house of Colastri, until the invasion by the Ikeri Rájá. Beggars begin to swarm here, as is the case almost every where in India in which I have been, except Malabar, where I scarcely met with one.



The Tahsildar (collector) says, that in the part of Malayala which Produce of is contained in Canara, the rice-lands near the sea produce annually the rice-grounds. only one crop, and yield from 5 to 10 seeds, or from 121 to 25 bushels an acre. In the vallies of the inland country the produce is greater; the land that produces one crop only gives from 12 to 15 seeds, or from 24 to 37½ bushels an acre; that which gives two crops, produces the same quantity in the first, and from 8 to 10 seeds in the second, or from 20 to 25 bushels an acre. More grain is raised in the country than the small number of inhabitants can consume. The people are accused by the Tahsildar of excessive indolence, and of drunkenness; vices which he attributes to the constant troubles that prevailed during the government of the Sultan.

Trimula Row, the Tahsildar, says, that the nominal value of this Revenue. part of Malayala which is contained in Canara, according to the revenue accompts of Tippoo's officers, was 8000 Bahádary Varáhas, or 32,000 Rupees. Although Major Monro did not make any formal remission of this rent, he only levied 6000 Pagodas, or 24,000 Rupees, and did not keep the remainder as a balance against the cultivators, which would have depressed their spirits. He took from each man, what in his present circumstances he could afford to pay, and did not, for the sake of a nominal revenue on paper, prevent. all exertion in the cultivator, by holding over his head the terror of a balance which he could never hope to clear. The rice ground now is not taxed by any share of the Varum, or neat rent; but each field pays so much, according to its supposed value; and this tax

XIV. Jan. 18.

CHAPTER is alleged to consume the whole rent. Very few of the landlords (Jenmears) remain, and even the mortgagees (Canumcars) are willing to give up all the land, which they cannot cultivate with their own stock, to any one who will pay the land-tax. The gardens here pay not only a tax on the trees, as in Malabar, but also a tax on the extent of ground which they occupy; yet by Trimula Row they are reckoned by far the most profitable heritage for the cultivators. He thinks that the taxes on the cultivator are heavier here than those in Arcot. I must observe, that with all these complaints there is little of the rice-land waste; while there is no tax on the cultivation of dry grains, and very little of them is sown.

Niléswara Rájú.

Trimula Row says, that Poduga and Cavi, the two districts formerly belonging to Cherical, had been entirely subdued; but that the Niléswara Rújás had constantly disputed the authority of Tippoo. They frequently were able to retain the management, on condition of paying tribute, and then again were frequently driven into exile. The Rájá asked nothing more, from Major Monro, than a remission of the taxes on the Cherical lands, which was last year granted; but it is uncertain whether or not this favour will be continued.

Jan. 19. Appearance of the country.

19th January.—I went to a temple dedicated to Iswara, at a place called Pulla. The first part of my journey was over a sandy spit, separating a salt water lake from the sea. Beyond this, the country rises into open rising lands, all the way to Chandra-giri river, which is the northern boundary of Malayala. This rising land is in very few places too steep for the plough, and these places are in general rocky. The whole of this land is totally waste, and looks very ill, being covered with long withered grass. There are traces of its having been formerly cultivated; and, no doubt, with manure it would be productive of dry grains. For the cultivation of rice, tanks or reservoirs might easily be constructed; but, with the present paucity of inhabitants, it would be madness to cultivate any thing, except the richest spots. Intermixed with this rising land are a few plots of rice-ground, surrounded by palm gardens

and the houses of the Nairs; but the proportion of this rich land CHAPTER does not seem to be above a hundredth part of the country.

Chandra-giri.

Chandra-giri is a large square fort, situated high above the river Jan. 19. on its southern bank. It was built, like the other forts beforementioned, by Sivuppa Náyaka, the first prince of the house of Ikeri that established his authority in this part of Canara.

At low water the river is shallow, but very wide. The country South bounon its north side is by the Hindus called Tulava, and resembles that dary of Tulava. through which I passed on the south side of the river. I left to my right another fort named Casselgoda, which also was built by Sivuppa, when he subjected the petty Rájás of Tulava. Pulla, where I stopped, is on the banks of a salt water lake, communicating both with the sea and with the Chandra-giri river.

20th January .- I went about ten miles to Kanya-pura, and about Jan. 20. half way crossed a river of considerable width; yet at low water it Face of the country. is shallow. The country through which I passed resembles much the part of Tulava that I saw yesterday, but the plantations of coconuts were rather more numerous. The rice grounds are more neatly cultivated than those in Malayala, and the water for the second crop is conducted to them with great care. In many places, where the ground is too high to give a second crop of rice, a crop of Ricinus, or of sweet potatoes (Convolvulus), is taken. Near the sea, sugar-cane is cultivated. Many traces of former gardens are to be seen from the road, which shows that this kind of cultivation may be greatly extended.

Kanya-pura is seated on the south bank of a river which sur- Kanya-pura, rounds the fort and town of Cumly. This is situated on a high peninsula in a salt water lake, which is separated from the sea by a spit of sand. Two rivers fall into this kind of lake, and contain between them the peninsula on which Cumly stands. By far the greater part of the coast is occupied by a chain of salt water lakes; but the necks of land interposed render them of little use for an inland navigation. Kanya-pura contains about 200 houses, and

XIV. Jan. 20. Bráhmans of

CHAPTER Cumly about 150. The inhabitants are chiefly Moplays, Mucuas, Mogayers, and Kankanies. The interior parts are chiefly occupied by the Bráhmans of Tulava, and the Bunts, or Buntar.

Tulava.

The Tulava Bráhmans resemble the Namburis, and consider themselves as the proper lords of the country.

Massadi Bunts.

The Buntar are the highest rank of Súdras in Tulava, and resemble the Nairs of Malayala. Having assembled some reputable persons of this cast, they gave me the following account of their customs. They are of three kinds: Massadi Bunts, or Buntar properly so called; Jain; and Parivarada Buntar. The Massadi Bunts are those whom I here examined. They can eat and drink with the Nairs; but the two casts have no sexual intercourse. They do not pretend to be by birth soldiers; their proper duty is the cultivation of the land. They can keep accompts, but are not admitted to any higher kind of learning. They have head-men, called Mocustas, one for every district. The office is hereditary in the males by the female line; the same mode of succession prevailing here, as in Malayala. At present, this office merely confers dignity; the officers of government having assumed all the jurisdiction that formerly belonged to the Mocustas, who settled disputes not only relative to casts, but also concerning property. In general, all the brothers and unmarried sisters of a family live together in the same house. All the property belonging to the family is considered as common, and is managed, for the good of the whole, by the oldest male. A man's own children are not his heirs. During his life-time he may give them money; but all of which he dies possessed goes to his sisters, and to their children. If a man has a mother's-brother's-daughter, he must marry her; but he may take two or three wives beside. The ceremony is performed by the girl's father, or other near kinsman. When a man marries several wives, none of them can leave him without his consent; but when discord runs high, he in general sends one of the disputants back to her brother's house; and then she is at liberty to marry again. A man at any time, if he

dislikes his wife, may send her back to her brother's house; and CHAPTER he can do no more if she has committed adultery. In all these cases, or when a widow returns to her brother's house on her hus- Jan. 20. band's death, she is accompanied by her children, and may marry again, unless she has committed adultery with a person of low cast; but if that crime has been committed with a Brahman, Kshatri, Vaisya, or Bunt, she is well received, her children become her brother's heirs, and no man will have any objection to marry her. The Buntar are permitted to eat animal food, and to drink spirituous liquors. They burn the dead. They seem to be entirely ignorant of a state of future existence; only they believe, that such men as die accidental deaths become Pysáchi, or evil spirits, and are exceedingly troublesome, by making extraordinary noises in families, and occasioning fits, and other diseases, especially in women. To expel these, the Buntar apply to the Nucaru, who are a class similar to the Cunian of Malayala, and who pretend by means of incantations (Mantrams) to have a power over the spirits. For the same purpose, sacrifices are offered to various Saktis, which differ in almost every different village. Those worshipped here are Dumawutty, Iberabuta, or the twin devils, and Birnala. Besides the sacrifices offered to these idols, to free the people from the attacks of the Pysáchi, Iberabuta and Birnala must be appeased by an annual, and Dumawutty by a monthly sacrifice. If these are omitted, the enraged devils kill both man and beast. Siva, however, is the proper deity of the cast; yet the Buntar pray also to Vishnu. They call the Tulava Bráhmans their Puróhitas; but on no occasion do these read Mantrams for their followers. All that they can do is to receive Dharma, or charity, and to bestow consecrated ashes and holy water.

All this south part of Tulava formerly belonged to the Cumly Cumly Rajá. Rájá, who pretends to be a Kshatri from the north of India. The manners of his family are the same with those of the Rájás of Malayala. All the males keep Nair girls; but their children, who are Vol. III.

CHAPTER called Tambans, have no right to the succession. The eldest daughter in the female line cohabits with a Tulava Bráhman; her sons become Rájás, and her eldest daughter continues the line of the family. Whenever she pleases, she changes her Bráhman. The younger daughters also cohabit with Bráhmans, and produce a race of people called Bayllal, who have no right to the succession. The dominions of this family extended from the Chandra-giri river to that on the north side of Cumly, and produced an annual revenue of 15,000 Ikeri Pagodas, or 60441. 3s. 4d. The Rájá lives now in the country; but he has neither lands nor authority. Before the last war he lived at Tellichery, on a pension from the Company; which has been doubled since we got possession of the country of his ancestors.

Invasion by the Coorg Rájá.

The interior parts are said to be naturally very fertile in rice, but they suffered much in the last war. The Coorg Rájá, during the siege of Seringapatam, under pretence of assisting the English, made an incursion into the country, and swept away all the inhabitants that he could seize. He has given them possessions in his own country; but they are very desirous of returning home, although I do not hear that he uses them ill.

State of the natives in Tulava.

The people of Tulava, although longer subjected to a foreign voke than those of Malabar, never have been so entirely subdued as the greater part of the Hindus, and have always been able successfully to resist the pretensions of their governors to be proprietors of the soil. Their native chiefs have, indeed, been in general able to retain more or less of the management of the country; and on the fall of Seringapatam, I am here informed, were very much disposed to try how far they could assert their independence. Two months are said to have elapsed, after the arrival of Major Monro in the country, before that gentleman could induce the people to meet him for the purpose of settling the revenue; but the decisive measures adopted to punish all those who presumed to disturb the peace, an assumed severity of manner to prevent the hopes of success from cajolery, and a strict forbearance from.

making promises or concessions for the sake of a temporary sub- CHAPTER mission, have saved Canara from anarchy, and destructive, though petty warfare.

21st January.—I ferried over the lake to the peninsula on which Jan. 21. Cumly stands, and which was formerly joined to Kanya-pura by a of the counbridge. The situation of the fort is very fine, and the town has try. formerly been pretty considerable. The two rivers leave a narrow isthmus of rice-fields. At present, both the rivers and the lake are salt; but in the rainy season they are quite fresh, and at that time, when no boats can venture to sea, might afford a fine supply of fish: this, however, is an article of food which, except by persons of very low cast, is seldom used. Having crossed the north branch, I went along the sea-beach, having on my right high sandy downs, which prevented me from seeing the country, until I arrived at the banks of a wide but fordable river. On the north side of this is a large straggling town called Manjéswara. It contains many good houses, chiefly inhabited by Moplays, Buntar, and Biluars. Having crossed the plain on which Manjéswara stands, and forded a small river, I took up my quarters at a town named Hosso-betta, or the new-strength, which is situated on a steep bank that overhangs the last mentioned river.

Immediately after crossing the northern branch of the Cumly Byrasu Woriver, you enter a country that formerly belonged to a Jain family dears, a Jain family. called Byrasu Wodear, which resided at Carculla. The Jain here say, that this family were overthrown by Sivuppa Náyaka of Ikeri, who divided the country into small districts, each producing an annual revenue of from one to three thousand Pagodas. Over each Petty Rájás of these was placed a petty Rája of the Jain religion. Ever since, of Tulava. the country has been constantly on the decline, having been continually in a state of insurrection or confusion.

The dominions of the first of these Jain chiefs that I entered Bungar Rájá. were those of the Bungar Rájá. Tippoo hauged the last person who

Jan. 21. Rájá of Vitly.

CHAPTER possessed this dignity; and his children cultivate some land at XIV. Nandavara, a village in the territory of the family.

Hosso-betta is also frequently called Vitly Manjéswara, from its having belonged to another Jain chief named Hegady Rájá of Vitly. By the intervention of other districts it is however entirely separated from the other territory which belonged to the Vitly Rájás, the last of whom was hanged here about three months ago. Before the war, he had lived at Tellichery, and received from the Company a monthly pension of 200 Rupees. When the army of General Harris approached Seringapatam, the Rájá came here, and, having collected a rabble, plundered the country with great success, and then returned to Tellichery. After Canara became subject to the Company, the people, who had been thus wantonly plundered, applied for redress, and Hegady was required to restore their property. This he refused, and, having procured 800 muskets, it is said from Mousa, he returned to Vitly, dressed up some ruffians like Sepoys, and assumed the authority of a sovereign prince. For almost a year he was able to skulk about the woods, and support himself by plunder; but having been then taken, he was immediately hanged, ever since which the country has been perfectly quiet.

Kankánies expelled from Goa. The principal inhabitants of Hosso-betta, and indeed of many of the towns in Tulava, are Kankánics, or people descended from natives of Kankána. They say, that they fled hither, to avoid a persecution at Govay (Goa), their native country. An order arrived from the king of Portugal to convert all the natives. The viceroy, when this order arrived, was, they say, a very lenient good man, and permitted all the natives who chose to retire to carry their effects with them, and allowed them fifteen days to arrange their affairs. Accordingly, all the rich people, Bráhmans and Súdras, retired to Tulava, with such of their property as they could in that time realise, and they now chiefly subsist by trade. Both Bráhmans and. Súdras are called by the national appellation of Kankánies, and the

other Bráhmans will have no communion with these exiles. They CHAPTER are, however, in flourishing circumstances; and I saw some of their marriage processions passing to-day, attended by a number of ex- Jan. 21. ceedingly well dressed people, and very handsome girls. The poor Kankánies who remained behind at Goa were, of course, all converted to what was called Christianity.

22d January.—I went a short stage to Ulala, a large town on the Jan. 22. south side of the lake of Mangalore, and formerly the residence of Ulala. a petty prince. I first passed through Harawurry Manjéswara, Harawurry which is immediately north from the Manjéswara that belonged to the Vitly Rájá; but it is situated in the district surrounding Mangalore, which was not divided among the petty Rájás, but was immediately under the government of the lieutenant of the Ikeri Rájá who commanded at Mangalore.

I afterwards crossed over the lake to the town, where I remained Harbour of until the 29th. The lake is a fine body of salt water, separated from the sea by a beach of sand. In this, formerly, there was one opening; the depth of water in which was such, that ships of a considerable burthen, after their cargo had been removed, could enter the lake. Last year a new opening formed in the beach, which has proved very injurious to the harbour. The depth of the old opening has diminished, and that of the new one has never become great; so that now, even at high water, and in easy weather, vessels drawing more than ten feet cannot enter.

For a native place of strength, the fort of Mangalore was well Mangalore, constructed; but was destroyed by Tippoo, after he had found how little his fortresses were calculated to resist European soldiers, and with what difficulty he could retake any of them, that were garrisoned by a few British troops. The town, called also Codeal Bundar, is large, and is built round the sides of the peninsula, in the elevated center of which the fort was placed. The lake, by which the peninsula is formed, is a most beautiful piece of salt water. The

CHAPTER boats that ply on it are execrable; and the fishermen by whom they are managed are a very indolent drunken race.

These fishermen are called Mogayer, and are a cast of Tulava customs of the Mogaver, origin. They resemble the Mucuas of Malayala, but the one cast will have no communion with the other. The Mogayer are boatmen, fishermen, porters, and palanquin bearers. All of this cast can eat and intermarry together. They pretend to be Súdras of a pure descent, which is rather doubtful; and assume a superiority over the Halepecas, one of the most common casts of cultivators in Tulava; but they acknowledge themselves greatly inferior to the They have head-men called Gurucaras, whose office is hereditary in the males by the female line. With the assistance of a council, the head-man settles disputes, and punishes all transgressions against the rules of cast. The only fault that is punishable with excommunication is when a woman commits fornication with a person of a lower cast; but for adultery with either a man of the cast, or of one that is higher, a woman is seldom turned away by her husband; and even if she be, she is by no means disgraced, but returns to her brother's house, and may be married again whenever she finds a new lover. The men may take several wives, and the whole ceremony of marriage consists in giving the girl some ornaments. After accepting these, she must live in his house, nor can she leave it without her husband's consent; but, whenever he pleases, he may send her back to her brother. The children always follow the mother, and are the heirs to her brothers, and not to their father. If a man's sister be living in the house, she has the entire management of it, and his wives have no authority. The Mogayer are permitted to eat animal food, and to drink intoxicating liquors. Some few of them can read, and write accompts. Those of them who are rich burn, those who are poor bury their dead. The spirits of good men go to Moesha, which, according to the Bráhmans, is the heaven where Vishnu resides; but the Mogayer

know of no other. After death, bad men are supposed to be taken CHAPTER by Emma Dharma Raja, the judge of the infernal regions. of the Mogayers pray to Vishnu, and some to Siva; but the proper Jan. 22. deity of the cast is a goddess named Restali Mahastumma, who is represented by an image in the form of a woman. The priest (Pújari) is a Biluar, whose office is hereditary in the males of the female line. The women of this family live with laymen, and the daughters of these are kept by the priest. This is the only kind of priest that these people have. The Brahmans indeed accept Dharma (duty) from them; but they do not attend at any of their ceremonies, to read Mantrams. The goddess has other worshippers, Buntar, and oil-makers. She never occasions any trouble to her votaries, if they pray and offer sacrifices; but, if these are neglected, she inflicts sickness on the impious persons. Men who have incurred her displeasure, and who in consequence have become sick, make a vow to suspend themselves by hooks passed through the skin of their backs, and thus to be swung round before her temple. This expiation is performed at the Játram, or great annual feast, when many bloody sacrifices are offered. Women who suppose that the goddess has inflicted on them barrenness, or other great infirmity, vow to walk barefooted on red-hot coals before the temple. If the goddess hears their prayers, she prevents the coals from burning their feet. My informants impudently assert, that the ceremony is frequently performed. A quantity of red-hot coals are spread before the temple; and the woman, after having fasted a whole day, walks three times slowly with bare feet over the fire. The Mogayers suppose themselves liable to various diseases from the influence of evil spirits, called Jacny, and Teiteno, which resemble those called Paisáchi. These are not to be expelled by sacrifices; but the Mogayer apply to some Biluaras, and Mussulmans, who possess invocations (Mantrams) fit for the purpose.

The princes of the house of Ikeri had given great encouragement Kankána to the Christians, and had induced 80,000 of them to settle in settled in Tulava.

Christians of

CHAPTER Tulava. They are all of Kankána descent, and retained the language, dress, and manners of the people of that country. The clergy, it is true, adopted the dress of the order to which they belonged; but they are all natives descended from Kankána families, and were purposely educated in a seminary at Goa, where they were instructed in the Portuguese and Latin languages, and in the doctrines of the Church of Rome. In Tulava they had 27 churches, each provided with a vicar, and the whole under the control of a vicargeneral, subject to the authority of the archbishop of Goa. Tippoo threw the priests into dungeons, forcibly converted to Islámism the laity, and destroyed all the churches. As the Christian religion does not prevent the readmission into the church of such delinquents, these involuntary Mussulmans have in general reconciled themselves with the clergy, who now of course are at liberty, and 15,000 have already returned to Mangalore and its vicinity; 10,000 made their escape to Malabar, from whence they are returning home as quickly as their poverty will admit. The clergy are now busy with their flocks, whose poverty, however, has hitherto prevented them from rebuilding any of their churches. During the government of Hyder, these Christians were possessed of considerable estates in land, all of which were confiscated by Tippoo, and immediately bestowed on persons of other casts, from whom it would be difficult to resume them. These poor people have none of the vices usually attributed to the native Portuguese; and their superior industry is more readily acknowledged by the neighbouring Hindus, than avowed by themselves. The vicar-general was long confined in Jamál-ábád. He speaks Latin neither correctly nor with fluency, and seems very desirous of obtaining what he calls a domineering power over the sect, that his authority may be equal to that of the native Gurus; so as to keep his flock in good order, not only by the spiritual means of excommunication, but also by the temporal expedients of fine and corporal punishment.

The coins in common currency here are,

CHAPTER
XIV.
Jan. 22.
Coin.

## Gold.

The Ikeri Varaha, or Pagoda struck by the princes of	Ikeri, e	ex-
changes for	Rupees	4
The Bahadary Varaha, or Pagoda struck by Hyder		4
The Sultany ditto, Pagoda coined by Tippoo -	-	4
The Krishna Raja ditto, Pagoda coined by the present M	ysore	
Raja	-	4
The Puli Varaha, star Pagoda of Madras		$3\frac{I}{2}$
The Feringy Petta Varaha, or Porto-novo Pagoda -	-	3
The Sultany, Canter'-Raya, or Ikeri Hunas or Fanams	-	1
The Vir'-Raya Huna, or Fanam coined by the Coorg Raja		<u>I</u>

## Silver.

Suráti Rupiya, the Rupee coined at Surat, worth silver Fanams  $5\frac{1}{2}$  Company Rupiya, the Madras Rupee lately introduced, ditto  $5\frac{1}{2}$  Bily Huna, the same silver Fanam that is current in Malabar. In the Bázár it exchanges for 10 Dudus, or Dubs, but in revenue is taken for 14.

## Copper.

Both the Any Dudus, or Tippoo's copper Dubs, and the Bombay Paisa, coined in England, are current here; and these with their fractions,  $\frac{1}{3}$ ,  $\frac{1}{2}$ , and  $\frac{1}{4}$ , are the only small coin in use. Cowries, or small shells, are not in circulation.

In payment for goods, or debts, every person must receive these coins at the above rate of exchange. The money-changers give silver for gold at the regulated price; but they take a small Batta, or exchange, when they give gold for silver. They give copper for silver at the regulated price; but demand  $10\frac{1}{2}$  Dubs for the silver Fanam.

Merchants accompts are commonly kept in Sultany Pagodas, Accompts. Vol. III.

CHAPTER Rupees, and Anas, or fractions of 16 parts; others are kept in Pagodas, a nominal Huna of 10 to the Pagoda, and Anas, or 16 parts of these Hunas.

> I shall make my alculations by reducing all sums to Sultany Pagodas, and taking these at their mint value of a little more than 8s.

> > Weights.

Weights.

The Seer (Sida) used for weighing ought to equal 24 Bombay Rupees, those in common currency having from 178 to 179 grains. I weighed a Seer in common use in the market (Bazar), and found, that it contained 4297 grains, which is more than the standard of 24 Rupees. The Seer is divided into halves, quarters, eighths, and sixteenths.

The Maund (Mana) by which goods are sold in the market, contains 46 Seers, or 28 14 lb.

The Maund by which the merchants purchase weighs 16 Rupees more, or is  $28\frac{55}{100}$  lb. This is the weight by which the Company buys and sells.

Jagory is both bought and sold by a Maund of 40 Seers, or 24 17 lb.

The Candy (Baru) contains 20 Maunds, and varies, accordingly, from 571 lb. to 4891 lb. These calculations are founded on the weight of the Rupee. If the Seer that I weighed were taken as a standard, we must to the above mentioned weights add about onethird per cent.

Grain Measures.

Dry-measure.

These differ not only in every village, but also as they are used for retailing grain in the market, for purchasing grain from the farmer, or for sowing the seed. These differences have, no doubt, been introduced in order to confuse the officers of revenue.

For retailing in the market here, the Seer (Sida) is formed by mixing equal quantities of salt and of the nine most common grains;

and then, by taking of the mixture 84 Bombay Rupees weight. CHAPTER This quantity, when heaped, fills a Seer measure, and is  $73\frac{683}{1000}$ cubical inches. The Moray, or Mudi, contains 38 Seers, or about Jan. 22. 13 bushel.

The grain measure by which the farmers sell their crops is thus formed:

 $64\frac{125}{1000}$  cubical inches = 1 Hany.

- = 1 Cullishigay. 14 Hanies

- = 1 Mudi or Moray, or  $1\frac{2525}{100000}$  bushel. 3 Cullishigays

Grain, salt, and sometimes pepper, are sold by measure. Of this last a Pucka Seer, or  $73\frac{6.83}{1000}$  cubical inches, is reckoned to weigh 51 Bombay Rupees.

In Tulava the era of Sáliváhanam is in use, and at Mangalore this Calendar. is reckoned the year 1722; but in the north it is reckoned the year 1723, and the people there are certainly the most learned. The year of Tulava is solar. I here give an almanack for the current year, according to the Bráhmans of Carculla, who agree with those above the Ghats concerning the time of the era.

Tulava Months. Europea		ropean Months.	Tulava Monti	Months.		European Months:		
Era of Sál.1723 Sughi	1 13 2 14 3 15 4 16 5 17 6 18 7 19 8 20 9 21 10 22 11 23 12 24 13 25 14 26 15 27 16 28 17 29	A. D. 1800. March.	Era of Sal.1723 Sughi Puggu	18 19 20 21 22 23 24 25 26 27 28 29 30 31 1 2	30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	A. D. 1800. March. April.		

## A JOURNEY FROM MADRAS THROUGH

CHAPTER
XIV.
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Jan. 22.

Tulava Month	s.	European Months.		Tulava Month	s.	European Months.		
Era of <i>Sál</i> , 1723			A. D. 1800.	Era of <i>Sál</i> . 1723			A. D. 1800.	
Puggu	4	16	April.	Baysha	21	3	June.	
	5	17	•		22	4		
	6	18			23	5		
	7	19			24	6		
	8	20		7	25	7		
	9 10	21			26	8		
	11	23			27 28	9	j	
	12	24			29	11	}	
	13	25			30	12	ŀ	
	14	26			31	13		
	15	27			32	14		
	16	28		Catialu	1	15		
	17	29			2	16		
	18	30	May.		3	17		
	19 20	1 2	maj.		4 5	18 19		
	21	3			6	20		
	22	4	~		7	21	*	
	23	5			8	22	[	
	24	6			9	23	į	
	25	7			10	24	1	
	26	8			11	25		
	27	9			12	26		
	28	10 11			13	27		
	29 30	12			14 15	28 29		
	31	13			16	30		
Baysha	1	14			17	1	July.	
	2	15		'	18	2		
	3	16			19	3	ļ	
	4	17			20	4	-	
	5	18			21	5 6		
	6	19 20			22 23.	7		
	8	21			24	8		
	9	22			25	9		
	10	23			26	10		
	11	24		1	27	11		
	12	25			28	12		
	13	26			29	13		
	14	27			30	14		
	15	28			31 32	15		
	17	29 30		Ati	1	17		
	18	31			2	18		
	19	i	June.	1	3	19		
	20	2		11	4	20		

CHAPTER XIV.	Tulava Month		European Months.		Tulava Month	5.	Eu	ropean Months.
Jan. 22.	Era of Sál. 1723 Buntüela -	10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 1 2 2 3 4 5 6 6 7 8 8 9 9 10 11 11 11 11 11 11 11 11 11 11 11 11	25 26 27 28 29 30 31 1 2 3 4 4 5 6 6 7 8 9 9 10 11 12 11 12 11 14 15 16 16 17 18 19 20 21 22 22 23 23 24 25 26 26 27 28 28 29 30 20 20 20 20 20 20 20 20 20 20 20 20 20	A. D. 1800. October.  November.	Era of Sál. 1723  Jarday -  Perarday -	29 30 1 2 3 4 4 5 6 6 7 8 9 10 11 12 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 26 27 8 8 9 10 10 10 10 10 10 10 10 10 10 10 10 10	12 13 14 15 16 17 18 19 20 21 22 23 24 24 25 26 27 8 8 9 9 10 11 12 13 14 15 16 17 18 19 19 19 19 19 19 19 19 19 19 19 19 19	A. D. 1800. December.

Tulava Months.	European Months.	Tulava Months.	European Months.	CHAPTER XIV.		
Era of Sál.1723 Pointalu - 18 19 20 21 22 23 24 25 26 27 28 29 30 Mahi 2 3 4 5 6	A. D. 1801.  January.  30 31 1 February.  2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	Era of Sál. 1723  Mahi 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	27 28 1 1 2 3 4 5 6 7 8 9	Jan. 22.		
7 8 9	17 18 19	29				

The Bráhmans of Tulava, like the Namburis, pretend, that the Pretensions country was created expressly for their use by Parasu-ráma, and of the Tulava Bráhmans. that they are the only persons entitled to be called Baliky, or proprietors of the soil. It would not appear, however, that in Tulava this story was ever so successful as it has been in Malayala. The Bráhmans indeed say, that they did not like the country, and were always running away to a city named Ahichaytra, which seems to be in Telingána. At length a prince, named Myuru Varmá, made all those here adopt some new customs; after which the Panch-Drávida Bráhmans of Ahichaytra, and they, could no longer live in communion. They allege, that Myuru Varmá reinstated them again in the whole property of Tulava.

At present, however, the greater part of the country belongs to Actual te-Bunts, and other Súdras, who style themselves proprietors (Balikies), nures. although the Bráhmans are willing only to give them the title of

Mulacaras. Balikies, or proprietors.

CHAPTER Mulacaras, or tenants. The property, if ever it belonged to the Brahmans, has been entirely alienated; nor is there even a pretence set up, of the Brahmans having a power of redemption.

The Balikies, Mulacaras, or proprietors, are answerable for the land-tax, called here Shista, and by the Mussulmans Shist. The estate is always called by the Baliki or proprietor's name, although it is often mortgaged to its full value.

Aduvacaras. or mortgagees.

The mortgagee is here called Aduvacara, from Aduva, a mortgage. The mortgagee pays the amount of the land-tax to the landlord (Baliky), who gives it to government. The remainder of the profit is retained by the mortgagee for the interest of the money that he has advanced, which is in general at the rate of 121 per cent, per annum: in some places, however, it is only 10 per cent. Land is never mortgaged without a regular writing, wherein is mentioned the sum for which the estate is mortgaged. It may be resumed, by paying up this sum, whenever the landlord pleases; but, if the mortgagee has planted any trees, he must be paid for them at a certain fixed rate, which is known to be equal to the expense that he must have incurred. Many of the landlords retain their own estates, and cultivate much of them with their own stock; but about an eighth of the country has been mortgaged. Some landlords have mortgaged the whole of their estates, and, having had no hopes of being able to redeem them, have entirely left the country. The estates still, however, go by their names, and the tax is paid in their names by the mortgagees.

Gaynicaras, or tenants.

Both proprietors and mortgagees let part of their lands to tenants, or Gaynicaras. In this district, the tenant gives a writing, obliging himself to pay a certain rent, but receives no lease in return; and, whenever the land-holder pleases, may be ejected from his farm. In other districts, however, especially that of Barcuru, the tenant has a lease in perpetuity, of which he can only be deprived by his, or his heirs, failing to pay the stipulated rent. Some of this rent is paid in rice, and some in money.

When a tenant undertakes to plant a garden, he obtains a writing CHAPTER from the landlord, by which he is ensured of the payment of the expenses incurred, should the garden be resumed; and he pays no Jan. 22. rent (Gayni) for a number of years sufficient to allow the garden to become productive. The amount of the expenses to be paid is improvesettled by arbitration. When rice-land has been waste, the tenant for two or three years pays nothing, except the tax. This is the account given by the landlords.

XIV. Encouragement given to

The tenants ought, on rice-lands, to have one-half of the produce; so, at least, the proprietors say. The proprietors let very few of their gardens, this being a profitable kind of farming.

In this district (Taluc) there are no waste lands; but some fields, actually cultivated, were by Major Monro allowed to be considered as waste, on account of the clamours made by the natives of their poverty.

Although all the Inams, or charity lands, were ordered by Tippoo Hindu worto be resumed, yet some belonging to temples have been concealed, ship, how as is acknowleged both by the Tahsildar and by the Hindu landlords. This has not been disturbed by Major Monro, nor his successor Mr. Ravenshaw; and an allowance is made by the government to both heathen temples and mosques. The principal Hindu temple here receives annually 120 Pagodas, and its lands produce 360, in all 480 Pagodas, or 1931. 8s. 3d. The people are very anxious for its being restored to its former splendour. Major Monro seems to have thought that very moderate expenses should be incurred in supporting the religious ceremonies of the natives, the allowances that he has made for the temples being in general very small. I do not find that this economy has had any bad effect; and it is impossible for a European to be more respected by Hindus, than Major Monro is by those who were lately under his authority.

supported.

In Tulava the state has no lands; the whole is private property. private pro-All the land-tax is now paid in money; but before the conquest pay a land-Vol. III.

All the lands of Tulara are perty, and tax.

CHAPTER XIV. Jan. 22. part of it was demanded in rice, and other articles of consumption for the troops, at a low rate, which was fixed by the officers of government. The accompts contain solely the tax which each proprietor ought to pay. When a man alienates part of his lands, he agrees with the purchaser to take a part of the tax, and then the revenue of the new proprietor is entered in the public accompts under his name. The sum which he is to pay is always mentioned in the title deeds; and the government has a right to prevent any division, that is not in proportion to the value of the lands alienated; otherwise the revenue might suffer greatly. The proprietors allege, that the tax amounts to more than the rent, and that they are obliged to borrow money, or to give part of the profit from the lands cultivated with their own stock, to enable them to satisfy the claims of government. Those whom I had assembled to give me information, and most of whom were as fat as pigs, gravely told me, that they were reduced to live upon Kanji, or rice-soup. From what they say, therefore, no estimate can be formed of the share of the rent which they pay to government. Every one thinks himself bound to conceal the truth, and none more so than the native officers of revenue. Every step, indeed, seems to have been taken, by a chaos of weights and measures, and by plausible but false accompts, to keep the state of the country a profound mystery.

Circumstances of the cultivator. To judge from appearances, the occupiers of land in Tulava are richer than even those of Malabar, who are, no doubt, in easier circumstances than those in Coimbetore, or those above the Ghats. The universal cry of poverty, however, that prevails in every part of India, and the care, owing to long oppression, with which every thing is concealed, render it very difficult to know the real circumstances of the cultivator. We may safely however conclude, from the violent contest for landed property of every kind in Canara, that each occupant has still a considerable interest in the soil, besides the reward due to him for cultivating whatever his stock enables him to do. It is indeed sincerely to be wished,

that this property may long continue unmolested; as no country can CHAPTER thrive where the absolute property of the soil is vested in the state.

XIV.

Cultivators who are rich keep from twenty to twenty-five ploughs, Jan. 22. but at least one half of the actual farmers have only one. Those stock. who keep two, three, and four ploughs, are common. Near the sea there are many plantations, and some cultivators take care of these only; but, in general, each cultivator has some rice-ground, and some gardens. In the interior parts of the country very few have gardens. A farmer with four ploughs requires constantly six men, four women, and eight oxen. To transplant his rice, he must also hire women; ten are required to plant in two days a Moray land. The wages of these ten for two days is said to amount to 40 Hanies, or almost the value of the seed; which seems to be exaggerated. A farm, thus stocked, ought to contain 8 Morays sowing. Some people cultivate 10 Morays, but they do it imperfectly. The land, either for rice or pulse, it must be observed, is cultivated twice a year. I made many measurements to endeavour to satisfy myself with respect to the extent of what is called a Moray, or Mudi sowing; but, owing to some artifices of the natives, the results differed so essentially, that I can place no reliance on my own measurements, and am inclined to think the extent very indefinite. The average Moray, according to Mr. Ravenshaw's answer to my queries, is 1 1 3 acre. At this rate, the eight Morays cultivated by four ploughs would amount to little more than 9 acres, which is absurd. The least that can be allowed for a plough is, I am persuaded, six or seven acres.

The cultivation is chiefly carried on by Culialu, or hired servants; Price of labut there are also some Muladalu, bought men, or slaves. A hired Culialu, or man gets daily 2 Hanies of clean rice, or annually 213 bushels, toge- hired serther with  $1\frac{1}{2}$  Rupee's worth of cloth, a Pagoda in cash, and a house. A hired woman gets  $1\frac{1}{2}$  Rupee for cloth, and  $\frac{3}{4}$  of the man's allowance of grain. In planting season, the women hired by the day get two Hanies of rice, or 1284 cubical inches. These wages are very

CHAPTER high, and may enable the hired servants to keep a family in the greatest abundance. It is evident from hence, that the stock required to cultivate eight Morays of land was excessively exaggerated by the proprietors. The wages, in grain alone, would amount to 1561 Morays of rice for 8 Morays sowing; so that, to pay even them, would require at least 40 seeds. We may safely allow six Morays for each plough fully wrought; but the number of ploughs in the whole district amount to rather less than one to 3 Morays of rice ground in actual cultivation, according to the revenue accompts; owing, probably, to a want of cattle and other stock. At the end of the year, the hired servant may change his service, if he be free from debt; but that is seldom the case. When he gets deeply involved, his master may sell his sisters' children to discharge the amount, and his services may be transferred to any other man who chooses to take him and pay his debts to his master. In fact, he differs little from a slave, only his allowance is larger, but then the master is not obliged to provide for him in sickness nor in old age.

Slaves.

A male slave is allowed daily 1 Hany of rice, or three-fourths of the allowance for a hired servant; a woman receives one Hany. The man gets 1½ Rupee's worth of cloth, and 2 Rupees in cash; the woman is allowed only the cloth. They receive also a trifling allowance of oil, salt, and other seasonings. A small allowance is given to children and old people. When a slave wishes to marry, he receives 5 Pagodas (2 guineas) to defray the expense. The wife works with the husband's master. On the husband's death, if the wife was a slave, all the children belong to her mother's master; but, if she was formerly free, she and all her children belong to her husband's master. A good slave sells for 10 Pagodas, or about 4 guineas. If he has a wife who was formerly free, and two or three children, the value is doubled. The slave may be hired out; and the renter both exacts his labour, and finds him in subsistence. Slaves are also mortgaged; but the mortgager is not obliged to

supply the place of a slave that dies; and in case of accidents, the CHAPTER debt becomes extinguished; which is an excellent regulation. Free men of low cast, if they are in debt or trouble, sometimes sell their Jan. 22. sister's children, who are their heirs. They have no authority over their own children, who belong to their maternal uncles.

In this country the hill ground is never cultivated, except for gardens; the whole may therefore be divided into rice-land and garden ground.

The rice land is of three kinds; Bylu, Majelu, and Betta. Bylu Rice-land of ground is that in the lower part of vallies which are watered by three kinds. small streams, from whence canals are dug to convey the water to the fields, which by this irrigation are able to give annually two crops. The Majelu land is higher than the Bylu, and is provided with small reservoirs, which ensure one crop, even when the rains last only two or three months. From some of these reservoirs, the water is let out by a sluice. It is raised from others by means of the Yatam, or by a basket suspended between ropes. The Betta land is the highest part of the rice ground, and is provided with neither streams nor reservoir; so that the crop depends entirely on the rain. In some places there is another kind of rice ground called Potla. During the rainy season, it is so inundated, that it cannot then be cultivated; and, as the water dries, the rice is transplanted.

On the Bylu land there are three crops in the year, 1st. Yenalu, Bylu rice-2d. Sughi, and 3d Colaky. This last is only produced by a few landproduces three crops spots particularly favoured with water. The accompanying table annually. will explain several particulars relative to the cultivation of rice.

CHAPTER XIV. Jan. 22. Table explaining the Cultivation of Rice at Mangalore.

Kind,	Quality.	Soil.	Crop for which it is used.	Months required for this crop.	Manner of cultivation.	Increase in a good crop. Folds.	Produce of an Acre, supposing it to sow
Bily Ayki	White and small -	Bylu	Yenalu	5	transplanted	20	25
Ditto	Ditto	ditto	Colaky		sprouted seed	5	61
Ditto	Ditto	Mujelu			ditto	12	15
Jirigay Saly	Very small	Bylu	ditto	5	transplanted	15	183
Amutty	Large and black -	ditto	ditto	5	sprouted seed	20	25
Cagi Ayki	Ditto	ditto	ditto	5	ditto	15	183
Ditto	Ditto	ditto	Colaku	_	ditto	5	$6\frac{1}{4}$
Atticaráya	Red and low priced		Sughi	31	ditto	10	121
Kiny Vettu	Treat and low priced	Majelu			ditto	10	121
Ditto		Bettu	ditto	3	ditto	8	10
Sampa Saly		Majelu		31	ditto	10	121
Soma Saly		ditto	ditto	31	ditto	10	121
Ditto		Bettu	ditto	31	ditto	8	10
Tungalu		ditto	ditto	3	ditto	8	10
Attigary		Potla		5	transplanted	10	121
2111,6 9		1 - 5104			Transplanted		-~2

Yenalu crop transplanted.

The kinds of rice that are transplanted for the Yenalu crop on Bylu land are cultivated as follows. Between the 14th of May and the 14th of June, water the ground intended for raising the seedlings for two days, and then plough it twice; all the water, except two inches in depth, being let off at each ploughing. The two ploughings must be repeated every other day, until the eighth time. The field, before the last ploughing, is manured with ashes, and with dung, in which, while in the cow-house, the leaves of every kind of bush and tree have been mixed. The mud is then smoothed with the Mutu Pallay, or plank drawn by oxen (Plate XXII. Fig. 58.). The seed, prepared by causing it to sprout, is then sown very thick, the water being three inches deep. Next day the water is let off. On the fifth day, when the shoots come up, they get as much water as covers the half next the ground; and every day, as the plants

grow, the quantity of water is increased. On the ninth day the CHAPTER water is let entirely off, and is not given again until the eleventh day. If worms affect the plants, about the end of the third week Jan. 22. the water is again let off for three days, and some ashes are sprinkled over the field to kill these destructive animals. The seedlings must be transplanted between the 30th and 35th days.

On the day that the seed is sown, the ground for receiving the seedlings when transplanted begins to be ploughed, and in the course of the month gets four double ploughings. The plough in use here (Plate XXII. Fig. 60.) is neater than usual in India, but is an implement equally wretched. In the intervals between the ploughings, the field is kept inundated. At the time of ploughing, two or three inches only of water are allowed to remain. After every ploughing, the soil is smoothed with the plank drawn by oxen. Between the 4th and 15th of July all the water except one inch is let off, and the seedlings are transplanted. On the third day the field is drained; and for two days it is allowed to dry. On the sixth it receives 2 inches of water, and then is continued inundated until the crop ripens. Between the 5th and 16th of August the weeds are removed by the hand. In October, or at the beginning of November, the straw is cut with the grain, and, till it be dry, is allowed to lie on the ground. In Figure 61, the sickle is delineated. The rice is thrashed by beating handfulls of the straw against a grating of Bamboos, which is placed sloping from a stone to the ground: the grain falls through the grating. This operation is performed in the square surrounded by the farm-houses; for here, as well as in most parts of India, there are no barns. The rough rice is dried in the sun, and much attention is paid to this operation with what is intended for seed. The straw is spread out to the sun as much as possible; but, owing to the rain, is seldom got in well. The seed is kept in Morays, or straw bags, which are hung up in the smoke of the kitchen. The rice intended for consumption is put up in heaps, placed on straw, and covered with thatch.

CHAPTER The husks are beaten off in the course of two or three months, and immediately sold. The rough rice is put into large pots, overnight, with so much water as will cover it. In the morning it is boiled until the husks begin to open. It is then dried in the sun, and beaten in a small hole in the ground, or in a stone with a long pestle, the end of which is covered with iron. For the use of Bráhmans, a little is beaten without having been boiled; but it does not preserve long.

Tenalu crop sown Mola.

The rices that are cultivated as sprouted seed for the Yenalu crop on Bylu land are thus managed. The ploughings and manure are conducted exactly in the same manner as in the field on which the seedlings are raised; but, in order to gain time, they are made fifteen days later. The seed is prepared by putting the Moray, or straw bag, in which it has been kept, into water from the evening until next day at noon. The bag is then removed into the house, and in the morning of the fourth day is opened, the seed is sprinkled with dung and water, and immediately sown. After having been sown, it is managed like the seedlings; but the weeds are removed about the 26th of July. The quantity of seed required on the same ground for the sprouted seed cultivation, is to that required for transplantation, as two to three.

Sughi crop.

In the Sughi crop on Bylu land the rice is mostly cultivated as sprouted seed. It is inferior in quality to the rice of the Yenalu crop, and is chiefly reserved for home consumption. Being reaped in the hot and dry season, the straw, though short, is well dried, and is a valuable supply of fodder. The sprouted seed for this crop is thus cultivated. Between the 16th of October and the 14th of November, immediately after the Yenalu crop has been reaped, the ploughings commence; and are carried on exactly as before described; only in place of one man's standing on the plank drawn by oxen, the ground being now harder, three or four men must stand on this instrument; a most barbarous and expensive manner of adding weight; but in India it is seldom that an attempt is made

to accomplish any thing by machinery, that can be performed by CHAPTER human labour. The quantity of manure required for this crop is larger than that which is given to the first. If this crop be trans- Jan. 22. planted, it only produces six seeds.

The seed of the rices that are cultivated for the Colaky crop is Colaky crop sown sprouted. Between the 12th of January and the 10th of Fe- of rice. bruary, immediately after having cut the Sughi crop, the ploughing for the Colaky commences, and the field is managed exactly as in the Sughi crop. In most places the water must be raised by the Yatam, called here the Panay, or by the instrument called Caidumbay (Plate XXV. Fig. 62), which makes the cultivation very expensive. The Cai-dumbay cannot raise water more than three feet, and is a means of irrigation very inferior to the basket suspended by ropes and wrought by two men. This crop requires a great deal of manure, otherwise it injures the following crop called Yenalu.

In place of this third crop of rice, where the quantity of water Colaky crop is too small, a crop of Urudu (Phaseolus minimoo Roxb: MSS.), Pa- of other dingi (Phaseolus Mungo), or Cudu (Dolichos biflorus), is taken from the Bylu land. In some villages, but not in this immediate neighbourhood, a crop of Enama (Sesamum) is taken. For the three leguminous plants the ground in five days gets five double ploughings, and after each is smoothed with the plank drawn by oxen. It is then manured with dung and ashes, and the seed is sown broadcast, and covered by the plough; after which the soil is again smoothed with the plank drawn by oxen. Then, if the field be not sufficiently moist, it must be divided into small plots surrounded by little banks, and once in fifteen days it must receive water. The quantity of the seed required for these pulses, is one-fourth of that required for rice in the sprouted seed cultivation, or about fivesixteenths of a bushel an acrc. The produce is about 8 seeds, or 21 bushels an acre.

CHAPTER XIV. Jan. 22. In order to prevent the torrents of water, which in the rainy season run down from the hills, from injuring the Bylu land, a strong mound is formed round the bottom of the hills; and a channel above this mound conveys all the superfluous water into the sea, or into rivers. Coco-nut trees are frequently planted under the bank, or mound, in order to give it strength.

Majelu land.

All the rices cultivated on the second sort of rice land, called Majelu, are sown sprouted; only, any seedlings, that may happen to remain after planting the Bylu fields are put into the Majelu. The cultivation on this is exactly the same, and at the same season, as the Yenalu, or first crop on Bylu land. The water, in case of a deficiency of rain, is supplied from small tanks, which reserve a supply for fourteen or fifteen days after the rains are over. The seed required for this kind of land is said to be one third more, than that required for the same extent of Bylu; but, on actual measurement, I found that a Moray of seed required considerably more Majelu than it did of Bylu. On a small portion of Majelu land, a second crop of Cudu (Dolichos biflorus) is taken. It is sown between the 16th of October and the 13th of November, and its produce is nearly the same as when cultivated on Bylu land.

Betta land

The third sort of rice land, called Betta, is the same with the lower Parum, or hill-land of Malayala, which is there chiefly used for gardens. The rice cultivated on this is always sown sprouted, exactly in the same manner as the Yenalu, or first crop; only it requires two more ploughings, and a greater quantity of manure. The seed ought to be  $1\frac{1}{4}$  of that which is required for the same extent of Bylu; but this also, I found, was not confirmed by actual measurement. This rice is kept for home consumption; for that of the Yenalu, or first crop from Bylu, or the lowest land, is the kind commonly exported.

Sugar-cane.

It is upon this kind of ground that sugar-cane is cultivated; but very small quantities only are raised, and that entirely by the native

Christians. Their method is as follows. Between the 14th of De- CHAPTER cember and the 11th of January the ground, for four successive days, has a double ploughing, and, after each, is smoothed with the Jan. 22. plank drawn by oxen. Then, with a hoe, called Haray (Plate XXI. Fig. 56), parallel channels are formed, at the distance of every 8 or 10 cubits. At right angles to these, and contiguous to each other, are formed trenches three quarters of a cubit deep, half a cubit wide at the bottom, and one cubit and a half at the top. The field is then manured with dung and straw; which, after they have been spread on the field, are burned; so that, in fact, the manure is ashes. The canes for seed are then cut into pieces, from half to three quarters of a cubit long; and these are soaked in water a whole day and a night. On the day after the manure has been burned on the field, the soil in the bottom of the trenches is loosened with the hoe, and mixed with the ashes; and with these united the joints of the cane are slightly covered. They are placed horizontally, two and two, in lines parallel to the trenches; and the ends of one pair touch the ends of the two adjacent pairs. The field is then watered, the channels being filled from a tank, or well, by means of the machine called Yatam. Except when there is rain, it must be watered every fourth day, speaking as a medical man; that is to say, if it be watered on the 1st day of a month, it will be watered again on the 4th, 7th, 10th, and so forth. A compost having been formed of rich mould, dung, and dry grass, it is burned; and on the 15th day from planting the ashes are spread over the field. At the end of the month, the weeds are removed by the hand, and with a small instrument named Sulingy. At the same time, the young canes are again manured with the burnt compost. At the end of the second month, if the cane has a sickly colour, it is again manured. The rains commence about that time, and then the earth from the intermediate ridges is gathered up round the young canes; which thus, in place of being in trenches, stand on the top of ridges. The field must then be well fenced.

Jan. 22.

CHAPTER The dried leaves must be removed by the hand, which is all the farther trouble required, no watering being necessary after the rainy season is over. Jackalls eat the cane, and must be carefully watched. The cane is fit for cutting in 11 or 12 months. There are two kinds; the Bily, and Cari Cabbu; or white, and black canes. The former is the Restali, and the latter the Putta Putty of the country above the Ghats. The same ground will not produce sugar-cane every year; between every two crops of cane there must be two crops of rice. A piece of land that sows one Moray of rice, will produce 4000 canes, which are about six feet long, and sell to the Jagory boilers at from half to one Rupee a hundred. The Moray sowing of Betta land is here about 30,000 square feet; so that, according to the price of sugar cane, the acre produces from about 58 to 29 Rupees, or from about 51. 17s. to 21. 18s. 6d. The land-tax is the same as when the field is cultivated for rice. The want of firewood is the greatest obstacle to this cul-· tivation; the trash, or expressed stems, is not sufficient to boil the juice into Jagory, while that operation is performed in earthen pots placed over an open fire. If all the land in Codeal Talue (district) that is fit for the purpose, were employed to raise sugar-cane, it would yearly produce 1000 Pagodas worth of cane; that is to say, there are about 1125 Mudis sowing of land, that once in three years might be cultivated. The quantity in the neighbouring district on the south side of the river is much greater. The Jagory made here is hard, but black, and of a bad quality. It sells at 3 Maunds for the Pagoda, or at 12s.  $3\frac{1}{2}d$ . a hundred-weight.

Kitchenstuffs.

Between the rows of sugar-cane are raised some cucurbitaceous plants, and some kitchen stuffs, that soon come to maturity.

On Betta, or the highest of rice-land, where the water may be had by digging to a little depth, some people, chiefly Christians, cultivate capsicum, and Banguns (Solanum Melongena), as a second crop after rice. In good soils, these require to be watered once in three days; in bad soils, they must be allowed water every other day.

The kind of land called Potla, or Mojaru, is situated in deep CHAPTER places near the banks of rivers; and is so much overflowed in the rainy season, that, until the violence of this is over, it cannot be Jan. 22. cultivated. Even in the dry season, it would in general be overflowed by the tide at high water; so that it is necessary to make banks to exclude the sea. The rice which it produces is always transplanted. Between the 17th of August and the 15th of September the seed is sown, and is managed in the same manner as the transplanted rice on Bylu land; only the season is different. The same quantity of seed is required for the same extent of Bylu ground; that is, one-half more than would be required for sowing broad-cast. This is a very precarious crop, being subject to be totally ruined by either too little or too much rain.

Potla land.

Poor land of every denomination requires more seed than richer land of the same kind.

The leaves of every kind of tree and bush, except such as are Manure. prickly, are used for manure. The cattle are kept in the house all night, and their dung is collected for the same use. It is kept in pits, and every day's collection is covered with leaves; the whole dunghill thus forming alternate strata of dung and leaves, which soon rot. The ashes and sweepings of the family are kept in a separate pit. The soil of towns is never used as manure.

In Tulava the coco-nut and Betel-nut are the only productions of Palm garthe gardens that are taxed. The gardens are formed on hilly ground dens, soil fit for them. which has a red soil; but, as the trees require to be watered, such places only are considered fit for the purpose, as afford water by digging wells to no great depth, or as can be watered by forming reservoirs. The water of the wells is raised by the machine called Yatam; but the gardens thus supplied, although requiring a great deal of trouble, are equally valuable with those watered from tanks; for as these sometimes fail in the hot season, the crop for that year is lost, although the trees do not perish.

Here the Areca or Betel-nut palm forms separate plantations, of the Areca

Cultivation



CHAPTER which are surrounded by some rows of the coco-nut tree, and is not scattered about the gardens, as in Malabar. The following is the manner of making one of these plantations, as described by the proprietors. Between the 17th of December, and the 13th of February, the seed must be collected from trees that are at least fifty years old. Having been kept four days in the house, it is tied up in a Moray, or straw-bag, and is immersed for 25 days in the water of a well. In the mean time a small plot of rice ground is repeatedly ploughed until it be reduced to a fine mud, and is well manured with dung and ashes. In this mud the nuts are placed close to one another, with their eyes uppermost, and one half of them above the earth. Then the plot is covered with straw, and is watered once a A piece of dry ground is then dug up with the day for a month. hoe, and manured with dung and ashes. Into this the nuts, which have now sprouted, are transplanted at half a cubit's distance from each other. The nuts only are covered, and the sprouts are left projecting. For two months, if the soil be moist, it must be watered once in four days; if it be dry, once in three days is sufficient. Another piece of ground is in the mean time prepared; and at the end of the two months the young seedlings are removed thither, and placed at the distance of one cubit from each other. In this nursery they remain eight months; and once in four days, when there is no rain, they are watered. In the mean while the garden is prepared by inclosing it with a dry hedge of prickly bushes. Within the hedge a row of coco-nut palms is planted, each being 24 cubits from the other. Within these, at 10 cubits distance from each other, are formed pits, two cubits in diameter, and two cubits deep. In the bottom of each of these is put a young Areca; all its roots are covered with fine mould, and it is manured with a little dung. This is between the 19th of October and the 16th of November, at the close of the rainy season. Every fourth day the pitsmust be watered, while the sun is excluded by branches and leaves. At the end of six months some dung must be given, and the weeds

removed by the hand. Whenever there is no rain the waterings CHAPTER are to be continued; and twice a year the trees must be manured, and the weeds ought to be removed from near their roots. In two Jan. 22. years the pits are filled up with the manure. At the end of five years another set of pits is made, one between every two of the old ones; and in these is placed another set of young plants, and managed as the first set. At this second planting some plantain trees (Musas) are set in the garden, but not above forty for the hundred Arecas. Near the hedge, in a line with the coco-nut palms, are also put some Jack (Artocarpus integrifolia) and Mango (Mangifera indica) trees. When ten years old, the Areca begins to produce fruit; but until the fifteenth year does not arrive at perfection. For thirty-five years it continues in full bearing. From its 50th year until its death, which happens in from its 70th to its 100th year, the quantity of fruit gradually diminishes, but its quality rather improves. The trees in full fruit produce annually three bunches, which ripen in succession between the 19th of October and the 16th of December. Each bunch contains from 30 to 100 nuts; so that, according to the natives, 200 nuts may be taken as the average produce of an Areca when it is in vigour. When the Mango and Jack trees have grown up, the pepper vines are usually put round them. Some people plant them also against the Areca, but they diminish its produce. Yams (Dioscoreas) are planted near the hedge.

The Betel-nut is collected by a set of people called Devadigus, Manner of who are sometimes kept as servants, and sometimes hired for the collecting crop season, at  $1\frac{1}{4}$  silver Fanam a day  $(5\frac{1}{2}d.)$ , part of which is paid ing the Betelin rice. A Devadiga in the forenoon cuts 25 bunches, and in the nut. afternoon assists the family to prepare the nuts. If the season promise to be favourable, that is to say, not too rainy, when the nuts are three quarters ripe, they are cut for Wan'-Adiky, or dry-betel. Immediately after they are cut, the husk is separated, and the nuts are then put into a pot, with as much water as will cover them, and boiled until the eyes (Corculla) fall out. They are then cut

CHAPTER into eight pieces, and dried in the sun four days, being removed into the house at night, or on the appearance of rain. It is of great advantage to the Betel to be dried on a gray granite rock (Bily Cullu); but where that cannot be procured, it is dried on a piece of ground that is purposely made hard and smooth. For this operation, the Devadiga requires the assistance of four people, generally the women of the house; and they prepare daily 12 Seers measure of Wan'-Adiky (1 155 peck). When the weather threatens to be rainy, the nuts are allowed to ripen on the tree for Nir'-Adiky, or wet-betel, which is thus prepared. The nuts, with the husk on, just as they are taken from the bunch, are put into large jars full of water, and the mouths of these are closely shut. In this state they cannot be preserved longer than four or five months, and are therefore taken for immediate consumption. A quantity adequate to supply the demand is daily taken out of the jar, and skinned as wanted. The knives used in preparing Betel-nut are delineated in Plate XXII. Fig. 63, 64.

Expense of cultivation.

A garden of 300 Arecas, which is one of a middling size, if it be watered by a well, requires the labour of six people, but of three only if it be watered by a tank. In the rainy season, however, while the cultivation of rice is chiefly carried on, the three men who are employed to raise the water have nothing to do in the garden, and are employed on the rice ground; even the three other men may be a few hours daily employed at any other kind of work. In fact, I suspect that the men, who spoke of six servants and four ploughs being requisite to cultivate 8 Morays of rice-land, ought to have added to the account an Areca garden of 300 trees. These men get 11 Pagoda a year in money, 2 Rupees worth of cloth, and eat three times a day in their master's house.

Black pepper.

The pepper is managed as follows. Between the 24th of May and the 22d of June, the ground near the tree upon which it is to be trained is dug with a hoe. Then two, three, or four cuttings of the pepper vine, each a cubit long, are put in the ground, one end

them being allowed to project. They are then covered with grass. CHAPTER This is done when the rainy season commences. A month afterwards they get a little dung. As the vines shoot, they are tied to the tree. Jan. 22. When the dry season commences, they must be watered every second day, until a year old, after which they require water once in four days. Twice a year also they must get manure of dung and leaves; and long grass, or bushes, must be prevented from growing near their roots; but there is no occasion to dig or plough the whole ground. They begin to bear in the fifth year; but are not in full crop until the eighth. If the worms attack the vine, they die in twelve or fifteen years; but otherwise they live twenty-five, and all the while produce good crops. When any vine dies, a new one is planted in its stead. Here they are trained upon the Pongary or Hongary (Erythrina), the Nuriga (Moringa), Jack (Artocarpus), Mango (Mangifera), Areca, coco-nut, and tamarind. The first is. however, most commonly employed, and in this country lives fifty years. It is not customary here to prune the trees upon which the pepper is trained. Each tree, according to the number of vines that it can support, produces from two to four Pucka Seers measure, or from 54.83 parts to 1, 59.66 of a Winchester gallon, which will weigh from  $2, \frac{6.25}{1000}$  lb. to  $5, \frac{2.5}{1000}$  lb. When one or two berries begin to appear red, the whole are collected by pinching off the amenta. A man, in one day, can take the fruit from three trees, that is to say, can cure about 12 pounds of pepper. It is kept all night in the house. Next day the berries are rubbed off with the hands, and picked clean. They are then dried three days on mats, or on a piece of smooth hard ground, and every night are taken into the house. The pepper is then fit for sale, and the common price is one Vir'-Raya Fanam for the Seer, which is at the rate of 106 Rupees a Candy of 560 lb. the weight here in use; or at the rate of 120 Rupees nearly for the Candy of 640 lb. which the cultivators in Malabar employ. The export price is on an average 136 Rupees. VOL. III. H

XIV. Jan. 22.

CHAPTER for the small Candy; but in this the merchants profit and the customs are included.

The crop season is between the 15th of January and the 13th of Sale of black February. Some people take advances; but the practice does not seem to be so prevalent as in Malabar, and the terms are somewhat more reasonable, although abundantly severe on the imprudent cultivator. If the advance be made six months before the time of delivery, the borrower gets three fourths of the value of the pepper: so that the lender has a profit of one Rupee for every three advanced, or 331 per cent. If, however, there is a delivery short of the stipulated quantity, the merchant gets back only a proportional part of the advance, with interest at the rate of three fourths of a Rupee for the Pagoda per annum, that is to say,  $18\frac{3}{4}$  per cent.

Coco-nut plantations.

Although I examined both the cultivators and extractors of palm wine concerning the plantations of coco-nut trees, the account that I can give of them is not at all satisfactory; what they said being in some places evidently false, and in others contradictory.

Account of them by the proprietors their own gardens.

The cultivators say, that the seed must be allowed one whole year on the tree to ripen, and must be the produce of a palm above who cultivate fifty years old. After being plucked, it is kept four months in a place which is sheltered from the sun and rain. Then it is put in a well, and kept a month under water. A small plot of dry ground is then dug, and manured with dung and ashes. In this the coconuts are placed, at one cubit's distance from each other, and buried so as just to be covered above the eyes, which are placed uppermost. The plot must be near a tank or rivulet, from which with a wooden scoop, Tay-pallay (Plate XXV. Fig. 68.), the water is thrown into it every other day when there is no rain. If there be rain, pains must be taken to prevent too much from lodging on the plot. These operations may be performed at any season; so that the young plants, after remaining in the plot from 12 to 15 months, may be fit for transplanting between the 22d of July and the 20th of August. In

this month square pits two cubits in width, two cubits deep, and at CHAPTER 24 cubits distance, are dug; and in the bottom of each is placed a coco-nut with its young shoot, which then is about three feet high. Jan. 22. Round it are placed a Seer of salt, some ashes, and as much fine mould as will rise four inches above the nut and roots. The young plant must be watered every other day, until the second leaves expand, which will be in about six weeks. In dry weather they must, for at least five years, be watered once in four days. In low grounds near the sea or inlets, the trees after this age require no watering: but on high ground, during the dry season, they must be watered as long as they live. In both situations the trees must be manured twice a year with ashes, dung, and leaves; and, if at a distance from the sea-water, they must at the same time get a little salt. When the first set are from five to ten years old, another set is planted in the spaces between them. They arrive at full perfection in twelve years, and continue in vigour until sixty. Those in plantations near the sea die at this age. These require no trouble; but after five years of age to be manured once in six months; and here no plantation is hoed or ploughed. Every second year, in the rainy season, between the 24th of May and the 16th of November, those trees which grow in low places near the sea are let for six months to the people who extract the juice. During this time, owing to the quantity of rain, the nuts in such situations do not ripen. In the year in which juice is extracted, the tree gives four bunches of nuts; in the intermediate year it gives six bunches. According to the farmers, a garden on high ground, that contains 500 trees, if watered by a tank, requires twenty men to work it; if watered by a well, it requires thirty men in the rainy, and forty in the dry season. This, however, must be an excessive exaggeration. In the dry season these trees may once in three years be let for extracting juice; but the practice is not common. Each tree, while in vigour, ought annually to produce fifty nuts. Those on the low ground produce more, but on the high-land they live much longer.



Jan. 22. Account given by the Biluaras, who extract

the juice.

CHAPTER They there continue in full vigour until sixty years old, and for about ninety more gradually decay.

The men who extract the juice in general hire the trees when these are fit for their purpose. The rate that they give seems very low, being only one fourth of a Rupee for three trees near the salt-water, and one fourth of a Rupee for four or five trees growing on hill-land; and there must be some mistake, as both to the north and south the rate for each tree is half a Rupee. It is true, that here the trees are never exhausted, and, even in the year in which juice is taken, produce a crop of nuts. According to the Biluaras the trees near the sea can at all times yield juice, those growing on hills produce it only in the rainy season; which is directly contrary to the assertion of the cultivators. The juice is partly sold, for drink, while fermenting; partly distilled into a liquor called Gungasir; and partly boiled into Jagory.

Customs of this cast.

The people who follow the business of extracting juice from palm trees, in their native language of Tulava, are called Biluaras; but in that of Karnáta, which the people of rank here commonly use, they are called Halepeca Davaru. Their proper business is to extract juice from palm trees, to boil it down to Jagory, or to distil it into spirituous liquor; but many of them also cultivate the ground, a few as masters, but many more as Culialu, or hired servants of this cast have now settled above the Ghats. These will marry the daughters of the people remaining in Tulava; but those here will not marry a girl from Karnáta, because the property there goes to a man's children, but here it goes to the children of his sisters; and, if he married a girl from Karnáta, her brothers would not receive the children. The Biluaras pretend to be Súdras, but acknowledge their inferiority to the Bunts. The business of the cast is settled by a person called Guricara, who is appointed for the purpose by the government, and who, with the assistance of a council of elders, has the power of excommunication, and of inflicting corporal punishment. None of this cast can read. They are permitted

to eat animal food, but ought not to drink intoxicating liquor. CHAPTER The men are allowed a plurality of women, who live in their houses; but on the husband's death the widows, with their children, return Jan. 22. to their brother's houses, and the eldest son of the eldest sister of the deceased person becomes master of his house and property. If a man fall into poverty, his children go to their uncle's house, before their father's death. Girls continue to he marriageable after the age of puberty; and a widow, or divorced woman, may marry again. A man may turn away his wife when he pleases; but a woman cannot leave her husband without his consent. This however, by committing adultery with any person of the cast, she can in general procure; for few husbands retain their wives when unfaithful; and she is not disgraced, but may get another husband, or at any rate she can live with her brother. Those who are in easy circumstances burn their dead; those who die poor are buried. The spirits of good men are supposed to go to a heaven called Sorgum, those of bad men are sent to a place of punishment called Nuraka. They seem to have no idea of transmigration. A few of them worship Vishnu; the greater part, however, never pray to any of the great gods, but content themselves with an annual sacrifice to Marina, and the other Saktis, by which they hope to avert the evils that are occasioned by these agents of Siva. Their women are liable to disorders that are attributed to the influence of Paisáchi, or evil spirits. These are not appeased by sacrifices; but the Biluaras apply to the Cunian, whose Mantrams, they fancy, are capable of casting out these devils. None of the Biluaras have Puróhitas to read Mantrams or Sústrams on occasion of any ceremony, such as marriage, or the commemoration of their deceased parents; nor have those who confine their worship to the Saktis any Guru; but those who pray to Vishnu are subject to the Sri Vaishnavam Bráhmans, who accept of their Dharma, or duty, and bestow on them Upadésa, Chakrántikam, holy-water, and the like.

Jan. 22.
Account of the coco-nut plantations by the tenants.

But to return to the gardens. The tenants (Gaynigaras) not only differ from the Biluaras, but also give a different account from the proprietors (Mulucaras). They say, that when they are disposed to plant a garden, they agree with a proprietor for a piece of ground suited to the purpose. They agree to give him a fixed annual rent in money; and so long as they pay this, the garden cannot on any pretence be resumed. In case of a deficiency of rent, the proprietor may resume the garden; but he must pay the tenant for all improvements made by planting. The value of each kind of tree is fixed, and is not left to arbitration, as was alleged by the proprietors. For coco-nut palms the value differs, according to their age, from one to three Rupees. A Betel-nut palm is valued at one fourth of a Rupee; ten or twelve fruit trees at one Rupee; a tree covered with pepper vines one Rupee. The expense of rearing all these must be as great here as in Malabar; and we may safely conclude, that these values at least equal the expense incurred. A tenant cannot sell his garden; but he may at any time go to the proprietor and compel him to take it off his hands, and to pay the value of the trees. The tenants sometimes hire gardens that have been brought to maturity. In this case, they pay a certain sum for each palm, but nothing for any of the other articles that are reared in the garden. The proprietor continues to cultivate the garden, and to keep up the number of the trees. This seems to be a reason for the low state at which the cultivation of pepper is in Tulava; as the proprietor is not at all interested in increasing the number of vines.

Betel-leaf.

Betel-leaf (Piper Betle) is here cultivated in separate gardens, as is the case in most parts of India, except in Malabar. For this purpose, a red stony soil on the side of a rising ground is preferred. Some of the gardens are watered from tanks; others, by means of the Yatam, from wells, in which the water stands from 12 to 24 feet under the surface. Between the 23d of April and the 23d of May the ground is first dug, and is then formed into beds six cubits

wide, which are separated by trenches three fourths of a cubit CHAPTER broad, and half a cubit deep. In the centre of each trench, at four finger-breadths from each other, are planted, in a row, cuttings of Jan. 22. the Betel-vine, each a cubit in length. If there is no rain, they must be slightly watered five times a day, and then covered with branches to keep off the sun. At the end of the first and second months, a little fresh red soil, mixed with small stones, are put in the bottoms of the trenches. At the end of the third month a row of branches, at six or eight cubits from each other, is planted on each side of every trench. The branches are intended to grow up to trees as supports to the vines. Those chosen are the Pongary (Erythrina), the Nuriga (Moringa), and the Agashay (Eschynomene grandiflora). At the same time, a little more earth and some dung are put into the trenches. In the sixth month more earth and dung is given; and, Bamboos having been tied horizontally along the rows of branches, the young Betel-vines are tied up to these. At the same time, in the middle of every second bed, a channel is formed, which every other day is filled with water; and from thence, by means of the Tay-pallay (Plate XXV. Fig. 68), the water must be thrown on the plants. Every month, a little dung and red earth is put to the roots of the vines, and these are tied up to the Bamboos and trees. When a year old, the garden begins to produce leaves for sale; after which, once in two months, it requires to be manured, and in dry weather to be watered once in two days. In the centre of each of the beds that have no channels, is then put a row of plantain trees. The garden is generally surrounded by a quickset hedge, at other times by a dead hedge of prickly bushes, and in the interval between the fence and vines are planted Capsicums, and other kitchen stuffs. Every four years the Betel-vines die; but in their stead others are immediately planted, a new trench being dug in the situation of each old one. In eighteen or twenty years, the soil having been exhausted, all that is near the trees is removed, and in its place fresh red earth is brought into the garden.

Jan. 22.

CHAPTER The trees last for fifty or sixty years; but when, by accident, one dies sooner, a fresh branch is planted to supply its loss. These substitutes, however, do not thrive. When, from old age, the whole trees begin to decay, the garden is abandoned, and a new one is formed in another place. If the garden receive its supply of water from a reservoir, the cultivator, each time that he plants, pays to the proprietor 10 gold Fanams, or 21/2 Rupees for every 1000 vines. In the three intermediate years he pays nothing. If the water be supplied from a well, the rent is only half of the above mentioned sum.

Cattle and fodder.

The cattle employed in labour here are chiefly bred in the inland districts about Subhra-mani, and are no larger than those of Malabar. From the month of January, until the commencement of the rainy season, they are supported on fodder. Between the 17th of November and the 16th of December a bad hay is made of the long grass which grows naturally on some hills that are purposely kept clear of bushes. This hay is chopped, and is boiled with rice husks for three hours; of this the oxen are allowed a quantity morning and evening; half a Maund (14 lb.), the people say, would be a good allowance. At night they get rice straw to the amount of about three fourths of a Maund (21 lb.), as the people whom I consulted conjecture; but, from the appearance of the cattle, the quantity allowed cannot be near so much. The people indeed merely spoke by guess, no Hindu, so far as ever I heard, having thought of weighing fodder. At the end of the dry season the cattle, as usual in India, become very poor; but in the rainy season those here are fat, and the cows are entirely supported by pasturing on the hills: at night the working cattle are allowed rice straw. An ox is wrought from sun rise until noon only, and is allowed the afternoon to pasture. Epidemic diseases are sometimes very destructive, and are attributed to a contagion which is supposed always to originate above the Ghats. An old man says, that he remembers twenty times the revalence of this epidemic; but that seems to be speaking in

round numbers: for the five last years there has been no disease of CHAPTER the kind. A good cow gives twice a day half a Seer of milk. For this purpose few female buffaloes are kept, but a great many males Jan. 22. are employed in the plough. Swine are kept by some of the low casts; but the pork of tame swine is an abomination with the Bunts, as with all the higher ranks of Hindus, although many of them are fond of the meat of the wild hog. No horses, sheep, goats, nor asses are bred in Tulava; nor have its inhabitants any carts.

Salt is made on this coast by a process similar to that used in Salt. Malabar; but the quantity manufactured is very inadequate to the demand of the country. A low piece of ground covered by the flood, but dry at low water, is chosen, and surrounded by a bank that is capable of excluding the tide. By means of a tunnel passing through the bank, and formed of a hollow coco-nut tree, the salt water can at pleasure be admitted. A sufficient quantity having been received, the tunnel is shut; and, when the water has evaporated, the soil is very strongly impregnated with salt. Brine is formed, as usual in India, by filtering salt water through this saline earth. The brine is exposed to the sun in small plots, levelled, and rendered impenetrable to water by a coating of clay and sand well beaten together, and rubbed smooth with a stone. To form the salt requires 28 hours evaporation; and it can be made only between the 26th of March and the 23d of May. The man who makes it gets from the government an advance of five Pagodas in cash, and of rice to the same amount. He repays the money, but not the rice, and pays on an average a tax of 43 Pagodas; so that, in fact, government gets from him 38 Pagodas (151. 16s. 3d.) for an ordinary salt-field. Larger or smaller ones pay in proportion. The manufacturer sells his salt as he pleases. It is mixed with a considerable quantity of earthy impurities, but not with more than the common salt of Bengal contains. The grains are large and cubical, and often adhere together in large porous masses. It seems to be VOL. III.

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CHAPTER very deliquescent. The common price is 1120 Seers for the Pagoda. The Seer measures  $76\frac{1}{2}$  cubical inches; the bushel therefore, in cluding the duties, costs less than 21/2 d.

No iron is made in the province of Canara.

No mines. Commerce.

Having assembled the principal traders of this place, they say, not only that the trade of the place has decayed greatly since the time of Hyder, which may possibly be true; but they also assert, contrary to the evidence of the custom-house accompts, that since the fall of Tippoo the imports have diminished greatly. They acknowledge, however, that under this prince the merchants suffered terrible oppressions, and that under his government the greater part of them were ruined. Hyder had collected them together with great pains, and he always allowed a Lac of Rupees (10,073 l. 12 s.  $2\frac{1}{2}d$ .) to be in advance to honest and industrious, but poor men; by which means such valuable persons were induced to come from great distances, and to settle at this place. The principal merchants in Hyder's time were Moplays and Kankánies; a few came from Guzzerat. Since the Company has acquired the government of the country, many men of substance have come from Surat, Cutch, Bombay, and other places to the north. These men are chiefly of the Vaisya cast, but a good many Parsis are among them. The shopkeepers are still mostly Moplays and Kankánics. The Bunts are now beginning to pursue commerce. The vessels employed in trade chiefly belong to other ports.

Exports.

Rice is the grand article of export. It is sent to Muscat, Bombay, Goa, and Malabar. The duties on its exportation were lowered by Major Monro; but that has made no material difference in the price, and the cultivators are not sensible of any benefit from this measure. The average price, including duties and shipping charges, varies, according to its quantity, from 24 to 181 Pagodas a Corge of 42 Morays. This makes the price from almost 3s.  $6\frac{1}{3}d$ . to 2s.  $8\frac{3}{4}d$ . a bushel. The cultivators, of course, sell it lower; about 2 Morays for a Pagoda may be the average price that they get for good rice, CHAPTER which is 3s. 1d. a bushel. The coarser kinds are lower in proportion.

Next to rice, Supári or Betel-nut is the chief export. It is sent Jan. 22. to Surat, Bombay, and Cutch. The export price of the raw nut is 14 Pagodas a Candy, or 11. 2s.  $4\frac{1}{2}d$ . a hundred-weight. That of the boiled nut is 15 Pagodas, or 11. 3s. 1134d. a hundred-weight.

· Black-pepper the merchants reckon the next greatest article of export; but, to judge from the custom-house accompts, it would seem to be more considerable. Its average price is 34 Pagodas a Candy, or 31. 1s. 1d. a hundred-weight. The customs on pepper are lower here than in Malabar, and no rent nor tax is exacted from the cultivator; yet the price at Mangalore is higher than at Tellichery, and the cultivation is more neglected.

Sandal wood is sent to Bombay; but it is all the produce of the country above the Ghats.

Cassia, called here Dhál'-China, or cinnamon, is sent to Muscat, Cutch, Surat, and Bombay; and is exported at 9 Pagodas the Candy, or 14s. 41 d. the hundred-weight. The buds of this tree are called Cabob China, which seems to be the origin of the European word Cubeb. They are exported to the same places.

Turmeric grows in the country, and is exported to Muscat, Cutch, Surat, and Bombay, at the rate of 8 Pagodas a Candy, or 12s.  $9\frac{1}{2}d$ . a hundred-weight.

The chief imports, according to these merchants, are blue cotton Imports. cloths from Surat, Cutch, and Madras. The Surat cloth is the most common. It is 36 cubits long, two broad, and of a very dark colour, and sells for from 18 to 50 Pagodas a Corge, or from 35 to 10 Rupees. a piece.

Coarse white cotton cloth from Cutch, Bavanagur, and other places north from Bombay.

Salt from Bombay and Goa. The former sells at 70 Pagodas a Cumbu, and the latter at 50 Pagodas: the former is a little more than  $3\frac{1}{4}d$ , and the latter than  $2\frac{1}{4}d$ . a bushel.

CHAPTER XIV. Jan. 22. Raw-silk, for the use of the manufacturers above the Ghats, is imported from China and Bengal; and from Muscat a kind of red dye, called Munjisht, which I believe is a species of madder.

Sugar is imported from Bengal and China, and oil and Ghee (boiled butter) from Surat.

Much of the cloth used in the country is brought from above the Ghats; partly by the merchants of this place, and partly by those of Bangalore and Cuddapa.

## CHAPTER XV.

JOURNEY FROM MANGALORE TO BEIDURU.

ANUARY 29th.—I went about ten miles to Arcola, which is also CHAPTER called Feringy-petta, having formerly been chiefly inhabited by the Christians of Kankána, invited to reside here by the princes of Jan. 29. the house of Ikeri. Its situation, on the northern bank of the sou- petta. thern Mangalore river, is very fine, and it was formerly a large town. After Tippoo had taken General Mathews, he destroyed the town, and carried away its inhabitants. One end only of the church remains, which however shows that it has been a neat building. Its situation is remarkably fine.

Even now the river contains a great deal of water, and in the Mangalore rainy season it is very large. Its banks, like those of the Panyani Appearance river, are very beautiful and rich. Indeed the whole country en- of the countirely resembles Malabar, only the sides of the hills have been formed into terraces with less industry. As no hill-rice is cultivated in this vicinity, the terraces are formed at the roots of the hills only, where the gardens in Malabar are situated. According to the report of the natives, not one fourth part of the ground fit for gardens is now planted. They say, that Tippoo, in order to remove every inducement for Europeans to frequent the country, destroyed all the pepper vines, and all the trees on which these were supported. Much of the rice land is so well watered by springs and rivulets, that it produces a constant succession of crops of that grain; one crop being sown as soon as the preceding one has been cut. Although here the steep sides of the hills are not formed into terraces,

CHAPTER XV.
Jan. 29.

as in Malabar, yet the gently sloping lands are formed into rice-fields that are cultivated once a year. In Malabar they would be either planted, or reserved for the cultivation of hill-rice, Sesamum, or the like; and would yield a crop once only in three years.

Jan. 30. Stupidguides.

30th January.—Yesterday a considerable part of my baggage lost its way; and although accompanied by two guides, and travelling on the most public road in Canara, I did not discover my tents until two o'clock this morning. The guides and attendants, in excuse for their stupidity, alleged, that they were misled by the reports of the natives, who had informed them of my having passed places which I never had been near. The cattle were so much fatigued that I would not proceed; so I employed the day in collecting plants.

Jan. 31. Appearance of the country. 31st January.—In the morning I went three Sultany cosses to Nagara Agrarum. The road in general is bad even for oxen. The country is similar to that between Mangalore and Arcola. Most of the hills are clear; but many palms of the Borassus kind are scattered throughout the country, and the little vallies are finely watered with clear perennial rivulets. These are confined by dams; so that it is said, that about one fourth part of all the low rice land in Buntwala district (Taluc) produces annually three crops of rice.

Buntwala.

About a coss from Nagara I passed through an open town named Buntwala, which at present contains about 200 houses. In the last war the Coorg Rájá destroyed about 200 houses, and carried away one half of the inhabitants. Many new houses are building; and, as I passed through, I observed, that the people were deeply engaged in the bustle of commerce, and from their appearance were in good circumstances. They carry on a great trade between Mangalore on the one hand, and Hásina, Bailuru, Wostara, Singa-purapetta, Narasingha-pura, and Attigupa on the other. From the neighbouring country they also collect much rice for exportation.

Nétrawati niver. The town is situated on the north bank of the river passing

Arcola, and which is named the Nétrawati. Since I left Animalaya, this is the first river that I have found possessing a name. The tide flows no higher than Arcola; but canoes carrying 100 Morays, Jan. 31. or about 130 bushels of rice, can at all seasons ascend five or six cosses above Nagara. The channel is very wide, and full of rocks, which in the dry season form many islands, among which the river winds with a gentle current. In the rainy season, canoes can ascend six cosses farther than they can do at present. There are two branches of the river, which join five cosses above Nagara. The northern branch is the largest, and comes from the same place that gives rise to the Tunga and Bhadra rivers.

All the way I observed many iron guns lying near the road; and was told that Tippoo, when he destroyed Mangalore fort, ordered all the guns to be transported to Seringapatam; but the people entrusted with performing this duty were bought off by the labourers, and found out various pretexts for leaving most of the guns on the road. By the natives they are considered as totally useless.

Nagara Agrarum, as its name implies, is a village, inhabited by Nagara Brahmans, of whose houses it at present contains thirty. They were brought here 70 or 80 years ago, and land was assigned for their support by Colala Vencatashya, a Bráhman in the service of Sómasékara Náyaka, the son of Sivuppa Náyaka, the first prince of the house of Ikeri. The Tahsildar of Buntwala resides here; for, being a Bráhman, he naturally prefers the society of Nagara to that of the traders of Buntwala. His district (Taluc) contains four Rájáships; Choutar, Bungar, Ajelar, and Mular. These Rajas were all Jain. The families are still extant, but have neither authority nor public revenue. They support themselves by their private estates.

The soil of Tulava gradually grows worse for grain, as it is distant Soil of Tufrom the sea. The best in quality extends from Mangalore to Bunt- lava. wala; the next from thence to Punjalcutta; and the worst from thence again to the hills. There the rains are so excessive, that they injure the crops of rice, as indeed happens in Malabar; but it

CHAPTER

try.

XV. Feb. 1. Appearance of the coun-

CHAPTER is allowed, that this inland portion of the country is very favourable XV. for plantations.

1st February.—I went three cosses to Cavila-cutty. The hills are much higher than those to the westward, and some of them are covered with tall thick forests, in which are found Teak (Theka) and wild Mango (Mangifera) trees, and the palm which Linnæus called Caryota. These hills abound with tigers, which have of late killed several passengers. The road all the way is tolerably well formed, but the engineer has paid no attention to avoid hills: some parts of it are excessively steep. I passed many oxen, loaded with salt, going to the Mysore dominions, and met many coming from thence loaded with iron.

Irrigation.

The road, part of the way, led along the south side of a small river called *Bambilu*. A dam has been formed on it, which confines a great body of water, so that it serves also as a reservoir.

Cavila-Cutty.

My halting-place was at a small temple dedicated to Culimanatia, one of the Saktis. Near it is a small temple belonging to the Jain, and a tree, which is surrounded by a terrace for the repose of passengers. Such a tree, in the languages of Karnáta and Tulava, is called a Cutty; and the names of many places in both countries have this word for their termination. The tree here is named Cavila-Cutty from its standing in Cavila, a district that belonged formerly to the Mular Rájá. The representative of the family lives at Bylangudy, on the road between Jamál-ábád and Subhramani.

Depredations of the Coorg Rhjá.

In the last war this vicinity was plundered by the Coorg Rájá; and, among others, the house of the Jain priest was destroyed. The Rájá wished to replenish his dominions with inhabitants; many of his subjects having perished in his wars with Tippoo. From most villages he contented himself with levying a contribution of fourteen or fifteen persons; but he carried off a much larger proportion of the Bráhmans from the Agrarums, or villages granted to them in charity. This did not proceed from any partiality that the Rájá has for the sacred order, as he is supposed rather to be averse to

the whole cast, and at any rate does not reverence them as his CHAPTER Gurus, for he is a Sivabhaktar. His severity, which the Bráhmans consider as worse than ordinary impiety, arose from their obstinacy. Feb. 1. Relying on the sacred nature of their cast, the Bráhmans would come to no composition, and the Coorg officers carried away every one of them whom they could seize. In Tulava their loss will not be severely felt; for there the Agrarum Bráhmans possess none of the industry that distinguishes those of Pali-ghat, and in Coorg necessity will probably induce them to follow some useful employment.

In the temples of Tulava there prevails a very singular custom, Singular cuswhich has given origin to a cast named Moylar. Any woman of the toms of the Moylar. four pure casts, Bráhman, Kshatri, Vaisya, or Súdra, who is tired of her husband, or who (being a widow, and consequently incapable of marriage,) is tired of a life of celibacy, goes to a temple, and eats some of the rice that is offered to the idol. She is then taken before the officers of government, who assemble some people of her cast to inquire into the cause of her resolution; and, if she be of the Bráhman cast, to give her an option, of living either in the temple or out of its precincts. If she choose the former, she gets a daily allowance of rice, and annually a piece of cloth. She must sweep the temple, fan the idol with a Tibet cow's tail (Bos gruiens), and confine her amours to the Bráhmans. In fact, she generally becomes a concubine to some officer of revenue, who gives her a trifle in addition to her public allowance, and who will flog her severely if she grant favours to any other person. The male children of these women are called Moylar, but are fond of assuming the title of Stánika, and wear the Bráhmanical thread. As many of them as can procure employment live about the temples, sweep the areas, sprinkle them with an infusion of cow-dung, carry flambeaus before the gods, and perform other similar low offices. The others are reduced to betake themselves to agriculture, or some honest employment. The daughters are partly brought up to live like Vol. III.

CHAPTER their mothers, and the remainder are given in marriage to the Stánikas.

> The Brahmany women who do not choose to live in the temple, and the women of the three lower casts, cohabit with any man of pure descent that they please; but they must pay annually to the temple from one sixteenth to half a Pagoda. Their children also are called Moylar; those descended from Bráhmany women can marry the daughters of the Moylar who live in the temples; but neither of them ever intermarry with persons descended from a woman of inferior cast. It is remarkable in this cast, where, from the corrupt example of their mothers, the chastity of the women might be considered as doubtful, that a man's children are his heirs; while in most other casts the custom of Tulava requires a man's sister's children, by way of securing the succession in the family. The Moylar differ much in their customs, each endeavouring to follow those of the cast from which his mother derived her origin. Thus the descendants of a Bráhmany prostitute wear the thread, eat no animal food, drink no spirituous liquors, and make marks on their faces and bodies similar to those which are used by the sacred cast. They are not, however, permitted to read the Védas, nor the eighteen Puránas. Indeed but very of them learn to keep accompts, or to read songs written in the vulgar language. Contrary to the custom of the Bráhmans, a widow is permitted to marry. They burn the dead, and believe in the transmigration of souls, but seem to have very crude notions on this subject. They are, indeed, very ignorant of the doctrine of the Bráhmans, who utterly despise them, and will not act as their Gurus to give them Upadésa. They will attend, however, at the ceremonies of the Moylar, and read the services proper on the occasion, and will accept from them both Dhana and Dharma.

Strata of Tulava.

The strata of Tulava, near the sea-coast, resemble entirely those of Malayala, and consist of Laterite or brickstone, with a very few rocks of granite interspersed. This granite is covered with a dark black crust, and is totally free from veins of quartz, or of felspar. CHAPTER In many places large masses of the granite immersed in the Laterite are in a state of decay; the black mica has entirely disappeared, Feb. 1. and the white felspar has crumbled into powder, leaving the quartz in angular masses. These sometimes form so large a share of the whole rock, that, after the decay of the other component parts of the granite, they firmly adhere.

On arriving in the Cavila district, the granite shows itself more abundantly; and among that which, as usual, has no strata, I observed some disposed in strata running east and west, and which were truncated at the end, like much of that which is found above the Ghats. Even this was free from veins of quartz.

2d February.-I went three Sultany cosses to Bellata Angady, or Feb. 2. the white market; a place very improperly named, as it contains Appearance of the counonly one shop, and in that nothing but Betel is sold. The country try. is not so steep as that through which I came yesterday; but it contains much less rice-land, which is the only part of this country that is considered as of any value. I am persuaded, however, that for cotton or dry crops much of it might be cultivated by the plough; but the population at present is too small to admit of all the rice-land being cultivated; and, while that continues to be the case, it would be madness to attempt any other. On the hills many trees have now grown up; but it would appear, that formerly they had been all cleared; and to keep the bushes down, and to destroy vermin, the grass is still annually burned. To-day many buffaloes and sheep have passed, coming for sale from the dominions of Mysore; and many oxen have passed from the same quarter, laden with iron, cloth, and grain.

At no great distance from the shop near which I encamped, is a Bungar Matam belonging to the Sivabhaktar; and from thence a town Rájás. formerly extended, almost two miles west, to a temple of the Jain. Midway is a ruinous fort, formerly the residence of the Bungar Rájás, to whom much of the neighbouring country belonged. The

Feb. 2.

CHAPTER fort and city were destroyed by Sivuppa Náyaka, the first prince of the house of Ikeri who established his power in Tulava. From this it is clear, that the petty Jain Rájás existed before the time of that conqueror; and so indeed do the people of this place say, in contradiction to the story which those of Hosso-betta told. The tradition here is, that the petty Jain Rájás existed long before the time of Sivuppa Náyaka, and were entirely independent of each other. Under the Ikeri Rájás they paid no tax of any kind for their Umblica lands, or private estates. For at least a portion of these Hyder continued to allow an exemption from taxes; but the Sultan taxed their whole lands at the same rate as the rest of the province, and this tax they continue to pay. During the siege of Seringapatam, the commandant of Jamál-ábád hanged the Bungar Rájá, as he was suspected of an inclination to favour the English. His children live at Nandavanram, south from Buntwala, and cultivate their lands in that neighbourhood.

Irrigation.

On the river at Bellata Angady is a dam, which is rebuilt every year, at the commencement of the dry season, and is formed of piles, stones, and earth. It sends off a large stream of water, the whole of which is wasted on one small Betel-nut garden.

Feb. 3. Appearance of the country.

3d February.-I went a short journey to Jamál-ábád, which originally was called Narasingha Angady. The country through which I passed to-day is almost entirely covered with wood; but much of it has a good soil, and might be watered by means of the small river which we twice crossed. The road is very good.

History of Jamúl-ábád, or Narasingha Angady.

The tradition here is, that a Bráhman named Narasingha Ráyá, the founder of a dynasty who governed the whole of Tulava immediately after that of Myura Varmá became extinct, built a town on the banks of the river here, and called it Narasingha Angady after his own name. Toward the foot of the rock, at present occupied by the fortress, he erected a citadel; and this was the residence of the family, of which I have found no traces in any other place. From the extinction of this family, which must have happened

many ages ago, the place continued totally unoccupied, until Tippoo CHAPTER was returning in triumph, after the peace which he granted to the English at Mangalore. As he encamped where the town now stands, Feb. 3. he observed the immense rock placed to the westward; and having sent two officers (Hirkaras) to survey it, he determined to build a fortress on its summit. Money was transmitted from the capital immediately on his arrival there, and the work having been completed, a number of people were collected and sent to inhabit the town, which was called Jamál-ábád. The Sultan afterwards destroyed the fort at Mangalore, as being too accessible for Europeaus, and made his new town the residence of an Asoph, who governed the province of Canara. In the fort was placed a Khiladar, or commandant, with a garrison of 400 men. In the town there were then about 1000 houses, and it enjoyed a considerable trade. On the late invasion of Mysore, the Coorg Rájá destroyed the town, and carried away one half of its inhabitants. The remainder made their escape into the woods, and only about 20 houses have been rebuilt; for the former inhabitants, having been mostly collected by force from different places, when dispersed by the Coorg Rájá, returned to their native villages. The immense rock on which the fort stands is wholly inaccessible, except by one narrow way, and may be deemed impregnable. The nature of the access to it, however, renders the descent, in face of an enemy, nearly as difficult as the ascent; so that a very small body of men, with artillery, are adequate to blockade a strong garrison; which renders the place of. little use, except as a safeguard for treasure or records. After the fall of Seringapatam, a party of British troops summoned the place to surrender; and informed the commandant, that if he submitted immediately, the whole arrears of the garrison should be paid; but that no quarter would be given, should the garrison, by a useless resistance, occasion a wanton effusion of blood. The garrison, however, continued obstinate for about a month and a half, until some mortars were brought up. After three days bombardment, the

CHAPTER XV.

soldiers ran off, the commandant poisoned himself, and the principal officers who submitted to be taken were hanged. Sometime afterwards, a person named Timma Náyaka, who had been a petty military officer at Beäcul, and who, by promising to procure recruits for the Bombay army, had been admitted into the Company's service, persuaded about 200 of the recruits to desert, and with them went to join an insurgent of the name of Suba Row. This was a Bráhman, who had been a clerk (Sarishtadár) at Coimbetore; and who, with a view of raising a disturbance, had set up a pretended Futty Hyder. The man that pretended to be Futty Hyder, who is a natural son of the late Sultan, remained at a temple near Bylangudy, a town on the Ghats towards Subhramani; while the Bráhman occupied a cave at no great distance, and detached Timma Náyaka with his recruits to surprise Jamál-ábád. In this they succeeded. A young officer had relieved the garrison, and was sleeping that night in a house at the foot of the rock, with all his men, except a native corporal's (Núyaka's) party, intending probably next day to march into the fort; but Timma Náyaka came upon them unawares, and put the whole party to death; after which he persuaded the corporal to give up the gate, and took possession without loss. While the neighbourhood was awed by their success, Suba Row, with his pretended Futty Hyder, descended from their hills, and plundered several villages. They then advanced to Buntwala, where they defeated the Tahsildar, who, to oppose their ravages, had collected some armed messengers (Peons). Elated with this advantage, they attacked a person called Rájá Hegada of Dharmastulla, whom they wounded at a place called Potur; but two of the neighbouring Talsildárs, having procured thirty regular Sepoys, soon came up, and immediately dispersed the rabble. The two leaders, however, made their escape to the mountains, where they are still skulking. A military force was sent from Mangalore, that a proper example might be made of Timmu Náyaka and his party, and two attempts were in vain made by Europeans to take the fort

by assault. The place was then blockaded for three months; when, CHAPTER all the provisions having been exhausted, the people in the fort contrived to let themselves down the back of the rock by means of Feb. 3. chains, ropes, blankets, and the like. They immediately dispersed; but many of them were secured by the country people, and hanged. For some time Timma Náyaka concealed himself in disguise; but at length he was recognised by an old friend, a Nair, at Beäcul. This man, under pretence of cutting a Bamboo, borrowed Timma's sword, without seeming to know him, but addressing him as a stranger. No sooner had he disarmed his old acquaintance, than he rushed on him, and threatened him with instant death, unless he followed quietly. The culprit was thus delivered over to justice, and the Nair as a reward received 500 Rupees. The fellow has the impudence to complain of its insufficiency, and has persuaded some gentlemen to support his demands for more, by pretending that, in attacking so desperate a man, he has performed extraordinary deeds of valour. The fort, in order to prevent it from falling into the hands of ruffians, is now garrisoned; for, as I have said before, in a military point of view it is of little use.

In this neighbourhood, the hills that are cultivated after the Malayar, and Cotucadu or Cumri manner are all private property. The Mulucaras, their manner of cultivating or proprietors, have alienated the whole right of cultivating them the hills. to a rude tribe, called Malayar, or Malay-cudies. The Malayar, who dwells on any hill of this kind has the exclusive hereditary right of cultivating it; but, while not occupied by this labour, he and his family must work for the proprietor (Mulacara), at the allowance of provisions usually given to slaves. The Malayar may give up his possession when he pleases, which secures him from being ill used by the proprietor; for such people on an estate add greatly to its value. They work for their master ten months in the year; but, having six or seven miles to come and go from their hills to their master's fields, they labour only six hours in the day. In this neighbourhood no tax is imposed on this kind of land; but in some

XV. Feb. 3.

CHAPTER districts the Malayar pay annually a small sum to government for each hill.

> The following is the manner in which this sort of cultivation, called Cumri, is performed. In the beginning of the dry season, the Malayar cuts down all the trees and bushes from a certain space of ground, and before the rains set in he burns them. The ground is then dug with a sharp Bamboo, and sown with Shamay (Panicum miliare), Ragy (Cynosurus Corocanus), rice, and various cucurbitaceous plants. The grains are sown separately; but seeds of the cucurbitaceous fruits are mixed with all the farinaceous crops. With the Ragy are also mixed the seed of Hibary (Cytisus Cajan), and of Abary (Dolichos Lablab). Next year another piece of ground must be cleared, the former not being fit for cultivation in less than twelve years. In Tulava, this is the only kind of cultivation of dry grains, although much of the ground seems fit for the purpose; but the natives have a notion, that no high ground can produce any thing unless a great deal of timber has been burned on it.

Hills of Tulara considered as useless. Hay.

They therefore consider the greater part of the country as totally useless, except for pasture or hay, and very little of it produces the proper grass. One kind of grass only that is produced in Tulava is eatable; and when I proposed to the natives to destroy the bad kinds, and sow the seed of the good, they were filled with astonishment at what they considered as the extravagance of the project. Where the hills are not too steep for the plough, I am persuaded that this might be done to great advantage; and the quantity of live stock and manure might be thus quadrupled. The hay at present is very bad, and sapless; for the grass, in its natural state, withers from maturity, before the rainy season is over; and before that period the hay could not be preserved. This, however, might be easily remedied, by cutting the grass while young, and allowing a second crop to come up, so as to be in juice at the commencement of the fair weather. The first crop would make good manure. This project the natives consider as equally extravagant with the former;

nor indeed can it be expected, that in their circumstances they CHAPTER should attempt any innovation of the kind, until convinced, by an experiment made before their eyes, that it would succeed.

Feb. 4.

4th February .- I returned by the same road to the Jain temple Appearance at Bellata Angady, and then turned towards the north, and came to of the coun-Padanguddy in a district named Majura, which formerly belonged to the Bungar Rájás. The country through which I came from Bellata Angady is clear, and the road good; the hills being low, and of gentle declivity. The quantity of rice ground is inconsiderable, and by the way I saw hardly any gardens. Near the temple is a very fine reservoir, made, exactly like those above the Ghats, by building a mound of stone across the head of a narrow valley, which it supplies with water. The value of the rice ground, from its small extent, seems not to have been a sufficient inducement with them to construct such a work; which was made, probably from ostentation, by a Linga Banijigar, named Luddi Guruvaia.

5th February.—I went three cosses to Sopina Angady. From Pa- Feb. 5. danguddy, to the banks of the northern branch of the Mangalore river at Einuru, the country is much like what I saw yesterday, but more woody. Between the river and Sopina Angady, the hills are steeper, and consequently the road is very bad.

Einuru is a small town, containing eight temples belonging to Jain. the Jain, and one to the Siva Bráhmans. The former have an annual allowance of 14 Pagodas, and the latter one of 10 Pagodas. As inthis country the worshippers of Jain are more numerous than those of Siva, the temples of the former ought to have the best endowments; but while the native officers of government are mostly Bráhmans, pretences will never be wanting for depressing these heretical temples.

At Einuru is an immense colossal image of one of the gods worshipped by the Jain. It is formed of one solid piece of granite and stands in the open air.

Vol. III.

## A JOURNEY FROM MADRAS THROUGH

CHAPTER XV.
Feb. 5.
Tigers.

Sopina Angady has only three shops; but the houses of the proprietors are very large, and the occupants seem to be in easy circumstances. Here is a Jain temple, with an excellent house for the priest (Pújári). The place was formerly much infested with tigers; but a year ago the inhabitants collected, and cleared away so much of the wood, that they now have no trouble from these animals. They clear the country by cutting down the brush-wood, and burning it when it has dried. If this be repeated two or three years successively, the large trees also decay. The country is afterwards preserved clear by annually burning the grass. A few bushes always spring up, but not more than is sufficient to supply the farmers with leaves for manure.

Feb. 6. Appearance of the country. 6th February.—I went two cosses to Mudu, or East Biddery, and by the way crossed a branch of the northern Mangalore river, which descends from the Ghats. On the way, two tigers were seen by some of my people. Although the country is well cleared, it contains very little rice ground; and, as the hills are considered as totally useless, this is in fact one of the poorest countries that I have ever seen.

Choutar Rájás. Mudu Biddery was formerly subject to the Choutar Rájás, and their descendants have still a house in the place. The tradition, as given me here by a Bráhman native officer, and apparently a well informed man, is, that the Jain Rájás of Tulava were independent of each other, and of all other powers, and were descended from the kings of Vijaya-nagara by Jain women. They derived their territories from their parents, as appanages free from all claims of tribute. I think it probable, that the Bráhman confounds the Baylala Ráyas, who were sovereigns of Karnáta, and who were Jain, with the family who afterwards founded Vijaya-nagar, who governed the same dominions, and who were worshippers of Vishnu.

About 150 years ago, when under the Choutar Rájás, the place contained 18 Busties or temples of the Jain, and a throne occupied

by one of the chief Gurus of this sect of Bráhmans. It also con- CHAPTER tained 6 Gudies, or temples belonging to the Bráhmans who follow the Puránas, and 700 houses, mostly occupied by Bráhmans of the Feb. 6. two sects. At that time, a dissension happening between the Rájás of Carculla and Choutar, the Siva-Bhaktar were called in, and subjected the country in the name of the kings of Vijaya-nagara; but in fact it continued subject to the princes of Ikeri, until these were overthrown by Hyder. Ever since the overthrow of the Choutar, the place has been on the decline, and the allowances formerly granted to the Guru have been stopped. The temples still, however, continued to enjoy their land; and in the government of Hyder, those of the Jain had possessions to the amount of 360 Pagodas a year. These were entirely resumed by Tippoo, who gave, in place of them, an annual pension of 90 Pagodas; but he destroyed most of the Bráhmans houses, and now the whole place contains only a hundred families. Major Monro increased the pension of the Jain temples to 207 Pagodas; but Mr. Ravenshaw has reduced it to what Tippoo allowed, and it is to be collected in the same manner, that is to say, by a small tax levied on the farmers. As this is to be done by officers who abhor the Jain as detestable heretics, very little of the pension will reach their hands. The free lands formerly occupied by the Jain have been totally resumed, and they have not been allowed to cultivate it on payment of the land-tax, as all the other persons holding land of this kind have been permitted to do. This is owing to the ill will of those Bráhmans who act as revenue officers.

Having invited Pandita Achárya Swámí, the Guru of the Jain, to Account of visit me, he came, attended by his most intelligent disciples, and Arhita sect. gave me the following account of his sect.

The proper name of the sect is Arhita (worthy); and they acknowledge, that they are one of the twenty-one sects who were considered by Sankara Achárya as heretical. Like other Hindus, they are divided into Bráhman, Kshatri, Vaisya, and Súdra. These Feb. 6.

CHAPTER casts cannot intermarry; but, provided she be of pure descent, a man of a high cast is not disgraced by having connection with a woman of inferior birth. A similar indulgence is not granted to the women of the higher casts. The men are allowed a plurality of wives, which they must marry before the age of puberty. The man and woman must not be of the same family in the male line. Widows ought not to burn themselves with the bodies of their husbands; but it is those of the Súdras only that are permitted to take a second husband. The Bráhmans and Vaisyas in Tulava, and every cast above the Ghats, consider their own children as their heirs: but the Rájás and Súdras of Tulava, being possessors of land, follow the custom of the country, and their sisters' children are their heirs. Even the Súdras are not permitted to eat animal food, nor to drink spirituous liquors; nor, except for the Kshatriyas when engaged in war, is it lawful for any one to kill an animal. They all burn the dead.

Opinions of the Jain, or Arhita tribes.

The Védas, and the eighteen Puránas of the other Bráhmans, the Arhita reject as heretical. They say, that these books were composed by a saint (Rishi) named Vyása, whom the other Bráhmans consider as an incarnation of the deity. The chief book of which the doctrine is followed by the Arhita is named Yoga. It is written in the Sanskrit language, and character of Karnáta, and is explained by 24 Puránas, all written by its author, who was named Vrishava Sayana, a saint (Rishi), who by long continued prayer had obtained a knowledge of divine things. They admit, that all Bráhmans are by birth of equal rank, and are willing to show their books to the Bráhmans who heretically follow the doctrine of the Védas; but they will not allow any of the lower classes to inspect their sacred writings.

The gods of the Arhita are the spirits of perfect men, who, owing to their great virtue, have become exempt from all change and misfortune, and are all of equal rank and power. They are collectively called by various titles; such as Jinéswara, (the lord Jina),

Arhita (the worthy), and Siddha (the holy); but each is called by CHAPTER a particular name, or names, for many of them have above 1000 appellations. These Siddha reside in a heaven called Moesha; and it Feb. 6. is by their worship only, that future happiness can be obtained. The first person who by his virtue arrived at this elevated station was Adi Paraméswara (the first supreme being); and by worshipping him, the favour of all the Siddha may be procured. He has 1008 names, the most common of which among his adorers is Jinéswara, the god Jina.

The servants of the Siddha are Dévatas, or the spirits of good and great men, who, although not so perfect as to obtain an exemption from all future change, yet live in an inferior heaven called Swargam; where for a certain length of time they enjoy great power and happiness, according to the merit of the good works which they performed when living as men. Swurgam is situated higher in the regions of the air than the summit of Mount Méru (the north pole); and men ought to worship its inhabitants, as they possess the power of bestowing temporal blessings. Concerning the great gods of the eighteen Puránas and Védas, the Arhita say, that Vishnu was a Rájá, who, having performed certain good works, was again born a Rájá named Ráma. At first, he was a great hero and conqueror; but afterwards he retired from the pleasures of the world, became a Sannyási, and lived a life of such purity that he obtained Siddha under the name of Jina, which he had assumed when he gave up his earthly kingdom. Mahéswara, or Siva, and Brahmá are at present Dévatas; but are inferior in rank and power to Indra, who is the chief of all the happy beings that reside in Swargam. In this heaven are sixteen stages, containing so many different kinds of Dévatas, who live in a degree of bliss in proportion to their elevation. An inferior kind of Dévatas, called Ventaru, live on mount Méru; but their power and happiness are greatly inferior to those of the Dévatas of Swargam. Marima, Putalima, and the other



CHAPTER Saktis, are Ventarus living on Mahá Méru; but they are of a malevolent disposition.

> Below Mahá Méru and the earth, is situated Bhuvana, or hell, the residence of the spirits of wicked men. These a called Rákshas and Asuras; and, although endowed with great power, they are miserable. Bhuvana is divided into ten places of punishment, which are severe in proportion to the crimes of their respective inhabitants.

> The heaven and earth in general, including Mahá Méru, and Bhurana, are supposed never to have been created, and to be eternal; but this portion (Khanda) of the earth called Arya, or Bhárata, is liable to destruction and re-production. It is destroyed by a poisonous wind that kills every thing; after which a shower of fire consumes the whole Khanda. It is again restored by a shower of butter (Ghee), followed by one of milk, and that by one of the juice of sugar-cane. Men and animals then come from the other five portions (Khandas) of the earth, and inhabit the new Arya or Bharata-khanda. The books of the Arhita mention many Dwipas, islands or continents, surrounding Mahá Méru, of which the one that we inhabit is called Jambu-dwipa. People, from this, can go as far as Manushotra, a mountain in Pushkarara-dwipa, between which and Jambu-dwipa are two seas, and an island named Daticy shunda. Jambu-dwipa is divided into six Khandas, and not into nine, as is done by the Bráhmans who follow the Védas. The inhabitants of five of these portions are called Mléchas, or barbarians. Arya or Bharata is divided into 56 Désas, or nations, as is done by the other Bráhmans. As Arabia and China are two of these nations, Arya would seem to include all the world that was tolerably known to the Arhita who composed the books of this sect.

> Every animal, from *Indra* down to the meanest insect, or the most wicked Ráksha, has existed from all eternity; and, according to the nature of its actions, will continue to undergo changes from a

higher to a lower rank, or from a lower to a higher dignity, until CHAPTER at length it becomes perfect, and obtains a place among the Siddha. Before a Súdra can hope for this exemption from evil, he must be Feb. 6. born as one of the three higher casts; but, in order to become a Bráhman, it is not necessary that he should be purified by being born of a cow, as many of the followers of Vyása pretend. The Arhita however allow, that to kill an animal of the cow kind is equally sinful as the murder of the human species. The death of any other animal, although a crime, is not of so atrocious a nature. The Arhita, of course, never offer sacrifices, but worship the gods and Dévatas by prayer, and offerings of flowers, fruits, and incense.

By the Bráhmans who follow the doctrine of Vyása, the Arhita The Saugata are frequently confounded with the Saugata, or worshippers of the same sect. Buddha; but this arises from ignorance. So far are the Arhita from acknowledging Buddha as their teacher, that they do not think that he is now even a Dévata; but allege, that, as a punishment for his errors, he is undergoing various low metamorphoses. Their doctrine however, it must be observed, has in many points a strong resemblance to that which is taught in Ava by the followers of Buddha.

The Jain Brahmans abstain from lay affairs, and dress like those who follow the doctrine of Vyása. They have Gurus, who are all Sannyásis; that is to say, have relinquished the world, and all carnal pleasures, These Gurus in general acknowledge as their superior, the one who lives at Sravana Belgula, near Seringapatam; but Pandita Achárya Swámí pretends to be at least his equal. In each Matam, or convent, there is only one Sannyási, who, when death approaches, gives the proper Upadésa to one of his followers, who must relinquish the world and all its enjoyments, except perhaps an indulgence in the pride of devotion. The office is not confined to the Bráhmans; none but the Súdras are excluded from this highest of dignities; for all the Sannyásis, after death, are supposed to become Siddha. and of course do not worship the Dévatas, who are greatly their

Feb. 6.

CHAPTER inferiors. The Sannyasis never shave, but pull out all their hair by the roots. They never wear a turban, and are allowed to eat and drink but once a day. In fact, they are very abstemious; and the old Swámí, who, from his infirmities, expected daily to become a god, mortified the flesh exceedingly. The Gurus have the power of fining all their followers who cheat or lie, or who commit murder and adultery. The fines are given to the gods, that is, to his priest (Pújári). These Gurus excommunicate all those who eat animal food, or fornicate with persons that are not Jain; which, of course, are looked upon as greater crimes than those which are only punished by fine. The married Bráhmans act as Pújáris for the gods, and as Puróhitas for the inferior casts. The follower may choose for his Puróhita any Bráhman that he pleases. The Bráhman receives Dhana, and on this occasion reads prayers (Mantrams); as he does also at the marriages, funerals, and commemorations of the deceased ancestors of his followers.

> The Jain extend throughout India; but at present, except in Tulava, they are not any where numerous. They allege, that formerly they extended over the whole of Arya or Bharata-khanda; and that all those who ever had any just pretensions to be of Kshatri descent, were of their sect. It, no doubt, appears clear, that, until the time of Ráma Anuja Achárya many powerful princes in the south of India were their followers. They say, that formerly they were very numerous in Arabia; but that about 2500 years ago a terrible persecution took place at Mecca, by order of a king named Parsua Battáraka, which forced great numbers to come to this country. Their ideas of history and chronology, however, as usual with Bráhmans, are so very confused, that they suppose Parsua Battáraka to have been the founder of the Mussulman faith. None of them have the smallest trace of the Arabian features, but are in every respect complete Hindus.

Feb. 7. Appearance of the country.

7th February.—I went three cosses to Carculla. The first part of the road led through a tolerably level country; but, as usual, nothing more

was cultivated than low places, which wind through among the CHAPTER swelling lands, and are very narrow. The higher part, which is bare, seems to be capable of cultivation for cotton or dry grains. Feb. 7. Nearer Carculla the hills are steep and rocky, and some of them are overgrown with trees. The road is wide, and has a fine row of trees on each side. In this part of the country are many traces of inclosures; and it is said, that formerly there were here several villages, which have been deserted ever since Hyder raised the taxes.

Carculla is an open town, containing about 200 houses, which Byrasu Womostly belong to shopkeepers. Near it are the ruins of the palace dears, and the Jain of the Byrasu Wodears, the most powerful of the Jain Rájás of Tu-Rájás. lava. The Jain, who are the chief inhabitants of the place, do not pretend that their prince had any authority over the Rájás of the south; the whole tradition, therefore, at Hosso-betta seems to be erroneous. That place, however, may have belonged to the Byrasu Wodears; as the territories of the Rájás of Tulava were probably as much intermixed as those of the chiefs of Malayála. The revenues of this family, it is said, amounted to 17,000 Pagodas, or 6850 l. 4s.  $7\frac{1}{2}d$ .

The Jain altogether deny the creation of Tulava by Parasu Ráma, Doctrines of or any gift of it made by that personage to the Bráhmans. From a the Jain, and their history, book called Amonoro Charitra, which gives an account of Jenadutta Ráya, the ancestor of the Byrasu Wodears, they say that he was born at Uttara Madura (the Matra of Major Rennell), near the Jamuna river. He was of the family of the sun; and, having incurred the displeasure of the Rájá his father, in order to avoid being put to death, was obliged to fly. Having come to a village near Nagara, he founded a city named Hombucha, and soon after conquered a place called Culisha. He afterwards descended to Sisila, near Subhramani, and finally established himself at Carculla. His son was the first Byrasu Wodear, and all his descendants assumed that title. The book gives no account of the time when these events happened, nor of the princes who were previously in the country. In Vol. III. M



CHAPTER one of the temples here there is an inscription on stone, in the language and old character of Karnáta, of which a copy in the modern character has been delivered to the government of Bengal (MSS. Inscriptions No. 1.). From this it would appear, that the protected by Padmawati (a title by which, it is well known, Jenadutta is meant) reigned at Carculla in the year of Saliváhanam 1256 (A. D. 1831). From this it would seem probable, that in the beginning of the fourteenth century a Rájá of the Jain religion governed Matra, now one of the chief seats of the followers of the Védas. The latest inscription here belonging to this family is on a colossal image. A copy (No. 2.), in the old character, has been also delivered to the Bengal government. It is dated in the year of Saliváhanam 1353 (A. D. 1431). The family were overthrown by Sivuppa Nayaka of Ikeri, and have since become extinct. The tradition is, that before the arrival of Jenadutta there were many Rájás of the Kshatri cast, and who, of course, according to the Jain, were of their religion. These, they say, were all tributaries, or Polygars, under the kings of Vijaya-nagara. These Jain say, that the Tulava Bráhmans who follow the Védas were first introduced by Myuru Varmmá, who was a Jain prince that lived about a thousand years ago at Barcuru, and governed all Tulava without any superior; but of this prince the Jain have no written account.

> Among the Jain there are two kinds of temples; one covered with a roof, and called Busty; the other an open area, surrounded by a wall, and called Betta, which signifies a hill. The temples of Siva and Vishnu, the great gods of the followers of the Védas, are here called Gudies. In the Busties are worshipped the images of 24 persons, who have obtained Siddharu, or become gods. These images are all naked, and exactly of the same form; but they are called by different names, according to the Siddharu which they are designed to represent. These idols are in the form of a man sitting. In the temples called Betta the only image of a Siddha is that of a person called Gomuta Ráya, who while on earth was a powerful king.

The images of Gomuta Ráya are naked, and always of a colossal size. CHAPTER That here, of which two views are given (Plate XXIII. Fig. 65, 66.), is made of one piece of granite, the extreme dimensions of which, above ground, are 38 feet in height, 101 feet in breadth, and 10 feet in thickness. How much is below ground I cannot say; but it is probably sunk at least three feet, as it has no lateral support. According to an inscription on the stone itself, it was made by Vira Pandia, son of Bhairava-Indra, 369 years ago. A copy of this inscription has been delivered to the government of Bengal.

The Jain deny the creation of man, as well as of the world. They allow, that Brahmá was the son of a king, and that he is a Dévata, and the favourite servant of Gomuta Ráya; but they altogether deny his creative power. Brahmá and the other Dévatas are worshipped, as I have said, by the Jain, who have not become Sannyásis; but all the images of these supposed beings that are to be found in the great temples of the Jain (Busties, or Bettas), are represented in a posture of adoration, as worshipping the Siddha to whom the temple is dedicated. These images, however, of the Dévatas are not objects of worship, but merely ornamental; and the deity has not been induced to reside in the stone by the powerful invocations of a Bráhman. When a Jain wishes to adore one of these inferior spirits, he goes to the temple that is dedicated to its peculiar worship. Jain or Ráma is never represented by an idol in .a temple of the kind called Busty, although he is acknowledged to be a Siddha; and although Ganésa and Hanumanta are acknowledged to be Dévatas, these favourites of the followers of Vyása have no images in the temples of the Arhita.

The Jain have no tradition concerning a great deluge that destroyed a large proportion of the inhabitants of the earth; but they believe, that occasionally most of the people of Arya are destroyed by a shower of fire. Some have always escaped to the other portions of the earth, and have returned to repeople their native country, after it has been renovated by showers of butter, milk, Feb. 7.

CHAPTER and of the juice of the sugar-cane. The accounts of the world, and of the various changes which the Jain suppose it to have undergone, are contained in a book called Lóka Swarupa. An account of Gomuta Ráya is given in a book called Gomuta Ráya Charitra. The Camunda Ráya Purána contains a history of the 24 Siddháru which are worshipped in the temples called Busties. These books may be read by any person; and the Jain of Carculla entered into an agreement with me to copy them for my use. I paid them the price, but I have not yet received the books.

Feb. 8.

8th February.-I remained at Carculla in order to investigate some matters relative to agriculture.

Divisions of rice ground.

Here the distinctions of rice ground differ somewhat from those in the south. Bylu is that which receives from rivulets a supply of water sufficient to ensure two crops. Majelu has one crop ensured by the same means. Small reservoirs, in case of a scarcity of rain, secure one crop from Betta land. Bana Betta is that which depends on the rains alone; so that, if these give over early, the crop is entirely lost. Potla is land overflowed by rivers. The sprouted seed is here by far the most common cultivation in both crops, and in all soils, except in some called Nunjinay Gudday, in which worms abound. In this the seed is sown broad-cast without preparation. Scarcely any rice is here transplanted, and sprouted seed is sown even on Potla land. The quantity of seed required for the same extent of ground, of whatever kind, is nearly the same; only Bylu land requires a little more, as part of the seed is choaked by sinking too deep in the mud. This is directly contrary to the assertion of the people at Mangalore; but the farmers here say, that the information given at that place was correct; and that near the sea the Bylu land requires the least seed, while in inland places it requires more than the Majelu or Betta.

If the rains continue late, a crop of pulse or Sesamum may be procured from both kinds of Betta land; but, if the dry weather commences early, they can only be obtained from Majelu, the others

being too dry. On the Majelu land here a very small quantity of CHAPTER sugar-cane is raised; but the whole of this is of very small extent. At the head of a Bylu field here, there is a large reservoir; but very Feb. 8. little use is made of its water, at least for the purpose of agriculture. The people say, that they do not make reservoirs, because the rains are so heavy that they would break the mounds, and that the soil soaks up the water so fast, that, very soon after the rainy season is over, they would become dry. The farmers of Carculla seem to be an obstinate and ignorant set of men.

The Betel-leaf is raised on the Areca, and this is planted in sepa- Betelgardens. rate gardens. It does not injure the produce of the tree. These gardens are made both on the low grounds, and on hills where there is a command of water. They are allowed much manure; but, if on hilly ground, require no red earth. They are always watered, as at Mangalore; their cultivation must be therefore much more expensive than in Malabar, where they are only watered when young. All the gardens belong to the landlords, who occasionally mortgage them, but very rarely let them out for rent. The revenue, although nominally raised by so much a tree, has nothing to do with the actual number. It is levied by an old valuation; in making of which three trees were called one; and, if double the original number has been planted, no additional tax is paid. A thousand nominal trees on good land were rated at so much, and those on worse soils are rated lower in proportion.

· In the Hitelu, or back-yard of the house, are cultivated turmeric, Turmeric ginger, Capsicum, greens, roots, and other things called Tarkári. and ginger. The quantity of turmeric and ginger raised in the neighbourhood is considerable. The soil proper for these plants is Betta land which is free from stones. Between the 24th of May and the 22d of June the ground is ploughed four times, and smoothed with a hoe. The whole is then divided by trenches, one cubit wide, half a cubit deep, and one cubit distant; and the earth which is taken from the trenches is thrown on the ridges. Then bits of the roots,

XV. Feb. 8.

CHAPTER each containing an eye, are planted in the ridges at half a cubit's distance from each other. These are then covered with Casara Sopu, or the small branches and leaves of the Strychnos Nux vomica, which is the most common tree on the hills of Tulara. At the end of a month, the leaves having rotted, the small sticks are removed. Dung is then put over the plants, and a little more earth is thrown up from the trenches. In the month preceding the winter solstice, the roots are fit for taking up. The large roots, containing eyes, are kept for seed; and, being tied up in a straw bag, are hung upon a tree until the next season for planting. The smaller roots are fit for salc. The turmeric and ginger are cultivated exactly in the same manner. The roots of the turmeric intended for sale are boiled for twelve hours, and afterwards dried fifteen days in the sun.

Betel-nut reared in large quantities by Brákmans.

About 250 years ago a Márattah Bráhman came here, and observed that many hills were quite waste, which might be cultivated for Betel-nut by making reservoirs at the head of a valley; so that the water might be preserved, and distributed upon the sides of the hills. He applied to Byrasu Wodear, then sovereign of the country, for some of these hills; and having obtained a grant of them, he began his plantations with great success. By degrees this man's descendants increased to fifty families; and these were joined by many of the same sect and country, who all betook themselves to this kind of cultivation; so that between Subhramani and Gaukarna they amounted to seven hundred families. In their plantations Betel-nut was the great article; but they also contained many coconut palms, and some black pepper, and Mango and Jack trees. Each of the last produces from two to three hundred fruit; and these are so little in demand, that they are given to the cattle. They are not palatable to the ox; but at the season in which they ripen, any thing will be devoured, as the cattle are then starving. The prohibition against exporting Betel-nut by sea, which the late Sultan issued, reduced the price so much, that many of the plantations were

allowed to go to ruin; and the number of Bráhmans was reduced CHAPTER to four hundred families. The markets being now open, and a brisk trade carried on between the coast and Madras, and Goa, Feb. 8. which are the principal markets for the nut, the Bráhmans are with great spirit returning to this object of industry. The influence of Mousa and his Moplays does not extend this length. The principal merchant is Murtur Sangaia, a Banijigar, who lives at Hara-punyahully, but has factories in every part of the peninsula.

The most judicious old men that I could find here gave me the Weather in following account of the weather. Between the 13th of March and Tulava. the 13th of May they have slight showers, lasting three or four hours a day. These come three or four days successively, with equal intervals of dry weather, and accompany easterly winds. In the first month the winds night and day are easterly; in the latter part of this time the winds are from the southward, and in the west there is much thunder. Between the 14th of May and the 16th of August there come from the west strong winds, and heavy rains. The land winds are not at all perceptible. Between the 17th of August and the 15th of October there are gentle showers from the eastward. Except when it rains, the winds are westerly. From the 16th of October to the 13th of November there are slight showers from the eastward. The rain is sometimes, however, so heavy as to injure the crops. Except when it rains, the winds are variable. In the four following months there is no rain, and the air is reckoned cold by the natives. At present, the days are hot and the nights cool. The winds in the day come from the sea, and in the night from the land.

9th February.—I went three cosses to Beiluru, a place where there Feb. 9. were a few houses of cultivators, but no shops nor market. There Appearance of the counis a small temple of Siva there, with an annual allowance to the try. Pújári of six Pagodas. The country is rather woody, and little rice ground can be seen from the road. The granite rocks make a conspicuous figure on the high lands.

XV. Feb. 9. Obstinacy of the guides.

Although the guides were natives of the place, and the road was well marked, yet they contrived to make a part of my baggage wander about from four in the morning, until two in the afternoon. Occasionally I meet with such accidents; from what other principle but obstinacy in the guides, I cannot say. This place is in the district of Barcuru, which formerly gave a title to one of the Jain Rájás of Tulava.

Feb. 10. Hills capable of cultivation.

10th February.-I went three cosses to Haryadika. The country is similar to that through which I came yesterday. The farmers here say, that all the hills, wherever the soil is free from rock, might be converted into Betta-land. The quantity of such grounds, they say, is very considerable; at least three times as much as is cultivated; but, they add, the expense is great, and the returns are small. About a fourth part of what was formerly cultivated is now waste, for want of people and stock. Until that be fully occupied, no experiments on new land would be proper. The people say, that they would be willing to bring this new land into cultivation on the following conditions. The whole expense attending the various operations being collected into a sum, they should pay no revenue to government until that was reimbursed by the usual amount of the land-tax, which is from one to three Sultany Fanams for a Moray sowing, or from rather more than  $6\frac{1}{2}d$ . to almost 1s. 11d. an acre.

Tenures, produce, and rent, of riceland.

The proprietors here say, that they let their rice lands to tenants (Gaynicaras), and are obliged to advance stock to a new man. In the course of four years the value of the stock is repaid by instalments. The rent is paid in rice, so much for each Moray sowing. The best Bylu-land pays 4 Morays of rice for both crops; the next in quality pays 3 Morays; and the worst 2. The best Majelu pays  $2\frac{1}{2}$  Morays; the second quality  $1\frac{1}{2}$ ; and the third 1 Moray. The best Betta land pays 2 Morays; the second  $1\frac{1}{2}$ ; the third 1; and the fourth  $\frac{1}{2}$  a Moray. The Moray of rice, if of the coarsest quality, is at present worth 2s.  $8\frac{1}{4}d$ ; and each

Moray of rent, for a Moray's sowing, is at the rate of about 2 s. 4 1/2 d. CHAPTER an acre. The tenant, according to these people's account, has about one half of the produce; which therefore, in the worst Betta land, Feb. 10. must be three seeds, or 3-636 bushels an acre. These people say, that when the rice is cheap the whole rent is not equal to the landtax. At present, they acknowledge that they have a little profit. Taking the statement which they give as fair, their present profit will be evident, even allowing their whole rice to be of the coarsest kind. The worst Betta land pays  $6\frac{1}{2}d$ . tax an acre, and the rent is 1s. 21/4d.; so that the tax does not amount to half the rent; and I am inclined to think, that the average price of all the kinds of rice is never lower than the present value of the coarsest.

At Haryadiká there is only one shop; and on the approach of my Haryadiká. people the owner ran away. There is a large temple of one of the Saktis; this is attended by one of the Tulava Bráhmans as Pújári, on which account no bloody sacrifices are performed. There was formerly a Jain temple here of the kind called Busty, but it has gone to ruin, and the number of the Jain is daily diminishing. The image in the temple was of copper. With many other similar idols from different parts of the country, it was carried to Janúl-ábád. By orders from the late Sultan, some of them were converted into money, and others cast into guns.

11th February. - In the morning I went three cosses to Udipu. Feb. 11. The country, to the vicinity of this place, is similar to that which Appearance of the coun-I passed through on the two preceding days. The strata of granite, try. however, are mostly covered by the Laterite. The roads are execrable; but, like many of those in Canara, are shaded by fine rows of trees, especially of the Vateria indica; which, being now in full blossom, makes the most beautiful avenues that I have ever seen.

On getting within sight of the sea near Udipu, the country becomes more level; and round the town it is finely cultivated, and the rice fields are beautifully intermixed with palm gardens. Such

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Feb. 11. Madual Bráhmans of Tulava. Panch Drárida, or five

Drávidas.

CHAPTER

a delightful situation has been chosen as the chief seat of the Tulava Bráhmans of the Madual sect.

Having assembled the men who, among the followers of Madua Achárya in Tulava, were reckoned the most eminent for their knowledge, they gave me the following information. The Tulava Bráhmans belong to the Panch Drávida division of the sacred tribe, and are a mixture composed of emigrants from each of the nations or tongues that compose this division. These are, Andray, or the nations speaking the Telinga, or Andray language, which occupy the north-eastern parts of the peninsula; Karnátaca, those who speak the language which we call Canarese, and who inhabit the country south from the Krishna river, and above the Ghat mountains; Mahárashtra, who speak the Maráttah language, and occupy the northwestern parts of the peninsula; Gurjara, or Carjura, or the Bráhmans of Guzerat, who also have a peculiar dialect, very different from the language of the Maráttuhs; and Drávida, or those who speak the Tamul language, and occupy the southern parts of the peninsula below the Ghats. Drávida proper, or the Désam so called, is confined to the country between Madras and the mountains; but the name is extended, first to all the country occupied by people who speak the Tamul language, and then to the whole of the Bráhmans of this division. Although the whole of the Tulava Bráhmans form a kind of separate nation, yet each subdivision confines its marriages to its own original nation; and, contrary to the custom of the Namburis, a Karnátaca Tulaca Bráhman has no objection to marry the daughter of a Bráhman of Karnáta who never has left his own country.

Origin of the

They allege, that originally they were assembled here from all Tulava Brúh- their native countries by Parasu Ráma, who created Tulava for their use, in the same manner as he created Malayala for the Namburis. The language of Tulava has a strong resemblance to that of Malayála, and the written characters are the same; but in the language

of Tulava there is a very great admixture of words from all the CHAPTER countries containing the five southern nations of India.

Originally, the Tulava Bráhmans were followers of Batta Achárya, Feb. 11. who flourished at Ahichaytra, on the banks of the Godávery. An Achárya. account of his life, which they of course consider as prophetical, is to be found in the Skandha Purána, one of the eighteen books written by Vyása. Batta Achárya had great success against 18 of the 21 heretical sects, some of which admitted, and others denied, the authority of the Védas.

Afterwards Sankara Achárya disputed with the followers of Batta, Sankara and, having convicted them of numerous errors, gained many pro- Achárya. selytes; and many of the Tulava Bráhmuns continue to follow his doctrines, and receive the Sringa-giri Swamalu as their Guru, and as the successor of Sankara Achárya. In this Yugam, or age, there have been three appearances of Sankara Achárya. First, he was born at Sivuli, in Tulava, about 1500 years ago, and established the Matam or college at Sringa-giri. His next appearance was some hundreds of years afterwards; when he was born in Malayála, and lived at Sri Rangam, near Tritchenopoly. Lastly, he was born about 600 years ago at Paducachaytra, in Tulava. In the Skandha Purána, composed, as my informants imagine, many myriads of millions of years ago, an account of all his transactions in these three incarnations is to be found, and also an account of the great success which he had against the heretical sects.

Madua Achárya was last born at Paducachaytra, in the year of this Madua. Kali-yugam 4500, or 601 years ago. In the time of the five sons of Pandú, he had appeared as one of these brothers, named Bhíma; in the time of Ráma he had been Hanumanta; and in the Kali-yugam preceding this (for the Bráhmans suppose a constant succession of the four Yugams) he had appeared as the Madua Acharyu of that degenerate age. When he appeared last, he not only confuted the heretical sects, but obtained a great victory in dispute over Sankara Achárya, who had forced all the Madual Bráhmans outwardly to adopt

XV. Feb. 11.

CHAPTER his opinions; and he thus restored his sect to its proper splendour. The Hindus will seldom allow their own sect to have had any origin; but insist rather, that it has existed from all eternity, or at the very least from the first origin of things. The Maduals say, that all the different sects were created in the beginning by Náráyana, and have continued ever since, sometimes one prevailing and sometimes another; and the prevailing sect has always forced the others, at least in appearance, to comply with their doctrine.

Doctrine of the Madual.

The Madual allege, that there is one supreme God, Náráyana or Vishnu. His son is Brahmá, who is the father of Siva. Both of these ought to be worshipped, but Brahmá only mentally; as temples and regular forms of prayer to that deity are not lawful. They look with abhorrence upon the doctrine of the spirits of good men being absorbed into the deity, in which they differ from both Smartal and Sri Vaishnavam. Moesha they consider as the highest heaven; and men who, by their piety, obtain a place there, are ever afterwards exempted from change; but still they are greatly inferior to Náráyana, or the other great gods; and, according to their merit, enjoy different ranks. The Madual pray to the Dévatas who reside in Swargham, which they say is the same with Mahá Méru; and when they are sick they pray to the destructive spirits, such as Marimá, Putalimá, and Kalimá. These are not considered to be different names for the wife of Siva, as the Smartal allege, but beings that live in the stars, clouds, and lower regions of the heavens. The Madual Bráhmans of Tulava act as Pújáris in the temples of these spirits, and offer sacrifices of paste made in the form of animals, but will not consent to the shedding of blood. In this country there are eight Sannyásis, each of whom has a Matam at Udipu, and each has a disciple who from his infancy is brought up to celibacy and other mortifications, and is destined to be his successor. These eight Sannyásis are the Gurus of the whole sect in Tulava; and each maintains a number of disciples, who are permitted to marry, but who are men of great Indian learning, and who read, and perform

all manner of services for their master. These Sannyásis are not CHAPTER conceived to be any portion of the deity; nor is it even believed, that in general they obtain after death a seat in Moesha. To attain Feb. 11. this, a Brúhman must completely adhere to every rule of his order, which is attended with so much difficulty, that human nature is seldom adequate to the task. No other cast has any kind of chance to procure a place so near the gods; and my informants seem to doubt, whether it be even possible for any person of low rank ever to be born a Bráhman. Temporal blessings they consider as those which the three lower casts ought chiefly to expect; and, by means of charity given to their superiors, they may have an abundance of these low pleasures.

The eight Gurus, each in his turn for two years, act as priests Government. (Pújáris) in the temple of Krishna at Udipu. During this time the officiating Sannyási must not only defray the expenses of worship, but must feed all his disciples, and every Bráhman that comes to the place. To do this handsomely, will require above 20,000 Pagodas (8054l. 14s. 81/4d.); and the very least, for which it can be done, is 13,000 Pagodas (5238 l. 4s.  $8\frac{1}{2}d$ .). In order to raise such great sums, each Sannyási, with his disciples, during the fourteen years that he is out of office, wanders about the country, and, wherever he goes, levies contributions under the name of Bhiksha, or begging. Out of these alms he not only supports a considerable equipage, and feeds all his disciples, but can save a sum sufficient to defray the expense which he must incur during the two years that he performs the office of Pújári. Except in Tulava, these Sannyásis have no authority as Gurus; for above the Ghats there are three Matams, whose Sannyásis possess the sole authority of bestowing Chakrántikam and Upadésa, and of punishing transgressions against the rule of cast. Each Sannyási of Tulava has certain families, who are hereditarily annexed to his Matam, as to that of their Guru. As, however, the officiating Pújári never goes out of the



CHAPTER temple, and as the others are generally absent, begging, the eight have mutually appointed two persons to act as judges. These have the power of excommunication, which implies the whole wealth of the sect being at their mercy. They also levy fines, and cleanse sinners by prayers (Mantrams), cow's urine, and other things esteemed pure. The Gurus reserve to themselves the exclusive right of bestowing Chakrántikam and Upadésa. They never, at any ceremony, read Mantrams, that office being reserved for the married Bráhmans; and each man by hereditary right belongs to some Bráhman, who is his Puróhita. The Sannyásis do not require a Puróhita; for they are considered as sufficiently holy to be exempted from all the ceremonies and customs usually observed by Bráhmans. They do not wear the thread; all meats become to them indifferent; and they do not celebrate the ceremonies in honour of their deceased parents. A Purohita may sell or mortgage the families that belong to him, and may give them to a Bráhman of any sect; for the prayers (Mantrams) and portions of scripture (Sastrams) read by any person of the sacred order, whatever his theological opinions may be, are considered as equally efficacious. This does not proceed from any gentleness or facility of temper among the Bráhmans, who abound in the Odium theologicum. It is, however, between the Madual and Sri Vaishnavam, although both are worshippers of Vishnu, that the most violent antipathy prevails. The Smartal, although followers of Siva, agree much better with the Madual; and, in Tulava and Malayála especially, these two live on tolerable terms. In Tulava, indeed, it is not unusual for one temple to be common to both gods; and in most places there the temples of Vishnu and of Siva are built near each other, and the same Rath, or chariot, serves for the Játram, or procession, of both idols.

To the east of the Ghats, the Madual Bráhmans scorn to serve as Pújáris, even in the temples of Vishnu, and are the proudest of the whole sacred order. This scorn, however, is perhaps affected; as when Madua Achárya appeared, the Sri Vaishnavam were in possession CHAPTER of the temples, and have always been favourites with the persons in authority.

Feb. 11.

The Bráhmans of Tulava are allowed a plurality of wives, which Customs. must be of the same nation with themselves, but of a different Gótram, or family, and which must be married before the signs of puberty appear. Their widows cannot marry, but may become Moylar, as already described. It is looked upon as disreputable for a Bráhman to keep a woman of this kind, and he would lose cast by having a connection with a dancing girl, or with a Moylar, that did not belong to a temple; but all such women as are consecrated to the gods cohabit with some Bráhman or other. The Bráhmans of Tulava burn the dead, and their widows ought to be burned along with them; but this practice has gone entirely into disuse. They can neither eat animal food, nor drink spirituous liquors. A man's own children, even in landed property, are his heirs.

I next questioned these Brahmans concerning the history of the History of country; and they produced a book called Gráma Paditti, which Tulava. they say is historical. It is written in Sanskrit, and is presumed to have been composed by Vishnu, who assumed a human form, under the name of Védi Vyása, and promulgated the Védas, the eighteen Puránas, the Gráma Paditti, and other sacred writings. From this work the Bráhmans say, that Tulava was created, and given entirely to them, 1 Arbuda, 95 Crowds, 58 Lacs, and 80 thousand of years, before the extinction of the Pándu family. The last of these ended. his reign in the year of the Kali-yugam 1036,

or - 3,865 years ago. Add 80 thousand 80,000

58. Lacs 5,800,000

95 Crowds 950,000,000

1 Arbuta 1,000,000,000

1,955,883,865 years since the creation of

Feb. 11.

CHAPTER Tulava, according to the Grama Paditti. The candid reader will not expect, that in a work comprehending the accounts of such a long duration of time a few thousand years, earlier or later, in the chronology of these degenerate times can be considered as of any consequence. This having been premised, and the accounts of the Hindu gods and heroes having been left in becoming obscurity, we find from the Grama Paditti, that 1115 years after the family of the Pándus became extinct, Ananda Ráya governed Tulava. He and his eight brothers (or rather kinsmen in the male line) reigned 200 years, or until the year of the Kali-yugam 2351. Vakia Rájá and his ten sons (descendants) reigned 112 years, till Kali-yugam 2463. Maursushy and his ten sons governed 137 years, till Kali-yugam 2600. Cadumba Ráya 45 years, till Kali-yugam 2645. Myuru Varma 10 years, till Kali-yugam 2655. Hubushica, chief of the savages called Coragoru, or Corar, governed 12 years, till Kali-yugam 2657. Lócáditya Ráya, son of Myuru Varmá, expelled the Coragoru, and governed Tulava, Malayála, and Haiga 21 years, till Kali-yugam 2678. After his death, eighty-one of his cousins, among whom the chief was Cadumba Ráya of Wudia-nagara, governed 24 years, till Kali-yugam 2702. Balhica Ráya, and twenty-nine other petty princes, governed 46 years, till the Kali-yugam 2748. Abhiri, and ten Rájás governed 99 years, till Kali-yugam 2847. The descendants of Mona Rájá then reigned 200 years, till Kali-yugam 3047, or till 53 years before the birth of Christ. At this time Mahummud Surtala, a Mlécha, who was a spy, visited the whole country as far as Ráméswara. It must be observed, that, according to these Bráhmans, Mlécha properly means an Arab, Turc a Tartar, and Yavana an European; but all the three terms are frequently applied to the nations living toward the north and west of Hindustan, without distinction of country or religion. Nine Belalla Ráyas governed 6 years, till Kali-yugam 3053, or 47 years before the birth of Christ. The Turc then returned, took Anagundi, and governed 540 years, till the Kali-yugam 3593, or A. D. 493. The followers of Vyása

here, it must be observed, cut short the government of the Belalla CHAPTER family, who are more detestable than Mléchas, as having been followers of the Arhita or Jain Bráhmans. Campi Ráya of Penu-conda Feb. 11. drove out the Mléchas, and governed 13 years over the whole country south of the Krishna, till the year Kali-yugam 3606, or A. D. 506. This prince sent an officer named Sankara Déva Ráya to visit Tulava. In his train was a messenger (Peon) named Hucabuca, a Curuba by cast. This fellow, having received assistance from the Yavanas, took Anagundi, and having built a city near it, which he called Vijaya-nagara, or the city of victory, he assumed the title of Hari-hara Ráya. This account of the origin of the family of Vijaya-nagara may be attributed to the following circumstance. The Bráhmans of Tulava had hitherto been exempted from taxes; but Hari-hara, on the conquest of the country, imposed an annual tax upon them, to the amount of 12,000 Morays of rice. Déva Swámi, a tributary prince, was ordered to collect this tax; but, his conscience having revolted at the thoughts of exacting tribute from the Brahmans, he was dismissed, and their tax was increased to 2578 Pagodas in money. The history of the Grana Paditti ends with this grievous event; but the Bráhmans say, that thirteen princes of the family of Hari-hara governed for about 150 years, or from A. D. 493 to 643. Unfortunately for the exactness of this chronology, many inscriptions on stone, made in the reigns of these princes, are scattered throughout their dominions. Copies of five of these have been delivered to the Bengal government. The date of the first is in the era of Salivahanam 1297, or A. D. 1375, and of the latest E. S. 1400, or A. D. 1478. With this correction of about eight centuries and a half, Muhammad Surutala may have been a Mussulman, and probably some of the followers of Muhammad Ghizni. The Yavana dynasty of Anagundi is, however, a matter of great curiosity, and not yet well understood.

These Bráhmans say, that the celebrated Krishna Ráyalu, of Krishna Vijaya-nagara, was not of the family of Hari-hara, but governed the

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CHAPTER same dominions after the overthrow of the former dynasty. He was descended from the nurse of one of the five princes called Pándus, who lived at the commencement of the present Kali-yugam. Dharma Ráya, the last of these five brothers, died in the year 36 of that era, or 4865 years ago.

Jain Rájás, or Polygars.

The country of Tulava was first subject to the kings of Anagundi, and then to the princes of Ikeri; by whom, these Bráhmans suppose, the Jain Polygars were appointed; but they pretend an almost total ignorance of these chiefs, and a sovereign contempt for their sect.

Possessions of the Bráhmans.

They allege, although there were Jain Rájás in many parts of Tulava, that there never was one at Barcuru; but that it, and all the Grámas in Tulava, were governed by Bráhmans immediately dependent on the sovereign, and over whom these infidel chiefs' had no control. The thoughts of being subject to a Jain are indeed horrible to a follower of Vyása; nor will it ever be acknowledged, where there is a possibility of denial. When pushed to account for the introduction of so many Jain into a country made expressly for the Bráhmans who follow the true doctrine of Vyása, they say, that Hubashica drove all the Bráhmans out of the country; and that, when Lókáditya regained his paternal dominions, he only brought a few Bráhmans from Ahichaytra, where he resided during his exile, and gave them the 32 Grámus, which they enjoyed without molestation till Hari-hara imposed the illegal tax. I think it probable, that Lókáditya, in order to procure assistance to regain his throne, changed the religion which he inherited from his father Myuru Varmá who, according to the Jain of Mudu Bidery, was of their sect; and having become a follower of Batta Achárya, then teaching the doctrine of Vyása with great success on the banks of the Gódávéry, he brought with him the first colony of Tulava Brúhmans, and gave them a gift (Enam) of thirty-two villages. In imitation of the Namburis, they afterwards set up the story of Parasu Ráma; but it does not seem to have succeeded so well with them as with their southern neighbours.

Udipu is a town which contains about 200 houses, and stands about CHAPTER a coss from the sea near a small river called the Pápa-násaní, which comes from a Tank at Carculla, passes about two miles to the south Feb. 11. Udipu, and of the town, and falls into the sea at a fort named Duriá Bahádar. its history. Near Udipu is a small fort, which formerly was the residence of Chittupadi Baylala, the chief Bráhman of the town (Gráma). Each of the 32 Grámas belonging to the Tulava Bráhmans was governed and defended by an hereditary chief of their own sect, who was in every respect, but the name, a Polygar, or petty chief; some of them assumed the title of Baylala; others that of Hegada, which signifies mighty.

At Udipu are three Gudies, or temples, which are placed in a common square, and surrounded by 14 Matams, or convents, belonging to an equal number of Sannyásis, who are Gurus to different sects of Bráhmans. Eight of these Matams belong to the eight Madual Sannyásis, who in their turn officiate as priests in the temple of Krishna, which is one of the three that stand in the square. Two other Matams belong to Sannyásis of the same sect; each of the predecessors of whom, as well as the eight others, received an image from Madua Achárya; but they have few followers, and are not entitled to officiate at the temple. Three other Matams belong to the three Sannyásis, who are the Gurus of all the Madual Bráhmans to the eastward of the mountains. The fourteenth Matam belongs to the Sringa-giri Swámi. These Matams are large buildings; and, considered as houses belonging to Hindus, improved by neither Mussulman nor European arts, they are stately edifices. Some pains have even been taken to admit air, as they have many windows. Apertures indeed "for the purpose of intromitting air and light," although scarcely deserving the appellation of windows, are more common in the houses of Tulava, than I have any where else seen among the mere natives of Hindustán. The Matams are designed chiefly as storehouses, in which the Sannyasis may deposit the produce of their begging till they want it for consumption, Being Feb. 11.

CHAPTER too expensive guests, they very seldom reside in one place more than a few days. The temples, as usual, are but poor buildings, and, like almost all those of Malayala and Tulava, have pent roofs. Those here are roofed, with copper, which must have cost much money; but, being very rudely wrought, it makes no show.

Customs of the Corar.

Having assembled some of the Corar, or Corawar, who under their chief Hubashica are said to have once been masters of Tulava, I found, that they are now all slaves, and have lost every tradition of their former power. Their language differs considerably from that of any other tribe in the peninsula. When their masters choose to employ them, they get one meal of victuals, and the men have daily one Hany of rice, and the women three quarters of a Hany. This is a very good allowance; but, when the master has no use for their labour, they must support themselves as well as they can. This they endeavour to do by making Coir, or rope from coco-nut husks, various kinds of baskets from Ratans and climbing plants, and mud walls. They pick up the scraps and offals of other people's meals, and skin dead oxen, and dress the hides. They build their huts near towns or villages. Their dress is very simple, and consists in general of a girdle, in which they stick a bunch of grass before, and another behind. Some of the men have a fragment of cloth round their waist; but very few of the women ever procure this covering. They are not, however, without many ornaments of beads, and the like; and, even when possessed of some wealth, do not alter their rude dress. Some few of them are permitted to rent lands as Gaynigaras. In spite of this wretched life, they are a good looking people, and therefore probably are abundantly fed. They have no hereditary chiefs, and disputes among them are settled by assemblies of the people. If they can get them, they take several wives; and the women are marriageable both before and after puberty, and during widowhood. They will not marry a woman of any other cast; and they are considered of so base an origin, that a man of any other cast, who cohabits with one of their women, is

inevitably excommunicated, and afterwards not even a Corar will CHAPTER admit his society. The marriages are indissoluble, and a woman who commits adultery is only flogged. Her paramour, if he be a Feb. 11. Corar, is fined. The master pays the expense of the marriage feast. When a man dies, his wives, with all their children, return to the huts of their respective mothers and brothers, and belong to their masters. They will eat the offals of any other cast, and can eat beef, carrion, tigers, crows, and other impure things; they reject however dogs and snakes. They can lawfully drink intoxicating liquors. They burn the dead, and seem to know nothing of a state of future existence, nor do they believe in Paisachi, or evil spirits. Their deity is called Buta, and is represented by a stone, which is kept in a square surrounded by a wall. To this stone, in all cases of sickness, they sacrifice fowls, or make offerings of fruit or grain, and every man offers his own worship  $(Pij\acute{a})$ ; so that they have no officiating priest, and they acknowledge the authority of no Guru. They follow all the oxen and buffaloes of the village, as so much of the live stock, when these are driven in procession at a great festival which the farmers annually celebrate.

12th February .- I went three cosses to Brahmá-wara. The rice Feb. 12. grounds extend from Udipu to the sea; their extent towards the Appearance of the counnorth and south is not considerable. I soon came to gently rising try. hills, free of woods; but the road was finely sheltered by avenues of the beautiful Vateria indica, called here Dupada Maram, or the resin tree. I passed first through Kalyána-pura, which was formerly a large place; but during Tippoo's government it has been almost intirely ruined. I then crossed a very wide, but shallow river, named the Suvarna. Its source is from a lake or tank near Carculla; but it owes its magnitude entirely to the water of the sea. Near the Suvarna are many fine plantations of coco-nut palms, and also some rice grounds. Barcuru is near Brahmá-wara; but for a long time, even previous to the irruption of Sivuppa Nayaka, it has been ruined. The fortress was erected by Hari-hara, first king of



CHAPTER Vijaya-nagara. It still gives its name to the district (Taluc), the Tahsildar of which resides at Brahmá-wara. This is a small place containing only about 60 houses, but in its neighbourhood there is much rice ground.

Cultivation and produce of rice lands.

I have received much information relative to the produce of the rice grounds in this neighbourhood; partly from Mr. Ravenshaw, and partly from the people employed to measure and value the district. In the annexed Tables I give some of this information, with the measures reduced to the English standards. It must be observed, that the Gunta, or chain used by the surveyors, ought to have been 33 English feet in length; but, owing to the rudeness of the workmanship, it had stretched to 33 feet 101 inches: by the standard, the acre would be equal to 40 Guntas; but, by the actual chain, it would be equal to only 37 36 Guntas. I calculate, however, by the standard measure. The Mudi, or Moray in use here, is that of the market of Mangalore; but is divided, when speaking of seed, into 60 Hanies; and, when speaking of produce, into 40 Hanies; but the produce is in general estimated in rice, after deducting the expense of beating and cleaning. It would appear from all circumstances, that the quantity of seed which is sown on the same extent of ground, even of the same kind, differs much. Whether this proceed from the natives having found by experience, that such or such a field gives most profits when sown with a certain quantity of seed; or whether it arises from a want of precision and economy that attends all rude states of agriculture, I cannot take upon myself to affirm; but the latter cause seems the most probable. The seed is here sown much thinner than in Malabar; which, although a kind of saving that is common in every part of India, seems to be very injudicious: the crops in general appear to me to be proportionably scanty. Of the gross produce of estates, one half is here, as in most parts of India, considered as a proper reward for the labour of the cultivator, and the use of his stock; and is perhaps sufficient, considering that his cattle pay nothing,

two Rice Estates in Seroor Village ors. The materials furnished by



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A Statement, showing the quantity of Seed required, and the Produce, both in respect to quantity and value, of two Rice Estates in Scroor Village of Tombrette Mangany; the grain having been cut down, beaten, and measured, in presence of the Valuators. The materials furnished by Mr. Ravenshaw.

				See	1,				Gres	-	Average	Average produce of one Acre.					
Estates.	Measurement.		Quantity at report of th	cording to the	Prop	ortion.			Clean Ra	e, deductin	g the expense of	f beating and	percase o	Qua	ntity.	Value of th	he
			Reduced to the Mudy of 40 Henres.			One Acre	Olioni	h Rice.	Qua	ntity.	Value at 12 40 M	Pagadas for	Average inc	Rough gice.	Clean rice, deducting expense of cleaning.	proceedings	- t
	Guntas, A	Acres dec.	Mud. Han.	Bush. dec.	Guntas Anas	Bush, dec.	Mud. Han	Bush. dec.	Mud. Han.	Bush. dec.	Pag, Rop. Fan.	£. 1. d.	Folds.	Bush. dec.	Bush, dec.	£. s. d	d.
Beem Pundary Landlord.  1 sort Bylu land  2 ditto Magelu land  3 ditto Bettu or Mackey land	182 1 52 1 209	51 1,324	4 20 2 10 6 0	5,9145 2,95725 7,8134	40 0 23 4 37 10	1,2936 2,233 1,4928	109 0 26 4 23 28	141,945 32,99 30,086	11 25	59,928 15,154 12,339		5 15 11½ 1 7 7⅓ 1 3 10₺	1125	31,06 25,665 5,896	13,102 11,446 2,357		0
Total -	415	11,180	12 30	16,68515	35 0	1,6731	158 32	206,021	67 4 <sup>1</sup>	87,421	20 3 82	10 7 5	1215	18,51	7,854	1 0 5	3
Ante Tolar Landlord, 1 sort Bylu land 2 ditto Mackey land	197 400 1		4 5 7 35	5,871625 10,2551	47 12 50 12	1,089 1,024		343,785 167,746		141,813 67,1	34 0 01 16 0 11		64 1643	69,713 16,748		2 17 ( 0 16 16	
Total -	597 1	14,946	12 0.	15,626725	49 12	1,0465	392 32	511,531	160 17	208,913	50 0 2	20 4 0	$32\frac{29\frac{1}{4}}{40}$	34,025	13,89	1 14 1	1 1/2
General Total	1043	26,076	24 80	32,311875	. 42 0	1,24	551 242	717,552	227 211	296,334	71 0 13	30 11 5	22 ±	27,5	11,36	1 8 7	7호

A Statement, showing the Seed required for Rice-ground, and its Produce, in seven Estates of five different Villages in Tombretty Mangauny of Barcuru Talue. The materials furnished by Mr. Ravenshaw.

Villages.								Produce in Rice, deducting the expense of beating.										
	Landlords.	Measure	ment.			eed rough ri	ce.					Average.						
* mages	Zandiolan			Tot	al.	For One	Gr	058-	Of C		Of One Acre.							
											Quantity.	Va	due.					
		Guntas. Anas.				Bush dec.	Bush- dec.		Bush dec.				£. 1.					
Heggualu -	Muddoo Row -	5242 12	131,0727			178,	1,3580		1259,911		5		0 18					
Ooloor	Sankara Nurayana Munice Shitty -		498,2333 26,5564		17	\$4,4276		3330 20 199 30	4988,125		30	10,011	0 19					
Hutichy -	Munjee Shitly - Poutevar	1507 14	37,6727	33	15	43,462	1,2964	289		6	22	9,795	0 19					
Hemnanu -	Aniss Shitty	2410 14	61,0243		17.5	81,308	1,133	456 30		9	5		0 18					
Retardy -	Shamberey	479 18	11,9955		224	24,1728	2,015	109 -	141,945	1 6	35	11.833		i				
Returny -	Timmy Hebba -	272 13	6,8204		321		1,11	56 20			29	10,787		i				
	Total	30932 -	773.4	640	25	834.4	1,078	5909 -	7694,838	9	8	9,955	0 19					

Measurement and Valuation of two Villages in Barcuru Taluc, furnished by Yessawunt Row, the Appraiser employed by Government.

		By/w lands.							Majelu landa,							Bella, Vara-Bella, and Markey lands.									Total of Rice lands.														
	Situation.		Situation.				Seed rough sice.		Produce in clean Rice after deduct- ing the expense of cleaning.		_		Seed rough sice,		Produce in clean Rice after deduct- ang the expense of cleaning.					Seed rough rice.		Produce in clean Rice after deduc- ing the expense of eleaning.		-		Seed ro	ugh rice.	Produce in clean Rice after ing the expense of clean											
		Measurement.		Measurement.		Measurement.		Measurement,		Measurement,		Measurement.		Gross.	Per Acre.	Gross.	Per	Acre.	Meas	urement.	Gross.	Per Acre.	Gross	Per	Acre,	Measur	emeat.		Per Acre.		Per Acre.		Measurement.		Gross.	Per Acre.	Gross.	Per	Acre.
Village.	Landlord.			Gran. Per As			Quantity.	Volue.			Gross.	Ter Acre.	Gran,	Quantity.	Value.	7		Gross-	Per Acre,	Gross.	Quantity.	Value.					Ceross,	Quantity.	Value.										
	Rant Chandra Nayako Linga Baylala Siteram Üluru Umpei Chitty Krishoa Eduala Dugupa Bagawata - Total	668 11 338 15 773 15 86 1 15 12	12,846 16,679 8,174 19,349 2,151 0,393	7 0 8 0 4 25 11 5 1 20	0,70963 0,623 0,701 0,749 0,929 0,827	Mod. Ho 126 2 126 2 76 2 186 2 21 2 4	12,825 12,687 11,709 12,552 13,012 0 13,229	1 4 9 1 4 6 0 18 1 1 4 3 1 5 2 1 5 7	Guntar And 411 2 387 9 232 2 244 6 34 6	Acres, dec. 10,27 9,68 5,80 6,09 0,85	Mud. Han. \$ 5 8 20 2 10 3 5 0 20 	0,526 1,142 0,505 0,839 0,757	Mud. Hon. 69 20 67 0 41 0 44 10 6 0	8,807 9,001 9,158 9,427 9,092	0 17 0 0 17 5 0 17 8 0 18 2 0 17 7	Gunias.Ana, 228 12 256 1 1 124 4 338 0 62 9	5,71 6,40 3,1 8,45 1,56	Mud. Han 1 17 1 3 10 1 30 4 5 1 0 14 22 1	Bush, dec. 1,01 0,832 0,783 0,635 0,832	Mud. Hen. 15 10 18 20 18 10 24 10 5 0	3,763 3,539 3,737 4,162	0 6 10 0 7 2 0 8 0	1153 I	28,78 5 32,739 5 17,383 7 33,912 4 4,575 2 0,393 8 117,91	Mad Ham. 15 22 19 13 8 25 18 15 3 0 0 10 65 22	0,704 0,769 0,616 0,706 0,834 0,826	211 1 248 125 3 255 32 2	0 9,866 0 9,42 0 9,792 0 9,25 0 13,229	0 19 33 0 19 11 0 18 21 0 18 11 0 17 10 1 5 7										
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that his other stock is of little or no value, and that the quantity of CHAPTER seed is very small. Owing to the present great want of people and stock, the cultivators, however, do not in general pay so much; Feb. 12. and, according to the valuation of five villages in this neighbourhood, I find, that out of 2048 Pagodas, the gross value of their produce, the cultivators retain 1295 Pagodas. The share of the government amounts in general to one quarter of the gross produce; and in these villages is 671 Pagodas, of which 37 are alienated in Enam, or charity lands, as they are called. What remains to the landlord is 82 Pagodas; but part of their lands are waste, and the Enams are nominally higher than what is here stated; so that, apparently, some of the landlords, who are supposed to pay these charities, are losers by their estates. At present, they are all cultivators; and, when the country is repeopled, there can be little doubt, that, should they not encumber themselves with mortgages, they will enjoy one fourth of the gross produce of their estates; for a part of the present great share of the cultivators arises from the interest of money which they have advanced on their farms; and this also should be considered as a part of the profits of the landlord.

13th February.—I went three cosses to Hirtitty, one of the four- Feb. 13. teen small villages that are called by the common name of Cotta. Language and inhabi-The whole of this almost is occupied by Bráhmans, who pretend to tants. he of Parasu Ráma's colony, although almost the only language spoken by them is that of Karnáta. Very few of them understand the peculiar dialect of Tulava. It must be observed, however, that, this country having been long subject to princes residing above the Ghats, all persons of rank speak the language of Karnáta; and from having been subject to these princes, and from its having been the place where all intercourse between them and Europeans was conducted, the province has got the name of the coast of Canara, a corruption of Karnáta. In the towns on the sea-coast the Mussulman language is more commonly understood, than in any other part of the peninsula that I have visited.

KV.

Feb. 13.

Appearance of the country.

The road from Brahmá-wara to Hirtitty for the most part passes along a low sandy ridge, on either side of which are extensive rice-grounds; for the Bráhmans, as usual, have appropriated to themselves the finest parts of Tulava. The country looks well; for even the greater part of the sandy height is inclosed, and planted for timber and fewel. Except where the cattle were forced to swim over a very wide river, called Mabucullu, the road was comparatively excellent. This river descends from the Ghats, and in the rainy season brings down a great body of fresh water; but, where the road crosses, it is at this season quite salt. The tide goes up from the sea about three cosses; and canoes, in the rainy season, can ascend six cosses from the mouth. The banks are well planted with coco-nut trees, which in Tulava seem confined chiefly to such places.

Feb. 14. Mr. Read's district.

Face of the country.

14th February.—I went three cosses to Kunda-pura, where I entered the northern division of Canara, which is under the management of Mr. Read, a young gentleman brought up in the same school with Mr. Ravenshaw. I had not the good fortune to meet with him; but he was so obliging as to send me very satisfactory answers to the queries that I proposed in writing, of which I shall avail myself in the following account. The country between Hirtity and Kunda-pura resembles that between Brahmá-wara and Hirtity; only there is by the way neither river nor coco-nut plantations; and, in proportion, the extent of rice-ground is smaller. The whole road is excellent, and fit for any kind of carriage, except in one place, where, in the descents to a low narrow valley, stairs have been formed. By the natives these are considered as an excellent improvement on a road, although they are very inconvenient even for cattle that are carrying back-loads.

Feb. 15. Kunda-pura. 15th February.—I was detained at Kunda-pura, as being the only place where I could get a supply of necessaries, till I reached Nagara: and also in expectation of meeting a Bráhman named Rámuppa Varmica, who is said to be the most intelligent person in the country concerning its former state.

Kunda-pura is situated on the south side of a river, which in dif- CHAPTER ferent places, according to the villages which it passes, is called by different names. This river is in general the boundary between Feb. 15. the northern and southern divisions of Canara; but Kunda-pura is under the collector of the northern division. The villages or towns on the banks of this river are the places where all the goods coming from, or going to Nagara are shipped, and landed. The customhouse is at Kunda-pura; but the principal shipping place is farther up the river at Bassururu. On the north side of the river the Sultan had a dock; but the water on the bar, even at spring tides, does not exceed 9 cubits, or 131 feet. The river, or rather lake, at Kunda-pura has only one opening into the sea. It is very extensive, and the only ferry-boats on it are wretched canoes. Five fresh water rivers come from the hills, and, meeting the tide in this lake, intersect the whole level ground, and form a number of islands. I have not seen a more beautiful country than this; and an old fort, situated a little higher up than the town, commands one of the finest prospects that I ever beheld. The people here seem to have no knowledge of any thing that happened before the conquest by Sivuppa Nayaka; since which it is, that the place has risen into any kind of consequence. The origin of its rise was probably a small fort built by the Portuguese. Round this General Mathews drew lines, as a defence for his stores, when he went up to Nagara. These were afterwards somewhat strengthened by Tippoo, but were always poor defences. The town contains about 250 houses, and is never remembered to have been larger. It is the head quarters of a battalion of Bombay Sepoys, by the officers of which I was most kindly received.

Colonel Williamson informed me, that at no great distance there Hu-minu, or was a tank of fresh water, in which was a kind of fish that the Sultan reserved for his own use, and which by the natives was named Hu-minu, or the flower-fish. It is a large fish, full of blood, and very fat, but is only fit for use when salted. For this purpose it is excellent, a circumstance very rare with fresh-water fish; so that

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the propagating of this species in different parts of the country would seem to be an object worthy of attention. My time would not admit of seeing any of them taken, as the fishery cannot be carried on without some days preparation.

Customs of the Bacadaru and Batadaru,

In the northern parts of *Tulava* are two casts, called *Bacadaru* and *Batadaru*, both of whom are slaves; both speak no other language than that of *Karnáta*, and both follow exactly the same customs. Each disputes for a pre-eminence of rank, and they will not eat nor intermarry with one another, except in certain cases of adultery, when, a ceremony of purification having been undergone, a slave of the one cast may marry a female of the other.

Although they do not use leaves to cover their nudities, they seem to be poorer and worse looking than the Corar, whom I lately described. Their masters give annually to each slave, male or female, one piece of cloth worth a Rupee, together with a knife. Each family has a house, and 10 Hanies sowing of rice-land, or about a quarter of an acre. At marriages they get one Mudy of rice  $(\frac{3}{10})$  bushel), worth about 2s., and half a Pagoda, or 4s. in money. When their master has no occasion for their work, they get no wages, but hire themselves out as labourers in the best manner they can; for they have not the resource of basket-making, nor of the other little arts which the Corar practise. The master is bound, however, to prevent the aged or infirm from perishing of want. When they work for their master, a man gets daily 11 Hany of rice to carry home, with \( \frac{1}{2} \) a Hany ready dressed, in all 2 Hanies, or rather more than one-sixteenth of a bushel; a woman gets 14 Hany of rice to carry home, and 1 Hany ready dressed; and a boy gets 1 Hany of rice.

These casts have no hereditary chiefs; but quarrels are amicably settled by eight or ten prudent men, who assemble the parties, and, with the assistance of a little drink, discuss the business. They never expel any one from the cast; even women who commit fornication with strange men are not subjected to this disgrace. If

the seducer has been a Súdra, or man of pure birth, the husband is CHAPTER not at all offended at the preference which his wife has given to a superior. If he be a slave, the husband turns her away; but then Feb. 15. she is taken to wife by her paramour, even though he be of a different cast. In order to purify her for this purpose, the paramour builds a small hut of straw, and, having put the woman into it, sets it on fire. She makes her escape, as fast as she can, to another village, where the same ceremony is again repeated, till she has been burned out eight times; she is then considered as an honest woman. The men may lawfully keep several wives, but either party may at pleasure give up the connection. Girls after the age of puberty, widows, and divorced women, are all allowed to marry. These casts can eat goats, sheep, fowls, and fish; but no other kind of animal food. They may lawfully intoxicate themselves. None of them can read, nor have they any kind of Guru, or priest. In every house is a stone representing the Penates called Buta, which, according to the Brahmans, means a devil, or evil spirit. Two or three times a year the family perform worship (Pújá) to this stone, by oiling it, and covering it with flowers. Fowls are also sacrificed to Buta, whose worship generally costs the family from two to three Pagodas a year; but the sacrifices are the most expensive part, and these the votary eats. It must be observed, that the Hindus of pure descent seldom eat animal food, except such as has been sacrificed to the gods; a custom that seems to have also prevailed among - the Grecians, in whose language the same word ispessor signifies a sacrifice, and an animal whose flesh is fit for eating. When the annual worship of Buta is neglected, he is supposed to occasion sickness and trouble. The spirits of the dead, both of those who have been good or bad, and of those who died naturally or by accident, are supposed to become Pysachi, and are troublesome, unless a sacrifice is made to Buta, who takes the spirit to himself, and then it gives the living no more trouble.

XV.

Feb. 16.

Appearance of the country.

If the February.—I was obliged to set out without seeing Ramuppa Varnika; and, after having crossed the lake, I went three cosses to Kira-manéswara, a temple dedicated to Siva. I passed first between the sea and a branch of the Kunda-pura lake, and afterwards my road led along a rising ground near the sea. I saw many plantations of coco-nut trees; but, owing to the want of inhabitants, they are very poor. About fifty years ago an epidemic fever raged in the country, and carried off a great number of the people. A few months ago the same complaint again destroyed many. The natives say, that before the third day it resembled a common fever; then the patient became delirious, and on the fifth day died. About ten years ago a predatory band of Marattahs, under the command of Balu Row, came this way, destroyed entirely the Agrarum at Kiramanéswara; and the inhabitants, who remained after the epidemic, were swept away from all the neighbouring country.

Face of the country.

The quantity of rice ground is small, and a great part of the country is covered with low woods, in which are to be seen the enclosures of former gardens. The road is good, but is not ornamented with rows of trees, as usual to the southward. The sea-coast, like that between Mangalore and Kunda-pura, is chiefly occupied by villages of Bráhmans; the interior parts of the country belong to Buntar. This is a part of Tulava, but the language of Karnata is that in most common use. The water in wells is no where at any great depth from the surface. The temple here is a sorry building. It had formerly lands to the yearly value of 100 Pagodas, or of about 40 guineas. Last year it received in money an allowance of 5 Pagodas.

Feb. 17.
Appearance of the country.

17th February.—Early in the morning I was joined by the learned Brûhman Ramuppa Varmika, who accompanied me to Beiduru, three cosses distant. By the way we crossed three rivers; the first, called the Edumavany, is the most considerable; the second also is not fordable, and is called Angaru; the third is small, and joins the

second at some distance to the westward. Its channel is in many CHAPTER places shut up, and converted into places for making salt; for the tide in all the three rivers, reaches a considerable way into the Feb. 17. country. On this day's route there is much rice ground, and the crops look well.

Beiduru is an open village, containing about 120 houses. It had Beiduru. once a fort, and was then a large place, which belonged to a Jain princess, named Byra Dévi. This family was destroyed by the Siva-bhaktars, and the place has ever since been on the decline. The cultivators now are Bráhmans, and Nadavar, who are a kind of Bunts, but they do not speak the language of Tulava. The Jainar are quite extinct. One temple of the kind called Busty continued. until the time of Hyder; when the Pújári, being no longer able to procure a subsistence, left the place.

The temple at present here is one dedicated to Sira. There are Inscriptions about it several inscriptions on stone, that contain the grants of at a temple of Siva. lands with which the temple was endowed. One, which was a good deal defaced, so as not to be wholly legible, is dated in the year of Salivahanam 1445 (A. D. 1523), in the time of Devarasu Wodear, Rájá of Sanghita-pura; and son of Sanga-raya Wodear, who held his Ráyada of Krishna Ráya, the chief of Rájás in wealth, a Rájá equal to Paraméswara, a hero greater than the Trivira, &c. &c. Sanghita-pura, in the vulgar language called Hadwully, is four cosses east from Batuculla, and was formerly the residence of a governor appointed by the kings of Vijaya-nagara. Devarasu Wodear must either have been one of these, or an ancestor of Byra Dévi. Krishna Ráya is, no doubt, the celebrated Ráyalu of that name.

In another inscription, of which a copy has been presented to the Bengal government, it is stated, that in the year of Salivahanam 1429 (A. D. 1505), and in the reign of Jebila Narasingha Raya, the great king of Vijaya-nagara, Kedaly Baswappa Arsa Wodear having been appointed to the Ráyada of Barcuru, with orders to restore the lands of the god, and of the Bráhmans, certain merchants



Ramuppa Varmika, a learned Bráhman. of Bideruru (Nagara) founded an inn for the accommodation of six travelling Bráhmans, and for this purpose purchased certain lands, which are specified in the inscription.

Ramuppa Varmika says, that his family have been hereditary Shanabogas, or accomptants of Barcuru district, ever since the time of the Belalla Ráyas; which dynasty, according to him, commenced their reign here in the year 637 of Salivahanam or A. D. 71\frac{1}{2}. Ramuppa, however, possesses no revenue accompts previous to the conquest of the country by Hari-hara Ráyalu, in the year of Sal. 1258 (A. D. 133\frac{1}{2}).

His account of the Rújús who have governed Tulava.

Ramuppa has a book in Sanskrit, called Vidiarayana Sicca; and from thence, and his family papers, he has made out a Ráya Paditti, or succession of the Rájás who have governed Tulava. Of this I here give a translation, with observations, partly made by himself, and partly from what I could collect from inscriptions. From these it will appear, that not much dependence can be placed on some of his dates. Great difficulty occurs in comparing the native accounts with those of the Mussulman writers, who corrupt the Hindu names most extravagantly, and hold all knowledge of the infidels in so much contempt, that very little can be gathered from what they say.

" Sri."

## "Succession of Rájás."

"The reign of the Yudishtira family commenced on Friday, the 6th day of the moon, in the month Chaitra, in Prindi, the 1st of the Kali-yugam."

" After this, Parikshitta Ráya was king here."

Then follows a *Slokam* on his *Putapesheca*, which is a ceremony somewhat similar to our coronation and anointing.

"From Parikshitta Ráya to Nanda Ráya's coronation, there had elapsed of the Kali-yugam 1115 years," B. C. 1984.

"After this, under Nanda Ráya and his family, in all nine princes, there passed 200 years."

- "After that, under ten princes of the Vahanicula family, passed CHAPTER XV.
- "After that, under ten princes of the Moviuan Navaiada family, Fe passed 137 years."
- "After that, one Cadumba Ráya had 45 years possession, till the year of the Kali-yugam 1609," B. C.  $149\frac{1}{2}$ .
- "After that, in the year Vicruti, of the Kali-yugam 1631 (B. C.  $147\frac{1}{2}$ ) Myuru Varmá brought the Bráhmans from Ahichaytra, or Eichetra, and gave them 18 Grámas or villages. In this 22 years were employed, till the year of the Kali-yugam 1631."
  - "After that, Myuru Varmá possessed the kingdom for 10 years."
- "After that, Trinétra Kadumba Ráya, son of Myuru Varmá, sat on the throne of the kingdom for 12 years."
- "After that, from the year Virodicrutu Myuru Varmá governed with his son for 10 years, till 1663 years of the Kali-yugam had elapsed," (B. C. 1432).
- "After that, Myuru Varmá gave Cadumba Ráya's sister in marriage to Lókáditya at Gaukarna, and destroyed the Hubashica family. This occupied 15 years."
- "After this, the countries of Parasu Ráma being without Bráhmans, Cadumba Ráya and Lókáditya brought good Bráhmans, and kept them in the country in the year Sarvajitu, being of the Kaliyugam 1689," (B. C. 1413).
- "After this, under twenty-one Jeantri Cadumba Rayas, there passed 242 years."

From an inscription from Bellagami, which has been presented to the government of Bengal, it would appear, that a Trinétra Cadumba was sovereign prince in the year of Sal. 90 (A. D.  $16\frac{1}{2}$ ), or 1579 years after the time assigned for Trinétra Cadumba in this Ráya Paditti. These princes, however, were probably the same; and in order to make the time of the possessions of the Bráhmans in Tulava much more ancient than it really is, the succession of dynastics has either been altered; or a number of families, that

Feb. 17.

CHAPTER never existed, have been introduced to fill up the space between the Cadumba Ráyas and the Belalla family, of whom many traces remain. In the northern parts of Karnáta the Cadumba family seem long to have retained considerable power, as I procured two inscriptions, belonging to them, after the time of Trinétra Cadumba. The one is a grant of land to the Kudali Swamalu in the reign of Purandara Ráya of the Cadumba family, who governed at Banawási in the year of Sal. 1043, or A. D. 1129. The other is from a temple near Savanuru in the reign of a Cadumba Ráya, and in the year of Sal. 1130, or A. D. 1204. Copies of these inscriptions have been delivered to the Bengal government.

> "After the Cadumba Ráyas there elapsed, under thirty-two Banhica Ráyas, 456 years."

> "After that, under Rájás of the Abhira family, there passed 1199 years."

> "After that, the Monayer family possessed the kingdom 200 years."

> "3786 years of the Kali-yugam had now elapsed; of which the particulars are,

> > 3044 years of the Yudishtira era. 135 years of the Vikrama era. 607 years of the era of Salivahanam.

3786 total of Kali-yugam," A. D. 684.

Bclalla family.

" From the year 607 of Salivahanam, Belalla Ráyaru, and persons of the same family, being in all nine princes, governed 209 years. Above and below the Ghats they governed 98 years, and below the Ghats they continued to govern 111 years more."

" Above the Ghats were the following princes:"

"The Yavanas at Anagundi possessed the kingdom for 54 years." Who were these Yavanas? This word properly signifies an European; but as the Hindus speak with great confusion concerning the northern and western nations, it is often confounded with the

Melenchas and Turcs, or Arabs and Tartars; and all the three terms CHAPTER are frequently applied to the Mussulmans. But the Yavanas of Anagundi could not be Mussulmans, as their government by this Feb. 17. account lasted from A. D. 782 till 836; and there is strong reason to believe, that Ramuppa is not essentially mistaken in the time at which the Belalla Ráyas lived. Although he says that they only governed 98 years above the Ghats, this must not be understood literally. Anagundi, where Vijaya-nagara was afterwards built, was probably their first seat of government; and after their being expelled by the Yavanas, according to the accounts given verbally by Ramuppa, they retired to Hully-bedu, or Goni-bedu, a town situated above the Ghats. They governed Tulava by officers called Ráyaru, who resided at Barcuru, and were also masters of all the southern parts of Karnáta. They were of Andray or Telinga descent, and originally of the Jain religion. One of them having been killed by the Mussulmans, who then were making predatory excursions into the Deccan, his son removed the seat of government to Tonuru, near Seringapatam; and soon after this period Tulava seems to have withdrawn its allegiance, instigated perhaps to rebellion by his having thrown aside the religion of his fathers, and adopted that taught by Ráma Anuja, as I have related in the seventh Chapter. After this conversion he resided at Bailuru; and from an inscription there, it would appear, that he rebuilt the temple of Cayshava Permal there, in the year of Sal. 1039, or A. D. 1115; while, from the inscription No. 13, it would appear, that his son, Hoisela Narasingha Ráya, continued to govern in the year of Sal. 1095, or A. D. 1172. The government of the Yavanas of Anagundi, and of the Hindu princes who followed them, must have been confined to the northern and eastern parts of the peninsula: for we have already seen, that the Cadamba Ráyas continued to have possessions in the north-west of Karnáta.

"After the Yavanas, the Campina Rúma Rúyas had the kingdom 30 years."

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CHAPTER XV. Feb. 17.

"Then Daria Soructa cut off the head of Campina Comora Rámanátha in the year of the Kali-yugam 3951." (A. D.  $8\frac{49}{10}$ ).

"After that, Boji Ráya possessed the kingdom 63 years; and under nine princes of his family were passed 145 years. Total of the reigns of the ten princes of this family 213 years." (A. D. 1062).

"After that, under eighteen princes of Andray descent, the ancestors of Pratápa Rudra, there passed 211 years."

"After this, Pratapa Rudra possessed the kingdom 54 years, till the year of the Kali-yugam 4429," (A. D. 1321) "then the kingdoms of Andray were in the possession of the Mlécha, who, increasing in power, seized on the dominions of Pratápa Rudra. They took his towns, and gained his kingdom, wealth, and umbrella. Then Hucca and Buca, both the Bundara Cavilas" (guards of the treasury) "of Pratápa Rudra, came to Sri Mahá Vidyáranya Mahá Swami" (who according to Ramuppa was Guru to the late king, and the eleventh successor of Sankara Achárya on the throne of Sringa-giri), " and solicited his favour. The Mahá Swámi visited God, and acted according to his orders. He built Vijaya-nagara city" (Pattana). "In seven years the whole city was fully built. In the year Datu, being 1258 of the era of Salivahanam" (A. D. 1335), "in the 7th day of the moon in Vaisákha, being Wednesday, under the constellation Mocca, in Abijun Muhurta" (Muhurta is a division of the day containing 3\frac{3}{4} Hindu hours), "and in Singha Laghana" (Laghana is a space of time equal to  $\frac{1}{2}$  a Pahar, or  $\frac{1}{4}$  of a natural day), "he took both Hucca and Buca, the guards of the treasury of Pratápa Rudra. To the man Hucca he gave Puttavuncutty" (a ceremony like our coronation), "and gave him the name of Hari-hara Ráyaru. The whole kingdom was given to him in the year of the Kali-yugam 4437," or A. D. 1335.

Kings of Vijaya-nagara, who rose on the ruins of the Andray.

There is reason to believe, that in the reigns of Pratápa Rudra and his ancestors the seat of government was Woragulla (Warancul of the Mussulmans), the chief place in Andray or Telingana. In many accounts, the last of the family is called Woragulla Pratápa

Ráya. He probably governed Telingana, or the country of warriors, CHAPTER and the northern parts of Karnáta which were not subject to the Belalla family. We learn from Scot's translation of Ferishta's his- Feb. 17. tory of the Deccan, that in the year 1309 Ala ad Dien, Mussulman king of Dhely, sent Mallek Naib to invade Telingana, and obliged Ludder Deo, Rájá of Warancul, to become tributary. In 1310 Mallek Naib advanced into Carnatic, and took Rájá Bellaul Deo prisoner; and in 1312 he again over-run these countries, and obliged Telingana and Carnatic to become tributary to the throne of Dhely. This chronology agrees very well with that of the Ráya Paditti, which makes the final overthrow of the kingdoms of Andray by the Mléchas to have happened in 1327, or 13 years after this last expedition of Mallek Naib, who had then rendered them tributary. It must be observed, that the Belalla family still continued to be in 1312 the principal rulers in Karnáta; but the Ráya Paditti considers them also as of Andray, as they originally came from that. country. It is true, that Pratápa Rudra is not mentioned by Ferishta, by whom the Rájá of Warancul is called Ludder Deo; but for this we may account, either from the sovereign contempt in which these infidel princes were held by the Mussulmans, who rarely gave themselves the trouble to inquire about their true names or customs; or Ludder Deo may be a corruption of some of the numerous titles, which, like all Hindus of his rank, this prince assumed.

Soon after this, we learn from Ferishta, that the government of Dhely declined into the usual debility of an Indian dynasty that has been established for any length of time; and many chiefs declared themselves independent of the king's authority. Among these, the most remarkable was the founder of a dynasty, who governed the Mussulman conquests in the Deccan, and who were called the Bhaminee Sultáns. This enterprising man, in the year 1347, was able to throw off all appearance of submission, and assumed at Beder all the insignia of sovereign authority. He was of



CHAPTER course obliged to manage with discretion the neighbouring Hindus; and Hucca and Buca, two of the principal officers of Pratupa Rudra, took this opportunity of establishing a kingdom in the southern parts of the countries which formerly belonged to princes of Andray descent; and to the southern provinces of Pratapa Rudra, they added those of the latter Belalla Ráyas. Rumuppa says, that after the overthrow of their master, these two men undertook a pilgrimage to Ráméswara; and, while on their way, met the Guru of the late king at Humpay, a village on the opposite side of the river from Anagundi, where afterwards Vijaya-nagara was built. Having conferred with this mighty Bráhman, he retired into a celebrated temple of Siva, who is worshipped at Humpay under the name of Vira-pacsha. Here the god was consulted; and the Bráhman declared, that he was ordered by the deity to crown Hucca, and to build the city Vijaya-nagara, or the city of victory. This name the Mussulmans corrupt into Beejanuggur; and Ferishta gravely tells us, that it derives its name from Beeja, a Hindu prince; and that it had been founded by the family who governed it in 1365, about 700 years previous to that time. Of his judgment in antiquities an opinion may be drawn from his also gravely relating, that Deccan (that is the south country) derives its name from Deccan, the son of Hind, the son of Ham, the son of Noah. In this author we need not wonder at any corruptions of names; for he changes the name of the river on which Vijaya-nagara stands, from Tunga-bhadra, or contractedly Tung'bhadra, into Tummedru; and he corrupts the celebrated Vikramáditya into Bickermajeet.

The Ráya Puditti, having detailed the princes who governed the country above the Ghats, returns to mention those who governed the sea-coast, while it was separated from Karnáta.

"Here below the Ghuts Belalla Raya entered upon the government in the year of Salivahanam 637" (A. D. 714). "He and his descendants, nine princes, and eleven persons of the same family, from Pratapa Rudra to Viruppa Wodearu, in all twenty princes,

occupied the country for 461 years, till the year of Salivahanam CHAPTER 1068." (A. D. 1145).

N. B. This *Pratápa Rudra* is evidently a very different personage Feb. 17. from the prince destroyed by the *Mléchas* in  $132\frac{1}{2}$ .

"Then in the intermediate time between the year of Salivahanam 1068, and the year Paradavi 1175 (A. D.  $125\frac{2}{3}$ ), for a space of 107 years, there was no person in the possession of the kingdom. Some of the servants of the Bellala Ráyas strengthened themselves, and this inter-regnum was passed in one person's plundering another."

"In the year of Salivahanam 1175, being Paridavi, the devils (Butagallu) brought Panda Ráya to the government of Baracuru kingdom, and gave him Puttuvuncutty, calling him by the name of Buta Panda Ráya. He alone possessed the kingdom 42 years. Of the same family Vira Pratápa Ráya governed 19 years, and Déva Ráya 21 years. Total three princes 82 years."

"There had then passed of the era of Salivahanam 1257 years," A. D. 1334.

I have already mentioned the probable cause of the overthrow of the Belalla family's authority in Tulava. These servants of the king, who strengthened themselves, were according to Ramuppa the ancestors of the Jain Rájás, such as the Choutar, Bungar, Byrasu Wodears, &c. &c. who have in this journal been often mentioned; and of the truth of this, I think, there can be little doubt. When the king changed his religion, and assumed the name of Vishnu Vardhana Ráya, as I have already related, these petty Jain Rájás refused to submit to his authority, or to pay any tribute. Many idle stories are told concerning the manner in which the Butagallu, or devils, introduced Panda Ráya, and rendered all the Jain princes subject to his authority. It would appear, that he camefrom Pandava, the district contiguous to Cape Comorin; and he is said to have introduced from thence the singular mode of succession that prevails in Tulava, as well as in Malayála. The Ráya Paditti then proceeds thus.

## A JOURNEY FROM MADRAS THROUGH

CHAPTER XV. Feb. 17. "In this manner in the year of Salivahanam 1257, being the year Yuva, Déva Ráya Mahá Ráya, of the family of Buta Panda Ráya, commanded Baracuru kingdom. In the year Dat'hu, by the favour of Srí Vidyáranya Mahá Swámí, the founder of Vijaya-nagara city, and the crowner of Hari-hara Ráya, Déva Ráyaru delivered Baracuru kingdom to Hari-hara Ráya. There had then elapsed of the era of Salivahanam 1258 years.

"From the year of Salivahanam 1258, being the year Dhatu, on Wednesday the 7th of the moon, in Vaisákha, after Hari-hara Ráya, were the following Ráyaru."

Family of Hari-hara.

In the original here follows a Slókam, containing the first letter of every Rájá's name, as the commencement of a word. It must be observed, that each of these princes is spoken of by the title of Ráyaru, the Karnátaka plural of Ráya. This is the same word with the Rylu, or Rayalu of the Telingas, contracted by Mussulmans into Ryl, and commonly applied exclusively to the kings of Vijayanagara. In the south, however, every person of very high rank is spoken of in the plural number; and the princes of all the great dynasties that have governed Karnáta are commonly called Ráyaru by its native inhabitants.

"In this manner 13 Ráyaru princes possessed the kingdom for 150 years."

	" Particulars.	Until the æra of Sal.	Until the year of Christ.
15 years	Hari-hara Ráya	1273	135%
22	Buca Ráya	1295	1373
31	Hari-hara Ráya	1326	1403
4	Virapaksha Ráya	1330	140-
1	Buca Ráya	1331	140 %
7	Déva Rúya and Ráma Rúya -	1338	1415
11	Virapaksha Ráya	1349	1425
28	Déva Ráya and Virapaksha Ráya	1377	1454
4	Maruppa Ráya	1381	145%
27	Ráma Ráya and Virapaksha Ráya	1408	1485

"Total thirteen princes governed till the year Crodi for 150 CHAPTER years. It was then of the era of Salivahanam 1407." A. D. 1484.

Although this is detailed with great minuteness, little reliance Feb. 17. can be placed on its exactitude. From an inscription, a copy of which I presented to the Bengal government, we learn, that Buca Ráya was king in Salivahanam 1297, A. D. 1374, two years after the end of his reign according to the Ráya Paditti. Another inscription, also presented to government, is in the reign of Déva Ráya, and is dated in the year of Sal. 1332, A. D. 1423, which agrees with the chronology of the Ráya Paditti. In this last Ráma Ráya is stated to have reigned conjointly with Déva; but it is evident from the inscription, that he had not been admitted to partake in the royal dignity for some time after the other's accession. Another inscription, also procured by me, is dated in the year Sal. 1352, A. D. 1429 in the reign of Pratápa Déva Ráya, son of Vijaya Ráya. This also agrees with the chronology of the Ráya Paditti. This prince's father was never sovereign. Another inscription is dated in the year of Sal. 1400, A. D. 1472, in the reign of Virapaksha Mahá Ráyaru. This also agrees with the chronology of the Ráya Paditti; but that mentions a Ráma Ráya, as governing along with Virapaksha, which is not countenanced by the inscription. It must, however, be observed, that these inscriptions seem to be among the Hindus, what the legends on the coins are among the Mussulmans; and so long as a nominal king is retained, all inscriptions and legends are made in his name; but the historian or chronologer must also mention the person actually possessed of the power of government; and Ráma Ráya was perhaps a minister, like the Peshwa at the Poonah, who confines his sovereign, the descendant of Sevajee, and governs the Marattah states with absolute authority. The general agreement between these inscriptions, collected in parts of the country very remote from the residence of Ramuppa, confirms beyond a doubt his account of the dynasty of Vijaya-nagara; and the accounts given of the great antiquity of that city by Ferishta

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CHAPTER must be looked upon as entirely fabulous. Of the actions which the princes of this dynasty performed, we have in that author's history of the Deccan several accounts, apparently strongly tinctured by zeal for the Mussulman doctrines. Owing to his corruptions of names, and probably owing to his frequently mistaking the general or minister for the sovereign (for Ráya is a title applied to all Hindus of distinction, as well as to kings) we very seldom can reconcile his names with those of the Ráya Paditti, or of inscriptions. He says, that in the year 1365 Roy Kishen Roy was king of Beejanuggur, and his ancestors had possessed the kingdom for 700 years. This was in the reign of Buca Ráya, son of the founder of the dynasty and of the city. From the year 1398 to the year 1420 Dewal Roy of Beejanuggur is frequently mentioned. This may have been Déva Ráya the First, who may have been employed as a general long before his accession in 1408. Deo Roy of Beejanuggur is mentioned in 1437 and 1443, and is no doubt Déva Ráya the Second, who during these times was sovereign.

Usurpers who governed at Vijayanugara.

As the two dynasties of the Bhaminee Sultáns, and the Ráyarus of Vijaya-nagara commenced nearly about the same time, their fall also happened at the same period. From Ferishta we have the following account of the manner in which the servants of the Hindu princes usurped their authority. Hemraje, or as he in one place is called Ram Ráje, was minister of Beejanuggur. He was a man of abilities, and gained some advantages over the declining power of the Bhaminee Sultáns. In order to protract his authority, he poisoned the young prince, son of Sheo Roy, and placed on the throne a younger brother. In making an excursion into the Mussulman territories, in the year 1492, he was met by Adil Shah, founder of the dynasty of Beejapoor (Vijaya-pura), and defeated. In this engagement the young Rájá was killed, and Hemraje assumed sovereign power. It must be observed, that Sheo Roy is a manner of writing Siva Ráya; and Virapaksha is one of the names of the god Siva. Virapaksha Ráya, the last of the thirteen Ráyaru, may therefore

be meant by Sheo Roy; and Hemraje, or Rám Raye, the usurping minister, may be the Ráma Ráya mentioned in the Ráya Paditti as conjoined in authority with Virupacsha. The dates agree very well. Feb. 17.

On his usurping sovereign authority, it is likely, that, as usual in India, he assumed some new name, and was called Prouwuda Ráya, the name by which the first usurper is known among the Hindus.

Of these the Ráya Paditti gives the following account.

"From the year Visua Vasu of Saliváhanam 1408 (A. D. 1485), the servants (Cadaëvaru) of the Ráyaru, being seven men, possessed the kingdom 103 years.

Particulars.	Till year of Sal.	Till vear of Christ.
12 years Prouwuda Ráya	1420	1497
10 ditto Vira Narasingha Ráya   -   12 ditto Solva Narasingha Ráya   -	1430 1442	150%
43 ditto Achuta Ráya, and Krishna Ráya	1485	1562
26 ditto Sadásiva Ráya, and Ráma Ráya	1511	1585

<sup>&</sup>quot;Total 7 men and 103 years."

Here, in the original, follows a Slókam, or Anagram on these seven princes. Among a set of usurpers struggling for authority, we cannot expect much regularity; and it is hardly possible, that two of them could unite exactly at the same time, reign together for 43 years, and then die together; but to a Hindu chronologist such difficulties do not present themselves as extraordinary. Several of these princes were men of abilities, and Krishna Ráyaru was by far the greatest Hindu monarch that has appeared in modern times. Of this we need not require a stronger proof, than his living in the immediate frontier of the countries whose history Ferishta is writing, and yet his never being mentioned by that author. In his reign no victories over the idolaters were to be celebrated; and it would have been unbecoming a Mussulman to disclose the disasters of the faithful.

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The account given orally by Ramuppa of the manner in which this country was governed by the kings of Vijaya-nagara is as follows. Hucca and Buca were of the Curuba cast, the customs of which low tribe I have already described. They were of Telinga extraction; all the officers of their court were of the same nation; and the remaining Rájás of Anagundi still retain that language. When Hucca had assumed the name of Hari-hara, and became very powerful, the Rájá of Tulava made a submission, in appearance voluntary, and did not attempt any resistance. It is not known what has become of his descendants; but they seem to have been entirely deprived of power; and Hari-hara appointed three deputies to command the military force, and to collect the revenue from the Jain Rájás, and other tributaries. The deputy, who resided at the former capital, Barcuru, or Baracuru, had the title of Ráyaru; the one who governed Mangaluru was styled Wodear; and an inferior person governed the small district belonging to Bagwady. These offices were not hereditary. The Jain Rájús were confirmed in the hereditary possession of their territories, and were allowed for their support certain estates, called Umbli lands, free from revenue. They collected the revenues of the other parts of their territories, and paid them in to the deputy under whom they lived; and over all persons living within their respective territories they possessed most ample authority. Each supported a certain number of troops, with which in time of war he was bound to assist his liege lord. Their common title was Manatana Dévaru. The Manatana, however, were not allowed to exercise any authority over the 32 Grámas which Cadumba Ráya had bestowed on the Bráhmans. The revenues of Cotta and Shivuli, two of these, were collected by the officers of the deputies. The remaining thirty were under the government of an equal number of Bráhmans, who held their offices by hereditary right. These were called Hegadas, or Baylalas, and . also enjoyed Umbli lands; but their jurisdiction was much less extensive than that of the Jain Rájás. They could not inflict

capital punishment, nor confiscate a man's property, nor erase his CHAPTER XV.

It would appear, that before the time of Hari-hara no land-tax Feb. 17. existed in Tulava; and this country, after its rebellion from the Belalla Ráyas, was probably in a state of anarchy and confusion similar to that of Malayála after its division among the captains of Cheruman Permal. The settlement and valuation made by Harihara is said to be still extant, and Ramuppa gives the following account of the plan adopted by that prince. The whole produce having been estimated, out of every thirty measures the government took 5, the Bráhmans got  $1\frac{1}{2}$ , the gods 1, the proprietors  $7\frac{1}{2}$ ; and 15, or one-half, was allowed to the cultivator. The whole lands of the Bráhmans were valued in the same manner as the others; but the revenue was remitted on such part of them as was dedicated to the support of the temples, or of public worship. This system of revenue continues to the present day; only the shares of the god and the Bráhmans are supposed to have been taken by the government, who grant annual sums for the support of public worship; and the Umbli lands are now taxed, in the same manner as the

Concerning the usurpers of the throne of Vijaya-nagara I collected from inscriptions, copies of which I presented to the government of Bengal, the following information. From that which I procured at Beidura, it would appear that Jebila Narasingha Ráya was king in the year of Sal. 1429. This is probably the Vira Narasingha of the Ráya Paditti, whose reign ended in the following year. In another inscription, Achuta Ráya Narasingha Ráya, and Krishna Ráya are mentioned as sovereigns conjunctly. The copyist has made the date 1337, but he evidently ought to have made it 1437. From this it would appear, that Achuta and Krishna had been conjoined with their predecessor, Solva Narasingha, so early as the seventh year of his reign, although the Ráya Paditti does not make their government commence until his terminated. In an inscription

others.



at this place, of which I have no copy, Krishna Ráya is mentioned as sovereign in the year of Sal. 1445, or A. D. 1523. In another inscription, Vira Pratápa Achuta Ráya is sovereign in the year of Sal. 1452, or A. D. 1539; and in another Achuta Ráya and Krishna Ráya are joint sovereigns in the year of Sal. 1454, or A. D.  $153\frac{1}{3}$ . In another still, Achuta Ráya is mentioned alone in the intermediate year 1453. With the long and glorious reign of these two princes the fortune of Vijaya-nagara departed. In another inscription at Banawási, is mentioned a Vencatadri Deva as sovereign in the year of Sal. 1474, or A. D. 1551. This name is not to be found in the Ráya Paditti; and Vencatadri was either some person struggling for the supreme authority, or some tributary who had entirely thrown off his allegiance. In another inscription Vira Pratapa Sadásira Déva Mahá Ráya is mentioned as king in the year of Sal. 1477, or A. D. 1554; and he is again mentioned in another inscription as king, and as son of Achuta Ráya. The date to this inscription is Sal. 1412; but that is an evident error in the copyist, and it must be in the original 1512. This, it is true, according to the Ráya Paditti, is one year after the death of his colleague Ráma Ráya, and the destruction of Vijaya-nagara; but the representatives of this family still exist, and for a long time their rebellious Polygars continued to show an external deference for their dignity, although they refused all submission to their authority. Upon the whole, from these two inscriptions it would appear, that although Achuta and Krishna are mentioned as joint sovereigns, whose reign did not terminate till Sal. 1485; yet Achuta died earlier, and was succeeded by his son Sadásira, so early at least as Sal. 1477; but his name was obscured, by the lustre of his first colleague's reputation, till the death of this celebrated prince.

Probably owing to the reason which I have before mentioned, the account of these princes in *Ferishta* is extremely imperfect. He makes the first usurper to be succeeded by his son *Rúm Ráye*, against whom three of the Mussulman princes united in 1564, and

killed him in the first engagement. After which the capital city CHAPTER was destroyed, and each of the Zemeendars (Polygars) assumed in his own district an independant power. This account makes the Feb. 17. destruction of Vijaya-nagara 24 years earlier than the end of the reign of Ráma Ráya according to the Ráya Paditti. Which is in the right, I cannot say; but the matter may probably be decided by means of some of the numerous inscriptions that are to be found in the country. It does not appear clear, whether or not the line of Hari-hara has become extinct, nor whether the present Rájá of Anagundi be descended from him, or from one of the usurpers who seized on Vijaya-nagara, but who still continued to govern in the name of the royal family, as their servants.

Ramuppa now takes leave of the family of the Ráyaru, and pro- Rájás of Kiceeds to give an account of one of the chief Polygars, who on the lidi, or Ikeri. decline of Vijaya-nagara assumed independence.

"Until the year Dhatu of Salivahanam 1510 (A. D. 1587) Sudúsiva Ráya, and Ráma Ráya possessed the kingdom, as servants of the Ráyaru. In the mean while Sadásiva Ráya gave to Sadásiva Gauda, son of Baswuppa, the Gauda of Kilidi, a government (Subayena) in Karnútaka Désa, namely Guty, Baracuru, and Mangaluru. These three towns were given into the possession of Sadásiva Gauda, and his name was changed into Sadásiva Ráya Náyaka, after the name of the Ráyaru who gave him the power Suluntra (of governing by a deputy), and put it into his possession. From the year Durmuti 1482 (A. D.  $15\frac{59}{60}$ ), to the year Chitrabanu 1685 (A. D.  $176\frac{2}{3}$ ), sixteen persons, styling themselves Rájás of Kilidi or Ikeri, possessed the government 203 years. Particulars."

"Seven persons governed 77 years, styling themselves servants (Cadaëvaru) of Vijaya-nagara. Particulars."

"16 years Sadásiva Náyaka;" began to reign 1482. A. D. 1559.

" 9 years his younger brother Bhadruppa Náyaka;" began to govern 1498. A. D. 1575.

- CHAPTER "11 years Doda (great) Sunkana Náyaka, the son of Sadásiva Náyaka's first wife." He began to govern 1507. A. D. 1584.
  - " 7 years Chica (little) Sunkana Náyaka, the son of Sadásiva's second wife." He began to reign in 1518, A. D. 1595.
  - 1 year Siduppa Náyaka, son of Chica Sunkana Náyaka." He began to reign in 1525. A. D. 1593.
  - "22 years Vencatuppa Náyaka, son of Doda Sunkana Náyaka." began to govern in 1526, A. D.  $159\frac{3}{4}$ .
  - "This Vencatuppa's son, Bhadruppa Nayaka, and his son Bhadruppa Náyaka, governed for 23 years nominally as servants of the Ráyaru, and 12 years as sovereign princes. They began to reign in 1548, A. D. 1625.
    - "In all, as servants of the Ráyaru, 7 princes governed 77 years."
  - "After this, from the year Dhatu 1559 (A. D. 1635), till the year Chitrabanu 1685 (A. D. 1762), nine Rájás governed in their own name 126 years. Particulars."
  - "The above mentioned Bhadruppa Náyakas 23 years; but, deducting 11 years before they governed independently, they reigned in their own name
  - "12 years." This began in 1559, A. D. 1635.
  - " 22 years Sivuppa Náyaka, son of Chica Sunkana Náyaka." He began to reign 1571. A. D. 164%.
  - "10 years his eldest son Bhadruppa Náyaka." He began to reign 1593. A. D. 167%.
  - " 5 years Hutso (Mad) Sómasikhara Náyaka, younger son of Sivuppa Náyaka." He began to reign in 1603. A. D. 1689.
  - " 12 Doda Chinna Magi, wife of Sómasikhara Náyaka." She began to govern in 1608. A. D.  $168\frac{5}{6}$ .
  - "16 years Baswuppa Nayaka, her adopted son." He began to reign 1620. A. D. 1692.
  - "26 years Sómasikhara Náyaka, his eldest son." He began to reign 1636. A. D.  $171\frac{3}{4}$ .

"31 years Budi (wise) Baswuppa Nayaka, son of Virabhadra, younger CHAPTER brother of Sómasikhara." He began to govern 1662, A. D. 173 .



- 2 years Chinna (little) Baswuppa Nayaka, adopted son of Viru Magi, widow of Budi Baswuppa." He began to govern in 1675. A. D.  $175\frac{2}{3}$ .
- 8 years Sómasikhara Náyaka, another adopted son of Viru Magi." He began to govern in 1677. A. D. 1754.

"In all, ten independent princes of Kilidi governed 126 years."

Ramuppa says, that Doda Sunkana Náyaka resigned his government to his younger brother, and undertook a pilgrimage to Kási, or Benares. From thence he went to Dhely, where he encountered and killed Ancusha Khán, a celebrated prize-fighter. On account of his gallantry he received many honours and lands from the king. The whole of these lands he gave in charity to the Bráhmans, and returned home, where he lived in retirement, without making any attempt to resume his authority. His younger brother, in return, left the government to his nephew. This nephew Vencatuppa, and his son and grandson, the two Bhadruppa Nayakas, being weak men, and mere cyphers, the whole business of the country was managed by their cousin Sivuppa, who acted as Dalawai, or minister. On their death without children, he succeeded to the sovereignty as lawfultheir, and seems to have been the greatest prince of the house. It was he who finally reduced the Jain Rájás of Tulava, and added to the family dominions the whole province of Canara; for, on the overthrow of Vijaya-nagara, the Jain Polygars had assumed independence. His successor, Sómasikhara, was mad, and during the paroxysms of his disease committed great enormities. He ripped up pregnant women with his own hands, and for the gratification of his lust seized every beautiful girl that he met. At length he was assassinated by a Bráhman named Saumya, who was one of his servants. The rank of the assassin did not save him, and he was put to death by the Sivabhactars, who were much attached to this

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CHAPTER family of princes, as being of their own sect, and which by this murder seems to have become extinct. Doda Chinna Magi, the widow of Sómasikhara, assumed the government; but having no children, she adopted Baswuppa, the son of Marcupa Chitty, a Banijiga merchant of Bideruru (Bednore), where the seat of government then was. The male descendants of this adopted son also ended in Budi Basauppa, who left two widows, Chinna Magi, and Vira Magi. The latter, although inferior in rank, being a bold woman, put her superior in confinement; and, having adopted a young man named Chinna Baswuppa, she governed in his name, and was called Rání. The publicity of her amorous intrigues was so scandalous, that the young Rájú ventured to remonstrate with her concerning this part of her conduct. He was immediately removed by a violent death, and a boy was adopted in his stead, and called Sómasikhara. Hyder, taking advantage of the disgust occasioned by her immoral conduct, subjected to his own authority the dominions of the Sivabhactars of Ikeri, and shut up the Rání and her adopted son in the fort of Madhu-giri. From thence they were taken by the Marattahs, but died before the purpose for which the Marattahs intended them could be carried into execution. The Ráya Paditti proceeds thus.

Mussulman conquest.

"In the year Chitrabanu, of Salivahanam 1685 (A. D. 1763), on the 3d of the moon in Maga, on Friday at the 18th hour, the Nabob Hyder Aly Khán's troops took possession of Bideruru city; from which time this name was lost, and the place was called Hyder Nagara. This Nabob Hyder Ali Khán governed (that is to say the dominions of Ikeri) from Chitrubanu, of Salivahanam 1685, till the 3d of the moon in Paushya of the year Shobacrutu, Salivahanam 1706 (A. D.  $178\frac{3}{4}$ ), 20 years and 11 months."

"From the same year Shobacrutu, till Saturday the last of the moon in Chaitra, of the year Sidurti, of Sal. 1722 (A. D.  $1\frac{7}{8}\frac{9}{800}$ ), governed Tip pooSultán 16 years 3 months, and 28 days.

British government.

"On Monday the Amávásya in Chaitra, in the same year Sidarty, 1729, the Company's forces took possession of Sri Ranga-Pattana,"

It must be observed, that Saturday is the real date; but, that CHAPTER being an unlucky day, the Bráhman changes the day of taking possession into Monday. In order, however, to show that it was on the same day with the fall of Tippoo, he tells us, that the one event happened on the last day of the month, and the other on the Amávásya, which is the same thing. Such discordances therefore in Hindu chronology must not be considered by the antiquary as any proof of either error or ignorance.

## CHAPTER XVI.

JOURNEY THROUGH THE NORTHERN PARTS OF CANARA.

CHAPTER XVI.

EBRUARY 18th.—I went four cosses to Batuculla, which means the round town. A very steep barren ridge separates Beiduru from a fine level, which is watered by the Combara, a small slowrunning stream, that in several places is dammed up for the irrigation of the fields. Here was formerly a market (Bazar) named Hosso-petta, which General Mathews destroyed. After passing this level, I came to a very barren country, but not remarkably hilly. It is covered with stunted trees, and intersected by a small rapid stream, the Sancada-gonda, and farther on by a narrow cultivated valley. Batuculla stands on the north bank of a small river, the Sancada-holay, which waters a very beautiful valley surrounded on every side by hills, and in an excellent state of cultivation. At the public expense eight dams are yearly made in order to water the rice grounds. They are constructed of earth, and are only intended to collect the stream in the dry season. In the rains they would be of no use, and the violence of the stream would then sweep away the strongest works. The dams are repaired between the 17th of November and the 16th of December, and are carried away in the two months which precede the summer solstice. There are here many coco-nut gardens, and these in the best condition of any that I have seen in Canara. They are well inclosed with stone walls. Their produce is partly shipped for Mangalore, or Rája-pura, and partly sent to the country above the Ghats.

Batuculla.

Batuculla is a large open town containing 500 houses. It has two mosques; one of which receives from the Company an allowance of

100 Pagodas, and the other half as much. These places of worship CHAPTER are situated in a quarter of the town inhabited by Mussulmans alone. Many of these are wealthy, and go on commercial specula- Feb. 18. tions to different parts of the coast; but this is their home, and here they leave their families. In this part of the country there are no Buntar, nor does the language of Tulava extend so far to the north. In fact, Batuculla is properly in a country called Haiga; Country and the most common farmers are a kind of Bráhmans, named Haiga after the country, and a low cast of Hindus called Halepecas. There are here 76 Gudies, or temples belonging to the followers of the Vyása. Last year the officers of revenue, being all Bráhmans, Money levied began by their own authority to levy money, under pretence of for the supapplying it to the support of these places of worship; but some of lic worship. them having been flogged, and dismissed from the service, a stop was put to this dangerous practice, and the priests (Pújáris) must content themselves with voluntary contributions. Major Monro does not seem to have thought it necessary to be so liberal to the temples, as Major Macleod and Mr. Hurdis have been. I do not perceive that his economy has been attended with any bad effect; and his conduct, on the whole, seems to have gained the good opinion of every honest industrious man that lived under his authority.

Thinking to obtain some information from the Bráhmans in a Account of place where they were so numerous, I sent for some of them. They by the  $Br\acute{a}h$ denied having ever been subject to the Jain, and said, that this mans. and four other districts were each governed by an independent officer, sent immediately from Nagara, meaning the capital above the Ghats; for the present Nagara is a name of very recent origin. These four territories were Shiraly, Chindawera, Garsopa, and Mirzee, and each occupied the whole country from the sea to the Ghats. They afterwards confessed, however, that this was only during the government of the Sivabhactars; and that Batuculla formerly belonged to Byra Devi, a Jain princess, whose dominions extended

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Account by the Jain.

CHAPTER almost to Barcuru, which belonged to a Jain Rájá of the name of Budarsu. These Bráhmans having told me that at all their temples I should find inscriptions, I set out in search of them, and was a good deal disappointed to find none at the two chief Gudies; and I inquired at several others, but was informed that they had no such thing. In the course of my walk I met with two Jain temples of the kind called Busties, the only remains of sixty-eight that were formerly in the place. The one had an inscription dated in the year of Sal. 1468, A. D. 1545, in the reign of Runga-raya. He is not mentioned in the Ráya Paditti, but in the inscription is said to have been brother's son of Krishna Ráya, by whom he was probably employed as a deputy. The date is toward the end of the time assigned by Ramuppa for the reign of Krishna Raya. At the other Busty is an inscription, dated Sal. 1479, A. D. 1555, in the reign of Sri Vira Sadúsiva Rúya. A copy of this has been delivered to the Bengal government. From the Pújári of the Busty, one of the few Jain now remaining in the place, I obtained the following account.

> All the country between Carcul and Cumty belonged to a family of Jain Rájás, called by the common name of Byrasu Wodears; but each had a particular name, several of which the Pújári mentioned. The founder of this family, as we have already seen, was Jenaditta, a fugitive prince from the north of India. The last of these Wodears having no son, the greater part of his dominions was divided among his seven daughters, all of whom were called Byra Devi; and it is concerning them, that Ferishta has related an absurd fable. From these ladies Barcuru was taken by a Jain prince, whom the Bráhmans called Budarsu. The Byra Devi of this place built a fort, the ruins of which may still be traced. In her time the town was very large. During the war conducted by Lord Cornwallis it suffered much from a plundering band of Marattahs, but is again recovering fast. The Pújári showed me the ruins of a Busty built by one of the Wodears. The workmanship of the pillars and carving

is superior to any thing that I have seen in India, probably owing CHAPTER to the nature of the stone, which cuts better than the granite in common use, and preserves its angles better than the common pot- Feb. 18. stone, of which many temples are constructed. The quarry is four cosses to the eastward. The stone is what Mr. Kirwan calls Sienite in a slaty form, and consists of hornblende slate, with layers of white quartz, and a little felspar interposed. In some pieces these are occasionally wanting, and the plates of hornblende are connected only by fibres of the same nature crossing the interstices between plate and plate. In some places again, the plates are waved, somewhat like the layers of timber at a knot, and there the quantity of quartz and felspar generally exceeds that of the hornblende.

As the Bráhmans err in denying their former dependance on the Errors in the Jain, and endeavour as much as possible to conceal the former the Brahmans existence of such odious infidels; on the other side the Jain go and Jain. into the contrary extreme, and deny altogether the dependance of their Rájás on the kings of Vijaya-nagara, which from many inscriptions, and other circumstances, is quite indubitable. The Belalla family, who, till the time of Vishnu Verdana Ráya's conversion, were undoubtedly Jain, probably governed their dominions, like other Hindu princes, by chiefs paying tribute, and holding their lands by military tenure. We have seen that, when their sovereign changed his religion, these chiefs threw off their allegiance, and continued in an independent anarchy, till subjected by Buta Panda, and soon after by Hari-hara. The princes of the throne of Vijayanagara, although favourers of the Bráhmans who follow Vyása, did not venture to dispossess the Jain Rájás, but employed them as their vassals, both in the civil and military government of the country. When the government at Vijaya-nagara became weak under Sadásiva, and fell into utter contempt by the death of Ráma Ráya, the Jain Rájás again asserted their independence; and in the inscription here, dated in the year 1555, the Byra Devi no longer

Feb. 18.

CHAPTER acknowledges any superior. It was at this time that Sadásiva Náyaka of Killidi obtained a grant of Tulava from the king; and, taking advantage of the weakness of a female reign, he attacked the Jain without mercy. It must be observed, that the Jain are extremely obnoxious to the Sivabhactars, as they altogether deny the divinity of Iswara; but the Bráhmans who serve as priests (Pújáris) in his temples are favourites, although among the Sivabhactars they are not the order dedicated to the care of religin. In this part of the country the princes of Ikeri seem to have almost extirpated the Jain; but toward the south they met with a more obstinate resistance, and made no considerable conquests there, until the government of Sivuppa, who reigned from 1642 till 1670, and had the management of public affairs from about the year 1625. Even he was obliged to permit the Jain Rájás of the south to retain their authority as his vassals; and until the more vigorous government of Hyder they continued in power.

Feb. 19. Face of the country.

19th February.-Honawera being too far distant for two days journey with my cattle, I went a short stage of one coss and a half to Shiraly. The country, after ascending the little hill above Batuculla, is not steep; but much of the soil is very poor, in many places the Laterite being almost entirely naked. In some other places the soil is very good; and, although not level, a part of it has been formed into Betta land for the cultivation of rice; which confirms the account given by the people of Haryadiká, concerning the possibility of rendering all the hills of Canara arable. In general, however, they are considered as not fit for this purpose. At Shiraly is a river called Shiraly-tari, which comes from a temple on the Ghats that is named Bhimeswara. The tide comes up to Shiraly, a mile from the sea, and forces the traveller to swim his cattle. The banks at the ferry are rather stony; but round the village, there is much rice land, and good plantations of coco-nut trees. A great quantity of salt is made in the neighbourhood. Shiraly is a poor village, with three or four shops.

20th February .- I went three cosses to Beiluru, which signifies CHAPTER the cleared place, and is a common name in countries where the dialect of Karnata prevails. My tents were, however, pitched in a Feb. 20. very stately grove of the Calophyllum inophyllum, which in this part Puna, the of the country is much planted near the villages. It grows to a Inophyllum large size, especially in sandy places near the sea. The common lamp oil of the country is expressed from its seed, by means of a mill turned by oxen. It is here called Hoingay, the name by which above the Ghats the Robinia mitis is known. In Tulava and Malayala it is called Puna, by us commonly written Poon. I suspect that the Poon of the eastern islands is different.

Poon, or

From Shiraly to Beiluru the plain, between the sea and the low Appearance hills, varies in breadth from half a mile to a mile and a half. Its try, soil is in general good, and almost the whole of it is cultivated for rice; but few parts yield two crops annually. The sea-shore is skirted with groves of coco-nut palms, and the view is very beautiful. This plain is only watered by two small streams, the one of which is a branch of the Shiraly. Among the low hills are said to be, as usual, many narrow rice vallies. About three-quarters of a coss from Beiluru is Murodéswara, a temple standing on a lofty promontory that has been fortified, and at high water is insulated by a narrow channel. To the south of the promontory is a small bay sheltered by some rocks, which appear above the water, and afford protection to boats. Near this is a small village containing shops (Bazars). South-west from the promontory is a peaked island, which I suppose is what our seamen call Hog Island: the natives call it Jaliconda. In the offing from Murodéswara is a very large rock; and still farther west an island, which I suppose is what the seamen call Pigeon Island. It seems to be five or six leagues from the continent, and is pretty high, with a flat top. By the natives it is called Naytrany Guda, which last word signifies a hill. They say, that it has trees, with a small stream of fresh water, and good landing on its western side. Its caves are frequented by many wild

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CHAPTER XVI. pigeons, whence the European name is probably derived. It is frequented also by boats for coral, with which its shores abound; and they likewise supply all the neighbouring continent with quick lime.

Worship of Jetiga.

To this island many people also go to pray, offer coco-nuts, and sacrifice to a stone pillar called *Jetiga*, which represents a *Buta*, or male devil. As this spirit is supposed to destroy the boats of those who neglect him, he is chiefly worshipped by traders and fishermen. On the continent there is another pillar called *Jetiga*; but as this devil is less troublesome than the one on the island, he receives fewer marks of attention.

Face of the country.

At Beiluru the inhabitants, living in scattered houses unprotected by forts, suffered much in the Marattah invasion; and there is not remaining above one half of the people that would be requisite to cultivate the ground. Owing to this cause, a great part of the coco-nut palms have died. A good tree is reckoned to produce annually 50 nuts. The rice lands near the sea, contrary to the common rule in Malayala, are reckoned more productive than those inland; but the soil here near the sea is not so sandy as that to the south, and the beach is quite firm; whereas to the south it is very heavy. The roads here are in general good; but that is entirely owing to the nature of the country, no pains having been bestowed on them by the natives. Every now and then the traveller comes to a river, hill, or rock totally impracticable for a carriage of any kind, and very difficult even for cattle that are carrying back loads.

Feb. 21.

21st February.—I went four cosses to the south side of the Honawera lake, and encamped in a coco-nut grove close by the ferry, which is above a mile wide, and without previous notice it is impossible to procure a conveyance capable of transporting cattle. The country from Beiluru to Cassergoda, about two miles from the ferry, is one of the most barren that I ever saw. It consists of low hills of Laterite, which extend down to the sea, and are almost

destitute of soil. In some places a few stunted trees may be seen; CHAPTER but in general the rock is thinly scattered with tufts of grass, or of thorny plants. On the whole route there are only two narrow val- Feb. 21. lies. In these there are a few inhabitants, and a little good rice-land. On descending to Cassergoda the traveller enters a plain, which, after having been in the desert, looks well; but its soil is very poor, and it wants cultivators, especially to plant coco-nut palms, for which it is best fitted.

The lake is of great extent, and, like that at Kunda-pura, con- Lake of Ho tains many islands, some of which are cultivated. It reaches almost to the Ghats, and in the dry season is quite salt; but it receives many small streams, which during the rainy monsoon become torrents, and render the whole fresh. By the natives it is commonly called a river, but lake is a more proper term. The lake abounds with fish; but many more are taken in the sea, and, when salted, form a considerable article of commerce with the inland country. Each fishing-boat pays annually to government from four to six Rupees.

Garsopa is a district including all the lands on the south side of Garsopa. the lake, and part of those on the north. The chief town, of the same name, stood at the extremity of the lake on its south side. This is now in ruins, and ought to be distinguished from a fort of the same name above the Ghats, which is laid down by Major Rennell.

Honawera, or Onore, as we call it, was totally demolished by Honawera, or Tippoo after he had recovered it by the treaty of Mangalore. It was Onore. formerly a place of great commerce, and Hyder had established at it a dock for building ships of war. In the lake remain the wrecks of some which were sunk by our troops, after the fort was taken by assault. There is now a custom-house at the place, and some poor people have made offers of rebuilding the town if government would assist them. Five shops only have been rebuilt, and these are not in the situation of the former town. Boats now come from Goa and

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CHAPTER Raja-pura; and from merchants who live scattered near the bank of the lake, they purchase rice, pepper, coco-nuts, Betel-nuts, saltfish, &c.

Pirates.

The piratical boats from the Marattah coast are a great impediment to commerce; they hover especially round Pigeon Island, and have even the impudence to enter the rivers and inlets of the coast. Eight days ago they cut out from this place two boats; fifteen days ago one boat from Manky; and five days previous to that a fourth from Batuculla,

Fortified Island.

A little way north from the entrance into Honawera lake is Baswa Rasa Durga, called by us Fortified Island. Its works were erected by Sivuppa Náyaka of Ikeri, and it contains coco-nut palms and plantain trees, with abundance of fresh water. Boats can occasionally go to it in the south-west monsoon; I imagine that vessels might even then find shelter in the channel between it and the continent. It produces the best quality of Cavi, or reddle, which is used by the natives for painting their houses.

The country called Haiga, or Haira, formerly belonging to Bávana.

All the country, as far as Gaukarna inclusive, is called Haiga, and seems formerly to have been under the influence of Rávana, king of Lanca, or Ceylon. Tritchenopoly is said to have been the station of his most northern garrison on the eastern side of the peninsula. It is probable, that on the west side his dominions extended much farther. Although a king governing the Racshasa, or devils, he seems to have been a pious Hindu; and four temples, dedicated to Siva in Haiga, are said to have been erected by him. Their names are Mahaboléswara at Gaukarna; Murodéswara, which I passed yesterday; Shumbéswara, on the south side of the lake; and Daréswara, half a coss from Hulledy-pura. He also built Sujéswara, which is in Kankána.

Feb. 22. Appearance of the counury.

22d February.—I crossed the inlet or lake, and went two cosses to Hulledy-pura, where the Tahsildar of Honawera resides. The road leads over a plain of rice-ground. The soil is poor, and much intersected and spoiled by creeks containing salt-water; this,

however, might be easily excluded by dams. Hulledy-pura is an CHAPTER open town containing 352 houses, and is situated east from a considerable creek that runs through the plain. Its present name, Feb. 22. signifying turmeric-town, was given to it by Hyder; for its original appellation, Handy-pura, signifying hog-town, was an abomination to the Mussulman.

23d February.—I remained at Hulledy-pura, with a view of taking Feb. 23. an account of the agriculture of the country, as an example of that which prevails in Haiga. Is found most of the cultivators to be Bráhmans, cunning as foxes, and much alarmed concerning my intentions in questioning them on such subjects. Great reliance, therefore, cannot be placed on what they said, especially as their answers were very contradictory.

Most of the cultivated lands in Haiga are private property; but Tenures. the hills and forests belong to the government. Every man pays a certain Shistu, Caicagada, or land-tax, for the whole of his property in cumulo, and cultivates it in whatever manner he pleases. This prevents a traveller from being able to ascertain how far the tax is reasonable or oppressive. The proprietors are called Mulugaras, and are chiefly Bráhmans. Most of them cultivate their lands on their own account; but some let a part out to Gaynigaras, or renters; for Gayni signifies rent. Very few are encumbered with mortgages; the Bráhmans of Haiga, like most Hindus, being in many respects good economists.

Those who keep twenty ploughs are reckoned very wealthy; men Size of farms, in moderate circumstances have from four to six; but a very great and quantity of stock, number possess only one plough. The Bráhmans perform no labour with their own hands. One of them says, that he has four ploughs, with eight oxen, and keeps four male and four female servants. The extra expenses of harvest and weeding amount to 20 Morays of rough rice. - He sows 20 Morays on low land, and 2 Colagas on hill land, and has a coco-nut garden containing 200 trees.

CHAPTER XVI. Feb. 23. Allowance for slaves.

In the farms of the Bráhmans most of the labour is performed by slaves. These people get daily 1\frac{1}{2} Hany of rice: a woman receives 1 Hany. Each gets yearly  $2\frac{1}{2}$  Rupees worth of cloth, and they are allowed time to build a hut for themselves in the coco-nut garden. They have no other allowance, and out of this pittance must support their infants and aged people. The woman's share is nearly 15 bushels a year, worth rather less than 141 Rupees; to this if we add her allowance for clothes, she gets 163 Rupees a year, equal to 11. 16s.  $8\frac{1}{2}d$ . The man's allowance is  $20\frac{1}{2}$  bushels, or  $23\frac{3}{4}$  Rupees, or  $2l. 3s. 0\frac{1}{2}d.$ 

Wages of free servants.

A male free servant, hired by the day, gets 2 Hanies of rice. Both work from seven in the morning until five in the evening; but at noon they are allowed half an hour to eat some victuals that are dressed in the family as part of their allowance; and every cast can eat the food which a Bráhman has prepared.

Leases, rent,

The leases granted to tenants (Gaynigaras) are in general for and land-tax. from four to ten years. For each crop of rice they pay, for every Moray sown, 2 Morays of rice for land of the first quality; 1½ for middling land; and 1 Moray of rice for the worst land: out of this the proprietor pays the taxes. The proprietor ought to find security for the payment of the land-tax. If he does not, a revenue officer is sent to superintend the harvest, to sell the produce, and to deduct the revenue from the proceeds. This is a miserable system, and one of a true Hindustany invention; as the person sent to collect the harvest received an allowance from the farmer; and thus one of the idle tatterdemalions that formed part of the clamorous suite of some great man had for a while the cravings of his appetite satisfied. If a man has given security, and fails in payment, on the third day after the term the security is called upon, and confined until the revenue is paid. The estate is never sold on account of arrears; and where the crop has failed from bad seasons, or other unavoidable causes, a deduction from the rent is generally allowed.

Estates that pay 20 Pagodas as land-tax, sell for about 100 Pa- CHAPTER godas. The same quantity of land may be mortgaged for 50 Pagodas. The lender gets the whole profits of the estate for interest; but, Feb. 23. whenever the borrower pleases to repay the debt, he may resume estates. his land.

Both these circumstances, of estates being saleable, and capable of being let on mortgage, show, that they are of more value to the proprietors than what might be esteemed as an adequate reward for the labour and expense of cultivation. This is also evinced by the number of disputes that happen concerning succession. These, in the first instance, are determined by the Tahsildar, with the assistance of a Panchaity, or assembly of respectable neighbours. The decision is sent to the collector, who, as he sees reason, either confirms it finally, or investigates farther into the matter. Here a man's sons generally divide the estate equally among them; but the eldest manages the whole, and they live all together. When it comes to be divided among a number of cousins, owing to more than one brother of a family having children, the estate is commonly let, and the rent divided.

I measured three fields. The first containing 76,280 square feet, Quantity of was rated in the public accompts at  $3\frac{1}{2}$  Morays sowing, which would seed required for an acre. make the seed at the rate of  $2, \frac{447}{1000}$  bushels an acre. The next plot measured 10,135 square feet, and was said to sow 8 Hanies, which is at the rate of 1,4 bushel an acre. The third plot measured 21,356 square feet, and was said to require 20 Hanies of seed, which is at the rate of 1, 668 bushel an acre. These agree so ill, that much dependance cannot be placed on the estimate; but, having no better grounds to proceed upon, I must take the average, or  $2\frac{194}{1000}$  bushel as the seed required for one acre. This is nearly the same quantity with that used in the southern parts of Malabar; but much greater than would appear to be the case in Mr. Ravenshaw's district.

In this neighbourhood there are three kinds of rice-ground; Divisions of Mackey, Bylu, and Caru. The first is the higher ground, which rice-grounds.

XVI. Feb. 23.

CHAPTER gives only one crop in the year. The Bylu ground gives either two crops of rice, or one of rice and one of pulse. The Caru in the rainy season is so deeply inundated, that it cannot then be cultivated; and in the dry season gives one crop. The crop of rice produced in the rains is called Catica; that which grows in the dry season is called Sughi.

Quality and price of different rices.

In the accompanying Table, several particulars, relative to the cultivation of rice are detailed. The rice raised on Mackey ground is of a very inferior quality to that raised on the lower fields, and is that which is given to slaves and day labourers. Its average price is 12 Pagodas a Corge, or 211 pence a bushel; while that of the other is 20 Pagodas a Corge, or 35½ pence a bushel.

Table explaining the cultivation of Rice at Hulledy-pura.

Kinds.	each is fitted.	Crop in	which sch is	Produce after deducting Seed.  Of one Moray sown. Of one Acre.					
		each is sown,		Good crop.	Middling crop.	Poor crop.	Good crop.	Middling crop.	Роог сгор.
	Mackey Bylu		2 1 2 2 4 5 4 4	Morays 6 6 10 10 12 9	Morays 4 4 8 8 9 6	Morays 2 2 8 8 8 9	Bushels $19\frac{3}{4}$ $19\frac{3}{4}$ $33$ $33$ $39\frac{1}{2}$ $29\frac{1}{2}$	Bushels 13½ 13½ 26¼ 26¼ 29½ 19¾	Bushels 6½ 6½ 13½ 13½ 13½ 13½ 16¾ 16¾

On Mackie land.

The only mode of cultivation used here for Mackey land is that called Mola, or sprouted-seed. In the month preceding, and that following the summer solstice, when the rains commence, the field is ploughed five times in the course of fifteen days, and all the while the water is confined. Before the last ploughing it is manured with dung from the cow-house. After the ploughings the field is smoothed with the Noli-haligay, or plank drawn by oxen (Plate XXII. Fig. 58.). It is then harrowed with the Haligay,

which is the same with the Halivay of Seringapatam (Plate IV. CHAPTER Fig. 9.); and at the same time roots and weeds are pulled out by the hand. The water is then allowed to run off, and the prepared Feb. 23. seed is sown broad-cast. If in three days any rain fall, the seed is lost, and the field must be sown again. For a month the water is allowed to run off as fast as it falls, after which it is confined on the rice until the crop is ripe. At the end of one moon and a half the weeds are removed by the hand.

The straw is cut with the grain. That intended for seed is imme- Management diately thrashed, and dried seven days in the sun. That intended for eating is put in heaps for eight days, and defended from the rain by thatch. The grain is then either beaten off with a stick, or trodden by oxen; and for three days is dried in the sun. The whole is preserved in Morays or straw bags, and kept in the house. till it can be boiled, and cleaned from the husks; for the farmer here never sells rough rice (Paddy). All the grain that is cut in the rainy season is boiled, in order to facilitate the separation of the husks.

of the grain.

The Catica crop on Bylu land is mostly sown sprouted-seed: a Catica crop very little only is transplanted. The manner of preparing the seed Bulu land. here is, to steep the straw bag containing it in water for an hour twice a day. In the intervals it is placed on a flat stone which stands in the house, and it is pressed down by another. The largegrained seeds require three days of this treatment, and are sown on the fourth day. The small-grained seeds are steeped two days, and sown on the third. For the Catica crop on Bylu land the five ploughings are given at the same season as for that on Mackey land. After the fifth ploughing the field in the course of five days is manured, and ploughed again twice, having all the while had the water confined on it. The mud is then smoothed with the rake drawn by oxen; the water is let off, and the prepared seed is sown broadcast. It is managed afterwards exactly like the crop on Mackie land; and, as it ripens toward the end of the rainy season, the straw

XVI. Feb. 23. Sughi crop of

rice on Bylu

land.

CHAPTER is in general well preserved. The rice however, to enable the husks XVI. to be easily removed, must be always boiled.

The Sughi crop on Bylu land is entirely sown sprouted-seed. In the two months following the autumnal equinox, the field is ploughed eight times, then manured with cow-house dung, and ploughed a ninth time. It is then smoothed with the rake drawn by oxen, having been all the while inundated. The water is then drawn off by an instrument named Cainully (Plate XXV. Fig. 70.), which is wrought by a man like a rake. Small furrows are then made in the mud, to allow the water to drain off thoroughly, which is done by a small wooden instrument named Shirula (Plate XXV. Fig. 69.). In the month preceding the winter solstice the seed is sown. On the ninth day a little water is given; and, as the rice grows, the quantity is gradually increased. Till the end of the first month, the rain water in general is not expended; afterwards, by means of the machine called Yatam, the fields are supplied from small reservoirs and wells, or still more commonly from rivulets or springs, the water of which is raised by dams, and spread over the fields. These dams are very simple, consisting of earth and the branches of trees, with a few stones intermixed. The government in general is at the expense of making the reservoirs and dams.

Cultivation of rice on Caru land.

In the rainy season the Caru land is covered with water to the depth of from three to six feet; and on that account cannot be then cultivated. Afterwards it is cultivated exactly in the same manner as the Bylu land for the Sughi crop; and, although it yields only one crop in the year, the produce is not greater.

Cultivation of dry grains on Bylu land.

Upon some of the Bylu land, where there is not a supply of water for two crops of rice, a crop of some of the dry grains is taken in the Sughi season. The quantity of seed for all the kinds is the same, 2 Colagas for a Moray land, or  $0, \frac{2\cdot 2}{1000}$  bushel an acre.

## Of the grains cultivated,

Ellu, or Sesamum produces 10 Colagas, or 1, 463 bushel an acre. Udu, Phaseolus minimoo R: produces 12 Colagas, or 1, 755 bushel an acre. Hessaru Bily (white) Phaseolus mungo, produces 14 Colagas, or 2, 047 bushels an acre. Pachy (green) produces 10 Colagas, or 1,463 bushel an acre.



For all these, the ground is ploughed five times in the month which precedes the shortest day; but the Hessaru is sown fifteen days later than the Ellu, and the Udu fifteen days later than the Hessaru. Before the last ploughing, the field is manured with ashes. The seed is sown broad-cast, and covered with the rake drawn by oxen. A month after seed time, the weeds are removed by the hand. Cattle will eat the straw of all the three pulses, but it is reckoned a worse fodder than the straw of rice.

Sugar-cane is raised on Mackey land; but four years must inter- Sugar-cane. vene between every two crops; and for the first two years after cane, the rice does not thrive. The kind of cane used here is called Bily-cabo, which above the Ghats is called Mara-cabo. Inland they cultivate the Cari-cabo, which above the Ghats is called Puttaputty. In the month preceding the vernal equinox, the field is dug to the depth of ten inches with the hoe called Cutari. It is then ploughed five times, and smoothed with the rake drawn by oxen. Channels for conveying the water are then made, parallel to each other, and at the distance of three cubits. They are about nine inches wide, as much deep, and raised a little above the surface, the field being level. The intermediate beds are formed into ridges perpendicular to the channels, and resembling those of a potatoe field when it has been horse-hoed. The field is then covered with bushes, grass, dry cow-dung, and especially with dried parasitical plants, such as Epidendra, Limodora, &c. and the whole of these are burned to ashes as a manure. On the third day after this the canes intended for planting are cut into pieces, each containing three joints, and these are soaked in water for two days. Then in each furrow between two ridges are placed longitudinally two rows of these cuttings. Each

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CHAPTER piece leaves an interval of four inches between it and the next piece of the same row. The rows are placed near the bottom of the furrows, and are slightly covered with earth; and the furrows arc then filled with water. All this must be performed before the new year commences at the equinox. Next day the furrows are again watered, and this is repeated on the eighth day, and afterwards once every four days. Two months after planting the field is weeded, and the ridges are repaired with a small hoe called Halucatay. The field is then manured with ashes, and with mud taken out of places where water lies deep. After this the watering is repeated once in four days till the commencement of the rainy season, when the ridges are thrown down, and new ones formed at the roots of each row of canes. In nine months these ripen without farther trouble. The water is in general raised, by the machine called Yatam, from wells in which it is found at the depth of from three to twelve feet from the surface. Three men are required to water and cultivate one Moray land, of which 1, 79 are equal to an acre; but at the time they are so employed the farm requires little other work. The canes are very small, being from 2 to 21/2 cubits long, and about the thickness of a man's thumb. The juice is expressed by a mill, which consists of three cylinders moved by a perpetual screw. The force is applied to the centre cylinder by two capstan bars, wrought by six or eight men; and the whole machine is extremely rude. A Moray land produces 10 Maunds of Jagory, worth in all 5 Pagodas. This is at the rate of  $4,\frac{3.3}{10.0}$  hundred-weight an acre, worth about 31. 10s. My informants seem to have greatly under-rated the quantity of Jagory.

In the very satisfactory answers which Mr. Read, the collector, has been so good as to send to my queries, he observes as follows: "As the land on which the sugar-cane is reared is all rice-ground, its cultivation might be increased to a very considerable extent; but not without lessening the quantity of rice, because, the market for sugar being neither so extensive nor so profitable, by any means, as that for rice, few farmers would be at the expense of levelling CHAPTER and preparing ground for sugar-cane only. They, probably, even now plant as much of their grounds with the sugar-cane as they Feb. 23. think they can readily sell; but I do not think this cultivation will be ever much increased, because the late reduction in the export duties on rice, together with the increased demand for that article, make its cultivation of still more importance to the farmer than it was heretofore."

In this Gramam of Hulledy-pura there are 144 Mulagaras, or proprietors, whose estates in the revenue accompts are said to amount to 14433 Morays sowing, or 8053 acres. They have besides, by actual enumeration, 7499 coco-nut palms, and 226 Arecas, young and old. The Shistu, or land-tax, is  $1084\frac{5\frac{1}{2}}{10}$  Bahadury Pagodas, or 4361, 16s, 11d,

The land called here Betta, or Hackelu, like the Parum of Ma- Betta, or hilllabar, is formed into terraces; but on these rice is not cultivated. The only crops that it produces are Sesamum and Udu (Phaseolus minimoo Roxb:). On this kind of ground, after the soil has been ploughed three times, and manured with ashes, these grains are sown broad-cast in the second month after the summer solstice. The seed is covered with a hoe called Ella-kudali. The produce is much the same as on Bylu land; but there are no means by which the extent of Betta ground can be estimated.

In the hilly parts of the country, many people of a Marattah ex- Cumri cultitraction use the Cumri, or Cotu-cadu cultivation. In the first season, after burning the woods, they sow Ragy (Cynosurus), Tovary (Cytisus cajan), and Harulu (Ricinus). Next year they have from the same ground a crop of Shamay (Panicum miliare Lamarck.). These hills are not private property, and pay no land-tax; but those who sow them pay, for the right of cultivation, a poll-tax of half a Pageda, or nearly 4s. On account of poverty, many of them at present are exempted from this tax.

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Implements and cattle.

I could here procure no satisfactory account of the garden cultivation, and shall not state what was said on the subject; but shall defer describing the gardens of *Haiga* until another opportunity.

The only cattle in Haiga are buffaloes and oxen, about an equal number of each of which are used in the plough. This implement is here of the same form as that in the neighbourhood of Seringapatam. In Haiga they have no carts. Many of the cattle are imported from the countries adjacent to the Ghats near Nagara, and even these are of the poorest kind, nor are they larger than those of Malayala or Tulava. In the dry season, although fed with hay and straw, they are scarcely able to crawl. In the rainy season they grow fat, and strong, on the natural grass of the hills. Working oxen get the powder which separates from rice while it is beaten; buffaloes get the cake which is left after squeezing the oil from coco-nut kernels. The natives are ignorant that the cake which is formed in the same manner from Sesamum seed could be given to their cattle. Milk, and butter, or Ghee, are very dear, owing to the small number of cows, and their wretched condition.

Manure.

At night the cattle in every part of Haiga are kept in the house, where they are daily well littered with fresh materials. The litter and dung are carefully reserved, as a manure for rice-land; and the manure that is made from each kind of litter is kept in a separate dunghill. In the two months preceding, and in that following the winter solstice, the litter is dry grass, and the manure formed with it is called Caradada Gobra. Dry leaves of every kind of tree, except those that are prickly, and those of the Govay (Goa) or Anacardium occidentale Lin: are used as litter in the three following months, and form a manure which is called Daryghena Gobra. During the six remaining months, mostly of wet weather, the fresh leaves of trees are used for litter, and make a dung called Hudi Gobra, which is esteemed the best. The ashes of the family are kept in a separate pit, and are applied to different purposes. The

cakes made of cow-dung are little used as fewel in this part of the CHAPTER country; but, to increase the quantity of manure, the women and boys follow the cattle while at pasture, and pick up the dung.

Feb. 23.

The Seer weight at Hulledy-pura is the same with that of Man-Weights. galore. It ought to weigh 24 Bombay Rupees; but, these being a scarce article with the shopkeepers, in their stead Dubs, or Dudus, are commonly used, and are somewhat heavier.

The Maund for the common articles in the

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market (Bazar)=40 Seers, or 24\frac{15}{100} lb.

The Maund of pepper - = 42 do. or 26\frac{9}{100} lb.

of Betel-nut - = 45\frac{1}{2} do. or 27\frac{9}{100} lb.

of dry coco-nut kernels = 48 do. or 29\frac{4}{100} lb.

of Jagory - = 44 do. or 26\frac{9}{100} lb.
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There are in use here two kinds of grain measure; one for the Dry-meafarmers, and one for the merchants. The basis of the farmer's sure, measure is the Hany, containing  $87\frac{3}{4}$  cubical inches.

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2 Hanies = 1 Colaga - - - = Bushel 0,08163
20 Colagas = 1 Moray or Mudy for common use = Bushel 1,632
22½ Colagas = 1 Moray for sale - - = Bushel 1,8136
15 Colagas = 1 Moray for seed - - = Bushel 1,224
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The basis of the measure by which merchants deal is the Sida of  $32\frac{1}{2}$  cubical inches.

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6 Sidas = 1 Colaga - Bushel 0, \frac{0.9 \cdot 0.7}{100000}
20 Colagas = 1 Moray, or Mudi = Bushel 1, \frac{9.14}{10000}
30 Morays = 1 Corge - Bushel 54, \frac{4.19}{10000}
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The market (Bazar) Mudy, or Moray, and that of the farmers for sale, ought to be the same; but they differ  $\frac{2}{1000}$  parts of a bushel. Any exact coincidence, however, cannot be expected from the rude implements which the Hindus employ in forming their measures. The different quantities that are called by the same denomination, when used for different purposes, seem to have been contrived

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Money.

CHAPTER with a view of increasing the difficulty of the government in acquiring a knowledge of the real state of the country.

> The common currency here consists of Ikeri, Sultany, and Bahadury Varahas, Hoons, or Pagodas; Surat and Madras Rupees, which are considered as of equal value, and pass for one quarter of a Pagoda; Silver Fanams, of the same kind as are current in Malabar, but here five and a half are only equal to one Rupee; and the Any Dudu, or elephant Dubs, coined by Tippoo, ten of which pass for one Fanam. The revenue is collected in a much greater variety of coins, according to a rate fixed by the collector, which private people also have adopted in their dealings; in forming it, therefore, due regard to justice has been observed.

Commerce.

Having assembled the principal traders from the neighbourhood, they said, that in the government of Hyder the trade of Honawera was very considerable.

Pepper.

The Company had established a factory, where they annually procured from above the Ghats about 750 Candies (520 lb.) of pepper, and 150 Candies the produce of the low country. The greater part of the pepper from above the Ghats was sold directly by Hyder. The chief of the factory contracted with individuals for the produce of Billighy, and of the low country, and advanced sometimes one-half, and at others the whole of the price, which varied from 110 to 120 Rupees a Candy of 520 lb. The merchants again began to make advances to the cultivators in the month after the autumnal equinox, which is about four months before crop season. These advances were always less in amount than what the merchant received from the Company; and the use of the balance, and two Rupees on each Candy, are alleged to have been all the profit which he received. The advances were not made to individuals; but the merchant gave a certain sum into the hands of some respectable Gauda, or chief of a village, who contracted to deliver a certain quantity of pepper at Honawera, at two Rupees a Candy less than the

Company's price. What profits these Gaudas had, the merchants do CHAPTER not know. There were no export duties; and nobody, except the Company, exported pepper.

Hyder sold to the Company the whole of the sandal wood. None Sandal-wood. of it is produced below the Ghats; and the quantity then brought annually to Honawera was from two to three hundred Candies of 600 lb.

No cardamoms ever came this way.

Cardamoms.

All the Betel-nut exported from Honawera was the produce of Betel-nut, or the low country between Batuculla and Mirzee, and amounted an- Areca. nually to 1000 Candies of 560 lb. worth 10,000 Pagodas (40341, 19s. 7d.): of this the Company took a considerable quantity, both raw and boiled; and, for whatever they wanted, they had always a preference.

The trade in coco-nuts, both whole, and in the state called Copra, Coco-nuts. or dried kernels, was in the hands of individuals. The value annually exported was about 12,000 Rupees (1206 l. 1s.  $1\frac{1}{2}d$ .). Owing to the great number of inhabitants, rice was then imported; at present it is the chief article of export. There never were in this country any manufactures. The oppressions of the late Sultan soon destroyed the whole trade; and the merchants are now just beginning to appear from their lurking-places, or to return from the countries to which they had fled. The exports at present, besides rice, are a little pepper, Betel-nut, and coco-nut; which are purchased by boats from Goa, Bombay, and Raja-pura. The Marattah pirates are a great obstacle to the inhabitants building boats for the exportation of goods.

The present price of staple articles here is:

Rice for slaves	per Corg	ge Pago	das -	13
coarse	-	-	-	15
fine	-	-	-	$22\frac{1}{2}$
Betel-nut boile	d, per Ca	ndy	-	15

## A JOURNEY FROM MADRAS THROUGH

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Betel-nut raw per Candy, Pagodas	-	11
Coco-nut Copra	-	10
whole per 1000 -	-	6
Black-pepper, per Candy -	-	50
Jagory of sugar-cane, Maunds 21	-	1

Feb. 24.
Appearance
of the coun-

24th February.-I went a long journey, called four cosses, and encamped on the south side of a river opposite to Mirzee. About two cosses from Hulledy-pura, I came to a town named Cumty. It seems to have been formerly a place of some note. Its lanes are straight, and fenced with stone walls, and it has many coco-nut gardens. Twice it had the misfortune of having Tippoo's army encamped in its vicinity; and on both occasions it was burned down by some of the irregulars. On its south side is a plain, intersected by a salt-water creek, which allows much salt to be made. The soil of the plain, which extends all the way from Hulledy-pura, is very sandy. For a coss north from Cumty, the ground is high, with very little cultivation; but a great part of it seems to be fit for being formed into Mackey, or at least into Betta land. Between this and the river is a very fine plain, called Hegada, from a small town near which I encamped. The low lands here are subject to being inundated by the swelling of the river, which frequently spoils the Catica crop of rice when the farmers attempt to cultivate it. The appearance of the farm-houses at Hegada denotes that the inhabitants are in a much more comfortable situation than is usual in India. The river is called Tari-holay, and abounds with fine oysters. At this place, which is three cosses from the sea, it is at this season about 600 yards wide. The tide and salt-water go up about three cosses farther. Its northern bank is high, and was formerly occupied by a fort and town called Midijay, corrupted by the Mussulmans into Mirzee, Merzee, and Merjawn. This place suffered much in a siege which it stood against Hyder; and in the oppressive government of his son it was entirely deserted. The river formed the northern

boundary of the dominions of a Jain family, who resided at Cumty, and possessed the country as far south as Honawera.

CHAPTER

There being in this neighbourhood many palm gardens, I assembled the cultivators, and obtained from them the following account:

In this part of the country the sandy downs near the sea are not Coco-nut. much esteemed for the cultivation of the coco-nut. Here the farmers prefer the banks of salt-water inlets; and near these the rising grounds are generally planted, and the houses are built in the gardens. About towns, many gardens are enclosed with stone walls; in villages, the proprietors are contented with fences of earth, like those in Malabar. Once in two years the whole garden is dug, and fresh earth at the same time is spread throughout, by the industrious, to the depth of two inches; but lazy people allow only a little to the roots of each tree. The garden gets no other manure, except some salt to the young seedlings when these are transplanted. For six months in the year they must be watered once in four days. A young tree, fit for transplanting, costs two Dubs (about a penny), and is set in place of an old one which has died; so that the garden is never suffered to decay. In a good soil, the trees when ten years old begin to produce fruit, but in bad soils they are much later. Common reckoning says, that a coco-nut palm lives 100 years; but some die at 20, and many at all intermediate ages. At all times plantains and Yams (Dioscorea) are raised in the coco-nut gardens. Rich people never draw juice from their coco-nut trees, except in one year when they are young. For some years before the young palms can bring the fruit to maturity, they produce flowers; but, by extracting juice for one year, their coming to perfection is hastened. If any disease happen to the tree, rich men, to give relief to the sickly plant, do not extract juice, as is usual in some places, but with a sharp iron they bore a hole into the pith above the diseased part. Poor people, not being able to raise money to pay the wages of their workmen, give them

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annually a certain number of trees for extracting juice, with which they can procure a daily subsistence. This compels the poor man, once in four or five years, to take juice from his trees. Besides, although this practice soon kills the tree, it gives much more immediate profit, especially in poor soils. In good soils, the nuts are of equal value with the juice; as a good tree in such a situation gives on an average, 80 full grown nuts, worth 25 Rupees a thousand; and 100 trees in such a soil, good and bad, young and old, produce 3000 nuts, which is at the rate of three quarters of a Rupee for each. In an indifferent soil the same number of trees produce only 1000 nuts, which is only at the rate of a quarter of a Rupee for each; but the coco-nut trees, good and bad, produce each a Rupee worth of juice, one-half of which goes to the extractor, and one-half is clear profit to the proprietor. One man can collect the juice of forty trees, and his share of the produce, being 20 Rupees (21. Os.  $3\frac{1}{4}d_1$ ), is reckoned a sufficient maintenance for a man, his wife and children; for the people who extract the juice of palms are of a very low cast.

Betel-nut, or Areca.

The Betel-nut gardens are cultivated, at a distance from the banks of rivers, in the upper ends of narrow vallies, which contain Bylu land. The best soil is red, and contains shining particles, which I take to be mica. This soil is called Cagadala. Next in value to this is Gujiny, which is a black loose earth. The worst soil is called Betta, and is a hard earth composed of decayed or broken Laterite. The Cagadala is found in the bottoms of the vallies at their upper end, and is watered from a small reservoir, whence the water sometimes runs off by sluices, and sometimes is raised into the channels by the machine called Yatam. The Gujiny is found very low and level, where the hills forming the valley begin to recede a little from each other. In such land the water at all seasons of the year stands in the ditches, but is of a quality pernicious to the Areca, which must be watered from springs or rivulets. The Betta land forms the upper parts of the declivities of the

hills, and must be irrigated, by the hand, with water drawn from CHAPTER wells that are dug in the valley below. The garden must be fenced with a wall of stone or mud, on the upper side of which a deep Feb. 24. drain must be formed to carry off the water, which during the rainy season descends from the hills in torrents. In this respect the Cagadala requires most trouble, and its watering is more expensive than that of the Gujiny; yet, owing to its being more productive, it is more profitable. The produce of the Betta land is still smaller than that of the Gujiny, and its cultivation is attended with much more trouble; yet it is worth while to plant the whole that is near a man's house; for to a certain extent the family can perform the watering without great inconvenience.

Immediately before the winter solstice, the nuts for seed are cut, and are exposed three days to the sun, and three nights to the dew. In the mean time, a plot of Cagadala soil is dug for a seed-bed. In this the seeds are placed at four inches distance, and are half immersed in the ground. They are then covered with dung; and, that having been covered with straw, they are watered every other day until the second month after the vernal equinox. The rainy season then commences; and a drain must be dug to prevent the water from lying upon the bed. In the first or second month after the autumnal equinox, another piece of ground is hoed, and in this are placed the nuts which are then said to be Mola, as they have shoots sprouting from them a cubit long. The nuts in this bed are placed at about the distance of a foot from each other, and are buried an inch under ground. Every other day, during the dry season, they are well manured and watered. In this bed they remain fifteen months; and in the month preceding the winter solstice, they are manured with dung made from dry grass-litter; while in the month following the vernal equinox, the manure, which they receive, is that formed of dry leaves. During the month before and the month after the autumnal equinox, the young palms are (Sussi) fit for planting.

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The garden having been properly inclosed, and secured from the torrents of the rainy season; and tanks, wells, or canals for supplying it with water, having been formed; the Cagadala soil is levelled into terraces like rice-ground, and formed into beds seven cubits wide. Between every two beds is a deep channel, to carry off the rain water; and in the middle of each is a small channel to convey the water that is to refresh the palms; and which, as it runs along, a man throws out on their roots with a spatha, that has fallen from the trees. On each side of the bed is planted a row of the Arecas, distant from each other five cubits, and between every two Arecas is set a young plantain tree. The garden is then manured with dung made from fresh leaves, and ever afterwards during the dry season it must be watered once in two days. For the first four years, it must be dug over in the month preceding the autumnal equinox, and at three different seasons must be manured with the three different kinds of manure. Afterwards, it is manured once a year only, in the second month after the autumnal equinox; and it is once in two years only that it requires to be dug. The Betelnut is improved by the plantain trees, which keep the earth cool and moist; and therefore these are always continued, except where it is intended to train up the Betel-leaf vine upon the Areca, which is the manner wherein that plant is here cultivated. In this case, in the tenth year, the plantain trees are removed; and in the second month after midsummer, five cuttings of the Betel-vine, each containing three joints, are placed round every Betel-palm, while one of their ends is buried in the ground. They are then manured with the leaves of the Nelli (Phyllanthus emblica). Immediately after the autumnal equinox, the ground round the young vines must be hoed, and manured with dung made from fresh leaves. Ever afterwards, it must be manured three times a year. As the vines grow, they must be tied up to the palms. In eighteen months they begin to produce leaves fit for sale; in the third year they are full sized; two years they continue to give a full crop; in the

Betel-leaf, or Piper Betle. following year the crop is bad, and then the vines are lifted, and CHAPTER new ones are planted in their stead. The Betel-palm, or Areca, in Cagadala soil begins to ripen fruit in ten years, is in full crop at Feb. 24. fifteen, and continues in perfection for thirty years. They then die; and as the old ones decay, new ones are planted. Each tree yields two bunches, which ripen at different times between the autumnal equinox and winter solstice. The produce of a hundred trees, young and old, is reckoned five Maunds of boiled nut, or thirty-five Bazar Colagas by measure of nuts in the husk, as they come from the tree. The five Maunds are one fourth of a Candy, or 140 lb. The present price of boiled Betel-nut is fifteen Pagodas; each tree therefore, young and old, produces to the value of  $3\frac{6.26}{10.00}$  pence, or a hundred trees produce fifteen Rupees. The cultivators boil the Betel-nut.

In Gujiny ground, in order to remove the water off the soil, the drains between the beds must be one cubit and a half deep. It is irrigated once in seven days only, from the same sources that supply the Bylu rice-ground. In this soil, plantains and Betel-leaf grow in the same manner as in Cagadala gardens. A hundred trees, young and old, on Gujiny ground, are reckoned to produce four Maunds of boiled Betel-nut, worth twelve Rupees.

On the Betta land no drains nor channels are required; but round the root of every palm a small bank is formed to confine the water, which is given once in two days. In such gardens, plantains, but not Betel-leaf, are reared. The trees in this soil do not come into full fruit till they are twenty years of age, and a hundred pro duce only two Maunds and a half of boiled nut, worth seven Rupees and a half. A man and his wife can manage a garden of 500 trees; some of which will grow on Betta, and a proportion on either Cagadala, or Gujiny, or on both. They require no assistance at crop season; but, unless the keeper be an active man, he will require some help when the garden is hoed. The expense of first planting a garden is commonly reckoned 100 Rupees for every 500 trees; but in

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CHAPTER level situations it will be much less, and in steep places much more. Some people go to 50 Pagodas for 100 trees, or 2 Rupees for each. No value is put upon the future expense, which is merely that of the keeper and his wife, who get 21 Hanies of coarse rice daily, and 4 Rupees a year for clothing; that is to say, 374 bushels of rice, worth 32 8 2 Rupees, and 4 Rupees in money; or in all 36 Rupees 13 Anas (3l. 14s. 3d.). It must be observed, however, that after the first year the plantains are adequate to the defraying of this expense, which is therefore not charged in the accompt. The farmer has therefore, on an average, 50 Rupees a year, for an original advance of from one to two hundred; but out of this must be deducted the revenue. His profit is much larger where he has a sale for Betel-leaf. It appears to me, that the gardens here are formed with more care, and at a greater expense, than in Malabar, where a colony of Haiga Bráhmans would be highly beneficial.

Feb. 25. Face of the country.

25th February. - In the morning, having crossed the river, I took a circle of about six miles into the country east from Mirzee, in order to see some forests that spontaneously produce black pepper. The whole of the country through which I passed was hilly; but I met with several narrow vallies well watered, though not fully cultivated, owing to a want of inhabitants. Many of the hills were so barren, steep, and rocky, that I was soon forced to dismount from my horse, and proceed on foot. These hills consist entirely of naked Laterite. Other hills, which were those I sought after, were covered with stately forests.

Pepper growing spontaneously.

The pepper-plant (Piper nigrum) seems to grow spontaneously on the sides of all the narrow vallies in the interior of Haiga, where the soil is so rich and moist as to produce lofty trees close to each other, by which a constant coolness is retained. In such places the pepper-vine runs along the ground and the roots of bushes, and propagates itself entirely by striking its roots into the soil, and then again sending out new shoots. The natives say, that without assistance it cannot ascend a tree; and that, unless it is exposed in

such a situation to sun and air, it never produces flowers. In order CHAPTER to procure fruit from a hill which spontaneously produces the pepper-vine, the proprietor cuts all the underwoo'd and bushes, and Feb. 25. leaves only the large trees, and a number of the young ones sufficient to exclude the violence of sun, but to allow of a free circulation of air. Four cubits from tree to tree is reckoned a proper distance. The ends of the vines, which were lying on the ground, are then tied up to the nearest trees. Any kind of tree answers the purpose; but those of about eight inches or a foot in diameter are preferred, as it is easy to climb such for the purpose of gathering the pepper. A quantity of leaves are then placed round the root of the vine, to rot, and to serve as a manure. In the course of the year the vine, so far as it has been tied, strikes its roots into the bark of the tree; but the shoots above that, hang down. Twice a year afterwards these are tied up, and strike root, till they spread over all the large branches of the tree. In places where no vines have naturally sprung, the owner, after having dug a small spot round the tree to loosen the earth, propagates them by planting slips near the roots of the trees on which he wishes them to climb. The early part of the rainy season is the time proper for this operation. In five years, after having been managed in this manner, a hill begins to produce fruit, and in eight years is in full bearing. The vines live about thirty years; when others, that are found creeping on the ground in their natural state, are tied up in their stead; or, where these happen to be wanting, shoots or cuttings are planted near the trees. There is no difference in the quality between the pepper springing spontaneously from the seed, and that growing from cuttings; nor is the pepper growing in gardens either better or worse than that growing on a hill, managed as I am now describing. These hills producing pepper require no trouble, but the tying up of the plants, keeping the forest clear of underwood, and collecting the pepper. They are



CHAPTER manured in the following manner. In the month succeeding the vernal equinox, a hole three or four inches above the ground is made into the trunk of any very large tree that is situated near the top of the hill. Into this are put some burning coals, and, for an hour, a fire is kept up with fresh fewel. After this, the tree will burn inwardly for two days, and is then killed. A large insect immediately takes possession of the trunk, and works its nest into the wood. In the next rainy season, the whole falls down into a rotten dust, which the rain washes away, so as to disperse it over the face of the hill below. The crop season commences about the winter solstice, and it continues rather more than two months. A man can in one day gather three Colagas, farmer's measure, or almost one peck of the amenta. These are dried three days in the sun, and then are rubbed with the feet on a piece of smooth ground, to separate the grains; which, having been cleared from the husks and foot-stalks, are again dried two days in the sun, and tied up for sale in straw bags or Morays. Seventy-five Colagas of amenta are required to make one Bazar Moray (bushel 1 to ) of dry pepper, which weighs 3 Maunds (about 84 lb.); so that a man daily collects about  $3\frac{15}{23}$  lb. of dry pepper. These hills were formerly valued; and, according to their extent, each paid as a land-tax so many Maunds of pepper, the Maund containing 60 Seers. The same valuation is now continued; but the Maund is reduced to 40 Seers, and converted into money, at the rate of a Pagoda, which is in favour of the proprietor. Still one half of these hills is waste, owing to a want of hands to cultivate them; and on that account three-fourths of the revenue are remitted to the proprietors, who are also favoured by having all the rice-ground lying among these hills free from tax. This has been given them, on a supposition that its produce was only adequate to feed the people who are employed in cultivating the pepper.

Produce of the forests. Teak.

So far as I went, no Teak grows in these forests; but I am told, that

it is procurable farther inland. The landlords (Malugaras) pretend, CHAPTER that all the timber trees are their property, but that none of them are saleable.

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The wild nutmeg and Cassia are very common. As the nutmegs Nutmeg. ripen, the monkies always eat up the outer rind, and mace; so that I could not procure one in a perfect state. They are collected from the ground, after having been peeled by the monkies, and are sold by some poor people to the shopkeepers; but they have little flavour; and the demand for them is very small. Although they are, doubtless, of a distinct species from the nutmeg of Amboyna, it is probable, that by proper cultivation and manure their quality might be greatly improved; and that, in the situations where they now grow spontaneously, they might be reared as the supportersof the pepper vine; which would produce copiously, and of an excellent quality, were the same pains bestowed on it here as is done in the gardens above the Ghats, where by far the best pepper grows.

The Cassia belongs to government, and is in general given in Laurus Caslease; but at present no renter can be procured. Its quality also sia. might, no doubt, be greatly improved; and by cutting the shoots, when of a proper size, and cleaning and rolling up the bark neatly, it might be made equal to the Cassia of China.

On my return from the pepper hills to Mirzee, I passed a very Strata. fine plantation of Betel-nut palms, belonging to four Bráhmans, and containing many thousand trees. It was placed on the two steep sides of a very narrow valley, well supplied with water from springs. Here I observed the first regular strata since leaving Pali-ghat. They consisted of very soft pot-stone, probably impregnated with hornblende slate, as they seem to be a continuation of the quarries of slaty signite, from which the temples at Batuculla have been supplied with stone. I have already noticed the affinity that prevails between the hornblende and pot-stone rocks in the dominions of Mysore. The strata at this garden are vertical, and run nearly north and south.

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Feb. 25.
Appearance of the country.

Having returned to Mirzee, I went two cosses and a half to Hiriguity. Part of the country through which I passed was very barren, consisting of low hills covered with stunted trees. The soil of other parts was good; but, owing to a want of inhabitants, was much neglected. Near Hiriguity, there is on the northern side of the river a remarkably fine plain. It does not seem to be well cultivated, and has suffered lately from the breaking down of a dam, which has permitted a great part of it to be inundated with saltwater.

History of Haiga, according to its Bráhmans.

At Hirigutty, I collected several Haiga Bráhmans, who were said to be the best informed men concerning the history of the country. The Shanaboga, or accomptant of the temple of Daréswara, produced a book called Bahudunda, which, they said, was written by a certain Subahitta, or Bráhmany chief, who will hereafterwards be mentioned. On the authority of this book the Shanaboga said, that Parasu Ráma created Haiga at the same time that he formed Tulava and Malayála, and he then also appointed certain Bráhmans to inhabit these lands. Tulava he gave to the Mittu Bráhmans, and Haiga to those called Nagar and Mutchy. These people were not true Brahmans; but they kept possession of the country till after the commencement of the Kali-yugam. The country was then seized upon by two casts of impure origin, the Mogayer and the Whalliaru. The former are the fishermen of Haiga; the latter I have had frequent occasion to mention; and to this tribe the Rájá belonged. At length a Sannyási, who had visited the country, induced Myuru Verma to invade it. He was king of Banawasi and Gutti in Karnata, and by cast a Baydar, which is a tribe of Telingana. His attack was successful, and he conquered Haiga, Tulava, and Kankána. He then brought a colony of five thousand true Bráhmans from Ahichaytra, a city in Telingana, and settled them in Haiga. He brought others of the same origin to Kankána and Tulava. A thousand of these Haiga Bráhmans lost cast immediately, having omitted the performance of certain prayers (Mantrams) which were necessary to purify the country before they took pos- CHAPTER session. The remaining four thousand obtained the whole lands of Haiga, and continued to enjoy them until Myuru Verma was obliged Feb. 25. to fly by Nunda, the son of Utunga, one of the Whalliaru, who recovered the dominions of his ancestors. This low fellow seized on the lands that had been granted to the four thousand Bráhmans, and forced them to retire to Ahichaytra. He was succeeded by his son Chanda Sayana, whose mother, being a dancing girl from the temples of Karnata, had educated him so as to have a due respect for the sacred order. Soon after his accession to power, he invited back the Bráhmans; and, having given up the whole of his authority to their Subahitta, or chief, the author of the book, he made all his Whalliaru the slaves of the sacred order. So long as Chanda Sayana lived, he was called Rájá, and the Subahitta continued to govern in his name. On his death without children, the Subahitta was at a loss what to do; as according to the laws of his cast he could not assume the regal title, and as there was no Rájá under whose authority he could act. He therefore invited Solva Krishna Devarasu Wodearu of Anagundi to take possession of Haiga, which had never before been subject to Vijaya-nagara. This prince accordingly came; but, far from allowing the Subahitta to enjoy any authority, he imposed a land-tax on the Bráhmans, and gave all the country to a Jain Polygar, Itchuppa Wodear Rajá of Garsopa. No date is assigned in the book for these extraordinary events, which nobody but a Haiga Bráhman can possibly believe. In order to conceal the long subjection to the infidel Jain, in which the Bráhmans of Haiga had been compelled to live, they bring down the time of Myuru Verma to that of the latter princes, or usurpers of the throne of Vijaya-nagara. Many inscriptions render it indubitable, that Haiga belonged to the kings of Karnata long before the time of Krishna Ráyalu. Copies of all these, which I now quote, were in the possession of the very Bráhmans who gave me the foregoing account. The temple at Daréswara has two grants engraved

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CHAPTER on copper-plates. The one is dated Sidarti of Sal. 1422, on the 14th of the moon in Bhádrapada, in the reign of Déva Ráya Wodearu Trilochia, &c. &c. This title of king of the three people (Trilochia) is said to be peculiar to the kings of Vijaya-nagara, as is also the title of king of the three seas. The title of Trilochia seems well enough applied, as these princes governed the tribes who speak the Telinga, Tamul, and Karnataca languages. This date apparently does not agree well with the Ráya Paditti; for the last Déva Ráya which it mentions ended his reign in the year of Sal. 1377. But, as we shall afterwards see, this Déva Ráya may have been one of the names of the usurper who reigned in 1422. The other grant on copper is by Solva Krishna Devarasu Wodearu Trilochia, &c. &c. and is dated Sal. 1481, on the 15th of Ashádha, in the year Calayucti. This agrees very well with the chronology of Ramuppa. A third grant to the same temple is by Krishna Devarasu Wodearu Trilochia, &c. &c. in the year Vicari of Sal. 1462, on the 1st of Kartika. This also agrees with the chronology of Ramuppa. Another, in the time of Trinetra Solva Narasingha Nayaka, king of the three seas, and of Anagundi, &c. &c. is dated in Durmati Sal. 1424, 14th Bhádrapada. Among other strange titles assumed by this prince, he is said to be able to pull all other potentates by the whiskers. In it he commands Devarasu Wodear, probably the lieutenant of Haiga, to grant such and such lands to the Bráhmans. It is clear therefore, that before the time of Krishna Ráyaru the kings of Anagundi were sovereigns of Haiga, and that all the lands did not belong to the Bráhmans. Another grant, for erecting an inn for travellers, is dated on the same day and year, and by order of Solva Déva Ráya Wodearu, Rájá of Nagara (not the present Nagara but Vijayanagara), Haiga, Tulava, Kankana, &c. &c. We here find, that the second Narasingha of the usurping princes is sometimes called also Déva; and the same probably was the case with the first Narasing ha, which will reconcile the chronology of the first grant with that of Ramuppa. The inscription on stone at the temple of Gunavunti, in

Garsopa district, of which a copy has been presented to the Bengal CHAPTER government, mentions, that Itchuppa Wodearu Pritani (Jain Rájú of Garsopa) granted certain lands to that temple by order of Pri- Feb. 25. tápa Déva Ráya Trilochia, &c. &c. of the family of Hari-hara, &c. &c. in Virodi Sal. 1332, on the 10th of Margasirsha. This is Déva Raya the First, and agrees very well with the chronology of Ramuppa.

A very intelligent Bráhman from Batuculla says, that he had con- Account sulted a book in the possession of a Jain Sannyási, which stated, of the Jain. that the Byrasu Wodear family of Carculla was descended from the Belalla Ráyas, the supreme kings of Karnata. The last male of this branch of the family had seven daughters, all called Byra Dévi. When the Rájá died, his country was divided among his daughters in seven portions; and Krishna Ráyaru was so gallant, as to remit the whole tribute to them, as being ladies. The eldest sister, Doda Byra Dêvi, lived at Batuculla. The second sister married the son and heir of Itchuppa Wodear of Garsopa, who seems to have been the tributary Rájá of Haiga. This marriage produced only one daughter; and none of her aunts having had children, she united again in her person the sovereignty of all the dominions of Carculla. To these she added Haiga; and, during the weakness of the princes of Anagundi, in the reign of the last usurper, she seems to have refused all marks of submission to their authority. She lived sometimes at Garsopa, and sometimes at Batuculla, until she was destroyed by the Sivabhactars of Ikeri, who were assisted by an insurrection of the Halypecas; and who, in conjunction with that low, barbarous tribe, almost exterminated the Jain of Haiga, and the northern districts of Tulava. There is still a man living at Dharmastilla, six cosses distant from Jamal-ábád, who is named Comara Hegada, and who is looked upon as a descendant in the male line of the Carculla family, and legal representative of the Belalla Ráyas, who began to govern Karnata in the year of our Lord 684. This man may very probably be of the family of the Carculla Rajás; but, in fact, these were descended from Jenaditta, a fugitive from the north of India;

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CHAPTER and a desire of flattering the princes of the Jain sect, who were the most powerful in these latter days, probably occasioned the legend, in the book of the Sannyási, to trace up their origin to the Belalla family.

> Hirigutty, which has no market (Bazar), stands on a fine plain, about two miles from the river; and at some distance, toward the east and north, has rugged barren hills.

Feb. 26. Appearance of the country.

26th February.-I went three cosses to Gaukarna. There was a thick fog, which prevented me from seeing the country; but near the road it was a plain, consisting mostly of rice fields; many of which, by the breaking down of the bank, had been inundated with salt-water. At the western extremity of this plain is a ridge of low barren hills, which bend round to the sea, and separate the plain on the banks of the river from that on which Gaukarna stands, about a coss north from the mouth of the river. The plain of Gaukarna is well cultivated, and consists of rice fields intermixed with coconut gardens.

Gaukarna.

Gaukarna, or the cow's horn, is a place of great note among the Bráhmans, owing to a celebrated image of Siva called Mahaboléswara. The image is said to have been brought from the mountain Coila by Ravana, king of Lanca. He wished to carry it to his capital; but having put it down here, the idol became fixed in the place, where it stands to this day. The building, by which the idol is at present covered, is very mean. Gaukarna is a scattered place. buried among coco-nut palms; but enjoys some commerce, and contains 500 houses, of which Bráhmans occupy one half.

Account of Bráhmans of Gaukarna.

I assembled the most distinguished of these Bráhmans, who in-Haiga by the formed me, that the book produced yesterday by the Shanaboga of Daréswara is not considered by them as of good authority. That every Shanaboga has a Bahudunda, containing the papers and deeds belonging to his office, and which are generally preceded by such an account of past times, as the first person of the family who enjoyed the office could obtain. These Bahudundas the Vaidika

Bráhmans hold in great contempt; but, as the office of Shanaboga CHAPTER has in numerous instances continued for many generations in the same family, I am inclined to think that from this source much Feb. 26. historical information might be procured. The Bráhmans here are all Smartal, of true Panch Dravada extraction, and despise the Haiga Bráhmans, as being greatly their inferiors. When I interrogated them concerning the history of the country, they said that it was contained in a book in their possession, called Seinghadri Utracunda, or the second volume of Seinghadri, a work composed by God in the form of Vyása, who wrote the eighteen Puranas. They suppose, that this was done long before the creation of this part of the world, and therefore look upon all the historical part as entirely prophetical. I found that none of them had ever been at pains to read the book, and they therefore spoke of its contents merely from report, or tradition. They say that it brings the history of Kérala, Tulava, Haiva (the Sanskrit name for Haiga), and Kankana, no lower down than the time of Myuru Verma's grandson. It is written in the character of Tulava, which is the same with that of Malayála, and in the Sanskrit language. It contains no dates, and seems to be, as usual, an idle rhapsody, in which are foretold the great deeds of five princes of one family, who were to be great favourers of a certain sect of Bráhmans. These five princes are Trenetra Cadumba, Hæmanga, Myuru Verma, Locadita, and Chanda-Sayana; which last the Haiga Bráhmans suppose to have been a Whalliaru. The dominion of these princes extended all over the country created by Parasu Ráma, from Cape Comorin to Surat. In all this country, at the accession of Myuru Verma, there was no true Bráhman; but for each division of it that prince brought a colony from Ahichaytra. The Namburis formed one of these colonies, all of which have in some measure lost cast, or at least have been degraded, by a disobedience of the orders of Sankara Achárya. At that time, the Rájá of Ahichaytra was a Jain; but he favoured the Bráhmans who followed Vyása, his wife's mother having been



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CHAPTER very intimate with one of these persons, and having educated her daughter in a due regard for the sect. Shortly before that time, this sect had risen into considerable reputation in Andray, by the efforts of Buta Achárya, and was afterwards spread throughout the peninsula by the teaching of the three great doctors Sankara, Rama Anuja, and Madua. These Smartal Bráhmans possessed a grant of lands engraved on a plate of copper. It is dated Servajittu of Sal: 1450, in the 20th of Maga, and in the reign of Krishna Ráya, which agrees with the chronology of Ramuppa. Having been informed that there were here many inscriptions on stone, I went out in search of them.

> The large tank is a very fine work, and the only structure in the place that is worth notice. Near this, in the yard of a small religious building called Kaméswara Matam, I found the most ancient inscription. The stone on which this is cut is at the top adorned with emblems, which indicate that its erectors have been worshippers of Siva. Much of it is buried under ground; only thirteen lines are at all legible, and parts of these are decayed. First come the titles of the sovereign Cadumba Chicraverti. These are quite different from those assumed by the kings of Vijaya-nagara, which are known by almost every Brahman, and facilitate greatly the reading of all the inscriptions that were made during their government. The titles given to Cadumba Chicraverti seem to be little understood. After the titles, and a defacement of half a line, mention is made of two sons, learned and heroic men, and Rájás by the favour of Rajaya (the goddess of the earth). Then follow some unintelligible words. Then the date of the Kali-yugam 120, being Vikrama, 15th Maga, there being then an eclipse of the moon. These two sons gave Dharma (charity), by building Kaméswara Matam, on the west side of the temple of Sankara Narayana, in the name of Sri Mahaboléswura; and for the performance of Bunaneia (worship and charity) in this Matam, they granted certain grounds, then overset, without proprietors, and become Haraweri (reverted

to the state) with the water-courses, house-steads, gardens, Betta- CHAPTER fields, Chitta-fields high and low, and the rank formerly thereunto appertaining. Here the writing is totally defaced. It probably Feb. 26. contained the extent, name, and boundaries of the lands. From their disposing of lands belonging to the government, it is probable that the two sons, mentioned in the inscription, were sons of the king. The first cypher of the date is defaced; but from some fragments of it the Bráhmans think that it must be either a 1 or a 3; and from their traditions they are inclined to think that it is the former. Cadumba Chicraverti is the ancestor of Myuru Verma. This date would make him to have reigned 534 years earlier than the time assigned for the commencement of his reign by Ramuppa; which, I have already said, is probably much more early than the reality. The 3120, supposing that to be the true reading, would make Cadumba Chicraverti to have been governing 149 years before the time in which (from an inscription that I afterwards procured) I found that his descendant Trenetra Cadumba actually reigned. I am persuaded, therefore, that this is the proper era of Myuru Verma, and the introduction of the Bráhmans from Ahichaytra; and that the Banchica, Abhira, and Monayer families of Ramuppa, are either names altogether fabricated, in order to increase the antiquity of Myuru Verma; or that, more probably, the order in the succession of the dynasties has been altered. This inscription, copied in imitation of the old character, has been delivered to the Bengal government. The image of Sankara Narayana, mentioned in this inscription, still remains in a small temple, on the east side of the Matam; and is a strong proof of the early prevalence of the doctrine which the Smartal now teach, namely, that Siva and Vishnu are different names for the same god, according to his different attributes, as destroyer and preserver of the world. A likeness of it is given in Plate XXIV.; from which it will appear, that, in order to show their identity, the same image has the emblems of both VOL. III.

CHAPTER XVI. Feb. 26. gods. The names do the same; for Sankara is one of the titles of Siva, and Narayana one of the names of Vishnu.

The next most ancient inscription that I found here was, like the others, in a private house, and exceedingly neglected. It is dated Anunda 1297, Friday 1st Palguna, in the reign of Sri Vira Buca Ráya, by the favour of the feet of Virupacsha Devaru (the Siva at Humpay opposite to Vijaya-nagara) king of the east, west, and south seas. This must be Buca Ráya the First, who would therefore appear to have reigned at least two years later than the time assigned for him by Ramuppa.

Another is dated in Sal. 1308, and contains a grant of revenue for supporting an inn, by the son of Hari-hara Ráya; but his name is effaced. A copy of this has been delivered to the Bengal government.

The last that I visited is dated Suabanu Sal. 1472, on the 23d of Srávana. In this, Solva Krishna Devarasu Wodearu, son of Sedásiva Ráya, and king of Nagara (Vijaya-nagara), Haiva, Tulava, Kankana, &c. grants lands situated in the Ashtá-grám of Sashisty district (Desa), in Govay Ráyada (principality of Goa). Hence it will be evident, that, while this powerful Hindu prince lived, the Adil Shah Sultans of Vijaya-pura were very much confined in their territories toward the south-west.

Feb. 27.
Account of a Bahudunda, or register, kept by the hereditary accomptant.

27th February.—It having been mentioned to me, that the books of the hereditary Shanaboga here contained much curious information, I determined to stay a day, and examine them. I found that he had a Bahudunda of two volumes. The first commenced with some verses on medicine. Then followed some rules for the performance of the ceremonies of religion. Then came an old list of the names of all the principal traders in Mirzee. They were 54 in number; but the ants had eaten up the date. This was followed by an old enumeration of the inhabitants of Mirzee district (Taluc), then divided into three divisions (Maganas) Gaukarna, Nagara,

Feb. 27.

and Seiganahully. Then came an account, without date, of a con- CHAPTER tribution which a vagrant Bráhman had raised for the repairs of a temple. Then came the copy of a grant, originally engraven on stone, dated in 1442, the year of Sal. 1441 having past. By this, Rutnuppa Wodearu, and his son Vijayuppa Wodearu, having been appointed Rájás of Barcuru by Sri Vira Krishna Ráya on the throne of Vijaya-nagara, they granted to a certain Bráhman the Shistu, or land-tax, arising from certain grounds, and amounting to the annual value of 25 Pagodas. This year, according to Ramuppa, was the first of the reign of Krishna. Next follows a paper respecting the relief granted to a village by a Mussulman governor, under the Sultan of Vijaya-pura. Then comes a memorandum, which states that Mahaboléswara, the great Pagoda here, possessed lands to the value of 12000 Pagodas a year (4835 l. 7s.  $2\frac{1}{2}d$ .), from the time of Madua Ráya (probably the great doctor of the Bráhmanical laws) in the year of Sal. 1383, until the time of Byra Devi. The memorandum then details all the lands, and appropriates the manner in which the revenue is to be expended. No date accompanies this memorandum; but it is looked upon by the Bráhmans as affording the temple a sufficient right to the specified lands, and as a clear proof that the rules for expenditure were prescribed by Madua Ráya. Next follows a grant of lands to the ancestors of the Shanaboga, from Mahanundeléswara Krishna Devarasu Wodearu, king of Nagara, Haiva, Tulava, Kankana, &c. in the year of Sal. 1452, which also is agreeable to Ramuppa's chronology. Then comes a copy of Valuation a Shist, or valuation, usually called that of Krishna Rayaru; but supposed to have been there is nothing in the writing that shows when or by whom it was made by framed. It extends to the three divisions (Maganas) of Mirzee Raya, already mentioned, and includes a fourth named Hirtitty. From this it would appear, that those people who cultivated Cumri land paid 25 Fanams a head. At present they pay 21 Fanams. Gardens then were also taxed, and the government took one half of their supposed produce. Thus 1000 coco-nuts paid 3 Pagodas. It would



appear, that since that time the price of this article has not increased, 6 Pagodas being the present value of 1000 coco-nuts. This seems to me a clear proof of the flourishing state of the country when the valuation was formed; as there can be no doubt, that the value of gold has in general decreased greatly since the time of Krishna, owing to the great quantities procured from America. The difference, therefore, must be made up by the more flourishing state of the country, which introduced wealth, and enhanced the price of every thing valuable: the present decayed state of the country, notwithstanding the low value of money, keeps down the price. By this valuation the pulse sown as a second crop was taxed. It had been a custom for every proprietor of a garden, at a certain festival, to wait on the officers of government, and present them with 11 Pagoda. The valuation directs, that they should be exempted from this trouble, and that the money should be paid at the same time with their land-tax. The rice land paid 3 Pagodas for every Cumbum of produce. The Cumbum is two-thirds of a Corge, and at present is worth on an average about 12 Pagodas. Since that time an additional tax of 33 Fanams has been laid on each Cumbum. In this manner each estate having been valued, the land-tax was fixed on it in cumulo; and the same continues still to be taken, with the addition above mentioned on the rice-lands; but a great deduction is made on account of lands not occupied. When the valuation was formed, there was no tax on houses, but shops paid a duty to the Suncha, or custom-house.

Chronicle.

The second volume of the Shanaboga's register commences with a kind of chronicle. Killidi Vencatuppa Náyaka having destroyed Byra Devi, information of the event was sent to Ibrahim Adil Shah Padishah, by Sherif ún Mulk, the Vazir residing at Ponday, a place near Goa. This officer seems to have commanded in Kankana, after the Mussulmans had seized on it, during the decline of the Hindus of Vijaya-nagara. The Padishah then ordered all the Havildars (military officers) commanding in Kankana, to join Sherif ún Mulk,

and to fight with Vencatuppa Nayaka. On the 5th of Margasirsha CHAPTER Sal. 1529, being the year Parabava, they advanced as far as Chindawera, where they were entirely defeated. They retreated beyond Feb. 27. the Mirzee river, and, having there built a strong fort, the river continued to be the boundary between the Sivabhactars and Mussulmans. Next year Sherif un Mulk returned to Ponday, leaving an officer (Havildar) in command at Mirzee to collect the revenues. and remit them to Ponday. In the course of thirty-five years, there were twelve governors (Havildars). These were succeeded by officers called Mahal Mocasi, of whom there were ten at Mirzee in the course of thirty years. A Tannadar then governed it for eighteen months. After which Mammud Khan held the government for a year and a quarter. Abdul Hassein Havildar then governed twentyone months, another Havildar nine months, and Murtiza Khan a similar length of time. He was displaced by two Mussulmans, who rose up, and put him in confinement. These possessed the country for eighteen months. After this Mirzee became subject to the Sivabhactars, and continued to be governed by Karnataca Parputties till the year Durmutti, fourteen years after Hyder had reduced Bidderuru, now called Nagara.

Next follows a valuation (Shistu) which was made by the officers Valuation by of Adil Shah, in the Fusly year, or year of the Hejira 1044, and in- Adil Shah. cludes the five districts, or Mahals, that were subject to Vijaya-pura, and were named Mirzee, Ancola, Ponday, Cadawada (Carwar), and Siveswarg; and which were probably the part of the dominions of Byra Devi, that fell to the share of the Mussulmans. This is the valuation now in use. Hyder imposed no new taxes, but resumed one half of the charity lands (Enams); Tippoo seized upon the remainder.

I have detailed the contents of these volumes, that a judgment may be formed, of what may be usually expected in such registers, which are very numerous throughout the Peninsula.

In my evening walk I examined an inscription on stone. It is Inscription.

Feb. 27.

CHAPTER dated Sal. 1311, 1st Phálguna, and in the reign of Buca Ráya Trilochia, &c. son of Hari-hara Ráya, king of Haiva, Tulava, Kankana, &c. This must be Buca Ráya the First, and his reign must have continued much longer than is mentioned in the Ráya Paditti. He must also be the same prince mentioned in the inscription, page 170 (of this Volume), which shows that Hari-hara was not succeeded by his former companion Buca, but that he named his son and heir after that friend.

> On my return, I met with an itinerant image of Hanumanta. He was in a palanquin, attended by a Pújári, and many Vairagis, and had tents, flags, Thibet-tails, and all other insignia of honour. He was on an expedition to collect the money that individuals in distress had vowed to his master Vencata Ramanya, the idol at Tripathi; and from his style of travelling seemed to have been successful. Many such collectors are constantly travelling about the Peninsula. Out of the contributions the Pújári (priest) defrays all the expenses of the party, and pays the balance into the treasury at Tripathi, which is one of the richest that the Hindus now possess.

Dancing women.

At the temples here dancing girls are kept, which is not done any where on the coast toward the south; for in Tulava and Malayala many of the finest women are at all times devoted to the service of the Bráhmans.

Feb. 28. Gangawali river.

28th February.—I went three cosses to Ancola. Midway is the Gangawali, an inlet of salt water that separates Haiga, or Haiva, from Kankana. Its mouth toward the sea is narrow; but inwards it forms a lake, which is from one mile to half that extent in width, except at the ferry, where it contracts to four or five hundred vards. Boats of a considerable size (Patemars) can come over the bar, and ascend the river for three cosses. Canoes can go three cosses farther, to the foot of the Ghats. The boats of Haiga are the rudest of any that I have ever seen, and no where worse than on this river, which possesses no trade; and the country on its banks, although very beautiful, seems rather barren.

Between Gaukarna and the river, the country consists of low CHAPTER hills, separated by rice grounds of very small extent. Where they are of any considerable size, the soil is very sandy. Soon after Feb. 28. leaving the Gangawali I crossed a smaller salt water inlet, which by of the counoverflowing it at high water injures a good deal of land.

The salt made in this part of the country, where there are the Salt. same natural advantages as at Goa, is very bad, and scarcely saleable at any market; whereas at Goa vast quantities are made, and sent not only inland, but all over the coast. This seems to be an object that merits attention, so soon as the population shall have increased beyond what is adequate to cultivate the lands.

The part of Kankana through which I have passed resembles Appearance Haiga. The quantity of rice-land is pretty considerable. Most of of Kankana. it is what in Malabar would be called Parum, yet it produces annually a crop of rice, and much of it a second crop of pulse. Although this part of Kankana, which is subject to the British government, and forms the district (Talue) of Ancola, is larger than either of the districts into which Haiga is divided, it produces only an annual revenue of 29,000 Pagodas; while Honawera produces 51,000, and Kunda-pura yields 50,000. This is not attended with any advantage to the inhabitants; for the houses of the proprietors and cultivators are greatly inferior in appearance to those in Haiga, Tulava, and Malayala. The low revenue is not therefore owing to the people being less burthened, nor is it owing to an inferiority in natural riches, but to a long unsettled state, which has occasioned a wonderful devastation. The officers of revenue say, that one-third of even the good lands are now waste. This devastation has been owing to the constant depredations of Marattah chiefs, and robbers of two casts which are called Comarapeca and A Comarapeca chief, named Ghida Ganoji, or the short Ganésa, having continued in his usual practices after the conquest by the English, Major Monro sent a party of Sepoys, who shot him; ever since which the country has been quiet.

CHAPTER
XVI.
Feb. 28.
Ancola.

Ancola is a ruinous fort, with a small market (Bazar) near it. Robbers have frequently burned the market; but it is now recovering, and contains forty shops. It is not the custom here for the people to live in towns. A few shops are collected in one place; and all the other inhabitants of what is called a village are scattered upon their farms. Most of the people here are of Karnata extraction; and few of Kankana descent remain, except a particular kind of Bráhmans, who are all merchants, as those of Haiga are all cultivators. Being originally descended from Pansh Gauda, or Bráhmans of the north of India, those of Kankana are held in great contempt by the Dravada Bráhmans, or division of the south; one of the strongest reasons assigned for which is, that they eat fish.

March 1.

1st March.—I went five cosses to Chandya. At two computed cosses from Ancola, I crossed a considerable salt-water inlet called Belicary. The country between is level, but very sandy, and little cultivated. The banks of the Belicary are well planted with coconut gardens; and being broken into many islands and points are very beautiful. At the mouth, although it admits boats of some size (Patemars), it is not above two hundred yards wide. Small boats can ascend two cosses, to where the inlet receives from the Ghats a stream of fresh water. A little north from its mouth is a high island, called by the natives Sonaka Guda, which with a high promontory, projecting far to the west, forms a large bay, in which at this season there is scarcely any surf. Here the road for some way leads along the beach. At the head of the bay there is a fine plain between the hills toward the Ghats, and those forming the promontory which projects into the sea. The soil of this plain is good, but in many places is spoiled by the irruption of salt water creeks. Money has this year been advanced to make a bank, which which will be a great improvement. Toward the north the plain becomes narrower, and is overgrown with trees. Part of this has been formerly cultivated; and, if there were inhabitants, the whole might be rendered productive. Farther north the valley opens

again into a fine plain, which faces the sea on the north side of CHAPTER the promontory. From the sea on the south of this to that on the north, is computed three cosses, or about ten miles. On our March 1. maps this part of the coast appears to be very ill laid down. Chandya is in the plain at some distance from the sea. At this place there is no market (Bazar), but there are many scattered houses sheltered by groves of coco-nut palms.

In this part of Kankana, a little Cut, Catechu, or Terra Japonica, Catechu. is made by some poor people, who gave me the following account of the process. The tree, or Mimosa Catechu, is called here Keiri, and grows spontaneously on all the hills of Kankana, but no where else in the peninsula that I observed. It is felled at any season; and, the white wood being removed, the heart is cut into small bits, and put, with one half the quantity of water by measure, into a round-bellied earthen pot. It is then boiled for about three hours: and when the decoction has become ropy, it is decanted. The same quantity of water is again added, and boiled, until it becomes ropy; when it is decanted, and a third water also is given. This extracts all the substance from the wood. The three decoctions are then mixed, and next morning boiled in small pots, until the extract becomes thick, like tar. It is afterwards allowed to remain in the pots for two days, and then has become so hard, that it will not run. Some husks of rice are then spread on the ground, and the inspissated juice is formed into balls, about the size of oranges, which are placed on the husks, or on leaves, and dried seven days in the sun. For two months afterwards they are spread out in the shade to dry, or in the rainy season for twice that length of time. and are then fit for sale. Merchants who live above the Ghats advance the whole price four months before the time of delivery, and give 2 Rupees for a Maund of 40 Cutcha Seers of 24 Rupees weight; that is, for a hundred-weight 9 8 9 Rupees, or nearly 1 l. sterling. The merchants who purchase reside chiefly at Darwara, Shanore, and other parts in that neighbourhood, and are those who Vol. III. Aa.

XVI. March 1.

CHAPTER supply the greater part of the peninsula with this article, which among the natives is in universal use. Their greatest supply comes from that part of Kankana which is subject to the Marattahs. The encouragement of this manufacture in British Kankana seems to merit attention. The tree is exactly the same with what I found used for the like purpose in the dominions of Ava, and does not agree very well with the descriptions in the Supplementum Plantarum of the younger Linnæus, nor in Dr. Roxburgh's manuscripts.

March 2. Appearance of the country.

2d March.—I went three cosses to Sedásiva-ghur. The road passes over two steep ridges of hills, running out into two promontories, between which is a bay sheltered by the island of Angediva, belonging to, and inhabited by the Portuguese. South from the island are two small hummocks, and off the southern promontory are some high rocks. The appearance of the whole from land renders it probable, that shelter might be found here for ships, even during the south-west monsoon. In the plain round this bay the soil is tolerably good. On the plain north from the two ridges it is very sandy, and much spoiled by salt water, which soaks through any such banks as can be formed of the loose materials that are procurable. The coco-nut is perhaps the production which would thrive best; but a great part of the plain is waste, and covered with bushes of the Cassuvium, called Govay by the natives, from its having been introduced from America by the Portuguese of Goa. The river of Sedásiva-ghur is a very wide and deep inlet of the sea. The passage into it is intricate, but at the height of the tide contains 25 feet water. It is sheltered in a deep bay by three islands, one of which, called by the natives Karmaguda, is fortified. The entrance is commanded by the fort, which is situated on a lofty hill. Much land in this vicinity has fallen into the hands of government, and, owing to the depredations of the Comarapeca robbers, has become waste. One of their chiefs, named Venja Náyaka, was the terror of the whole country, and forced even Bráhmans to adopt his cast. Two of his sons were hanged by Tippoo; but, until

terrified by the firmness of Major Monro's government, he conti- CHAPTER nued obstinate in his evil practices. Soon after that gentleman's arrival, he made his submission, and continues to behave like a good March 2. subject. I found him very ready to give me assistance in procuring supplies, and means to transport my baggage; and from the mildness of his manners, until informed by the officers of revenue, I had no idea of his disposition, which was barbarous in the extreme.

3d March.-I remained at Sedásiva-ghur taking some account of March 3. the state of British Kankana, and making preparations for my journey up the Ghats. The Petta, or town, here contains about twenty very wretched shops: all the other inhabitants live scattered on their farms. Cadawada, or as we usually pronounce it Carwar, stood about three miles above Sedásiva-ghur, on the opposite bank of the river. It was formerly a noted seat of European commerce, but during the Sultán's reign has gone to total ruin. There are here at present some merchants from the Marattah dominions above the Ghats, who say that they came chiefly with a view of purchasing salt. They also procure here a considerable quantity of Cut, none of which grows above the Ghats. They purchase it for ready money from the merchants of the country, who make the advances to the manufacturers. It is of a very good quality; and they cannot afford to give more than 10 Sultany Pagodas for the Candaca, or Candy of 40 Maunds of 48 Seers each; that is, 40 Rupees for the Candy of  $582\frac{1}{2}$  lb., or 15 s. 5 d. a hundred-weight.

It would appear, that at one time all the lands of this district Tenures. (Taluc) belonged to Jain landlords (Mulagars); but all these have either been killed, or so oppressed that they have disappeared. After their expulsion, part of the lands were annexed to the government, and part given to landlords (Mulagars) called Hubbu Bráhmans. These are of the Pansh Dravada division; but are considered as having been degraded by Sankara Achárya, and are now reduced to a miserable state of ignorance. None of them here can give any

March 3.

CHAPTER account of the time when they came into the country, who brought them, or whence they came. They are the common Panchangas, or almanac-keepers of the country, and in some temples are priests (Pújáris); but Sujéswara, the most celebrated temple in the country, and one of those built by Ravana king of Lanca, is in possession of a colony of Marattah Bráhmans, who were introduced by Mahomed Adil Shah of Vijaya-pura. Of the history of the country these know nothing, except the legends concerning the foundation of their temple that are to be found in the eighteen Puránas. The lands formerly granted to the Hubbu Bráhmans, and which form by far the greater part of the country, are called Mula lands, and may be transferred by sale whenever the proprietor pleases. The Hubbus have indeed alienated a great part of it to Marattahs, Kankana Bráhmans, and Comarapeca. It may be also transferred on mortgage, resumable at pleasure by paying the debt. This tenure is here called Adava. The Shist, or assessment, now in use, was made by Sherif un Mulk, the Vazir of Ponday already mentioned; and was formed by laying so much on the land, according to its soil, and the quantity of rice seed that it was supposed capable of sowing. The proprietor may cultivate it with whatever he pleases, and may plant it with palms without any additional tax. Since the time of Sherif un Mulk, a small tax has been imposed on every coco-nut tree; and at different times, by imposing a per centage (Pagadiputti) on the amount of each person's land-tax, an increase of revenue has been made. Major Monro, according to the account of the revenue officers, considerably reduced the rate of the landtax; but owing to his care, and strictness in the collections, the revenue which he raised was much greater than was ever before realised. The proprietors allege, that they paid more to him than they did to Tippoo. The two accounts are very reconcileable; as under the inspection of Mr. Monro there was little room for the corrupt practices which in the Sultán's government were very prevalent. Disputes about landed property are very common. An

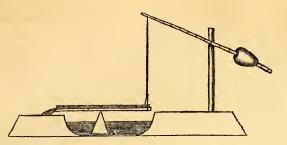
estate paying four Pagodas of revenue can be mortgaged for a hun- CHAPTER dred Pagodas, and the mortgagee pays the taxes. The same estate will sell for one hundred and fifty Pagodas. The government lands March 3. are let at rack rent, which is of course higher than the tax (Shist) paid by the proprietors (Mulagars). The tenants on these lands, or Circar Cutties, cannot be turned out of their farms so long as they pay the rent, the leases being in perpetuity. They can neither sell nor mortgage their lease; but they may let it to an undertenant. By far the greater part of the cultivation is carried on by the proprietors (Mulagars) and tenants of the public (Circar Cutties), and very little by lease-holders. The sizes of the farms vary from one to five ploughs. Two oxen are required to each plough, which cultivates from five to seven Candies of land. In general, the family of the proprietor labours the farm, but a few rich men employ hired servants. There are here no slaves. Men servants get yearly from two to six Pagodas, or from 16s.  $1\frac{1}{2}d$ . to 48s.  $4\frac{1}{2}d$ .; but those, who get only the first sum in money, have daily one meal of rice.

· The cultivation of watered-fields, and of gardens, both on the Rice. same kind of land, is the only one known in British Kankana, except the Cumri, or Cotu Cadu, called here Culumbi. There is no ground from which two crops of rice in one year are taken; but, while most of the rice grows in the rainy season, some land called Vaingunna is so low, that in the rainy season it cannot be cultivated, and, after the water has evaporated, this yields a crop. All the other land is called Surd, and is mostly what in Malabar would be called Majelu, and what the people of Tulava would call Betta. In the accompanying Table may be seen several particulars relative to the cultivation of rice, which were taken from the accounts of the cultivators. I had no opportunity of ascertaining the quantity of land required to sow one Candaca of seed, nor, consequently, of judging how far the statement of the produce is credible.

CHAPTER XVI. March 3. Table explaining the cultivation of Rice in British Kankana.

		Produce of One Candaca			Time	
Name.	Ground.	Suca-dan.		Rice.	required to ripen.	Quality.
		1st Soil.	2d Soil.			
			Candacas.			T
Asgha - Pandia -	Surd	6	5	4	3 1 2	Large. Ditto.
Pandia -		6	5	4	3	Ditto.
Halga -		none		4	3	Middle sized.
Sanmulghi		6	5	4	4	Ditto.
Wala		8	6	5	4	Small.
Cago		none		10	31/2	Large and coarse.
Sorutta -	Vaingunna	none		4	4	

The Suca-dan is, where the seed is sown broad-cast without preparation; and in this case one-fifth more seed is required for the same ground, than when, previous to its being sown, the seed is prepared, or made to sprout, which is here called Rau. The Cago is cultivated on the lands impregnated with salt by inundations, and is the only kind that will thrive in such places. The Wala requires a clayey soil, and its produce is great; but the quantity of this soil is very small. All the Surd land requires manure. The seed season for dry-seed is the month preceding midsummer; and that for sprouted-seed is the month following. In Vaingunna, or inundated land, according as the water evaporates, the seed season continues during the two months previous to and one month after the winter solstice. The fields are watered from small Tanks, which in such low situations do not suddenly dry up, and contain the water at from one to two feet below the surface. It is raised by means of a trough, which moves upon a pivot near the centre; so that one of its ends may be immersed into the water, while its lighter end hangs over the field.



CHAPTER

To the heavy end is annexed a Yatam wrought by two men, who allow this extremity of the trough to sink into the water, and to be thus filled. They then raise it by the Yatam, and the water runs out upon the field by the light end. Two men with a basket and ropes would throw out four times as much water, but it would be hard work.

Upon good Surd land may be procured a second crop of the fol- Pulse. lowing leguminous plants:

Udied, Phaseolus minimoo Roxb: MSS.

Mung, Phaseolus mungo.

Cultie, Dolichos biflorus.

These are cultivated in the same manner as the pulses in Haiga.

In the rainy season the cattle are kept in the house, and, to in-Manure. crease the quantity of manure, are littered with fresh leaves. In the dry season they are shut up at night in pens, which are placed on the Surd lands, and are shifted once in four days. Every morning some dry soil is mixed with the foregoing night's dung, and the whole is made smooth, that the cattle may lie clean. The manure collected in the rainy season is given to the soil of the first and second quality, which are always sown with rice after the dryseed cultivation. The ashes of the family are kept separate, but are used for the same kind of land.

· The cattle here are of the same small kinds that are to be found Cattle. on the coast to the southward. A great many of them are brought

XVI. March 3.

CHAPTER from above the Ghats. At this season they are in a most wretched condition, and are supported entirely on straw; for in Kankana no hay is made. In this part of the country few buffaloes are employed.

Customs of the Comarapeca.

The Comarapeca are a tribe of Kankana descent, and seem to be the Súdras of pure birth, who properly belong to the country; in the same manner as the Nairs are the pure Súdras of Malayala. By birth they are all cultivators and soldiers; and, as usual with this class of men among the Hindus, are all strongly inclined to be robbers. From the anarchy which has long prevailed in this neighbourhood, they had acquired an extraordinary degree of cruelty, and had even compelled many Bráhmans to assume their customs, and adopt their cast. They have hereditary chiefs called Náyakas, who, as usual, with the assistance of a council, can expel from the cast, and settle disputes among their inferiors. A man's own children are his heirs. They can read poetical legends, and are permitted to eat meat and drink spirituous liquors. Their women are not marriageable after the age of puberty. Widows ought to burn themselves with the bodies of their husbands, but this barbarity is no longer in use. Widows, and women who have been divorced for adultery with a Bráhman or Comarapeca, may be taken into a kind of left-hand marriage; but their children are despised, and no person of a pure descent will marry them. A woman cannot be divorced for any other cause than adultery; if the crime has been committed with any man but a Bráhman, or Comarapeca, she loses cast. The men may take as many wives as they please. The Sringagiri Swamalu is their Guru. He receives their Dharma, and bestows on them Upadesa, holy-water, consecrated ashes, and the like. The Panchanga, or astrologer of the village, is their Puróhita, and reads prayers (Mantrams) at marriages, Namacurna (the giving a child its name), Tithi, Amávásya, &c. &c. They worship the great gods, Siva and Vishnu, in temples where Kankana Bráhmans are Pújáris. They offer bloody sacrifices; and at the temples of the Saktis, or

destructive spirits, such as Dava Dévaru, and Marca Devi, whose CHAPTER priests (Pújáris) are called Gurus, they swing suspended by iron hooks which are passed through the skin of their backs. spirits of children, whose mothers die during pregnancy, are supposed to become Butas, or devils, and to occasion much trouble to those unfortunate persons into whom they enter. The sufferers attempt to be relieved of them by prayer and sacrifice, and some village people are imagined to be possessed of invocations (Mantrams) capable of expelling these evil spirits. The Comarapecas suppose that the spirits of good men go to Moesha, a pretence that is looked upon by the Bráhmans as very impudent; for they think that such a place is far beyond the reach of a Súdra. For the spirits of bad men the Comarapeca do not know any place of punishment, nor do they know what becomes of such after death.

The Bráhmans properly belonging to Kankana, and who alledge Bráhmans of that they are the descendants of the colony to whom the country was given by Parasu Ráma, are of the Pansh Gauda division. Goa, called by them Govay, seems to have been their principal seat. After being expelled thence by the Portuguese, they dispersed, and have now mostly become traders. A few are still priests (Pújáris), and a very small number call themselves Vaidikas. All those who are here are very ignorant, and do not pretend to say when the Jain and Panch Dravada Bráhmans came in upon them.

4th March .- I went three cosses to Gopi-chitty. For the first March 4. part of the journey the road led through a level country, with a Appearance few small hills scattered at some distance, and a pretty good soil. try. It afterwards passed among low hills covered with wood. In many places here, the soil seems good, and the trees are tall; so that pepper might probably be cultivated to advantage. In many other places the hills are barren, producing nothing but bushes, or stunted trees: among them I saw no Teak. Gopi-chitty is a village Gopi-chitty. containing eight houses. Owing to the disturbed state of the country, it had for twenty years been entirely deserted; but the VOL. III. B b

XVI. March 4.

CHAPTER confidence of enjoying security under Major Monro's authority, has induced the present inhabitants to settle in the place, and they have already cleared a considerable extent of the rice ground, which consequently belongs entirely to the government. lower part of the valley, toward the great river, has been destroyed by the breaking down of the dykes that kept out the tide. To repair these, would cost 25 Pagodas, which is more than the tenants can afford or choose to advance.

History of the part of Kankana British.

This part of Kankana, on the fall of the Sultans of Vijaya-pura, became subject to the Rájás of Sudha, which we call Soonda. One subject to the of these, named Sedásiva Row, built the fort at the mouth of the river, and called it after his own name. The dialect of Kankana is used by the natives of this place in their own houses; but, from having been long subject to Vijaya-pura, almost all of them can speak the Marattah language, which has a very strong affinity with the Hinduy that is spoken on the banks of the Ganges.

March 5. Appearance of the country.

5th March.—I went four cosses to Caderi, and did not see a house the whole way; but the heads of some cultivated vallies approach near the road, and extend from thence toward the river. I passed through many places that formerly have been cultivated, but are now waste, and through some places where the soil seems fit for cultivation, but which probably have never been cleared. The trees in some places are of a good size, but none of them are very valuable. The people whom I took with me for the purpose gave me the following account of such as I observed by the way.

Forests.

The most common is the prickly Bamboo, called Colaki.

Cussum, or the Shaguda of my MSS.

Is very hard, and strong, and is used for the cylinders of sugarmills.

Rindela, Chuncoa Huliva, Buch: MSS.

Is used only for the beams of the houses of the natives.

Biba, Holigarna, Buch: MSS.

This is the varnish tree of Chittigong, and I suppose of Ava. The

natives here are only acquainted with the caustic nature of its CHAPTER XVI.

Cadumba, the Nauclea purpured Rox:

A large tree used for planks.

Maratu, a Chuncoa called by Dr. Roxburgh Terminalia alata glubra,

Grows to a very large size, and is used for building boats and canoes.

Beiladu, Vitex foliis ternatis,

Of hardly any use.

Cajeru, Strychnos Nux vomica.

Hedu, Nauclea Daduga Roxb: MSS.

A large tree fit for planks.

Cumbia. The Pelou of the Hort: Mal:

Ticay, Laurus Cassia.

People from above the Ghat's come to collect both the bark and the buds, which the natives call Cabob-China.

Paynra. Gardenia uliginosa Willd:

Of no use.

Hodogus. Arbor foliis suboppositis, estipulaceis, ovalibus, integerrimis. The timber is said to be very strong and durable, and to resist the white ants, even when buried in the ground.

Sissa. Pterocarpus Sissoo Roxb: MSS.

Is found in great plenty near the river toward the Ghats.

Dillenia pentagyna Roxb:

The natives have no name for it.

Jambay. Mimosa xylocarpón Roxb:

It grows to an immense size.

Bassia longifolia.

Robinia mitis.

Myrtus cumini.

The forests are the property of the gods of the villages in which they are situated, and the trees ought not to be cut without having March 5.

CHAPTER obtained leave from the Gauda, or head man of the village, whose office is hereditary, and who here also is priest (Pújári) to the temple of the village god. The idol receives nothing for granting this permission; but the neglect of the ceremony of asking his leave brings his vengeance on the guilty person. This seems, therefore, merely a contrivance to prevent the government from claiming the property. Each village has a different god, some male, some female, but by the Bráhmans they are all called Saktis (powers), as requiring bloody sacrifices to appease their wrath.

No persons here collect honey or wax.

Caderi. Unhealthy nature of the country.

Caderi at present contains only two houses, with one man and a lad, besides women. It was formerly a place of note; but for several years a great sickness has prevailed, and has swept off nearly all the inhabitants. This is attributed to the vengeance of some enraged Buta, or devil; but may be accounted for from the neighbouring country having been laid waste, and being over-run with forests. On the banks of the river at Caderi there was a fort, which was destroyed by Hyder, and the garrison sent to occupy the fortified island at the mouth of the river. General Mathews, the natives say, took possession of the ruins, erected some works, and left a garrison, which held out until the peace of Mangalore. Most of the cultivators lived on the opposite side of the river. Those who resided near the fort were chiefly traders; and there is still a weekly fair at the place, to which many people resort. This seems to be the reason why the few remaining inhabitants continue in such a situation. They are Bráhmans; and from those who frequent the fair they receive considerable contributions. Patemars, or large craft, can ascend almost to the fort, and canoes can go two miles above it. The water is quite fresh. The encouraging of a market (Bazar) here seems to be an object of importance, and a mean likely to bring back a great trade to this river, which by nature has many advantages.

River of Sedásiva-ghur.

6th March .- I went four cosses to Avila-gotna, without having CHAPTER seen the smallest trace of cultivation, or of inhabitants. The country is not, however, entirely a desert. Small villages are scat- March 6. tered through the forests, and hidden in its recesses. Formerly the Robbers suppressed. inhabitants of these lived in a constant defiance of the rest of mankind, robbing whoever unfortunately came within their power, and continually on the alarm to defend themselves from their neighbours. This manner of living has however been entirely stopped. Major Monro, by taking advantage of the terror inspired by the fall of Seringapatam, and by an instant punishment of the first transgressor, has made every thing quiet; and there is reason to think that a defenceless man may now traverse these forests without danger from his fellow-creatures. Tigers are said to be very numerous; and, to lessen the danger to be apprehended from them, the traders who frequent the road have cleared many places where they may encamp, and these are prevented from being overgrown by annually burning the long grass. On one of these clear places I halted, having at no great distance a village of thieves.

The country through which I passed to-day was in general level, Appearance with hills near the road toward the left, and a ridge to the right at of the country. about four or five miles distance. This ridge is that which runs out into the sea to form the southern boundary of the bay of Sedúsivaghur. The trees are in general high, with many Bamboos intermixed. The soil is apparently good, and a large proportion of it is sufficiently level for the plough. Near Avila-gotna I crossed the river, which here assumes a very singular appearance. Its channel is about half a mile wide, and consists of a confused mass of rocks, gravel, and sand, intersected by small limpid streams, and overgrown with various trees and shrubs which delight in such situations. In the rainy season, it swells into tremendous torrents, but never fills the channel from bank to bank. It is then, however, quite impassable. At present its clear streams, with the fresh

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XVI. March 6.

CHAPTER verdure of the plants growing near them, are very pleasant, after having come through the forest, whose leaves at this season drop; for all the juices of the trees are dried up by the arid heat of this elimate, in the same manner as they are by the cold of an European winter. The nights, however, are at present cool, but the days are burning hot. Near the sea a more equable temperature prevails.

March 7.

7th March.-Although before leaving Sedásiva-ghur, I had collected the persons who were said to be best informed concerning the road, and had procured from them a list of stages said to be distant from each other three or four cosses, that is, about ten or thirtee's miles; yet to-day I came to my stage at Déva-kara, after less than an hour's journey.

Face of the country.

The road passes along the south side of the river; and toward the east the valley becomes narrower, and more uneven; but still much of it is fit for the plough. From the stunted appearance of the trees, I conclude that the soil is worse than that on yesterday's route. At Déva-kara there is a good deal of ground cleared, and formed into rice fields; but the people of eight houses, which form the village, are not able to cultivate the whole. The ground that is cleared is by no means equal either in soil or levelness, to much of what I saw waste on the two last days' journey; but it is finely watered by a stream that even now affords a great supply. The river at Déva-kara is a rapid stream full of small islands; but not so much broken as at Avila-gotna, and of course narrower. In the rainy season it is quite impassable; and then, although very rapid, swells at least ten feet above its present level.

Unhealthy nature of the country.

At the commencement of the last rainy season, this village contained twelve houses; but, twenty persons having died, four of the houses are now deserted. It is looked upon as certain death, for any stranger to attempt to settle in this place.

Robbers.

Here was the residence of a very notorious robber, who died in consequence of the wounds that he received from the party which

Major Monro sent to apprehend him. His family are now quiet CHAPTER cultivators, and ever since his death safety and tranquillity have been established in the country. March 7.

The people here say, that their Surd lands produce from 12 to 20 Produce of seeds, which is a more probable account than that given at Sedásiva-ghur, unless the seed there be sown as thick as in Malabar.

rice-ground.

As I am now about to enter Karnata Désam, where a new face of Mr. Read's things will present itself, I shall here conclude the chapter, by ex- account of the districts tracting from Mr. Read's answers to my queries such as relate to below the that part of his district which is situated below the Ghats, and which comprehends the districts (Talucs) of Kunda-pura and Honawera in Haiga, and that of Ancola in Kankana.

In these districts the proportion of land capable of being cul- Soil. tivated with the plough, or of being converted into gardens, Mr. Read estimates as follows:

	Nov	v cultivated.	Capa	ble of being	50.	Sterile.
Kunda-pura	-	0,32	- 1	0,08	-	0,60
Honawera	-	0,26	-	0,12	-	0,62
Ancola -	-	0,21	-	0,20	-	0,59

The revenue, notwithstanding so much waste land, is said to have Revenue. been greater during the first year of Major Monro's management, than it was ever before known to have been. Mr. Read attributes this to an increase of rent on the lands actually in cultivation; but of this I have much doubt. In general, the natives acknowledged a remission, which naturally they would not have done had their taxes been increased; and it must be remembered, that Tippoo had resumed all the charity lands (Enams), which during the former governments probably amounted to more than what is now waste. while the collections remitted to the treasury, and consequently brought to accompt, during the Sultán's government, are no rule by which an estimate can be formed of the taxes; the whole revenue department under him having been subject to the most gross peculation.

CHAPTER XVI. March 7. Produce of waste-land. The produce of the waste lands brought to market, Mr. Read states as follows.

The Maund weighs 24 100 lb. and is divided into 40 Seers.

		Teak trees cut annually.		produce	'Aonual produce of bees wax.		Annual produce of Cabob China.		Annual produce of wild pepper.
Kunda-pura Honawera -	8758 1017	2059	1582 344	Maunds.	Maunds.	Maunds. 8 30 99 35		Maunds. 	Maunds. 51 0 533 0
Ancola	315	1124	572	8 0	2 71/2			$\frac{12}{28} \frac{3}{17\frac{1}{2}}$	
Total -	10143	3183	2498	8 0	$2 7\frac{1}{2}$	123 35	118 361	40 22½	1058 383

The Cut, and perhaps some other articles of less importance, have eluded Mr. Read's inquiries, probably from their never having been objects of revenue.

Sandal wood.

"All sandal trees," says Mr. Read, "growing upon private lands are considered as the property of the government; but it would be ridiculous to suppose, that they will always be considered as such by the occupiers of estates, who undoubtedly commit frequent depredations upon them. It would therefore be for the benefit of the Company to have the whole cut down immediately that are of a fit age, which I am told is not till they are 30 years old. The whole might be easily collected at Onore (Honawera), and taken up by one of the Indiamen passing from Bombay to China." Mr. Read was probably not aware, that last year all the ripe sandal in Mysore had been cut, and a great danger has consequently been incurred of glutting the market; while some years hence it will probably be greatly enhanced in value. I have already mentioned, that some measure should be adopted for regulating the cutting of the sandal wood; so that a certain supply should annually be brought to market, and no more permitted to grow than can be disposed of to advantage; for it must be considered as a mere superfluous luxury, the only proper use of which is to become a source of as

much revenue as possible. As the Company and the Mysore Rájá CHAPTER are in the sole possession of the countries which produce it, the arrangement might be readily made on somewhat like the follow- March 7. ing plan. An estimate of the quantity annually saleable, and of the whole produce that grows in both territories, having been formed, an agreement might be made, that each party should furnish the annual supply for a number of years, in proportion to the whole quantity that grows in his country. For instance, the Mysore Rájá might furnish the supply for nineteen years, and the Company for one, which I imagine is somewhat about the relative proportion of what the two territories produce. The parties, of course, would be tied down to sell no more than a certain weight each year. They might improve its quality, as much as they could; and public sales, such as the Company use in Bengal for opium and salt, I am persuaded would be found by far the most advantageous manner of disposing of this article. Mr. Read mentions no difference in the quality of the sandal which grows below the Ghats, from that which grows in Karnata; but all the natives that I have ever spoken with on the subject, from Pali-ghat to this place, look upon the produce of the low country as of little or no value, as having no smell.

The wild cinnamon and Cabob China are rented together for about Laurus 22 Rupees a year. The former sells in the market (Bazar) at 28 cassia. Rupees a Candy, and the latter at 32 Rupees. The Candy is equal to 20 Maunds.

Mr. Read values the wild pepper at one Pagoda a Maund; and Wild pepper. says, that it is of a quality very inferior to that raised in gardens, which sells for about 1\frac{1}{2} Pagoda. All the natives with whom I conversed looked upon them as of equal value.

The number of people at present employed in the Cumri, or Cumri culti-Cotu-cadu cultivation, amounts to 2418, who pay yearly 9541 Pagodas, or 3s.  $2\frac{1}{4}d$ . a head. It is supposed by the revenue officers. that in this manner 1900 more people might find employment.

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CHAPTER
XVI.
March 7.
Sugar-cane.

I have already mentioned Mr. Read's opinion concerning the quantity of land in his districts below the Ghats that is fit for the cultivation of rice or gardens. The quantity of sugar-cane annually raised is estimated at 98,19,250 canes, and Mr. Read does not think that this cultivation ought to be farther encouraged, as it would interfere with that of rice, which is more valuable.

Stock.

The stock required for the arable lands, according to Mr. Read, is as follows.

	Ploughs bel	onging to	Cattle.		
	Landlords.	Tenants.	Total.	Buffaloes old and young.	Cow kind old and young.
Kunda-pura - Honawera Ancola Total -	3180 4883 2331 10396	4343 1221 67 <b>3</b> 6237	7523 6104 3004 16633	5894 8472 2858	23462 22148 11055 55665

Plantations.

Mr. Read states it as Major Monro's opinion, that, had the landtax on coco-nut plantations been more moderate, double the present quantity would have been raised. No means at present exist to ascertain the number, either actually growing, or that of plantations which have gone to decay.

Mr. Read gives the following account of the population of these districts.

	House		hich t	he folk d by	owing a	are		ns of the	
	Total Numbers	Christians.	Mussulmans.	Bráhmans.	Sivabhacters.	Jain.	Salt-makers.	Fishermen.	Slaves of both sexes.
Kunda-pura - Honawera Ancola	9049 10554 6130 25733	36 256 93	704 311	1799 2231 804 4834	21	46 39 1	180 —	2628 4842 1832	470 270

In the annexed Statement will be seen the exports and imports, by sea, from these districts: the first amounting to 331,532 Rupees, and the latter to 44,585 Rupees.

Statement shewing the Average annual Quantity of Goods imported and exported by Sea in the northern Division of Canara, 1800-1.

No.

19523 41837 in Rupces. Total Value Picces. ddud, or Average annual Quantity Exported. Cubits. Tak 40 Scores. Nodie, or Seers Cutcha Maunds of 44 Seers Culcha. spunny 02 jo szipuvy 3105 Marays of 515. Pucha Seers. Corges of 1470 2419 .szzdny uj Total Value 98500 JO 'papy Average annual Quantity Imported. Tak 40 Cubits, Scores. Kodie, or Seers Culcha of 24 Rupees. 9 Seers Culcha. by jo spunnis Candies of 20 Maunds. 76431 253 Morays of 512 Pucka Seers. Corges of 1470 11 Hurvaday, or Allahsundy (ditto) 18 Lobay, or white Gram (ditto) Sweet-oil seeds (Sesamum) Names of the Articles. 13 Lamp-oil seeds (Ricinus) 12 Gram for horses (ditto) Green Cuddalay (ditto) Paddy, or rough rice Toor Dhall (a pulse) 22 Ditto - 2d ditto 23 Ditto - 3d ditto 24 Ditto - 4th ditto 25 Peper 26 Cardamoms -O Green Gram (ditto) - 4th ditto 2 Paddy, or rough in 3 Ragy (Cynosurus) 9 Wooduth (a pulse) 21 Betel-nut 1st sort 7 Shamay (millet) 8 Mustard Chunam (lime) Toor (a pulse) Rice, cleaned 9

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## A JOURNEY FROM MADRAS THROUGH

CHAPTER XVI. March 7.

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## CHAPTER XVII.

JOURNEY FROM THE ENTRANCE INTO KARNATA TO HYDER-NAGARA. THROUGH THE PRINCIPALITIES OF SOONDA AND IKERI.

MARCH 8th, 1801.—On leaving Déva-kára, the valley watered CHAPTER by the Bidháti becomes very narrow, and you enter Karnata Désam, which extends below the Ghats, and occupies all the defiles March 8 leading up to the mountains. Karnata has been corrupted into Désam. Canara; and the coasts of Tulava and Haiga, with the adjacent parts of Malayála and Kankana, as belonging to princes residing in Karnata, have been called the coast of Canara. The language and people of this Désam being called Karnataca, the Mussulmans, on conquering the peninsula, applied this name, changed into Carnatic, to the whole country subject to its princes, and talked of a Carnatic above the Ghats, and one below these mountains; although no part of this last division belonged to the Karnata of the Hindus. Europeans for a long time considered the country below the eastern Ghats as the proper Carnatic; and, when going to leave Dravada and enter the real Karnata, they talked of going up from the Carnatic to Mysore.

After going two cosses near the river side, with stony hills to my Appearance right, I came to the first cultivated spot in Karnata. Here a small of the counrivulet descends from the hills, and waters a narrow valley, which in the bottom is cultivated with rice, and on the sides is planted with Betel and coco-nut palms. For half a coss the road then passes through a forest of the kind which spontaneously produces black pepper. Beyond this I came to another narrow valley, that is VOL. III. Dd

March 8.

CHAPTER watered by a perennial stream, and cultivated like the former. Afterwards I went about half a coss through a forest, where the ground is very level, and capable of being converted into rice fields. At the end of this I encamped in a third valley, which is called Barabuli, and like the two former is finely watered, planted, and cultivated. Near it is another hill that spontaneously produces pepper; and there are many such in this part of Karnata, especially in the Yella-pura and Chinna-pura districts. These pepper-hills are miserably neglected. The vines are not tied up to one third part of the trees, and the whole ground is overgrown with brush-wood. From their moisture a delightful freshness prevails in these places; and were they carefully cultivated, and the trees manured, I have no doubt, but that the pepper would be of a quality as good as any other. No tree should be allowed to grow in them, but such as are of some use; and of these the country spontaneously produces many; namely, two species of Artocarpus, Teak, blackwood, Cassia, wild nutnegs, Caryota urens, and the Bassia, with perhaps some others that escaped my notice. At present, however, these valuable kinds are not numerous, for they are overwhelmed by such as are totally useless. By the natives these pepper forests are called Maynasu Canu. The people here have no idea that any thing farther should be done to them, than once in three years to cut the bushes, and once annually to tie the vines to the young trees; and even these operations are much neglected. But, to make the most of such places, they ought to be carefully cultivated, no trees ought to be permitted to grow in them but such as are of use, and the vines ought to be manured as much as possible.

Mutti.

In all this day's journey, even where the soil was full of stones, the forests through which I passed were very stately. The Mutti (Chuncoa Muttia Buch: MSS.) in particular grows to a prodigious size. The natives use the ashes of its bark to eat with Betel, in the same manner as in other parts quick-lime is employed. Fewer of the trees lose their leaves here than nearer the sea; for a freshness CHAPTER and moisture are kept up by the vicinity of the mountains, which every morning are involved in clouds.

March 8.

The stream of the river is here slow, and its channel is filled Bidhati river. with rocks and small islands. Owing to the quantity of rotten leaves that it contains, the water is dirty. From the straw and leaves which adhere to the trees high above the banks, it is easy to perceive, that in the rainy season it must be an immense stream, and must then rise between eight and ten feet above its present level, which in such a country will give it a most formidable velocity.

The climate here, although very pleasant, is reckoned extremely Climate. unhealthy.

9th March.-I went what was called two Sultany cosses, to Cu- March 9. taki; but this estimate is formed more from the difficulty of the Road up the Ghats. road than the actual distance, which cannot be above five or six miles. At first I ascended close to the river, with a high hill immediately on my right. Soon after I came to the foot of the Ghat, where a fine stream enters from the south through some ground fit for cultivation; but of this no traces can be observed. I then ascended a very long and steep hill, sloping up by the sides of deep glens; and having gone a little way on a level ridge, I descended a considerable way into a valley, where there is a fine perennial stream. On the banks of this are some rice ground, and a wood ' which spontaneously produces pepper, and which is totally neglected. I then ascended a mountain, still longer and steeper than the first; and after a very short descent came to a small lake, and a building for the accommodation of travellers. Another short ascent brought me to a plain country above the Ghats, and immediately afterwards I came to Cutaki.

The road, although not so steep as that at Pedda Náyakana Durga, is by no means judiciously conducted, and no pains have been taken in its formation. Loaded cattle, however, can pass; and, by the March 9. Soil and trees of the western Ghats.

CHAPTER natives of the peninsula, that seems to be considered as the utmost perfection that a road demands.

Here the western Ghats assume an appearance very different from that at Pedda Nayakana Durga, or Kaveri-pura. The hills, although steep and stony, are by no means rugged, or broken with rocks: on the contrary, the stones are buried in a rich mould, and in many places are not to be seen without digging. Instead, therefore, of the naked, sun-burnt, rocky peaks, so common in the eastern Ghats, we here have fine mountains clothed with the most stately forests. I have no where seen finer trees, nor any Bamboos that could be compared with those which I this day observed. The Bamboos compose a large part of the forest, grow in detached clumps, with open spaces between, and equal in height the Caryota urens, one of the most stately palms, of which also there is great plenty. There is no underwood nor creepers to interrupt the traveller who might choose to wander in any direction through these woods; but the numerous tigers, and the unhealthiness of the climate, would render any long stay very uncomfortable. About midway up the Ghats the Teak becomes common; but it is very inferior in size to the following trees, which unfortunately are of less value.

Tari, Myrobalanus Taria Buch: MSS.

Jamba, Mimosa xylocarpon Roxb:

Nandy, foliis oppositis, non stipulaceis, integerrimis, subtus tomentosis.

This is reckoned to make good planks and beams.

Unda Muraga, foliis oppositis, integerrimis stipulis inter folia ut in Rubiaceis positis.

Also reckoned good for planks and beams.

Mutti, Chuncoa Muttia Buch: MSS.

Good timber.

Sampigy, Michelia Champaca.

The wood used for drums.

CHAPTER

XVII.

## MYSORE, CANARA, AND MALABAR.

Shaguddy. Shaguda Buch: MSS.

A strong timber.

Wontay. Artocarpus Bengalensis Roxb: MSS.

The fruit is about the size of an orange, and is preserved with salt. Here it is used by the natives in place of tamarinds, which are much employed by the Hindu cooks.

Honnay. Pterocarpus santalinus Willd:

The Teak in some parts of this district of Yella-pura is abundant, and in the rainy season may be floated down the river.

Below the Ghats the country consists of the Laterite, or brick- Strata of stone, so often mentioned; but it is much intermixed with granites, and talcose argilite, which seems to be nothing more than the potstone impregnated with more argill than usual, and assuming a slaty form.

The strata on the Ghats are much covered with the soil; so that Strata on the it is in a few places only that they are to be seen. Having no compass, I could not ascertain their course; but, so far as I could judge from the sun in a country so hilly, they appeared to run north and south, with a dip to the east of about 30 degrees. Wherever it appears on the surface, the rock, although extremely hard or tough, is in a state of decay; and owing to this decay, its stratified nature is very evident. The plates, indeed, of which the strata consist, are in general under a foot in thickness, and are subdivided into rhomboidal fragments by fissures which have a smooth surface. It is properly an aggregate stone, composed of quartz impregnated with hornblende. From this last it acquires its great toughness. In decay, the hornblende in some plates seems to waste faster than in others, and thus leaves the stone divided into zones, which are alternately porous and white. I am inclined to think, that all mountains of a hornblende nature are less rugged than those of granite, owing to their being more easily decomposed by the action of the air. This rock contains many small crystallized particles, apparently of iron.

March 9.
Appearance of the country.

From the summit of the Ghats to Cutaki, the whole country is level enough for the plough, and the soil is apparently good; yet, except in some low narrow spaces used for rice ground and Betelnut gardens, there is no cultivation. Cutaki is a poor little village, with seven houses.

Height of the mountains.

I perceive no difference in the temperature of air, on coming from the country below the *Ghats*; and, in fact, do not think that I have to-day ascended more than a thousand feet perpendicular height. This is perhaps the very lowest part of the mountains; but the country is said to rise rapidly all the way to the *Marattah* frontier.

Robbers.

Almost all the inhabitants of this neighbourhood are Haiga Bráhmans, who are a very industrious class of men, that perform all agricultural labours with their own hands. During Tippoo's government, thieves were in this vicinity very numerous; and many bands of a set of scoundrels, called Sady Jambuty, were then in the habit of coming from the Marattah country to plunder. The former have been entirely banished; but the Sady Jambutty still come in bands of twenty or thirty men, although not so commonly as in former times. On Mr. Monro's arrival, a thief of this country, finding that this was not likely to be a convenient place for his residence, withdrew to the Marattah territory, and formed an alliance with Lol Sing, a noted robber. With their united forces these two ruffians have made three incursions into this country. In their last expedition, about twelve days ago, both were taken prisoners, and are now in confinement at Hully-halla. When these robbers make their attack, or are known to be in the neighbourhood, the Bráhmans, and other peaceable inhabitants, retire from their houses with their effects, and even during the rainy season conceal themselves in the forests; for pestilence, or beasts of prey, are gentle in comparison with Hindu robbers, who, in order to discover concealed property, put to the torture all those who fall into their hands.

10th March.—I went four cosses to Yella-pura. The first part of CHAPTER the road led through a forest spontaneously producing pepper. The trees and soil are very fine; but owing to a want of culti- March 10. vators, according to the report of the inhabitants, not above one of the counfourth of the pepper is procured from it that ought to be. forest is intersected by narrow vallies of rice-ground, with a few gardens well supplied with water from springs and rivulets. I afterwards passed through a very hilly country; but the hills are of no considerable height, and in general the soil is apparently good. The trees, however, are not so large as where the pepper grows; and it is universally agreed, that the plant will not thrive in any forest but where it is found spontaneously growing. Many places among these hills are so level that the plough might be employed; and I suppose they might be cultivated for Car' Ragy, as is done in similar situations at Priya-pattana; but the people say, that unless the ground has been formed into terraces, the rains here are so heavy as to sweep away the seed. The rains in general are fully adequate to produce one crop of rice from any land properly levelled; and therefore it might be thought that by far the greater part of the country here might be cultivated for rice; but the people have an idea that no part of the country is fit for that purpose, but what has been already cultivated. Even of this, owing to a want of cultivators, three fourths are at present waste. The gardens being more profitable, and being also private property, are better occupied; and not above one quarter of them have gone to ruin.

Yella-pura is the residence of a Tahsildar, and contains a hundred Yella-pura houses with a market (Bazar), which is tolerably well supplied; trict. but every kind of grain is dearer here than at Seringapatam.

The Tahsildar gives me the following account of his district. Near the Ghats cultivation is confined to pepper and Betel gardens, and to rice fields, in which, as a second crop, a little Hessaru (Phaseolus Mungo) is raised, and occasionally a little sugar-cane. In

XVII. March 10.

CHAPTER the eastern parts toward Hully-halla, Sambrany, Madanuru, Mundagodu, and Induru, the woods consist mostly of Teak, and there are no gardens. The cultivated articles on low lands are rice, Carlay (Cicer Arietinum), and Horse-gram (Dolichos biflorus), and on the dry-field Ragy (Cynosurus Corocanus), and Ellu (Sesamum). The soil every where is tolerably free from stones. Although the rains are not so heavy as below the Ghats, they are sufficient on level land to bring to maturity one crop of rice. Little attention is paid here to the tanks; and they are rather dams to collect the water of small streams, or of springs, and to distribute it to the fields and gardens, than reservoirs to collect the rain water.

Maynasu Canu, or forests containing spontaneous pepper.

The Haiga Bráhmans say, that all the forests spontaneously producing pepper, with the gardens and rice fields intermixed, are their private property. By an old valuation, a separate land-tax is affixed on each kind of ground; but on most of the properties, on account of the depopulated state of the country, from one half to three fourths of what was exacted by the Ráyaru have been relinquished. To manage a Maynasu Canu properly, requires the following labour. Once a year the branches of the pepper vines must be tied up to the trees, and these must be freed from all climbing plants, especially the Pothos scandens Lin. and the Acrostichum scandens Buch: MSS, both of which climb to the tops of the highest trees. Every third year all the bushes ought to be cut down; and every fifth year the side branches of the trees should be lopped, to render them proper supports for the vine, which thrives best on slender straight trees. Where the trees are too distant, a branch or cutting ought to be planted; and if no young shoot of the pepper is near, a cutting or two of the vine should be put into the earth near the young tree. The pepper vine thus managed lives about ten years; when it dies, another young shoot must be trained up in its stead. In doing this, care must be taken to select shoots of a good kind; for, as the birds drop all the seeds promiscuously, shoots of the three different kinds of pepper are to be found in these woods. These three kinds are

Cariguta, Bily Maynasu, and Vocalu. The first kind is the best; not CHAPTER that there is any difference in the quality of the pepper, but the amenta of the two last kinds contain very few grains. I have had March 10. no opportunity of determining, whether the difference consists in sex, species, or variety; but the natives, by examining their leaves, can distinguish the different kinds. Every kind of tree is reckoned equally fit for supporting the pepper vine; but, where the woods are too thin, the tree commonly planted is the Bondu Bala, because it easily takes root. As the produce could not be secured from themonkies, no fruit trees are planted. When the trees are about three cubits distant from each other, and are of a middling size, the vines thrive best. Very large trees do not answer for the pepper, but are said to be of advantage by giving shade. In fact they are very common; but I imagine more owing to the trouble of cutting them, than to any advantage that they are of to the pepper. In order to prevent the havoc which would be occasioned by the natural decay and fall of one of these immense trees, when they observe one beginning to wither, the natives cut off its branches, and a circle of bark from the bottom of the stem; by this means it decays gradually, and rots without falling down in a mass, owing to the weight of its branches. Except this rotten wood, no manure is used. Most of these steps, which I have now enumerated, are in general very much neglected. The pepper of a Maynasu Canu is reckoned somewhat inferior to that raised in gardens, which I consider as arising merely from a want of proper cultivation and manure. In a Maynasu Canu, a tree, although much larger than one in a garden, produces only one Cutcha Seer; while the one in the garden usually produces double that quantity. A man collects in the day the produce of twenty trees, or rather more than 12 lb., and at the same time he ties up the branches, which is all the annual labour required. He ascends the tree by means of a ladder of Bamboos, some of which are forty cubits long.

XVII.

March 11.
Face of the country.

11th March.—I went four cosses to Caray Hosso-hully; that is, the new village at the tank. The whole country, so far as I saw, was totally uninhabited, and very few traces of former cultivation were observable. A few narrow vallies seem once to have been under rice. The higher grounds, I suspect, have been always a forest; although, from the stateliness of the trees, the soil would appear to be good, and in its present state much of it is not too steep for the plough, while no part seems incapable of being formed into terraces, as is done below the Ghats. In a small portion near Yella-pura, the trees of the forest were stunted, and from a want of moisture had lost their leaves; but in the greater part they were very luxuriant, and many of the kinds were, to me at least, quite unknown. In my botanical investigations, however, I had very little success; for the cutting down one of these trees is a day's work for four or five natives; and at Yella-pura I could procure nobody that would climb to bring me specimens. The vast number of ants, indeed, that live on the trees in India, render this a very disagreeable employment.

Caray Hossohully.

Caray Hosso-hully is a miserable village of six houses, collected by Major Monro as a stage between Yella-pura and Soonda; for, on his taking possession of the country, the whole way was through a continued waste. The nearest inhabited place to Hosso-hully is two cosses distant. The new settlers are Marattahs, by which appellation in the south of India the Súdras of Maharastra Désam are known. Since the conquest, many of these people have come into this province; and many more would come, were small advances made to enable them to commence cultivation; for the desolation here has introduced a wildness equal to that of an American forest. The huts here are wretched, but the people have already cleared some ground. Throughout the forests of Soonda, tigers and wild buffaloes are very numerous, but there are no elephants.

Irrigation.

The reservoir here has been a very fine one, and never becomes dry; but it is now so filled with bushes and long grass, that to put

it in proper repair would require a thousand Pagodas. Its water CHAPTER never was employed for the cultivation of rice, but was used only to bring forward the young shoots of sugar-cane, which, till the March 11. setting in of the rainy season, require irrigation.

About two-thirds of the way from Yella-pura to Hosso-hully, I Bidháti river. crossed the Bidháti-holay, which goes north, and joins a river coming from Supa to form the Sedásiva-ghur river. Its channel is wide, and in the rainy season is probably full, but at present it contains very little water.

The strata, laid bare by the river, are of the same nature with Strata. those on the Ghats; but their dip toward the east is greater.

12th March.-I went three cosses to Sancada-gonda. diately after setting out, I crossed a small branch of the Bidháti, Appearance of the counwhich is called Baswa-holay; and still farther on I crossed another, try. named Gudialada-holay. The whole country is waste, and covered with forest. The soil almost every where appears to be excellent, with more low vallies, and more vestiges of former cultivation, than on the route of yesterday. This valley land is here called Taggu, and the rice growing on it requires five months to come to maturity. The higher lands are called Mackey, and the highest arable land is called Bisu. The rice cultivated there requires only three months to come to maturity. Sancada-gonda contains three houses, with some pretty rice lands in a good state. Not far from it are two other villages, each containing four houses, with some riceland and gardens. These villages subsisted during all the trouble of Tippoo's government, and belong to the Guru of all the Haiga Brahmans, who resides at Honawully Matam, in Soonda, pays the land-tax, and lets his lands to some of his disciples.

Imme- March 12.

13th March .- I went three cosses to the place which Europeans March 13. and Mussulmans call Soonda. In the vulgar language of Karnata it is called Sudha, which is a corruption from Sudha-pura, the Sanskrit appellation. The road was very circuitous; as I went first about south-west, and afterwards almost east. The hills are much

XVII. March 13.

CHAPTER steeper than those on the last two days route, and of course are less fit for the cultivation of rice; but there are many deep and narrow vallies fit for Betel-nut gardens; and several of these, within ornear the old walls, are now occupied, and filled with Haiga Bráhmans, who in this country are the sole cultivators of gardens. In many places I observed the pepper growing spontaneously; but it is entirely neglected; and many of the trees that would bear it are stript of their leaves and branches, which are used as manure for the gardens. All the rivulets that I crossed to-day are said to be branches of the Sálamala, which comes from Sersi; and on going below the Ghats assumes the name of Gangáwali, and forms the boundary between Haiga and Kankana.

Guru of the Haiga Bráhmans.

I sent a message to the Guru of the Haiga Bráhmans, offering to visit him; but this he declined, and sent me word, that he would come to my tents at three o'clock, at which time he would have finished his devotions which then occupied his time. He did not however arrive until late in the evening, when I was eating; so that he could not enter. I found, that in place of prayer he had been employed in giving an entertainment to another Sannyási; and I am uncertain whether he thought that it would be consistent with his dignity to keep a European four or five hours in waiting; or whether these persons, who had relinquished the vanity of worldly pleasure, were detained so long at table by pious conversation.

Haiga Bráhmans.

The Haiga Bráhmans seem to have changed countries with the Karnataca Bráhmans of Sudha, who in Haiga are in greatest estimation, while the Bráhmans of that country have all the valuable property in Sudha, and their Guru has taken up his abode in its capital, at Honawully Matam, or the golden convent. Whatever truth may be in the story of Myuru Verma, the Haiga Bráhmans were certainly the first of the Panch Dravada division who penetrated among the Jain of these parts. It seems to have been with the view of depriving them of their property, that the pretence of their having lost a part of their cast, or rank, was set up by the subsequent

intruders, who followed the conquests of the Vijaya-nagara mo- CHAPTER narchs. The character which the Haiga Bráhmans use in writing books on science, is the Grantha of Kérala, which they say includes March 13. all the countries created by Parasu Ráma. The Haiga Bráhmans, however, consider the Karnataca language as their native tongue; and all accompts and inscriptions on stone, whether in the vulgar language or in Sanskrit, are written in the Karnata character, which is nearly the same with the Andray, or old writing of Telingana.

While I was waiting for the Sannyásis, I assembled the most Account of learned men of the place, among whom was the hereditary Guru of the Rajás of Sudha-pura the Rájás, who has a written account of the family of Sudha, with a by their copy of each prince's seal. These men said, that in the time of the father of Krishna Rayaru this country belonged to Jain Polygars, the descendants of the Cadumba family; which strongly confirms the assertion of the Jain of Haiga, when these said that Myuru Verma was of their sect. These Polygars managed the country as usual, and paid tribute to Vencatuppati Ráya, the father of Achuta and Krishna Ráyalu, and who was their predecessor on the throne of Vijaya-nagara. This, however, is probably a mistake; as from an inscription at Gaukarna, already mentioned, it would appear, that the name of Krishna Ráya's father was Sedásiva. Vencatuppati. having for many years obtained no children, promised the whole of his kingdom to his sister's son Arasuppa Náyaka; but, having afterwards had two sons born to him, he gave to the young prince, his nephew, the full sovereignty of Sudha. This warrior governed from the year of Sal. 1478 (A. D. 155 $\frac{1}{6}$ ) till 1521 (A. D. 159 $\frac{1}{6}$ ). He built Sudha-pura; and having destroyed all the Jain Polygars, and the priests of these heretics, he brought up the Haiga Bráhmans to occupy the waste lands. He was succeeded by his son, Ram Chandra Nayaka, who governed till 1541 (A. D. 161s). He was succeeded by his son, Ragunata Nayaka, who governed till 1561  $(A. D. 163\frac{3}{2})$ . His son, Mādŭ Linga Nayaka, became a follower of

CHAPTER the Sicabhactars, and governed till 1597 (A. D. 1674). He was succeeded by his son, Sedásiva Ráya, who governed till 1620 (A. D. 1692); he by his son, Baswa Linga Rájá, who governed till 1668  $(A. D. 174\frac{1}{6})$ ; and he by his son, *Imody Sedásiva Rájá*, who was expelled by Hyder in 1685 (1763), and took refuge in Goa, where his son is now living on a pension from the viceroy.

> During the government of these Rájás the country is said to have been cultivated, and the town to have been very large. The space within the walls is said to extend each way a coss, or at least three miles, and was fully occupied by houses. The country, having been repeatedly the seat of war between Hyder and the Marattahs, has been desolated, and the houses in the town are now reduced to about fifty. In the reign of Imody Sedásiva, the town suffered much from an attack of the Marattahs; but, when Hyder took possession of it, there still remained 10,000 houses. The original territories of the family seem to have been the four districts (Talucs) above the Ghats, now under the management of Mr. Read; and, according to the Guru, they acknowledged no superior. From the Vijaya-pura Sultans, Sedásiva, grand-father of the last Rájá, conquered five districts (Pansh-malu) in Kankana. Imody Sedásiva, as has been already stated, was attacked by the Marattahs, and forced to pay tribute (Chouti). Till he was able to collect the sum demanded, the Pansh-malu were given in pledge to a Marattah chief named Gópál Row, who restored them when the money was paid. On Hyder's attack, the Rájá resigned the Pansh-malu to the viceroy of Goa, who settled on him an annual pension of 12000 Putlis, or Venetians, equal to 48,000 Rupees. This his son now enjoys; and he has besides some houses, and gardens, befitting his rank. These five districts are said to be worth annually 80,000 Rupees, and seem to have been the remnant of the five larger districts, at one time governed by the Vazir of Ponday, after what now composes the Ancola district (Taluc) had been wrested from the Mussulmans, and Rájás of Sudha, by the Sivabhactars of Ikeri.

Although in many points this account seems to be true, it is by CHAPTER no means accurate, as I learned from inscriptions found at this place. Those of which I was able to take any account to-day are March 13. as follow:

Inaccuracies in this acfrom inscrip-

The most ancient inscription here is at a Jain temple (Busty) count, shown dedicated to Adéswara, the first of the gods (Sidaru). It is dated tions. in the year of Sal. 722 (A. D. 799), and in the reign of Imodu Sedásiva Ráya. This being the name of the last Rájá of Sudha, it might at first sight be supposed, that he was the prince mentioned in the inscription, the thousand years of the era having been omitted in the date, as is sometimes done among the Hindus; but this, it must be observed, would bring down the date to the year of our Lord 1799, and the donation is made to a Jain temple that has been long in ruins, and to a sect abhorred by the last dynasty. Besides, it is said that the titles used in the inscription are totally different from those used by the late Rájás of Sudha, and are of a much higher nature.

The next inscription in antiquity is at a Jain Matam. A copy of this, as of the preceding, has been delivered to the Bengal government. It is dated in the year of Sal. 727, or A. D. 804, and in the reign of Chamunda Ráya, who has very high titles, like those of his predecessor, and is styled the chief of all the kings of the south. He mentions the advantages that had been gained over the followers of Buddha by two of his ancestors, Sedásiva and Belalla. These two inscriptions, therefore, belong to the dynasty of the Belalla Rayas, monarchs of Karnata. Ramuppa Varmica makes the overthrow of that dynasty, as supreme monarchs, to have happened in the year of Christ 782; but here we find them governing in the northern parts of Karnata 22 years afterwards. Although this is an inaccuracy, yet the difference is so small, that the era of the government of the Belalla dynasty may be considered as ascertained to have been in the eighth century of the Christian era. The Jain religion was then the predominant one in the peninsula, and had

March 13.

CHAPTER been preceded by that of Buddha, whose followers were then persecuted by the Jain, as these again were afterwards by the followers of Vyása.

> The third inscription, of which a copy has also been delivered to the Bengal government, is placed in a Jain Matam, and is dated in Sal. 1121, or A. D. 1191, in the reign of Sedásiva Rájá of Sudhapura; which shows, that this town was not founded by Arasuppa Nayaka, but had many centuries before his time been the residence of a Jain Rájá. Sedásira does not acknowledge any superior, but he does not arrogate to himself such high titles as those used in the two last mentioned inscriptions. He is very lavish in praise of his Guru, Sri Madabinava Butta Calanca, who (that is to say, his predecessors in the same Matam) had bestowed prosperity on Belalla Ráya. Whether this Sedásiva was a descendant of the Belalla family, as this would incline one to think, or whether he was descended from the Cadumba family, as the Guru here supposes, is uncertain.

> There are here two inscriptions by Imody Arasuppa, founder of the last dynasty of Sudha Rájás. The one is on a stone at Honawully Matam. The whole almost is in couplets, few of which are to be found in the inscriptions of an early date. The time of this inscription is involved in one of these conceits, of which I have not procured the explanation. The other inscription is at a Matam belonging to one of the Udipu Sannyásis. It is dated in the year of Sal. 1515, or A. D. 1592, which confirms the chronology of the family Guru. The donation contained in the inscription is made by Arasuppa Nayaka, Rájá of Sudha; by the appointment of Sri Vira Prubu Vencatuppati, his superior, who gets all the titles usually bestowed on the sovereigns of Vijaya-nagara. This, in the first place, shows, that the Rájás of Sudha were not independent, but for a time governed, at least nominally, as vassals of the kings of Vijaya-nagara. Indeed, the first four persons of the family assumed only the title of Nayaka, which is that usually given to Polygars.

In the year 1674, Sedásiva assumed the title of Ráya, 38 years after CHAPTER the Ikeri family had thrown off all form of respect for their ancient. lords. This inscription also shows, that Vencatuppati could not have March 13. been the father of the celebrated Krishna Ráyaru; as he lived after the reign of that monarch. In fact, the date of this inscription is after the period assigned for the destruction of Vijaya-nagara by Ramuppa; and Vencatuppati was probably some person adopted to support the falling dynasty after the death of Ráma Rájá, and conjoined in the government with Sedásiva, usually reckoned the last king of Vijaya-nagara.

14th March.-I went four Sultany cosses to Sersi. The outermost March 14. wall of Sudha was at least six miles from where I had encamped, Former ex tentof Sudha, and is said by the natives to be sixteen cosses, or at least forty-eight miles, in circumference. There are three lines of fortification round the town. The extent of the first, as I have already observed, was estimated by the natives at three miles square, and the whole space that it contained was closely occupied by houses. In the two spaces surrounded by the outer lines, the houses were formerly scattered in small clumps, with gardens between them.

From the outer gate of Sudha, till I reached Sersi, I saw neither Appearance houses nor cultivation; but it was said, that there were villages in of the counthe vicinity of the road. The country is more level than that through which I came yesterday. In two places the trees of the forest were covered with pepper-vines; but these were entirely neglected. Sersi is a small village, but it is the residence of the Tahsildar under whom Sudha is placed. It is not centrical for the district, but is chosen on account of its being a great thoroughfare, and as having a very considerable custom-house. It has a small mud fort, in which nobody resides, although robbers are still troublesome; but to live in forts is not the custom of Sudha. Near it are the ruins of a fortress, which was built by Rám Chandra Nayaka, the second prince of the last dynasty. It is called Chinna-pattana, the same name with that of the city which we call Madras.

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CHAPTER XVII. March 14. Former population.

The hereditary accomptant (Shanaboga) of the place says, that his brother is now with Baswa Linga Rájá, the son of Imody Sedásiva, at Goa, and confirms the account given by the Guru. He says also, that an enumeration of all the houses of the country was taken, in order to levy a tax for discharging the tribute which the Marattahs exacted. Sersi then contained 700 houses, and Sudha 100,000; but with the amount of the whole population of the country the accomptant is not acquainted. The population of the capital consisted of the court and army, with their followers; for it would appear, that the country never possessed any manufactures. The country must have been then very well cultivated, and rich, to be able to support such a capital, whose inhabitants, if this account be true, were then at least three times as numerous as the present people of the whole territory: but the account is probably exceedingly exaggerated.

Sources of two rivers. From a garden on the west side of Sersi, the Sálamala, or Gangawali river takes its rise; and on its east side, from a Tank called Aganasini, issues a river of the same name, which in the lower part of its course is called the Tari-holay.

March 15. Cultivation in the western parts of Soonda. 15th March.—I continued at Sersi, taking an account of the state of the country, as an example of the western parts of Soonda, in which the cultivation of gardens is the chief object of the farmer.

Gardens. Situation. In these gardens are raised promiscuously, Betel-nut, and Betel-leaf, black-pepper, cardamoms, and plantains. A great part of the ground formerly planted has now become waste, and there is some fit for the purpose that would appear never to have been cultivated; but it is only a small proportion of the whole country that can be employed in this way, and that is chiefly in the vicinity of the Ghats. Toward the eastern side of the province there are very few gardens. The situation required is a low narrow valley, with its head to the west, and opening toward the east; so that the hills by which it is bounded may defend it from the west and south sun.

To add to the shelter, the hills in these directions must be covered CHAPTER with high trees. The hills on the north side of the valley must also belong to the garden, and must be covered with trees, which are annually pruned to procure branches that serve as manure. At all seasons the garden must command a supply of water. This commonly is obtained from springs, which are numerous in this country at the head of almost every little valley. The water of these springs is collected in a small pond or reservoir, from whence it can at pleasure be let out by a channel which is conducted along the upper side of the garden. Water is also procured by forming channels from the small rivulets with which the country abounds. Some rich men fill up the whole bed of one of these rivulets, and form their plantation in the place where it was. They have thus at its upper end a reservoir formed of the remaining part of the old channel, and by one side of the garden they draw a canal to carry off the superfluous water. This incurs a very considerable expense, not only in filling up the channel, but in giving the reservoir and canal a strength sufficient to resist the torrents of the rainy season. The best soil for these gardens is the Cagadali, a red mould containing very small stones. I observe, however, that all kinds of soil are used. The prevalent one throughout the country is a lightcoloured loam of great depth.

The first step in the process of making a new garden is, to sur- Formation of round it by a ditch, to keep off the torrents which descend from the hills. The garden is then levelled with the hoe, and the whole is formed into beds, about twenty feet wide, by drains, which are parallel to each other, and run in the direction of the length of the valley, or nearly east and west. These drains are intended to carry off superfluous moisture, and in some gardens to carry away water that at all seasons springs up from the soil wherever it is opened. The soil where this abounds is reckoned by far the best; but the water itself is very pernicious, and nothing would grow unless it were carefully removed by the drains. These are about a foot broad,

March 15.

CHAPTER and, according to the natural moisture of the soil, are from a foot to eighteen inches deep. At the same time must be formed the reservoir or canal for giving the supply of water, with the channels in which it is to run. The principal channel runs at the head of the garden, and crosses the direction of the drains. From this a small channel leads between every two drains, in the centre of each bed. Such is the disposition of some of the gardens that I examined; but, according to the various declivities in different gardens, it must be varied considerably. The season for performing this labour is during the two months which precede the autumnal equinox.

Plantain trees.

In the month following the autumnal equinox, young plantain trees are set in rows, within two feet of each side of the drains, and at the distance of twelve feet from each other. If possible, the whole garden should then be covered with branches of the Nelli (Phyllanthus Emblica); at any rate, some must be put near each young plantain tree; and at the same time the centre channel of each bed must be raised a cubit high, with earth brought from the neighbouring hills. When the rainy season is over, the earth is spread upon the bed, the channel is formed anew, and every fifteen days water is given once. In the operation of watering, the channel is first filled; and then, with a pot or scoop, some water is thrown on the roots of the trees.

Betel-nut palm, or Areca.

In the same season of the second year, a pit, of a cubit square and of the same depth, is made between every two plantain trees. In each pit is placed a young Areca, which is taken up from the seed-bed with much earth adhering to its root. The pit is filled with fresh earth, which is trampled down by the foot; so that one half of the pit becomes empty, and is afterwards filled with the leaves of the Emblica. At the same period of every even year, that is, the second, fourth, sixth, and so forth, the channels of every bed must be filled with fresh earth. In the month preceding the winter solstice, the beds must be levelled; and, new channels having been

formed, the trees must be watered once every fifteen days. In the CHAPTER second month afterwards, the beds must be hoed, and each tree manured with rotten dung taken from the cow-house, where the March 15. litter used has been either fresh leaves or dry grass. Above this are spread the small branches and leaves of any kind of trees, and towards the root of every Areca a quantity of these is heaped up. In the month preceding the summer solstice, to prevent the rains from washing away the manure, the beds are covered with plantain leaves. In the uneven, or intermediate years, nothing is done in the garden, but to clear the drains and channels, and in the dry season to give the trees water. Each garden therefore is divided into two parts; in the first year one half is formed, and in the year following the other is planted.

The Betel-nut palm, or Areca, in thirteen years after it has been planted, begins to produce fruit, and in five years more arrives at perfection: it lives from fifty to a hundred years; and, when one dies, another from the nursery is put in its place. There is only one kind.

The nursery is managed as follows. In the month preceding the vernal equinox the seed is ripe. After having been cut, it is kept eight days in the house. In the mean time a bed of ground in a shady place is dug, and in this the nuts are placed nine inches from each other, and with their eyes uppermost. They must be covered with a finger breadth of earth. The bed is then covered with dry plantain leaves, and once in eight days is sprinkled with water. In the month preceding the summer solstice, the plantain leaves are removed, and young shoots are found to have come from the nuts. In the second month afterwards, leaves of the Emblica are spread between the young plants. In the month preceding the vernal equinox, they get a little dung. In the dry season they are watered once in from four to eight days, according to the nature of the soil. They are not removed till they are going to be finally

CHAPTER XVII. March 15. planted in the garden, which is done in their fifth year. They are then estimated worth one silver Fanam a hundred,  $5\frac{1}{2}$  Fanams going to the Rupee; but they are seldom sold, any man lending to his neighbour when he may be in want of a few.

The crop season of an Areca garden continues from two months before, till one after, the winter solstice. The bunches are cut as they approach to ripeness, for the ripe nut is of no use except for seed. The husk is removed with a knife. A decoction is then made with a few nuts, a little Chunam (ashes of the bark of the Chuncoa Muttia Buch: MSS.), and some bark of the Honay, or Pterocarpus santolinus. These are bruised together, and are boiled six hours in water. A quantity of the nut cleared from the husk is then put in a pot, and into this the decoction is poured, until it rises above the nuts, which are then boiled till the eyes separate. They are now put upon a strainer of mats supported on posts, and are dried six days in the sun. At night they are covered with a mat. In this country the Betel-nut is never cut, but is sold entire, and is called red Betel. Any nuts of a bunch, that have become too ripe before it was cut, are picked out and kept separate. Their husks are removed, and they are dried in the sun without boiling. These are called raw Betel, and sell much lower than the other kind.

From the month preceding the winter solstice, to that following the vernal equinox, the leaves of the Areca fall off. Each is accompanied by its broad, leathery, membraneous petiole; which, when they are young, form collectively a green smooth body at the top of the stem. These membranes are cut off, and carefully preserved. They are about three feet long, and a cubit broad; and, in the rainy season, are used to make covers for the young bunches, or spadices. In the month following the summer solstice, a man mounts the Areca, and above every branch fixes a cover, so as entirely to keep off the rain. Some of the trees are so tall and slender, that

they cannot bear the weight of the operator, and thus are deprived CHAPTER of covers. On these the bunches produce only from five to a hundred nuts, while two hundred nuts are reckoned the average March 15. produce of a covered bunch, and some bring five hundred to maturity. Each tree commonly yields two good bunches, or three small ones. The average produce is said to be 1 Maund, or 72 Seers of boiled nut from fifty trees, or from each 1148 parts of a pound. A particular set of men are employed to cover the bunches, and cut down the fruit. At each time they get two Rupees for every thousand bunches, and are very dexterous. Round their ancles, and under their soles, they fix a rope made of plantain stems, and thus unite their feet, which are then placed against the stem, and drawn up together, while the climber holds on with his hands. Having

placed the rope and his feet firm against the stem, he first moves up one hand, and then the other, and afterwards draws up his feet again. In this manner he reaches the top of one tree, where he secures himself by taking a round turn with a rope, which he carries up in his hand. One end of this rope is tied to the middle of a short stick, upon which the man seats himself, and performs his labour, drawing up whatever he wants, from an attendant below, by means of a line that he has fixed to his girdle. When he has done with one tree, he unties his seat, secures it round his neck, and swings the tree backwards and forwards, till he can reach another, upon which he then throws himself, and again makes fast his seat. He thus passes over the whole garden, without ever coming to the

ground. The trees that, from being too tall and slender, are unable to support a man's weight, have their fruit gathered by being pulled towards a neighbouring tree by means of a hook. tivators seem to under-rate the produce very much. When the Betel-nut palm is thirteen years old, the garden is Blackpepper. planted with either black pepper, or Betel-leaf vines, which climb upon the Areca. The pepper, as I have already mentioned, is of

## A JOURNEY FROM MADRAS THROUGH

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CHAPTER three kinds. The Cari Maynasu is the most productive, but requires a Cagadali soil. In this, the produce of a good tree covered with Cari Maynasu, is reckoned five Seers of cured pepper, or a small fraction more than three pounds. The Sambara and Arsina gutti thrive very well on Arsina Munnu, or a light-coloured soil; but the first produces only one Seer, and the latter two. The quality of all the kinds is the same. In the month following the vernal equinox, four cuttings of the pepper vine, each a cubit and a half in length, are taken for every Areca. One of their ends is buried five or six inches in the ground, the other is tied to the stem of its supporter. The vine requires no farther trouble, but tying its branches up once a year in the month preceding the summer solstice. It bears in six or seven years, and lives about twenty-five; so that one Areca requires three or four sets of vines. The crop season is during the two months which precede the vernal equinox. The fruit is collected by means of ladders; and a man does not collect, and cure, in a day more than five Seers, or three pounds. The pepper, as usual, is gathered when the grains are full grown, but not ripe. Here the amenta are gathered into a heap, which stands in the house, and there they are kept three days. They are then rubbed with the foot; and the grains, having been separated from all other matter, are then fit for sale.

White pepper.

A little white pepper is made by allowing the berries to ripen. The bunches, having been kept three days in the house, are washed and bruised in a basket with the hand, till all the amenta and pulp are removed. The seed is then dried five days, and is fit for sale. It is twice as dear as black pepper, but the demand for it is very small, for it is used only as a medicine.

Betel-leaf.

The Betel-leaf is cultivated exactly like the pepper, and lives the same length of time. In this country, the Nagwally, or female plant, for it is dioecious, is that chiefly used; but the Umbadi, or male, may also be found. Here both frequently produce fructification, which I have not seen any where else. A thousand CHAPTER leaves of the Nagwally sell for 8 Dubs, while the same number of XVII. leaves of the Umbadi bring only one fourth part of that sum.

Whenever the Betel and pepper vines have fairly taken root, the greater part of the plantain trees are removed.

The cardamoms (Amonum repens) are propagated entirely by Cardamoms. cuttings of the root, and spread in clumps exactly like the plantain tree, or Musa. In the month following the autumnal equinox, a cluster of from three to five stems, with the roots adhering, are separated from a bunch, and planted in the same row, one between every two Betel-nut palms, in the spot from whence a plantain tree has been removed. The ground around the cardamom is manured with Nelli (Emblica) leaves. In the third year, about the autumnal equinox, it produces fruit. The capsules are gathered as they ripen, and are dried four days on a mat, which during the day is supported by four sticks, and exposed to the sun, but at night is taken into the house. They are then fit for sale. Whenever the whole fruit has been removed, the plants are raised, and, all the superfluous stems and roots having been separated, they are set again; but care is taken never to set a plant in the spot from whence it was raised, a change in this respect being considered as necessary. Next year these plants give no fruit, but in the year following yield capsules again, as at first. After transplantation the old stems die, and new ones spring from the roots. Each cluster produces from one quarter to one Seer weight of cardamoms, or from Too to of a pound.

All these gardens are private property, and all belong to Haiga Tenures. Bráhmans. When a man wishes to make a new one, he fixes upon a spot, which must not only contain room for the trees, but must have hills for shelter, and for supplying manure, and a place for the house and kitchen garden. When a proper situation has been found, the planter purchases the whole from the government. The usual price has been ten Pagodas, or forty Rupees, for every thousand

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CHAPTER trees planted. For twelve years they pay no land-tax; on the thirteenth year, every thousand trees paid, on a good soil, three Pagodas; and every year, until the eighteenth, an additional tax of three Pagodas was imposed. Afterwards the thousand trees, on a good soil, paid yearly twenty Pagodas; on a bad soil, the tax was only ten Pagodas a thousand. Nothing was exacted for the plantains, pepper, Betel-leaf, or cardamoms. If the proprietor become poor, and be not able to cultivate his garden, so that it runs to waste, he informs the officers of revenue, who sell the ground, and give him the price. He may sell the garden when he pleases. This property is never mortgaged. Tippoo raised the land-tax; owing to which burthen, and other troubles, many of the gardens are now waste. Major Monro reduced the rent to the old standard; but as yet no new gardens have been formed, and the people are expecting some farther indulgence before they begin to plant.

Labour.

In this country a few slaves are kept; but most of the labour, even in the grounds of the Bráhmans, is performed by the proprietors, or by hired servants. The Haiga Bráhmans toil on their own ground at every kind of labour, but they never work for hire. The hired servants seldom receive any money in advance, and consequently at the end of the year are free to go away. No warning is necessary, either on the part of the master or of the servants. These eat three times a day in their master's house, and get annually one blanket, one handkerchief, and in money 6 Pagodas, or 48 Rupees, or 21. 8s.  $4\frac{1}{4}d$ . Their wives are hired by the day, and get 11 Seer of rough rice, and 3 Dudus, of which 491 are equal to to 1 Rupee. In so poor a country, these wages are very high. A male slave gets daily 2 Pucka Seers of rough rice, with annually one blanket, one handkerchief, a piece of cotton cloth, and some oil, tamarinds, and capsicum. He gets no money, except at marriages; but these cost 16 Pagodas, or 61.8s.  $11\frac{1}{2}d$ ., for the woman must be purchased. She, and all her children, of course become the property of her husband's master. The woman slave gets daily

13 Seer of rough rice, a blanket, and annually a piece of cotton CHAPTER cloth, and a jacket. Children and old people get some ready dressed victuals at the house of the master, and are also allowed March 15. some clothing. The men work from sun-rise till sun-set, and at noon are allowed one Hindu hour, or about twenty-four minutes, for dinner. The women are allowed till about eight o'clock in the morning to prepare the dinner, which they then carry to the fields, and continue to work there with the men until sun-set.

In the forests here, any person may cut whatever trees he pleases, Sandal-wood. except sandal-wood, and such as grow in forests producing pepper. The sandal trees are numbered, and put in charge of the head-man of the village. The custom of this district (Taluc) is, once in twelve years to cut the sandal. Three years ago a man purchased all that was fit for cutting, and procured about 100 Maunds of 40 Seers each, or about 211 hundred-weight.

Few or no merchants reside in Soonda. Those from below the commerce. Ghats come, and purchase a little pepper; but by far the greatest Exports. part of this article, and all the Betel-nut and cardamoms, are brought up by the Banijigas, who come from Hubuli, Darwara, Hameri, or Haveli, and Umanabady in the Marattah dominions. They come here in the hot and dry season, between March and June, and, going round the houses of the cultivators, give cash for the produce of the gardens. The common price of pepper is 18 Ikeri Pagodas, or 72 Rupees, for the Nija of 12 Maunds, each weighing 72 Seers of 24 Dudus. This is at the rate of  $3\frac{321}{1000}$  pence a pound, or at about 821 Rupees for the Candy of 600 lb., which is used by the Company in Malabar. The cultivation of gardens being evidently more expensive here than in Malabar, we may, from the price given at this place, judge of the practicability of the Company's taking at a low rate all the pepper of that country, and, provided they removed the land-tax, of giving a sufficient encouragement for its cultivation. The common price of red Betel-nut here is one Pagoda for the Maund, or 2 14 pence a pound. The

XVII. March 15. Imports.

CHAPTER cardamoms sell for 7 Pagodas the Maund of 40 Seers; so that a pound costs almost 2s. 4d.

> The Marattah merchants bring almost the whole cloth, and a great part of the grain, that is used in the country. Some they exchange with the cultivators; but the greater part is sold for ready money to shopkeepers, who again retail these articles to the people of the country. The iron used in the neighbourhood comes from Chandra-gupty, and other places in the dominions of Mysore. Their salt comes from Canara, and a vast quantity passes this way to the Marattah territory.

Betel-nut.

The Marattah merchants, who are just now here, say, that the Betel-nut of this place is greatly inferior to that of Sira, and the neighbouring countries; which is in direct opposition to the information of the people of Bangalorc. The taste of the people in the two countries may be different; as, for instance, the female Betelleaf is here preferred, while in some other countries the male is in greater request. There is no reason to doubt the accuracy of the price current given me at Bangalore. The Marattah merchants say, that they purchase all that they can get at Sira; but, that being totally inadequate to supply the demand, they must take whatever they can get. They say, that none grows in the Marattah territories, and from hence it is carried to the most remote parts of their dominion.

Cardamoms.

The cardamoms that grow here are of an inferior quality to what they get at Sringa-giri, that is, to the produce of Coorg.

Pepper.

The garden pepper of Soonda and of Nagara is of equal value, and is better than that which grows spontaneously, by three Pagodas a Candy, that is, in the proportion of ten to nine. They say also, that merchants and commerce meet with every protection and encouragement in the Marattah dominions. Indeed, among the Hindus, even in the most rapacious governments, this class of people is seldom molested.

Strata of Jaydi Munnu.

In low moist vallies here, a kind of white clay, mixed with small

bits of quartz, is very commonly found under the soil of rice- CHAPTER grounds. Its strata are often several cubits in thickness, and, where it comes to the surface, render the ground very sterile. It is called March 15. Jaydi Munnu, and is used to white-wash the houses of the natives. It is diffused in water to separate the sand and stones, and is then mixed with a little Chunam, that is to say, the ashes of Muddi bark (Chuncoa Muddia Buch: MSS.); for in this vicinity there is no lime.

The Panchanga, or astrologer of this place, gives me the following Weather. account of the weather. In the month preceding, and the four months following, the summer solstice, the winds are westerly, and very strong, with excessive rains; so that during these five months it is rarely ever fair for an hour. In the five following months, that is, two months before and three months after the winter solstice, the winds are easterly, and of moderate force. The weather is in general fair; but during the first month there are some showers, and during the two next there are every morning heavy dews, and thick fogs. In the two months following the vernal equinox, the winds are variable, but come mostly from the south. At first they are moderate, but they increase in strength toward the end of this period, and bring on the commencement of the rainy season. At present, toward the end of the second period, the nights are rather cool, with very heavy fogs in the morning. The days are clear, and very hot.

The two most unhealthy seasons are, the two first months of the Unhealthy. rainy season, and the four months of cool weather. At all times, however, the country is extremely unhealthy for people not inured from birth to its dangerous air; and my servants are now suffering considerably from its baneful influence.

16th March.—Having been employed all the 15th in taking the March 16. foregoing account, I to-day went five cosses to Banawasi. A great Appearance of the coundeal of the country through which I passed has been formerly try. cleared; and the greater part, although now waste, has not yet

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CHAPTER been overgrown with trees. The woods, being young, do not in general contain tall trees; but I passed through a stately forest, in which the pepper-vine grows spontaneously. In this there was some Teak. The greater part of the country is not too steep for the plough; but in many places the Laterite rises to the surface. Where that is not the case, the soil is apparently good. Banawási, in Hyder's government, contained 500 houses, which are now reduced more than one half. Its walls are ruinous, and, although it has been a place of great celebrity, do not appear to have been ever of great extent. It is now the residence of a Tahsildar. The Varadá river, after having come from Ikeri, passes on the east side of the town, and falls into the Tunga-bhadra. At present it is very small, and muddy, with little current; but in the rainy season it is no where fordable, and might be applied to the purposes of commerce. It is only navigated, however, by the baskets covered with leather, which serve for ferry-boats.

Madu Linga, a Hindu antiquary.

I remained at Banawasi two days, having met with a Brahman very curious in antiquities, who was named Madu Linga Butta, and who was priest (Pújári) in the temple called Madugéswara, to the sanctity of which the celebrity of Banawasi is attributed by Madu Linga. It is dedicated to Maducanata, one of the names of Iswara, or Maha Déva, of whom my antiquary is a most devout worshipper. This temple had formerly very large endowments; and, although a very mean building, is still in good repair, and much frequented. Its priest was to me the most interesting object about the place. Although a person of the most austere and mortified life, and who employs much time in the ceremonies of devotion, yet he had considerable curiosity, and had been at great pains in studying and copying the ancient inscriptions, both here, and at some places of celebrity in the neighbourhood.

Banawási.

Banawasi, he says, in the first Yugam was called Coumodi; in the Traytaia-yugam it was called Jainti, or success; in the Duaparyugam its name was changed to Beindivi; and in this age it is called

Vanavási in the Sanskrit, and Banavási in the vulgar language, as CHAPTER being situated in a forest. At the very commencement of this age, it was for some time the residence of Dharma, the youngest of March 16. the five sons of Pandu; and here several princes descended from Trenetra Cadumba held their court.

Madu Linga gave me copies of the following inscriptions, which Inscriptions, have been delivered to the Bengal government.

The most ancient by far, and, unless there be some mistake in the matter, which indeed is almost certain, the most ancient inscription any where existing, is at the temple Madugéswara, and contains a grant of lands to the god Maducanata, by Simhunna Bupa of Yudishtara's family, dated in the year of the era of Yudishtara 168. As the Christian era, according to the usual reckoning of the Bráhmans, commences in the 3102 year of Yudishtara, this inscription was made 4735 years ago.

Another very ancient inscription, but following the other at a great interval, is also at the temple of Maducanata. It is dated in the year Jeya of the era of Vicrama 96, in the reign of Vicrama Dittya. This answers to the 39th year of our Lord.

The next most ancient inscription, of which he gave me a copy, is at Balagami, a place south-east from hence in the Mysore territory. Yudishtara, or Dharma Ráya, dwelt at it one year; and afterwards, during the reign of Vira Belalla, it was for some time the capital of Karnata. The ruins are said to contain an immense number of inscriptions. Two of these are dated in the reign of Yudishtara; and the others are all in the reigns of Jain princes, who, early in this Yugam, according to Madu Linga, expelled the followers of the Vedas, and till the time of Sankara, and Rám' Anuja, continued to be the governing power. The inscription of which I am now treating contains a grant of lands to the goddess Renuca, mother of Parasu Ráma. Her temple is, however, situated at Chandra-gupty. The date is in the year of Sal. 90, or A. D.  $16\frac{7}{8}$ , in the reign of Trenetra Cadumba. I have many doubts concerning the XVII.

CHAPTER antiquity of this inscription. It is said to mention, that, before the time of this Trenetra Cadumba, there had been fourteen Cadumba Ráyas, and twenty-one of the family of the Barbaraha; and that after him there would be seven Cadumba Rájás, and Vira Bojah Vassundara, a Rájá who, according to the Bráhmans, has not yet appeared, but who is soon to come, and who, after having expelled all Melenchas and other infidels, is to restore the true worship in all parts of Bharata-khanda. When I stated, that the inscription must have been written after the last of the twenty-one Jeantri Cadumba Rájás mentioned by Ramuppa, as their exact number is specified in the writing, my doubts by no means discomposed the Hindu antiquary; he said, that this matter could have easily been ascertained by prophecy; and, in order to remove my doubts, showed me a list of monarchs extracted from the eighteen Púranas, in which the Mussulman kings of Delhi were mentioned. Any reply to this could only have given offence; but the circumstance shows, that either these books usually attributed to Vyása are of recent fabrication, or have suffered gross interpolations.

Madu Linga was, however, so far from looking upon the power of foretelling future events as a proof of supernatural authority derived from divine favour, that he gave me a copy of an inscription on stone, which also came from Balagami, and which he says is prophetical, and yet acknowledges that it was composed by a Jain Guru, who by intense study had acquired the art of prophecy. A copy of what is said to be the prophetical part of this inscription I delivered with the others; the remainder Madu Linga did not think worth copying. The prophecy he applies to the success of the British arms in India; and says, that before the year of Sal. 1900, the English are to possess the whole country from the snowy mountains, to Raméswaram. The author of the inscription in question is said to have been Muru Jamadeya, Guru to Maha Sholia, or Sholun Rájá, a Jain prince, who was sovereign king of the five great divisions of the world. He lived since the time of Salivahanam;

and my antiquary relates many extraordinary things of this infidel CHAPTER prince, and of his unbelieving Guru. I am at a great loss to account for this circumstance, as Madu Linga is apparently a zealous worshipper of Siva. I can only account for it by supposing, that he is inwardly a Jain, which does not prevent him from worshipping the Linga as a representation of a Devata. However that may be, he gravely relates, that Sholia Rájá permitted none of his subjects to die till they were a hundred years old; and also, that his Guru one day, about 3 o'clock in the afternoon, told the sun to stop, and the luminary immediately obeyed. After three hours the Guru allowed it to set, which it accordingly did at the usual time by a sudden movement to the west. The inscription in question was composed by Muru Jamadeya, that, when the prophecies in it came to be fulfilled, all future ages might have evident proof of his learning.

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Another inscription is engraven on a stone at the temple of Talaléswara in Hanagul, a place in the Savanuru district (Taluc), which is probably the Shanoor of Major Rennell. The date is involved in the conceit of a couplet, but was interpreted to be Sal. 1130, being the year Jeya. The reigning prince is Cadumba Ráya, and must have been a descendant of the Jeantri Cadumba monarchs, who even then retained a portion of their dominions.

The next inscription is at a place called *Cupatura*, which lies east from Banawási. It is dated Anunda Sal. 1297 (A. D. 1374), in the reign of Vira Buca Ráya of Hasinawali, which is the Sanskrit name of Anagundi, a city on the bank of the Tunga-bhadra, opposite to Vijaya-nagara.

The next inscription is engraven on a stone at a Jain temple (Busty) in the same place, Cupatura. It is dated in Sal. 1337, which, as I before mentioned, is probably an error of the copyist for 1437; as it is in the reign of Achuta Ráya, Narasingha Ráya, and Krishna Ráya.

It would appear, that until about this period the Jain in these parts continued numerous. Among other proofs, I may mention:

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CHAPTER that a valuation of all the country between Nagara and Vereda, both included, and said to have been made by the orders of Krishna Ráyaru, appears to have been conducted by a Jain officer, Gopa Gauda. This valuation is engraved on stone at Balagami, or Balagavi; and a copy of it, which I procured from Madu Linga, accompanies the other inscriptions.

> The next inscription is in a temple at Banawasi, and is dated Paradavi, Sal. 1474, in the reign of Vencatadri Deva Maha Ráya.

> The last inscription also is engraven on a stone at Banawási, and dated Vilumbi of Sal. 1501, in the reign of Imudy Arasuppa Nayaka of Sudha, which confirms the chronology of the Guru of that family in the account which he gave me while I was at their capital.

State of agriculture in the open part of Soondu.

Having assembled the cultivators in presence of the officers of government, they gave me the following account of the state of agriculture; which may be considered as applicable to the eastern and more open parts of Soonda.

Every village has a different measure for grain: that in use here is as follows:

Grain measures.

One Candaca contains 20 Bullas; 1 Bulla 4 Seers. The Seer, when heaped as usual, contains 76½ cubical inches. The Candaca, therefore, is equal to  $2\frac{8.4.5}{10000}$  bushels. By this Candaca, the farmers estimate the seed and produce; but they sell rough rice by another, the Bulla of which is equal to 80 Seers, or which contains  $56\frac{9}{10}$ bushels. The value of this at present is 6 Pagodas, which is at the rate of  $10\frac{19}{100}$  pence a bushel. Rice again, when freed from the husk, is sold by a Candaca whose Bulla contains 32 Seers, or which is equal to 221 bushels. This at present sells for 61 Pagodas, or 25 Rupees; which is at the rate of 2s.  $2\frac{1}{2}d$ , the bushel, and is said to be higher than the price at Seringapatam. The difference of price shows the enormous expense which attends the operation of removing the husks, owing to the ignorance of mechanism among the natives; for only one half of rough rice consists of husk.

Here, and all toward the east side of Soonda Rayada, the great

object of cultivation is rice; as toward the west the farmers are chiefly CHAPTER occupied with plantations. I measured two fields, in order, if possible, to ascertain the rate of seed and produce, but without getting March 16. any thing satisfactory. By measuring a great extent an average may be struck, as has been done by Mr. Ravenshaw; but it will be found, that some fields are alleged by the cultivators to require one half less seed than others of equal extent. Great allowances must be made, in a point even of such importance, to the ignorance of the farmers; but still I do not suppose them to be so grossly inattentive, as to make such a difference in the seed actually sown. I rather suppose, that what they call a Candaca's sowing has nothing to do with the real quantity of seed, which is concealed with a view of lowering their burthens. One of the fields which I measured contained 72,698 square feet for the nominal Candaca, which is at the rate of 1-205 bushel an acre. The other field was at the rate of 48,749 square feet a Candaca, or at  $2\frac{1}{2}$  bushels an acre. These fields were contiguous, and the difference appeared to me to have arisen from two plots of Ragy ground having been stolen into the first, which in the revenue accompts was still kept at its original rate of sowing, but actually required more seed. As a foundation for calculation, I therefore prefer the last measured field.

The rains are not so heavy as to the westward; but, in ordinary seasons and a moist soil, are sufficient to bring to maturity a crop of rice that requires six months to ripen. Where the soil is very absorbent, small tanks are formed, to keep a supply for a few days that may occasionally happen to be without rain. A few of the highest fields are cultivated with a kind of rice that ripens in three months; but the natives here consider as totally useless much land that might be easily formed into terraces, like the Mackey land of Kankana, and of which the soil is apparently good. The rice ground never gives two crops of rice in one year, although, by means of tanks, a constant succession of crops might be obtained from the lower parts of the vallies. This kind of land is divided

March 16.

CHAPTER into two sorts; the Soru, or low fields; and the Bisu, or higher ones. Both are cultivated in the same way, and the only difference is in the quantity of produce.

> The six months rices are cultivated on the low fields (Soru); and on the best of the higher land (Bisu); and are the following:

Doda Honasu.

Sana Honasu.

Mulary.

·Cari Chinna Calli.

Sali Butta.

Mota Hulliga.

Sidu Sali.

Asidi Butta.

Chinta Punny. All these are large grained.

Sana Butta, a small grain, and rather more valuable than the others; but it is found to answer on very few soils. Experience shows, that certain fields agree best with certain kinds of rice, and each is of course sown with the kind only that gives most return. The natives have no rule to ascertain this a priori; and when a new field is brought into cultivation, they must find it out by experience. The manner of cultivating these kinds of rice is as follows. Immediately after harvest, the field is ploughed lengthwise and across. (The plough of this place is delineated in Plate XXVI. Fig. 71). The clods are then broken by drawing over the field an instrument named Coradu, which is yoked to a pair of oxen, and is represented in Plate XXIX. Fig. 72. The field is then allowed to rest exposed to the air until the month preceding the summer solstice, or until the rains commence, when its soil is loosened by the hoe drawn by oxen and called Heg Cuntay (Plate XXVIII. Fig. 75); and the seed is sown without preparation by means of a Curigy, or drill (Plate XXVI. Fig. 73). The four bills of this implement are secured by bolts of iron passing through a beam, to which the yoke-rope is fastened. The perforations, for the seed to pass through from the

cup, are an inch in diameter; so that the seed must fall very thick. CHAPTER After having been sown, the field is manured with cow-dung, and smoothed with the Coradu. The water is allowed to run off as it March 16. falls. Eight days after having been sown, the field is hoed with the Cuntay, which kills the weeds without injuring the seed that is then just beginning to sprout. Eight days afterwards the young rice is four inches high, and the field is hoed between the drills with a hoe drawn by oxen, and called Harty, or Nir Cuntay, which is delineated in Plate XXVIII. Fig. 76. This kills the grass, and throws the earth toward the drills. After this, a bunch of prickly Bamboos is yoked to a pair of oxen, and the driver stands on a plank above the thorns, to give them weight. This is drawn over the field, and removes the grass without injuring the corn. When this is six inches high, if there be rain, the water is confined, and the field is kept inundated; but, if the weather should be dry, the field must again be hoed with the Harty Cuntay, and harrowed with the bunch of Bamboos. Whenever the field begins to be inundated, it must be again hoed with the same implement, and smoothed with the Coradu, which acts in some measure like a rolling-stone. the end of the third month, the field is drained, and the weeds are removed. The water is again confined; but in fifteen days, if more weeds spring up, the field must be again drained and cleaned: this, however, is not always necessary. In the fifth month, a grass, much resembling rice, comes up, and must be carefully removed with a knife. In the seventh month the crop is reaped, and the straw is cut close by the ground. For three days it is allowed to remain on the field in handfulls. It is then thrown into loose heaps, and afterwards tied up in small sheaves, which are stacked on some airy place; and in the course of three months it is trodden out by the feet of oxen. All this time there is seldom any rain; and even when any comes, it seldom injures the reaped corn. The grain is always preserved in the husk, and beaten out as wanted for use. Any omission in these steps of cultivation produces a great

XVII. March 16.

CHAPTER diminution of the produce. Ten seeds, the farmers say, is a good crop on low land, and 7 seeds on the higher fields called Bisu. this rate, an acre of the former produces 25½ bushels, worth 11. 1s.  $7\frac{1}{4}d$ ; and of the latter,  $17\frac{8}{10}$  bushels, worth nearly 15s.  $1\frac{1}{2}d$ . The officers of revenue say, that the produce is about a fifth part more. Much reliance cannot, however, be placed upon what either party say; as all the officers have either lands of their own, or mave relations who are deeply interested.

> The kind of rice that is sown on the more elevated parts of the (Bisu) high land, and which ripens in three months, is called Varangully. The grain is of the same value with the others. cultivation is similar, only it is sown eight days later, and all the steps of the operation must succeed each other more rapidly. produce is from five to seven seeds.

Sugar-cane.

Sugar-cane is raised on the rice-ground, but in very small quantities, and the whole is made into Jagory. The ground fit for it must have a Tank containing water enough to irrigate the field twice after it has been planted, and once before the crop is reaped. The kind used is called the Hulocabo, or straw cane; and it is the same with the Maracabo of Bangalore. It is planted in the second month after the winter solstice, and is cut within the year. 1400 canes give a Maund of Jagory, and a Candaca of land will produce 21,000 canes, or 15 Maunds of 44 Seers, each weighing 24 elephant Dubs. The produce of an acre, by this account, is only about 357 lb. of Jagory. Some people allow the cane to grow up again from the roots, and thus get what in Jamaica is called a crop of Ratoons. This produces only half of the above mentioned quantity of Jagory. Between every two crops of sugar must intervene two of rice, which are as productive as usual.

At Banawási, no second crop of any kind is taken from the rice ground.

Sterility of the higher lands.

In the eastern parts of Soonda, a very small quantity of the grains called dry is cultivated, but none toward the west. This cultivation

was formerly much more extensive; but the rice ground being CHAPTER most profitable, and the whole even of that not being cultivated, owing to a want of people and stock, the dry-field is of course March 16. much neglected. The fields used for dry grains are not levelled. I have already said, that all over the Ráyada, even in its western parts, there is a great extent of land apparently fit for the purpose; but the natives allege, that they find by experience, that the grain will thrive only in particular spots. Experience is their sole guide; they have no rule by which they can at sight discriminate the barren from the fertile land. I am inclined to think, that this is one of the absurd notions prevalent among all unskilful farmers: and that in a well watered country, such as this is, wherever the soil is not rocky, or the land too steep, it will be found productive.

A certain field having been found by experience fit for the cul- Cultivation tivation of Ragy, the following succession of cre three years fit for Ragy. is taken from it; Huts' Ellu, Ragy, fallow.

A month before or after midsummer, acco the ground is ploughed three times, and sme Coradu before mentioned. The month follo nox, the seed of the Huts' Ellu is sown. and the field is then smoothed with the sam is sown twice as thick as that of Ragy. It ripens in two months, and produces five seeds.

is rain, Huts' Ellu, the or the Verbeii- Roxb.

aned in,

.. The seed

Next year, in the month preceding the summer solstice, the field Ragy, or the is ploughed with the first rain. Eight days afterwards it gets a Cynosurus corocanus. second ploughing. On or about the 16th day it is smoothed with the same implement, and two or three days afterwards it is ploughed a third time. After another interval of two or three days, furrows, at a span's distance, are drawn throughout the field. The seed of the Ragy is then mixed with some cow-dung; and at a span's distance from each other, small lumps of the mass, containing from eight to twenty seeds, are dropt into the furrows. The field is then smoothed with the Coradu before mentioned. In about fifteen days,

XVII. March 16.

CHAPTER afterwards, when the plants are four or five inches high, the field is hoed with the Cuntay, and afterwards harrowed with the bunch of prickly Bamboos. About fifteen days afterwards, the intervals between the drills are ploughed, and the field is again smoothed with the Coradu. In five months the Ragy comes to maturity, and produces 20 fold. In this, the greatest imperfection, besides the usual want of proper implements, is the neglect of manure. I measured a field, said to sow one Colaga and a half of Ragy, and found it to contain 33,516 square feet. An acre at this rate sows about  $\frac{2.7}{\sqrt{200}}$  parts of a bushel, and produces about  $5\frac{1}{2}$  bushels of Ragy. Its produce of Huts' Ellu is half that of Rugy, and the seed is double.

Cultivation of dry field fit for Horsegram.

By experience, other fields are found fit for the cultivation of Huruli, or Hover-gram; and Harulu, or the Ricinus. These are milar rotation of Huruli, Harulu, and fallowcultivated ir Sometimer s consist of the Harulu.

Harulu, or Ricinus palma christi.

'd is ploughed four times in the month pre-For F ths following the summer solstice. At the cedi sat. pothed with the Coradu above mentioned. chs furrows are drawn throughout the field In the and crossing each other at right angles. at one cut-In each intersection are placed two seeds, and the whole is again smoothed with the same implement. On the tenth day the plants come up; on the fifteenth the intervals between the rows must be hoed with the Cuntay. The plant does not rise above two cubits high, and produces four seeds. The crop season continues during the two months preceding the winter solstice. The oil is extracted entirely by boiling, and four Seers of seed give one of oil, but with the seed the measure is heaped. The oil is used for medicine and for the lamp. After the Harulu comes a fallow.

Huruli, Horse-gram, or Dolichos biflorus.

Then in the month preceding the summer solstice the field is ploughed twice, and smoothed with the Coradu. In the month preceding the autumnal equinox, the field is again ploughed, sown

broad-cast, and smoothed with the same implement. In three CHAPTER months the grain ripeus, and three seeds are reckoned a good crop.

A field said to sow 3 Seers of Huruli, and 31 of Harulu, measured Small value 24,780 square feet. The seed required for an acre will be of Hu-ground. ruli  $\frac{23}{100}$  parts of a bushel, and the produce  $\frac{69}{100}$  parts of a bushel, or deducting seed 46. Horse-gram sells here at 15 Seers for the Rupee, or for 3s.  $9\frac{3}{4}d$ . a bushel. The value of the produce of an acre, deducting the seed, is therefore about 1s.  $9\frac{1}{2}d$ . The seed of Harulu required for an acre will be 269 parts of a bushel, producing \$0.7 parts of a bushel.

The cattle of Soonda are of a rather larger breed than those of Cattle. Kankana or Haiga; but they are greatly inferior to those of the country to the eastward, whence many are brought for the plough. Buffaloes are here more used than oxen. There are in Soonda no sheep, goats, swine, nor asses, and very few horses. In the dry season, that is, from the month preceding the shortest day, until the summer solstice, the cattle are fed on straw, and that of Ragy is preferred to that of rice. In the two months following the summer solstice, while there is much labour going forward, the cattle are allowed hay made of the soft grass which grows on the little banks separating the rice-fields: that of the hills is considered as totally useless. For the milch cattle the hay is boiled, and mixed with the bran of rice. During the three remaining months the cattle are allowed to pasture.

In the dry weather, the cattle are folded on the fields; in the Manure. rainy season they are taken within doors, and as a manure for the fields their dung is collected, and mixed with ashes, and the soil of the farmer's house. 'Those who have no gardens allow no litter: but the Haiga Bráhmans, for the use of their gardens, litter the cattle at one season with fresh leaves, and at another with dry grass. The two manures thus formed are kept separate, and applied to

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XVII. March 16. Tenures.

CHAPTER different purposes. A want of attention to manure is a striking feature in the grain farmers of Soonda.

> All the arable land in Soonda is considered as the property of the government; but the value of every estate is fixed; and so long as a tenant pays his rent, it is not customary to turn either him or his heirs out of their possessions. It is true, that he cannot transfer his right to occupy the farm by sale, but he may transfer it by (Votay) mortgage to any person (Aduvacara) who will advance money. There are two kinds of mortgage. In the one the Aduvacara advances nearly the value of the property, cultivates it, and pays the taxes. This loan is made for a stipulated time; and, when that expires, the money must be repaid. If the mortgagee has neglected the weeding, arbitrators will fix a certain reduction to be made from the debt, on account of the injury which his neglect has done to the property. He can claim nothing on the score of improvement; indeed, a field, once regularly brought into cultivation with rice, is supposed to be incapable of farther amelioration. The other mortgage is, where the tenant borrows money on his land, and gives a bond, stating that he has borrowed so much money on such and such lands at such an interest, generally from  $1\frac{1}{2}$  to 2 per cent. per mensem, and that he will pay the interest monthly, and at such a period will repay the capital. The mortgager in this case continues to cultivate the lands and to pay the taxes. If he cannot discharge the debt when it becomes due, the mortgagee takes the land, pays the revenue, and keeps the profits for the interest; but it is always redeemable by the original tenant, should his circumstances ever enable him to repay the debt.

Land-tax.

The revenue is paid entirely in money, at from one to four Rupees for the Candaca, according to the old valuation; but in some places the quantity sown is double of what is rated in the revenue accompts. The reason assigned for this is, that such lands are poor. The dry-field pays no revenue whatever; but a certain quantity is

annexed to each estate of rice-land, as an encouragement for the CHAPTER farmer. Of the two fields that I measured, one paid at the rate of 2 Rupees, and the other at the rate of 2 s Aupees an acre; the March 16. first equal to 4s.  $0\frac{1}{4}d$ ., and the last to 5s.  $8\frac{1}{2}d$ . The gross produce I have already stated, on the report of the farmers, to be worth from 15s. to 1l. 1s. an acre. This calculation, and the custom of lending money on mortgage, are a clear proof that the tax is moderate, and that enough of the property remains with the actual cultivator, not only as a reward for his trouble, but to render his land a valuable property.

A farmer who has five ploughs is esteemed a rich man. With Size of farms. these he must keep six men and six women, and ten labouring cattle: and at seed-time and harvest he must hire additional labourers. Farmers, who are not Bráhmans, unless their farms be large, work the whole with their own families; but rich men must hire servants, or keep slaves; and, to hold their plough, Brahmans must always have people of the low casts. This is a kind of work that even a Haiga Bráhman will not perform.

A man slave gets	daily 2	Seers o	f rough	ı rice,	or year	ly		•
about 26 bushe	els worth		-			£I	2	$0\frac{t}{2}$
A handkerchief,	a blanke	t, and	piece	of cle	oth wor	th		
2 Rupees	-	-		•	-	0	4	01
A Pagoda in mon	ey		-	-	-	0	8	$0\frac{3}{4}$
Six Candacas of r	ough ric	e at h	arvest		-	0	14	6
-			**			_		
~			-			2	8	$7\frac{1}{2}$

Condition of the slaves.

The women get one piece of cloth annually, and a meal of ready dressed victuals on the days that they work, which may amount annually to Hired men get four Seers of rough rice a day, worth less than Wages of

free men.

three half-pence. The farmers say, that, with a stock of six ploughs, a man can

Quantity of land cultiplough.

cultivate thirteen Candacas of land. The officers of government vated by one

March 16.

CHAPTER say, that three Candacas for a plough is the common reckoning; but even this cannot be received, unless we suppose the ground more productive than the farmers confess. For, supposing all the eighteen Candacas to be of a good quality, and to produce ten seeds, the whole value of the crop would be 21 l. 15 s. 2 d.; and the support of six men and women slaves, not to mention seed, rent, cattle, &c. &c. would come to 16 l. 19 s. 9 d. The people here are far from taking any extraordinary trouble with their lands; and, I should suppose, cultivate with a similar stock as much as is done in Bengal, where about seven acres may be considered as the usual rate of work for one plough. We may, therefore, allow between thirty and forty Candacas at least for six ploughs, or double that which the officers of revenue stated.

Mr. Read's account of this part of his district.

Being now about to enter the territories of the Mysore Rájá, I shall conclude what I have to say concerning Soonda, with extracts from Mr. Read's answers to my queries, which have been collected with great precision and ability from the reports of the native officers.

Soil.

Mr. Read states the proportion of sterile and productive lands, in the four districts (Talucs) of Soonda, in the following proportions, supposing each to be divided into a hundred parts.

Talucs.		La	nd capa		Sterile lands		
Supa -		-	-	12 -	-	-	88
Soonda, or	Sudh	a	-	16	~	-	84
Banawási	-	-	-	20	-	-	80
Billighy	-	-		20	-	_	80

Produce of waste lands.

The produce of the waste lands Mr. Read states as follows. Maund weighs 24 s4 lb. and is divided into 40 Seers.

Taluc.	Sandal wood trees.		Sissa trees.	Annual produce of honey.	Annual produce of wax.	Annu a produce of wild cin- namon.	Annual produce of Cabob China.	Annual produce of wild pepper.
Supa Soonda, or Sudha Banawási Billighy	2097 1718 3812 5266	394495 1639 29 —	1715	8 7 11 24	49 6 29 28 <u>‡</u>	_	Maunds. 5 10 1 0 43 0	Maunds
Total -	12893	396113	64588	53 14	72 7 <u>1</u>	17 30	49 10	34 8

CHAPTER

I know that wild pepper is collected in the Soonda Taluc, but it Wild pepper. has not been reported to Mr. Read. The report of the Marattah merchants, I look upon as decisive, that it is not of so little value as interested persons have endeavoured to represent to the collector.

The Tahsildars have reported, that nearly the whole of the arable Arablelands. lands are now cultivated; which is in direct opposition to both what I heard and what I saw.

The number of sugar-canes cut annually amount to 6,260,400, which should produce about 4471 Maunds, of about 30 lb. each.

Dry grains are chiefly cultivated in Supa; and about one twentieth part of the arable land there is employed for that purpose.

The cultivation of gardens has decreased about a third since the year 1754, when it is supposed that they were in the greatest possible prosperity.

CHAPTER The stock employed in the country at present, according to Mr. XVII. Read, is.

. March 16. Stock.

	Ploughs bel	onging to	Cattle.					
Taluc.	Landlords.	Tenants.	Total.	Buffaloës old and young.	Cow kind old and young.			
Supa Soonda Banawási Billighy	2348 1709 804 1407	2043 389 454 560	4391 2098 1258 1767	8992 3115 3658 1760	19882 12234 7818 7515			
Total -	6268	3246	9514	17525	47449			

Population. Mr. Read gives the following account of the population of these districts.

	Hous	Houses, of which the following are occupied by											
Talues, .	Total	Christians.	Mussulmans.	Brúhmans.	Sivabhactars.	Jain.	Slaves.						
Supa	6929	87	515	1116	780	87	348						
Soonda	3396	4	178	2015	417	21	61						
Bunawási	2729		57	845	295	40							
Billighy	2593	_	50	692	433	14	36						
Total -	15647	91	300	4568	1925	162	445						

Commerce.

The exports and imports by land are very considerable, as may be seen by the accompanying Statement. The former amount to Rupees 9,63,833; and the latter to 1,08,045. The Rupee is worth nearly 2s.

Statement shewing the Average annual Quantity of Goods imported and exported in the northern Division of Canara and Soonda by Land, 1800-1.

			1
		Total Value in Rupees.	74176 24 12740 96 166 186 187 188 188 188 189 189 189 189 189 189 189
	1	Pieces.	11111111111111111111111111111
		Baskets.	
	orted.	Kodi, or Scores.	
	Average annual Quantity Exported	Guddah, or Potts,	127.44
	antity	bsol s'nsm 75% (llems)	-
	al Qu	beol s'nem 754 (5grsl)	
	anno	Seers of 24 Rupees weight.	
	verage	Maunds of 44	22 22 22 147 147 169 169 169 168
1	A	Bullock-load of 6 Maunds.	18544 16 16 17 17 18 18 18 18 18 18 18 18 18 18
		No 28 biV. sbannls 21	
		Total Value.	18128 1460 5985 13810 1263 4070 130 90 1158 1158 1177 1460 1460 163 163 163 163
		Adud, or Pieces.	
	. pa	Kodi, or Scores.	111111111111111111111111111111111111111
	mport	Potts.	111170 1111111111111111
	Average annual Quantity Imported.	brol s'nsm 759 (lisms)	81
	l Qua	bsol s'nsm 15¶ (9315l)	11
	nuna	Seers Cutcha of	10 tc               10 lc
	erage a	Maunds of 44 Seers Cutcha.	
	Av	Bullock loads of 6 Maunds	0.00 0.00
		Nidge of	-11111111111111111111111111111111111111
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		Names of the Articles.	Casto.  Casto.  mum)  onica  tter)
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		of ti	isee isee is see
		ames	p-oil-oil-oil-oil-oil-oil-oil-oil-oil-oil
		Z	Salt - Lampoil seed (Castor)  Sweet-oil seed (Sesamium, Jungle-oil seed (Sesamium)  Sweet-oil (Sesamium)  Sweet-oil (Sesamium)  Coco-nut oil - Sandal oil - Sanda
1		å l	100400 L 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

CHAPTER XVII. Murch 16. CHAPTER XVII. March 16.

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	rage :	Maunds of 44 Seers Cutcha.	1	1	1-1	17	7 1	1	1	}	11		14	1 1	. 1	1	1	H	1	882	$316\frac{1}{4}$	1	1	11
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CHAPTER XVII. March 16. March 18.
Appearance of the country.
Chandraguti.

18th March.—I entered the territory of the Mysore Rájá, and went to Chandra-gupti. The country through which I passed is level, and would appear to have been at one time almost entirely cultivated. A great part of it is now overgrown with trees, which have not yet had time to arrive at a great height. Chandra-gupti, or Chandra-guti, is also called simply Guti; care must therefore be taken to distinguish it from Gutti, a place of some note situated at a distance toward the north. It formed one of the first acquisitions of the house of Ikeri, and has a fort, which stands on a high peaked hill. The fable of the natives says, that this hill was formerly of an immense height, and prevented the moon from going round in her due course; whence the name of the place is derived. When the Racsha Jellasunda had defeated Krishna, that incarnation of the deity hid himself among the rocks of this hill. The enraged demon, not being able to discover the god, consumed the hill to its present size, very much to the satisfaction of the moon. It may perhaps be thought, that this fable may have arisen from a tradition of the hill having been formerly a volcano. For my own part, I think that these stories are so monstrous, that nothing can be drawn from them, but a commiseration for the credulity of mankind. In times far posterior to those of Krishna this was a place of great celebrity; the town at the foot of the hill having been the residence of Trenetra Cadumba Ráya, on the site of whose palace I am encamped. A well, and some faint traces of walls and buildings, still mark the spot. On the fall of this dynasty the place lost its consequence. About a hundred and fifty years ago, it suffered much from an invasion by a Mussulman named Seyd Assaripha. In the time of Hyder, Somashecara Nayaka, Polygar of Billighy, destroyed it. Soon afterwards the commandant (Killadar) betrayed the fort to Purseram (Parasu-Ráma) Bhow; but seven months afterwards he was compelled to restore it. From that time the inhabitants had no molestation, until the troubles occasioned by Dundia, who held it almost a month. It at present contains about 100 houses.

To the eastward of the hill Chandra-gupti, although much of the CHAPTER country is waste, it is in a better condition than Soonda. Much of it is under Ragy, which pays no revenue; and between every two March 18. crops the ground is allowed three years fallow. The natives allege neighbourthat the soil is very poor. I have never seen stronger stubble, and hood. to all outward appearance the soil is rich. I suspect that the principal defect is in the cultivators; but without actual experiment, it would be rash to speak decidedly on the subject.

About a coss north from Chandra-gupti is a hill producing iron Iron ore. ore, which is wrought to some extent. It is found in veins intermixed with Laterite, like the ore of Angada-puram in Malabar. The ore is of the same nature with what is usually smelted in the peninsula; that is to say, it is a black sand ore, which here is conglutinated by clay into a mass, and contains less extraneous matter than common. It is broken into small pieces, and the little masses of iron are picked out of the clay. Every man employed in the work pays to government two Rupees, or about 4s.; and they all have an equal share of the produce. There being no tax on the forges, is perhaps the reason why none are mentioned in the public accompts of this Ráyada, in which much iron is smelted. The workmen say, that in Billighy and Sudha, there is abundance of ore; but in these districts there are no people who understand the process.

The rock on which the fort is built is a white granite without Strata. observable strata, exactly like that of Janal-ábád, and which is common throughout Haiga. The nature of the minerals there and here is indeed quite similar.

In this district (Taluc) there is some sandal-wood of a very good Sandal wood. quality. It grows on dry hard ground, where of course the forest

trees do not arrive at any great size. It is never planted, but grows from the seed which the birds disperse. In Hyder's government, in order to regulate the market properly, it was cut by the officers of revenue (Amildars); and, after having been divided into proper billets, was sold on the account of government. Purseram Bhow March 18.

CHAPTER cut all that he could, and the remainder was much injured by renting it out to merchants. All that was good for any thing was cut last year; but three years hence there will be some more fit for the market. The quantity procured last cutting was about 40 Candies, of 20 Cutcha Maunds, each weighing about 26 lb. Its price is commonly about 30 Pagodas, or 120 Rupees, a Candy. The following is considered to be the proper management. The trees, after having been cut, are allowed to remain in the woods for one month. They are then taken into a house; the white wood is removed, and the sandal, or heart, is cut into billets, and stored. The roots are dug up, and oil can be extracted from them, as well as from the chips, and the cuttings of the stem. All the persons who extract the oil are Mussulmans.

March 19.

19th March.-I went three cosses to Sunticopa, or dry-gingervillage. The country through which I passed is by nature very fine; and the trees, by which much of it is overgrown, are low, a proof of its not having been long waste. The fields have never been enclosed, and the cultivation of dry grains is not at all understood, the ground being cultivated once only in four years. The rice grounds are tolerably well occupied. It probably would answer good purposes to bring here, from Priya-pattana, a colony to cultivate Car' Ragy, and to send thither a colony of Haiga Bráhmans, to form Betel-nut plantations. No tanks are required for the rice grounds; but in this district of Chandra-guti, there are many small ones, for the use of gardens. The rice lands suffer much from the inundations of the Varadá, which frequently sweep away the crops. Of course, those near the river let very low, 5 Candacas, or 300 Seers sowing, being only taxed at four Rupees. Where the inundations do not reach, the lands let at from two to four Rupees a Candaca. The natives acknowledge twelve seeds as the produce of land which is properly laboured and manured.

Malararu, or Malawars, and their government.

The most numerous class of inhabitants are Halepecas, whose customs I described while in Canara. There are also many of rather

a low class of Sivabhactars, called Malavaru, or Malawars. Most of CHAPTER the Gaudas are of this class; and the father of Sedásiva Nayaka was a Malawar, the Gauda of Kilidi. The people do not complain of the March 19. change of government from his descendants to Hyder; but they say, that not above a tenth part of the inhabitants remain. This devastation was occasioned, first by a cruel invasion of the Marattahs headed by the Peshwa, and afterwards by a sickness inflicted by the goddess Havali. This appears to have been a remittent fever, a disease that is still very prevalent; but of late its virulence has considerably abated.

In this neighbourhood the village god is Nandi, or the bull on Worship of which Siva rides. He is also called the Baswa, and receives no handi, or the Baswa, sacrifices, which are held in abhorrence by the Sivabhactar chiefs and of the (Gaudas). The Halepecas and Whalliaru offer bloody sacrifices to Marina, and the other Saktis, but have no temples. The votaries go to the side of some river, put up a stone which represents the deity, and offer it the blood. From this worship the Sivabhactars entirely abstain; and under their government the temples of the Saktis were called Butagallu Champadi, or devil's huts, a name which the Mussulmans did not change.

20th March.—I went three cosses to Kilidi. The greater part of March 20. the country is pretty level; but the higher grounds seem to be Appearance of the counentirely neglected, although the soil is in general apparently good. try. Most of the trees are small, owing to their being young; but in places where they are aged, they have grown to a large size, and support pepper vines. Tippoo prohibited the produce of these from being gathered, and of course the woods supporting them were neglected; but some pains having last year been bestowed, there is now a tolerable crop. In the neighbourhood of Kilidi are many gardens of Areca palms, in which pepper is raised; but among the Arecas neither Betelleaf nor cardamoms are cultivated. The Arecas are planted wherever there is a supply of water, without regard to the exposure; but they are sheltered from the west and south by several rows of trees.

XVII.

March 20.
History of the Kilidi family.

I here found a Bráhman, named Bayluru Dwuppa, whose ancestors have been the hereditary writers of the chronicles of the Kilidi family. He engaged to give me the family book, called Kilidi Ráya Paditti. It is in the old dialect and character of Karnata, and contains 400 Slókams, or distichs; for, like all the other works of any note among the Hindus, it is poetical. He afterwards forwarded a copy of the work to Purnea, who was so good as to add a translation into the modern language and character, and both of them have been delivered to the Bengal government. The family of the historiographer enjoyed an Enam, or free land, to the amount of sixty Pagodas a year.

From some particulars explained to me out of this historical poem it would appear, that its chronology differs considerably from that of Ramuppa. The Kilidi family were originally hereditary chiefs (Gaudas) of five or six villages in this neighbourhood, and were Sivabhactars of the Malavara cast. Bhadraconda, the son of Basw'uppa Gauda, entered into the service of Krishna Ráyaru, who gave him the name of Sedásiva Nayaka, and conferred on him the hereditary government of some districts in the year Sal. 1422, being Sidarty. Kilidi continued the seat of government, until Sal. 1436 only. From Ikeri it was removed to Bidderuru, in Sal. 1568 (A. D. 1645). Viru Magi, the last princess of the house of Kilidi, or Ikeri, says Dwuppa, allowed her adopted sons no power. She put the first to death when he was twenty-four years old, because he presumed to interfere with her intrigues. Soon afterwards Medicarey Náyaka, Rájá of Chatrakal, took a young man, a weaver by cast, and brought him up as Basw'-uppa Náyaka, the murdered prince. Finding, however, that he was not able to make any advantage of the young man's claims, he lent him to Hyder, who espoused the cause of the weaver with much seeming earnestness, and carried him about with great pomp. He accompanied the pretender through the whole country, merely as an ally; and, Viru Magi being detested on account of her criminal life, many of the commandants of fortresses

were induced to deliver up their charge to the pretended Baszw'- CHAPTER uppa. These were immediately garrisoned with the troops of his friend Hyder. The princess, conscious of the detestation in which March 20. she was held, retired with her adopted son Somashecara to a strong hold named Belalla Ráya Durga, and left her capital in charge of the Delawai, or prime minister, named Virapadruppa. On the approach of Hyder and the pretender, the people of Bidderuru deserted, and the Mussulman took possession without trouble. He laid siege to Belalla Ráya Durga, and after some time took the princess (Rany) and her adopted son prisoners. Thence he returned to the capital, on which he bestowed his own name of Hyder Nagara; and, disguise being no longer necessary, he began to treat the pretender with the utmost contempt, and at length induced the young man to quarrel with him, by taking his favourite dancing girls, who by intercourse with a Mussulman were defiled. Immediately after the rupture, the pretender, the princess, and her adopted son, were sent to Madhu-giri. Soon afterwards they were relieved by the Marattahs, who altogether neglected the pretender, and, knowing the weakness of his claims, dismissed him. The princess died on the road to Poonah of a pain in her bowels; but the Marattahs, with a view of taking advantage of his claims, carried the son to their capital. The people here do not know what has been his fate, and seem very little interested about the matter. The pretender, being in absolute want, applied to Hyder, who gave him free lands to the amount of 120 Pagodas a year, or 40 Rupees a month. He left two sons, who on the fall of Seringapatam collected a rabble, and began to plunder in the neighbourhood of Hossodary (Wostara of our maps, I suppose). They were soon taken by a party of British troops, and were immediately hanged as lawless robbers.

Sedásiva built a fort at Kilidi, which continued to be garrisoned Kilidi, and till the time of Hyder. The town never was large, and the only Sedásiva, remarkable building is a temple of Iswara, which Sedásiva erected

XVII, March 20.

CHAPTER by orders of the god, who appeared to him in a dream. As a curiosity, I was shown the pit whence Sedásiva dug out a treasure, and a sword, the commencement of his great fortune. To this he was conducted by a Naga, or hooded serpent, sent for the purpose by some propitious deity. While Sedásiva was asleep in a field, the Naga came, and shaded his head from the sun by raising up as an umbrella its large flat neck. The young man was awaked by a shriek from his mother, who, in looking after her son, found him under the power of the monster. He immediately started up to escape, but was opposed by the serpent, until he consented to follow it quietly, and was conducted to the place where the treasure was hid. Here the snake began to bite the ground, and make signs. At length Sedásiva, having dug into the earth, found a cave filled with treasure, and containing a sword. Such are the fables by which the *Hindu* chiefs endeavour to gain the admiration and respect of their countrymen, whose credulity indeed renders the means very adequate to the end proposed.

March 21. Sugar, and its commerce.

21st March.—I went three cosses to Ikeri, through a country entirely like that which I saw yesterday. Near Ikeri is a well-built town, named Sagar, which at present is the residence of the chief. of the district (Amildar). It stands on the southern bank of the Varadá, which is here a very small stream, as being near its source. Ságar has some merchants of property, who export to a considerable distance the produce of the country. The exports are pepper, Betel-nut, and sandal wood; about equal quantities of which go to the dominions of the Nabob of Arcot, and to the country south of the Krishna, lately ceded by the Nizam to the Company. The prices are highest in the last mentioned territory; but the expenses and duties are in proportion. The returns from both countries are chiefly made in cloths, there being no manufactures in this neighbourhood. To Haiga the merchants of Ságar send pepper, cloth, iron, and grain; they receive from thence salt, coco-nuts, and Cut,

or Terra Japonica. About one half of all the returns made to this CHAPTER country for its produce are in cash. The merchants say, that the sandal wood of the Ikeri Ráyada is superior to that of either the March 21. south or east. They acknowledge the inferiority of their Betel-nut. According to the report of the custom-house, the quantity of Betelnut exported annually from Ságar is about 8000 loads. That of pepper is about 500 loads. The load is about 8 Maunds, or  $196\frac{1}{2}$  lb.

During the time Ikeri was the residence of the princes descended Ikeri. from Sedásiva, it was a very large place, and by the natives is said, in round numbers, and with the usual exaggeration, to have contained 100,000 houses. Like Sudha, its walls are of very great extent, and form three concentric enclosures, rather than fortifications. It had also a citadel, but of no great strength, which until eight or ten years ago continued to be garrisoned. Within it was the palace of the Rájá, constructed of mud and timber, like those of Tippoo, and by no means a large building. The wooden work has been neatly carved, and covered with false gilding. The temple of Siva, where the town stood, is a large edifice, and is formed of stone brought from a great distance; but, as usual, it is destitute of either elegance or grandeur. It is now repairing, and workmen have been brought from Goa for the purpose; even the Portuguese of India being more skilful artists than any that can be procured in this country. At Ikeri there remains no town, but the devastation has not been occasioned by any calamity. When the court removed to Bidderuru, the inhabitants willingly followed. Ikeri continued, however, to be the nominal capital; the Rájás were called by its name, and the coins were supposed to be struck there, although in fact the mint was removed.

So long as the government of the Sivabhactar family lasted, the Coins. coins continued to be called Ikeri Pagodas and Fanams. On the conquest, the name was changed, first by Hyder into Bahadury, and then by Tippoo into Sultany. The princes of Mysore never coined Pagodas; but Canterua Narasingha Ráya, the first of them who VOL. III. Li

XVII. ~~ March 21.

CHAPTER acquired considerable power, coined gold Fanams, called after his name Canter'-raya Fanams, which we usually write Cantery. Ten of these formed a nominal Pagoda, which accomptants commonly use. On the fall of Tippoo, the Mysore government, having found it convenient to coin Pagodas of the same value with those before current, struck them at Mysore and Nagara, but restored the old name of Ikeri.

Forests of the Ghats.

The Ságar district (Taluc) extends to the bottom of the mountains, on the declivity of which are many woods that spontaneously produce pepper. These forests are said to be very unhealthy.

Soil.

The Amildar, who is a man of plain manners and good sense, says, that in this neighbourhood dry grains have been often tried, but have always failed; and that the goodness of the soil is merely apparent; for in general it is very shallow, and placed on a substratum of Laterite, which renders the soil above it very unproductive of grain. Even rice thrives ill, although the deepest and richest soils are reserved for its cultivation. It must be observed, that in all the countries where it is found the opinion of the unfitness of the soil for dry grains is prevalent. The Amildar makes a curious observation. He says, that in the country to the eastward the surface is covered with stones; but under these there is a fine cool earth; while here, the surface is earth, but under that there is a dry rock which burns up every thing. It must, however, be observed, that the forests here are greatly superior to those farther east; owing probably to the roots of trees being able to penetrate into the crevices of the rock, and to get at water, which is here generally found at no great depth from the surface: but to the eastward, before water can be procured, the wells must be dug to a considerable depth.

Account of the Marattahs by the Amildar.

The Amildar says, that he was employed by the Sultán in a diplomatic capacity at Poonah when Seringapatam was taken. He would have been successful in procuring assistance for his then master, had the dissensions among the Marattah chiefs permitted them to

act. Scindia was decidedly in favour of the Sultán; but was quite CHAPTER destitute of money; and the army which he had at Poonah, after having expended all the means that they possessed, had for some time been subsisted on plunder. The Amildar says, that Tippoo's government, when compared with that of the Marattahs, was excellent; and, notwithstanding all the evils the people suffered from the extortions of the Asophs, and the attacks of invading armies, they enjoyed a comparatively great security. The government never subsisted by open plunder; whereas among the Marattah chiefs there are very few who do not support their troops by avowed robbery.

March 21.

22d March.—I went three cosses to Ghenasu-guli. The country March 22. all the way is hilly, and is considered by the natives as totally use- Appearance of the counless, although in many places the nature of thesoil would admit of try. the use of the plough. It does not even answer for pasture, and the coarse, rank grass that grows upon it in the rainy season cannot be made into hay. Once a year, in order to keep the country clear, it is burned. This is probably the reason of the stunted appearance of the trees. On the whole, no desert in Africa can be less productive of use to man. At Ghenasu-guli there is no market Ghenasu-(Bazar); but there is a small village of Haiga Bráhmans, who, to guli. judge from the appearance of the houses, are in easy circumstances. They cultivate some fine gardens. I here met with Ram' Row, chief officer (Subadar) of the Nagara principality (Ráyada), a very gentleman-like person, which is rather uncommon in people of his cast. He agrees entirely with the other natives, in thinking the higher lands of this Ráyada totally useless.

23d March.-I went three cosses to Duma, or Dumam. The coun- March 23. try resembles that which I came through yesterday, and on the Wild pepper, whole way I did not see the smallest trace of cultivation. I passed ance of the through a very long wood where pepper grows spontaneously. The trees are very fine, and the soil is apparently good; but it is quite neglected by the natives, who say that the pepper is of no value

March 23.

CHAPTER It is watered by the Pada-gópí, a rivulet that, after passing through the Garsopa district, falls into the inlet of the sea at Honawera. At Duma there is only one house belonging to a Malawar Gauda; but it is a very large one.

March 24.

24th March.-Although I had desired the guides to divide the road into tolerably equal stages, I found this day's journey to Fatahpetta very short. It was called two Sultany cosses. The country is rather opener than what we passed through on the two preceding days; but a large proportion of the small quantity of rice-ground is waste.

Fatah-petta.

Fatah-petta, or the town of victory, is usually pronounced Puttypet. It was built by Hyder in commemoration of an advantage which he gained at this place over the troops of the princess of Ikeri. At first he built five hundred houses; but finding that the place injured the trade of Naggar, and gave a facility to smuggling, he reduced the shops to fifty, and they have now decreased to twenty-five. Near the town runs a small stream, commonly called Ram Chandra-pura from the place where it has its source; but its proper name is the Sarawati. North from Fatah-petta, it receives a small branch, and forms the Pada-gópi.

Farm belonging to the Rájús.

At this place the Rájás had a farm, which an overseer now cultivates on account of the government. It produces coco-nuts, Arecas, and rice; and is finely supplied with water by a canal, which is supplied from a perennial stream as clear as crystal. No experiment is made at this farm, nor any attempt at improving the usual cultivation of the country; which is the only rational inducement that could lead a prince to farm. On the contrary, it is in a more slovenly condition than any plantation that I have seen in the country. At this farm the Rájás had a Mahal, or palace, consisting of three squares, which are surrounded by low, mean buildings covered with tiles. These, however, contained baths, and all such conveniences as a Hindu chief requires. Near the palace are stables for the cattle of the farm.

25th March.—I went two cosses to the centre of Hyder Nagara, CHAPTER through a fog so thick that I could see little of the country. It is extremely hilly, and overgrown with woods, in which there are March 25. many fortified defiles and passes, that are guarded by armed men gara, or Bidin the service of the Mysore Rájá.

Hyder Na-

I remained three days at Nagara, where I met with a kind reception from Captain Lloyd of the Bombay army, who commanded the garrison in the fort.

Nagara was originally called Bidder-hully, or Bamboo-village, and consisted of a temple dedicated to Nilcunta (Blue-neck, one of the titles of Siva), and surrounded by a few houses, under the direction of a Bráhman chief. Sivuppa, son of Chica Suncana, removed the seat of government from Ikeri to this place, and changed its name into Bidderuru, or Bamboo-place. The whole revenue of the country being then expended here, it immediately became a town of great magnitude and commerce. The situation is also favourable for trade, as the Hosso Angady pass, leading from Mangalore this way, is one of the best roads in the western mountains. The town is said to have contained 20,000 houses, besides a very great number of huts; but, on account of the inequality of the ground, could never have been closely built. It was defended by a circle of woods, hills, and fortified defiles, extending a great way in circumference, and containing many Bamboos, from which the name of the place was derived. The space within these defences is much larger than was ever occupied by the city, and contained many hills, woods, gardens, and rice fields. Toward the centre stood the Rájá's palace, situated on a high hill, and surrounded by a citadel. To this Hyder added some new works; but, being commanded by some neighbouring hills, it never was capable of much defence. After Hyder took the town, its trade increased greatly; for he made it his principal arsenal, and employed many people in making arms and ammunition. He also continued the mint, and much money was coined there during his reign. He gave great encouragement

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to merchants, and endeavoured to introduce the cultivation of mulberries and silk, but in this he had little or no success. On the outside of the fort, he built a palace, and resided in it three years. On the invasion by General Mathews, the commandant of the fort, by way of showing an inclination to make an obstinate defence, burnt the palace; and the whole town shared the same fate during an engagement which took place on Tippoo's coming up with his army. It is commonly reported by our officers, that General Mathews was surprised; and, indeed, from his infatuated conduct, that would appear to have been the case; yet the people here say, that he had given them eight days previous notice of the probability of a siege, and of consequence they lost little more than their houses, as they had time to remove all their valuable effects. The palace was rebuilt by Tippoo, elated with the victory of which he made so cruel a use; but in the short time that has since intervened, it is now almost a ruin; for it is built entirely of mud and timber; and on these materials the excessive rains of this climate have so strong an effect, that without a very complete repair once in three or four years, no building of this kind will stand for any length of time. Tippoo also re-established the mint and arsenal, and recalled the people; but a great many of them did not return, being under suspense for the event of the siege of Mangalore.

After the peace of 1783, Tippoo returned to Bidderuru, and immediately afterwards his officers began to be troublesome to the merchants, and put a stop to all commerce with those who did not belong to the Sultán's dominions. At his death the town contained between fourteen and fifteen hundred houses, besides huts; one hundred and fifty new houses have been since built, and merchants are resorting to it from all quarters. It cannot be expected, however, to arrive at its former greatness, as it is neither the seat of a court, nor of any public works. It possesses no manufactures; so that its chief support will be its trade, as being a convenient thoroughfare. The mint is maintained, and every liberty granted

to merchants; which seems to be all the encouragement that could CHAPTER with propriety be given.

During the princesses (Ranys) government a hundred families March 25. Christians. of Kankany Christians had settled at Bidderuru, and subsisted chiefly by distilling and selling spirituous liquors. Their condition may be estimated by knowing, that the building of their church cost 12 Pagodas, or less than 5 l. They were, however, able to support a priest, and to maintain some form of worship. In the reign of Tippoo they were all carried to Seringapatam; but, since the fall of that place, ten families have returned, and are living in great poverty. The church was pulled down by the Cazi, who was a furious Mussulman bigot, and delighted in overthrowing what he called the temples of bigot. idolaters. There were at this place many inscriptions on stone; but they were all broken to pieces by the zealot. With the ruins of temples he built a handsome mosque, and settled in it three priests (Moullahs), with whom he passed his leisure time in prayer, and exercises of religion. When he saw the Christian flag displayed on the fort, he could not endure the abomination, and immediately withdrew towards Mecca. The three priests remain in the mosque, where, in place of being pampered by the charity of the Asophs, and other officers of distinction, they drag out an existence upon an annual pension of 2 Pagodas, or 16s. Their being allowed any thing is however a great proof of Purnea's moderation; as they are still living in the spoils of Hindu temples, torn from the gods at their instigation.

During my stay here I had frequent intercourse with the Hujiny Hujiny Swami, one of the four great chiefs of the Sivabhactar religion. His Swami. predecessors were the Gurus of the Ikeri family, and had obtained from them free-gift lands to the yearly amount of 3000 Pagodas (1208 l. 16s. 8d.). By Hyder and Tippoo the whole was gradually taken away, and no allowance has been made to him since the country has been granted to the Rájá of Mysore. He has, it is true, a village considered as his property; but he pays rent for it like

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any other farmer. Whether it be owing to his poverty or to his good sense I know not, but he is quite free from pride or affectation; a kind of virtue that I do not expect among those who, like him, are considered by their followers as incarnations of the deity.

Remains of the *Ikeri* family. The Swami says, that a brother of Chinna Basw'-uppa is still alive in the Marattah territories, and lives near Savanuru. Somashecara, the last adopted son of the princess, died in the Marattah country unmarried, but has left behind him relations who are living with the brother of Chinna Basw'-uppa. By the Swami this person is considered as the lawful heir of the family. In case of his line failing, the relations of Somashecara would be entitled to the succession.

Account of the Sivabhactars by the Swami.

The original Matam or college of the Hujiny Swami was at Harapunya-hully; but the seat was removed to this neighbourhood in the time of Choudeia Budreia, who founded Ikeri. According to the Swami, Sivabhactar is the proper name of the cast, which arose in the following manner. Iswara, having been displeased that his worship was neglected on this earth, commanded Baswa, or the bull on which he rides, to assume a human form, and to recall mankind to the true worship. Baswa was very reluctant to go among such a wicked race of beings; but at last consented, and took upon himself the form of a child, and was born in the family of a Bráhman. Having, while a boy, performed sundry miracles, and persuaded his supposed parents of his divine nature, he was called by the name of Baswana. In the year Vicrama of the Káli-yugam 3875 (A. D. 775), he took with him his sister, and went to Kalyán-pura, a city in the country now belonging to the Nizam, but at that time the residence of a prince named Bejala, who was a Jain. While this Rájá was sitting in his court surrounded by all his officers, there fell from the heaven called Coilasa a letter, which no one present could read. The stranger, who had already obtained some reputation, was called, and read the letter, which informed the Rájá, that is a certain place he would find a treasure amounting to some

millions of Rupees. The treasure having been found, Baswana was CHAPTER. made prime minister, and married the daughter of a certain Moduersa. Baswana's sister now became pregnant, without having March 25. been married. She alleged, that she had been impregnated by Iswara; and, as a proof of her veracity, the child came from her back, in place of being born in the usual manner. The child was called Chinna Baswana. The Baswa then began publicly to teach, that the only true worship was that of Iswara, or Siva; and, having gained many proselytes, he made 196,000 Jangamas, some of whom were allowed to marry, and others were ordained to be Sannyásis. In the year Racshasa, of the Kali-yugam 3911 (A. D. 811) the time for the Baswa's remaining on earth having been expired, he went to Capily, a place at the junction of the Malapahari (Malpurga) with the Krishna. At that place was a celebrated image of Iswara, which, on the appearance of Baswana, opened, and desired him to enter. Baswana replied, that nobody would believe that he had entered into a stone, and requested that the god would assume the form of a Jangama; which he accordingly did, and, having clasped Baswana in his arms, they became as one person, and ascended to Coilasu on Wednesday the 1st of Margasirsha, at 21 hours (Gurries) of the night.

Chinna Baswana succeeded his uncle as minister, and three months afterwards Bejala Rájá was killed by three servants of that personage, named Jagådeva, Maleya, and Bumuna. He was succeeded by Vira Vassuunta, who is allowed by the Swami to have been also a

The Sivabhactars are divided into two sects; the one is called Vira Siva, and comprehends all the Jangamas, and by far the greater part of the Banijigaru, who are of a much higher rank than the artists and cultivators who wear the Linga or emblem of their deity, and who compose the second division called Samana Siva. All the descendants of Jangamas continue to be of that class, whose proper profession, like that of the Bráhmans, is to subsist upon alms. The Vol. III. M m

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CHAPTER Upadésa of a Jangama may be given to any Sivabhactar, who is thus adopted into the sacred order; but this practice is condemned by those who are strict. The descendants, however, of these adopted Jangamas enjoy all the privileges of the sacred order. This class of men has so multiplied, that in order to procure a subsistence many of them are compelled to pursue the low occupations of the world.

> The Swami says, that Iswara created the Védas, and also created many sects, some of which ought to follow one part of the sacred books, and some are bound to obey other portions of those writings. The Vira Siva ought to reject the greater part of the doctrine of the Védas concerning Curma, or ceremonials; that is to say, the offerings of Yagam, or sacrifice, washing of the head, Puja, and the · like. They are, however, permitted to follow part of the Curma, and to give Dhana and Dharma, two kinds of alms bestowed on religious men. These ought only to be given to the Jangamas; but many of the laity, who are of the division called Samana, have been persuaded heretically to give to the Bráhmans both kinds of alms. The Vira, Siva reject altogether the Bráhmans, and never employ them at any ceremony to read prayers (Mantrams). The doctrine of the Védas, which the Sivabhactars are bound to follow, is called Gniana, and consists in an acknowledgment of the gods, and in prayer. The Vira Siva follow in part only this doctrine, and confine their worship entirely to Iswara, his family and dependants: but the Samana Siva consider Vishnu and Bráhma as the same with Iswara, and worship them accordingly. These Samana Siva act as Pújáris in some temples, especially those of Baswa; but the Swami considers this as an abominable heresy.

The Swami says, that the eighteen Puranas were written by a very pious Bráhman named Vyúsa; and that ten of them contain doctrines which he considers as sound. Next in authority to the Védas, however, he considers twenty-eight Agamas, which contain an account of the doctrines taught by all sects, with warnings to

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avoid such as are heretical. Next in point of authority to these, CHAPTER is the Baswa Purana, written originally in the Andray language, by Andray Cavi Somaderu, at the command of Baswana, who did not March 25. deliver any thing in writing. The work has been translated into the Karnataca language by Bhima Cavi; and of this translation a copy, which the Swami gave me, has been delivered to the Bengal government. Many commentaries have been written by different learned Jangamas.

At each Matam, or college, is a chief Sannyási, who gives the Upadésa of this rank to several children that become his disciples and servants. These Sannyásis are of various ranks, and some of them are even permitted to marry. They must be all children of Jangamas. From among these Sannyásis, the chief Guru or Swami of the Matam chooses the most pious person; and, when he is apprehensive of the approach of death, gives him the Upadésa peculiar to his elevated rank, and delivers over to him his book and authority. The successor, so soon as master of the Upadésa, is considered as being the same with Iswara.

The Guru reprimands his followers for small faults, and possesses the power of excommunication for great crimes, such as eating animal food, or drinking spirituous liquors. He also possesses the power of reconciling a man to his wife, when she has committed adultery with a man of the cast. In such cases, he reprimands the woman, but will seldom permit the husband to turn her away. If the crime has been committed with a man of another cast, the Guru does not interfere to prevent divorce; but the husband is not under any necessity of parting with his wife; for on paying a fine for her purification, he may retain her.

The Swami says, that at certain periods the fourteen Locums of the world are destroyed by water. The Baswa stands in the middle of the deluge, which reaches only half way up his thighs, and all living creatures are saved by laying hold of his hair. The world is afterwards restored by Iswara, who lives in Coilasu. It is thither

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CHAPTER that after death the spirits of good men go, and are united to the substance of God, where they are exempted from all future change. There is no other heaven, such as Moesha, or Sorghum; but there are various purgatories, and hells, in which are punished the spirits of wicked men, either for a time, or for eternity, according to the nature of their transgressions. The spirits of men who have been neither bad nor good in the extreme are born again, some as men, others as animals; on which account, except in battle, the Sivabhactars kill no animal. The crime of the premeditated death of an insect is quite the same with that of a man, nor is a cow more sacred than any other animal.

Commerce.

Having assembled the principal merchants, they say, that since the time of the Rájás and of Hyder, owing to a removal of the court, and of extensive public works, the trade of the place has greatly diminished. It never was the seat of private manufactures; but still has a considerable trade, and is the residence of several wealthy merchants, who export the produce of the country. This consists of pepper, Betel-nut, sandal wood, and cardamons. The merchants cannot state the quantity of any of these articles exported, either now, or at any former period. They say, that advances to the cultivators are seldom made; but, when the owner of a plantation takes advances six months before crop-time, he gets one half of the value of the estimated produce. The price of the commodity is not fixed, but it is taken at the common market-price at the time of delivery, deducting ten per cent. for the money advanced. The greater part of the produce is, however, bought up for ready money, immediately after crop season, and more than one half of it is purchased by merchants of the Marattah territory, or other distant countries; some of whom come hither in person, and others employ agents. Every merchant, whether native or foreign, has certain families with whom he commonly deals; and at the proper seasons he goes round to their houses, and collects the produce of their farms. Fairs or markets are not in use.

The Marattah merchants purchase pepper, cardamoms, and sandal: the Betel of this place, being cut, is not fit for their purpose. They bring for sale a great variety of cloths, thread, and cottonwool, most of which are again exported from hence. They also Marattah bring wheat, Callay (Cicer arietinum), and Danya, a carminative seed like anise.

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The merchants of Mangalore, and other places below the western With Tulava, Ghats, take from hence pepper, wheat, Callay, Danya, tamarinds, capsicum, cotton-wool, cotton-thread, Goni (cloth made of the Crotolaria juncea), cotton-cloth, blankets, iron, iron-work, and steel. They bring up salt, rice, Horse-gram (Dolichos biflorus), coco-nuts, oil, turmeric, and sandal-wood.

From the ceded provinces south of the Krishna, the merchants With the import cotton-cloths, and take back Betel-nut, pepper, and car-vinces. damoms.

From the Chatrakal principality are imported buffaloes, sheep, With Chablankets, Ghee (boiled butter), and tobacco.

From Gubi, Sira, Bangalore, &c. are brought cotton cloths, to- With Bangabacco, blankets, Goni, sheep, steel, and iron. The exports to all these places are pepper, Betel-nut, and cardamoins.

Merchants from the dominions of Arcot, and those of the Com- With Arcot. pany below the eastern Ghats, bring cotton cloth, with European and Chinese goods; and take back Betel-nut and pepper. The merchants say, that three quarters of the whole produce are purchased with ready money; and the imports brought are equal only to the amount of the remainder.

The pepper of Nagara is here reckoned better than that of the Pepper. sea-coast; and a Parsi merchant says, that it sells higher at Bombay than the pepper of Malabar. The average price here is 23 Ikeri Pagodas for every Niza (Nidge, of vulgar English) of 21 Maunds, each weighing 40 of the Cucha Seers of Mangalore, that is used for Jagory; so that the Niza should weigh  $515\frac{1}{2}$  lb., and sells for 92 Rupees. The carriage to Mangalore is one Rupee a Maund, making

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CHAPTER the Niza there worth 113 Rupees. The Company's Candy of 600 lb. would therefore cost 1311 Rupees, beside the charges of merchandize.

Carriage.

The roads being bad, most of the goods are carried between this and Mangalore by porters. A man's hire between the two places is 3 Rupees, or 6s.; and he carries 3 Maunds, or 731 lb. To the country toward the east and north, all goods are sent on oxen, as back loads, each carrying 8 Maunds, or 1961 lb. For each load the hire is 4 Rupees for 10 Gavadas, or days journies; the Gavada being computed at four Sultany cosses, or Hardaries, or at about 141 British miles; so that the carriage of one hundred-weight costs almost 1 d. a mile.

Betel-nut.

The most important article of export from Nagara is Betel-nut, which is fit for the consumption of all the country to the eastward as far as Madras. The merchants cannot state the quantity. In Tippoo's reign the merchants were afraid to purchase, knowing that obstacles would be put in their way. The whole, therefore, fell into the hands of the dependants of the Asophs, at a low price, and was exported on their account to Seringapatam, Bangalore, and other cities in the Sultán's dominions; for the trade with foreign countries was prohibited. Owing to this, the cultivation was diminished; but the merchants think that this foolish plan had not continued so long as to occasion the loss of many of the trees; but that their produce was only diminished from a want of due cultivation. This year, all due encouragement having been given, it is expected that the produce will equal what it did at any former period. The price just now is higher than it was in Hyder's government, and amounts to 20 Pagodas a Niza, or Candy.

Cardamoms.

It is evident from the considerable exportation of cardamoms from hence, all of which are the produce of Coorg, that what was stated at Tellichery as the amount of cardamoms reared in that country, is applicable only to the quantity sent down to Malabar. I have reason to believe, that a much greater quantity comes

through the Mysore Rájá's territories, although I received no proper CHAPTER account of the specific quantity.

The grain measure in every village is different; and even in Na- March 25. gara, that which the cultivators use is different from that by which Grain measure. grain is sold in the market. The Sida, or Cucha Seer of 20 20 cubical inches, is however the foundation of both.

The Colaga of the farmers contains  $183\frac{3}{10}$  cubical inches. Candaca of 20 Colagas is, therefore, equal to nearly  $1\frac{7}{10}$  bushel. The market measure is a third larger.

The climate here is nearly the same with that of Sudha. In the Climate and day-time the winds, at present, are pretty strong from the westward. The same plants that one month ago were in flower, when I was at Kunda-pura in the same latitude, are now coming into flower here; the difference of elevation making this climate a month later than that of the sea-coast. It is remarkable, that in many parts of India, during March and April, there are on shore strong winds blowing directly from the sea; while in the offing it is a perfect calm. Thus in Bengal there are, at that season, very strong southerly winds; while in the bay calms prevail until May or June. On the coast of Malabar, the south-west monsoon does not commence blowing with strength until the beginning of the rainy season; but on shore there are strong westerly winds from about the vernal equinox.

The ground levelled for the cultivation of wet crops is here called Lowlands. Gudday, and is not subdivided into different kinds. The bottoms of vallies only are levelled, and are chiefly watered by the rain; but there are also some small reservoirs, from which a few days supply. can be obtained in the rainy season, when there happens to be no fall for eight or ten days. For the same purpose, the water of some rivulets is turned into channels by dams; but irrigation is much neglected; and although in many places the rivulets are perennial, the farmers do not endeavour to take two crops in one year. The only crops taken from watered ground are rice and sugar-cane.

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Different kinds of rice.

In order to give time to the cultivators, part of the rice is so w dry seed, and part is transplanted; the seasons for these two modes of cultivation being different. Every kind of rice that is sown here takes six months to grow; and they are of less variety than usual, namely, Billy Battu, or Heggai, and Jolaghena, which may be cultivated both ways; and Honasena, or Kempa, which can be sown only as dry-seed.

Dry-seed, or Bara-butta cultivation,

The Bara-butta cultivation is conducted as follows. In the course of the five months following the winter solstice, the field gets four single ploughings. In the second month after the vernal equinox, it is manured with leaf-dung, and ploughed once. After the next rain, the seed is mixed with dry cow-dung, sown broad-cast, and covered by the implement called Coradu, which differs from that of Banawási in having its section composed of three sides of a square, as in Plate XXIX. Fig. 78, in place of being a segment of a circle. A month after sowing, when the young rice is about four inches high, the field is turned over with a small plough, to kill the grass, and to destroy part of the young corn, which is always sown too thick. After this, the field is again smoothed with the same implement, and harrowed with a bunch of thorns, as described at Banazvási. In the second month after the summer solstice, all the banks are repaired, to retain the water on the fields, which are then ploughed again, and smoothed with the implement called Aligena Coradu (Plate XXIX. Fig. 77.). A large rake, called Halacu, is then drawn by the hand over the field, to remove the weeds. In the month preceding the autumnal equinox, the weeds are removed by the hand. In the two months preceding the shortest day, the crop is ripe. It is cut close by the ground, and for four days is allowed to lie loose on the field. It is then stacked in heaps, with the ears inward, but without having been bound up in sheaves. In the course of three months, it is trampled out by oxen. The grain with the husk is preserved in store-houses, or straw bags, and is only made into rice as it may be wanted for immediate use.

The process for transplanted rice, called here Nitty, is as follows. CHAPTER In order to raise the seedlings, in the course of fifteen or twenty days during the month following the vernal equinox, a plot is in- March 25. undated, and ploughed four times. It is then manured with any transplanted kind of fresh leaves, and with the dung made by cattle that have been littered with dried leaves. These are ploughed down, and the mud is smoothed, first with the Noli (Plate XXIX, Fig. 79.), and afterwards by the Mara, which is a square log of timber yoked in the same manner. The field is then drained so that three inches of water only remain. In any of the three months between the vernal equinox and the summer solstice, the seed is sown broad-cast. As this is the dry season, the seedling plot must be very low, so as to receive a supply of water from some rivulet. On the fifth day after the seed has been sown, the whole water is allowed to drain from the plot; and for three days this is kept dry, after which it is constantly inundated, till the seedlings are fit for transplantation. The field, into which they are to be removed, is inundated during the two months following the summer solstice, and in the course of three days during that period is ploughed four times. It is then manured, in the same manner as the plot was; and afterwards, in the course of two or three days, it is ploughed again three times. The mud is then smoothed with the Noli, above mentioned; and the water having been let off to the depth of three inches, the seedlings are transplanted into the field, which must be always kept under water; and a month after it has been planted, the weeds must be removed by the hand. The harvest is in the month preceding the winter solstice.

Nitty, or cultivation.

All the fields are capable of both modes of cultivation. The Produce. transplanting is reckoned most troublesome, and least productive. and requires most seed. A Candaca of land is an extent, that in the

transplanting cultivation requires one Candaca of seed; in dry-seed cultivation, it requires only fifteen Colagas. The produce of all the three kinds of rice is nearly the same, only the Heggai gives rather

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CHAPTER most. Of this grain a Candaca of land of the first quality, cultivated by transplanting, produces eleven or twelve Candacas; land of the second quality produces eight Candacas; and land of the third quality produces six Candacas. The same ground, cultivated with dry-seed, would produce from one half a Candaca to one Candaca more.

Seed and produce for an acre.

Having taken the Shanaboga, or accomptant, and the farmers who gave me the foregoing account, to a man's fields, who was rated in the public books as possessed of fourteen Candacas of land, I found that they contained 308,024 square feet, or that the Candaca was equal nearly to 22,000 square feet; so that the seed required for one acre, in the transplanted cultivation, would at this rate be 3 3 7 6 bushels, which in Indian farming appears to be an excessive quantity. The owner would give no account of the quantity actually sown, nor of the usual produce; and I observed some contiguous plots, which he called Ragy land, and which of course paid no land-tax: but they appeared to have been cultivated with rice, and there was no observable difference between their soil or situation, and those of the neighbouring plots of Gudday land. The accomptant pretended ignorance; but from circumstances I am inclined to believe, that there was a collusion between him and the farmer to impose upon the government. At present, from the confused manner in which all native accompts are kept, this is too much in the accomptant's power.

I afterwards sent to discover some farmer who would be more communicative, and at length found a respectable looking Gauda, who declared his willingness to tell me the real quantity of seed required to sow his fields, and the quantity that he usually reaped from them. I first measured two plots, each said to require one Colaga in the transplanted cultivation, and two thirds of a Colaga when sown with dry-seed; the produce in both cases was stated to be one Candaca and a half; that is, 30 seeds in the former, and 45 in the latter. The first plot measured 3836 square feet; the

second 4131; average 3983. At this rate, the Candaca sowing on a CHAPTER good soil is 79,660 square feet; and the acre in the transplanted cultivation requires \frac{7325}{10000} parts of a bushel of seed; and in the March 25. dry-seed 6215 of a bushel. The produce in both cases is 29 bushels. I then measured 12 Colaga of poor land, which proportionably requires more seed than that of a good quality. I found, that it contained 2880 square feet; so that the Candaca of poor land contains nearly 47,127 square feet. This plot produces one Candaca, and consequently about 16-36 seeds; and an acre at this rate would require 1575 bushel of seed, and would produce 2579 bushels. From this it would appear, that a Candaca of land is not a measure of definite extent. I think that this man spoke the truth.

The same people who gave me the account of the cultivation of Sugar-cane. rice say, that the sugar-cane cultivated here is the Maracabo, or stick-cane. The ground fit for it is that which has a supply of water in the dry season. Any soil will do, but a red earth is reckoned the best. In the month preceding the vernal equinox, they plough four times; and then throughout the field, at the distance of one cubit and a half, they form with a hoe trenches one cubit wide, and one span deep. They then cover the field with straw, dry grass, and leaves, and burn them to serve as a manure. The soil in the bottom of the trenches is afterwards loosened with a hoe; and a man, with his hand, opens up the loose earth, puts in a little dung, and upon this places horizontally, and parallel to the sides of the trench, cuttings of the cane, each containing four or five joints. These he covers with a little dung and earth. The cuttings are placed in one row, in each bed, the end of the one being close to that of another. Once a day, for a month, the canes must be watered with a pot; the young plants are then about a cubit high; and, the earth round them having been previously loosened with a sharp pointed stick, a little dung should be given to their roots. After this, the ridges are thrown down, and the earth is collected toward the rows of young cane, which by this means are placed on

CHAPTER ridges, with a trench intervening between every two rows. Until the rains commence, these trenches must every other day be filled with water. In the month preceding the autumnal equinox, in order to prevent them from being eaten by the jackalls and rats (Bandicotes), the canes are tied up in bundles of from five to ten, and each of these is surrounded by a service of straw rope. In ten months they are fit for cutting, and require no farther trouble. The crop season lasts one month. Five Colagas of land, or about 457 parts of an acre, form what is considered as a large field of sugar-cane, and will produce one Maund and a half of Jagory, each Maund containing 40 Seers of 24 Dudus weight. At this rate, an acre of cane would produce only about 80½ lb.; but these people do not state the produce of their rice land at more than a third of the truth; and respecting the sugar, they fall into at least an equal fault. Their mill consists of three cylinders moving by a perpetual screw, and turned by a man with a capstan bar, which is fixed to the cylinder in the centre. No addition is made to the juice when it is boiled into Jagory, which is done in flat iron boilers. The whole apparatus is extremely rude. On the second year a crop of Ratoons is taken, on the third year the roots are dug up, and the field is again planted with cane; so that it is never reinvigorated by a succession of crops. If a sugar-cane garden be to be converted into a rice field it is allowed a year's fallow before the rice is sown.

Dry grains.

On the lower part of the hills bordering on the rice grounds, are some small plots of land called Hakelu, or Mackey, which are cultivated for dry-grains. The whole is of a small extent, and of a bad quality: the Ricinus, for instance, does not grow more than two feet high. The grains cultivated on these fields are Udu (or Phaseolus minimoo Roxb:), Huts' Ellu (Verbesina sativa Roxb:), Huruli (Ricinus palma christi), Harulu (Dolichos biflorus), Ragy (Cynosurus corocanus).

Plantations.

The garden cultivation is here of great importance, and produces about one third of the whole revenue. Much of it is conducted by

Haiga Bráhmans; but they have not, as in Sudha, the exclusive CHAPTER possession. The most favourable situation is the head of a valley, where the two hills approach each other. By raising a bank from March 25. hill to hill, a tank is formed at the upper extremity; and along the declivity of each hill a canal is made from whence all the intermediate ground on the slopes, and in the valley below, can be supplied with water, and is planted for a garden. At the junction of the hills, or lowest part of the valley, the water from both sides is again collected, and carried down to where the valley is wide, and is cultivated with rice. A western exposure is reckoned very prejudicial; but I see some very thriving gardens which face the setting sun. They are sheltered from its withering influence by tall groves of forest trees. In some cool places, where the water is near the surface, the trees grow without irrigation; but then they require a great quantity of dung, and do not produce much fruit. Gardens are also made on plains, where a tank or canal affords a supply of water. These thrive very well. The Cagadali soil is here likewise preferred to all others.

The seed of the Areca is managed in the same manner as at Sersi. In the month preceding the autumnal equinox of the second year, the young plants are removed into another nursery, where they are planted a cubit distant, and manured with Nelli (Phyllanthus emblica) leaves and dung. This nursery must be kept clear of weeds, manured twice a year, and in the dry season should receive water once in eight days. The seedlings remain in it two years, when they are fit for transplantation. The gardens are formed as at Sersi; but when the Arecas are three years old, they are removed into the garden, planted close to the drains for letting off the water, and remain there two years, when they are finally placed in the spots where they are to grow. Once in twenty or thirty years only the watering channels are filled up with fresh earth, and then are not allowed water. During that year, the garden is kept moist by occasionally filling the drains. The water in these is, however, reckoned

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CHAPTER very prejudicial, and is never thrown upon the beds. Once in two years the garden is dug near the trees, and manured. The manure is dung, above which are placed the leafy twigs of all kinds of trees. When an Areca dies, a new one is planted in its stead; so that in an old garden there are trees of all ages. On this account, although a Candaca of land will plant 300 trees, in the books of revenue these are only rated as 100 taxable Arecas. When the trees are sixteen years old they are employed to support pepper vines. Here few or no cardamoms are raised. In some gardens there are a few plants. but they are not productive. After having been boiled, the Betelnuts are cut into pieces. According to the report of the cultivators, a garden of a thousand rated trees in a good soil produces twentyfive Maunds of prepared Bctel-nut, each Maund containing 60 Seers, of 24 Dudus weight. The pepper of such a garden will be four Maunds of the same weight. The extent of this garden is about 796,600 square feet, or about  $18\frac{1}{4}$  acres. Its produce of Betel-nut weighs 9201 lb. worth 14l. 9s. 6d.; and of pepper 117 lb. worth 19s.  $4\frac{t}{4}d$ . A garden rated at two thousand trees is reckoned a good one; any thing less is small. Five thousand Arecas constitute a very great garden. Many proprietors of gardens have no rice ground. For dung, they must keep cows, and female buffaloes; but this is far from being a charge against the garden, which in the dry season supplies the cattle abundantly with grass, and in the rainy season they pasture on the hills without cost to the owner, who sells the males which he rears. Four men can work a garden of two thousand rated trees, and collect the fruit and pepper. In an ordinary situation, to bring such a garden to perfection will cost about 1000 Pagodas, or 403 l. 8s.  $11\frac{1}{2}d$ , besides 100 Pagodas for the tank; but of this the government advances one half. The only return, until the garden becomes productive, is from the plantains. The cultivators say, that they never take advances for the produce of their gardens, but sell for ready money when it is fit for market.

The fields here are called the property of the government; but CHAPTER the government cannot legally dispossess any farmer of his lands so long as he pays the rent, which is also considered as fixed. The March 25. Gudday, or rice ground, only is taxed; and each farmer has annexed corn land. to this a portion of Mackey, or dry-field. The whole of this is of little value, and pays no tax; but it gives room for evil practices; what is really Gudday, being sometimes, by the connivance of the accomptants, called Mackey. The pasture land is common. The farmer can neither sell his land, nor let it on mortgage. If he be not able to pay his rent, he goes away; but, if either he or his descendants recover stock enough, they may return, and claim their heritage, and any new occupant would be obliged to relinquish the property. The rent is paid in money, according to a valuation made by Sivuppa, of the Kilidi family; and for each Candaca of ground, according to its quality, amounts to from 3 to 10 Ikeri Fanams. Allowing that the land of the Gauda of veracity was of the best quality, this rent will amount to less than one sixth of the produce, 10 Fanams being worth almost 6s. 3d., and 29 Candacas of rough rice, at one sixth of an Ikeri Pagoda, the usual price, being worth nearly 11. 18s. 111d. Upon this valuation, the princess Viru Magi laid a per centage, or Puggaday Putti, of one fourth, making the rent of the Candaca of the best land 7s.  $9\frac{3}{4}d$ ., or nearly one fifth of the produce. To this no addition has since been made; but some new taxes were imposed both by Hyder and Tippoo. The former, however, put a stop to certain exactions that had formerly been levied by the revenue officers; so that the people, on the whole, were not higher taxed than by their native princes. The taxes imposed by Tippoo have been repealed, and the revenue put on the same footing as in Hyder's time, whose example Purnea seems most judiciously to follow.

The plantations of Areca can be sold or mortgaged; on which Tenures of account they are looked upon as more the property of the cultiva- plantations. tors, than the rice fields are; but this is a fallacy; for a rice field

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CHAPTER is in fact the cultivator's unalienably. If a cultivator get into debt, he must sell his garden to satisfy his creditors; but he may relinquish his rice-land for a time, and, whenever his creditors cease from molesting him, he may again obtain possession. The mortgage here is exactly similar to the wadset of Scotland; the lender of the money taking the use of the estate for the interest of his money. The tax on plantations varies, according to the nature of the soil, from 8 to 24 Canter'-Ráya Pagodas for every thousand rateable trees. This is from 2l. 9s. 11d. to 7l. 9s.  $9\frac{1}{2}d$ . for about  $18\frac{1}{4}$  acres planted; but conjoined with this is always much ground for the house, tank, hills, &c. &c. According to the report of the cultivators, the produce, in a good soil, of 1000 rateable trees is worth 15 l. 8s.  $10\frac{1}{2}$  d.; so that the cultivator would at this rate pay about one half of the produce. A garden usually mortgages for from two to three times the amount of the tax, and sells out-right for twice the amount of the mortgage. The cultivators probably detracted as much from the real produce of the gardens, as they did from that of the rice land.

Price of labour, and condition of slaves.

Most of the cultivation is carried on by the families of the cultivators: there are very few hired servants; but a good many slaves, by whom on the farms of the Bráhmans all the ploughing is performed. A slave gets annually  $1\frac{1}{2}$  Rupee for a blanket; 3 Rupees worth of cotton cloth; 1/4 Rupee for a handkerchief; 6 Candacas of rough rice, worth 4 Rupees, to procure salt, tamarinds, &c.; and daily 11 Colaga of rough rice, or annually 27 Candacas (or almost 49 bushels), worth 1 l. 16s.  $11\frac{3}{4}d$ .; add the annual allowances  $17s. 7\frac{1}{4}d$ . the total expense of maintaining a male slave one year is 2l. 14s.  $7\frac{1}{4}d.$ A woman slave gets as follows: 365 Colagas of rough rice, one daily, and 3 Candacas at harvest; in all, 21 Landacas, or 36 bushels, worth 14 ? Rupees; 2 Rupees worth of cloth, and 4 Rupee for a jacket; in all, nearly 161 Rupees, or 11. 13s. 2d. The marriage of a slave costs 10 Pagodas, or about four guineas. The wife belongs to the husband's master. A master cannot hinder his slave girl from marrying the slave of another man, nor does he get any price for CHAPTER her. The widow and children, after a slave's death, continue with his master. If a slave has no children by his first wife, he is allowed March 25. to take another.

The same people who gave me an account of the cultivation of Stock and rice say, that a man who has ten ploughs is reckoned a very great size of farms. farmer; and a man who has three ploughs is thought to have a good stock. These three ploughs require four men, and six oxen. They seldom have occasion to hire additional labourers at seed time or harvest, one man helping another on such occasions. The annual expense of the servants amounts to 17 l. 11s. 1d. With three ploughs they can only cultivate 15 Candacas of land. The produce of these, supposing them of the best quality, would be only worth 30 l., and the rent is 5 l. 16 s.  $10\frac{1}{4}$  d.; so that the farmer, for his trouble and stock, would have only 61. 12s.  $0\frac{3}{4}d$ ., which is evidently too little. From the number of people employed to manage the three ploughs, it is indeed probable, that, besides the fifteen Candacas of rice-land, the same stock cultivates also a plantation of Arecas.

The cattle here, like those of the country below the Ghats, are Cattle. remarkably small. No large ones are ever bought, as they do not live long. About an equal number of oxen and buffaloes are employed for the plough. The country breeds more than are required for its cultivation, and a considerable surplus is annually exported to the sea-coast. In this country there are neither sheep nor asses. All the chief officers of revenue keep brood mares, considerably better than the common Indian ponies, or Tatoos. The horses, in the present state of the breed, would not answer for our cavalry; but it might, no doubt, be improved, by sending into the province a few good stallions.

The cattle are kept all the year in the house. In the rainy sea- Treatment of son, they are littered with green leaves. Fresh litter is every day the cattle and manure. added, but the stable is cleaned only once a week. This dung is

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CHAPTER collected in a pit, and called Sopina Gobra, or leaf manure. During the two months preceding and the two following the winter solstice, the cattle are littered with hill grass, and cleaned once in four days. This dung also is collected in a separate pit, and is called Hulu, or Soday Gobra. In the hot and dry season the cattle are littered with dry leaves, and cleaned once in four days; the dung is generally spread upon the hollow roads leading into the villages, where it is trodden upon by man and beast, and is thereby much improved; but it renders the villages quite loathsome. This is called Daraghina Gobra. The grass (Hulu) dung is never used for rice land; but all the three are indiscriminately used for gardens.

## CHAPTER XVIII.

JOURNEY FROM HYDER-NAGARA TO HERIURU, THROUGH THE PRIN-CIPALITIES OF IKERI AND CHATRAKAL.

MARCH 29th.—I went to Cowldurga, which is said to be four CHAPTER cosses from Nagara; but the stage proved very long, as the gate was at least four miles from where my tents had been pitched. March 29. The road the whole way is exceedingly rough and hilly. The country, hills are all covered with woods, most of which produce the wild pepper vine: but these are guite neglected; and as they are not cultivated, although the village people collect a little pepper, they pay no revenue. The want of the stimulus of rent seems to produce the neglect. I passed through a good many narrow vallies fit for the cultivation of rice, several of which were entirely waste. All the streams of these vallies fall into the river of Honawera.

place of great antiquity. A small fort is said to have been erected or Bhavanaon the hill by Dharma Rájá, or Yudistara, one of the five sons of Pandu, who governed India at the commencement of this Yugam, almost 5000 years ago. The works of this old fortress are said to be still distinguishable by their solidity, and the excellence of their structure. The fortifications were much enlarged, and improved into their present form by Sedásiva Náyaka, the founder of the Kilidi family. Hyder repaired it, and added a cavalier, which by the Mussulmans here is called a battery; and he then changed the name of the place into Cowldurga, a name which the natives have retained

out of respect to Huder's memory, although they laugh at the

The original name of Cowldurga was Bhavana-giri, and it is a Cowldurga,

XVIII. March 29. Manday Gudday.

CHAPTER barbarity of its derivation; for Cowl is a Mussulman word, originally I believe Arabic, and signifies protection or encouragement, such as is given by a good government to the subject; and Durga is a Karnataca word, signifying a fort that is situated on a rock. Tippoo, with the usual zeal of a Mussulman, changed the Pagan names of almost every town in his dominions; but the names which he bestowed have already fallen into disuse, and in a few years will sink into oblivion. The hill on which Cowldurga stands is not very high; but, the walls being numerous and lofty, it looks better than most of the hill forts of Karnata, of which the buildings are hardly observable at a distance, being hidden among the immense rocks on which they are placed. It is now undergoing a complete repair, and is garrisoned by the troops of the Mysore Rájá. The Petta stands at some distance, and contains about a hundred houses, which for an Indian town are well built. In the government of the Kilidi family, it contained six or seven hundred houses; for it is a considerable thoroughfare, and well situated for trade. The road from Hosso-Angady-ghat divides into two branches at Hyder-ghur: the one goes by Nagara; and that way the trade of Bangalore, Chatrakal, and other places toward the north-east, passes; the other branch of the road passes through Cowldurga, and is that by which the trade of Seringapatam goes to Canara. Hyder-ghur is a pass fortified by a wall and gate. Near it there is no cultivation; and indeed near Cowldurga there is very little. As, however, the pass commands one of the principal entrances into Karnata Désam, it seems to deserve some attention.

March 30. State of the country.

30th March.—I went four cosses to Hodalla. Near Cowldurg, the country is covered with thick forests. Farther on, the hills. are tolerably well cleared, and the intermediate little vallics are as usual rice grounds. In fact, all this part of the country resem bles entirely that below the western Ghats. The hills here, although apparently well fitted for this purpose, are never formed

into terraces, as in Malabar. The gardens are not so numerous as CHAPTER near Nagara, and infinitely fewer than in Malayala. About half way, I passed through a village named Arga, which formerly was a large March 30, place. Its inhabitants were removed by Huder to Cowldurga, and suffered much from the change of air; for Arga is in a clear open country, and Cowldurga is surrounded by hills and forests. East from Arga are two small rivulets, the Gopinátha, and Kusawati; which join, and then fall into the Tunga. The natives say, that at Galagunjy-mani, a hill near Sringa-giri, there is an image of Narasingha, the incarnation of Vishnu, whose head resembles that of a lion. This image is not larger than a man. From one eye comes a small stream, called the source of the Nétrawati, which falls into the sea at Mangalore; another stream comes from his left tusk, and is the source of the Tunga; and a third stream, called the source of the Bhadra, comes from the right tusk of this image. These streams are about the thickness of a quill, and, having united for a little way, run down a rock, when they again separate; and each, being joined by various springs and rivulets, forms a river. I have heard a similar story at several places, both above and below the Ghats; and the account here given I took with care from a sensible person who has been on the spot; yet there is probably some gross mistake in it, most of the people here being willing to believe any thing extraordinary, even in perfect opposition to the evidence of their senses.

Hodalla contains seven or eight families, who are very inadequate Hereditary to cultivate all the arable lands. It was formerly the residence of flute-player to the king. a family of Polygars, 'named Coramar, and of Telinga extraction. They were hereditary flute-players to the kings of Vijaya-nagara. By the first chiefs of the family of Kilidi they were deprived of their authority, but were allowed certain lands free from taxes. The family is now extinct.

A man here is just now forming a garden that will plant 12000 Plantations. Betel-nut trees, which will be rated in the public accompts as 4000.

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CHAPTER The cost, before it comes to produce, according to estimate, will be 4000 Ikeri Pagodas, or 1611 l. 15 s. 11 d. When the garden begins to produce, the Amildars (chief officers) of three districts (Talucs), three Sheristadars (accomptants of districts), and two principal cultivators from each of three neighbouring districts, will form a kind of jury, and fix the revenue according to the soil and local advantages; the maximum being 18 Ikeri Pagodas, and the minimum being 5 Pagodas, for every thousand rateable trees. In every part of the country this is the practice.

March 31. State of the country.

31st March.-I went to Tuduru. The stage seemed to be short, but it is called four cosses. The road passes near a village called Maluru, but on the whole way I did not see a house. By far the greater part of the country is covered with stunted woods; and as the roads generally follow the low hills, these hide from the view of the traveller the greater part of what is cultivated.

Mahisi, a temple built by Hanumanta.

On the banks of the Tunga, near Maluru, is a celebrated temple named Mahisi, which signifies the female buffalo. It is supposed to have been built by Hanumanta, who, unwilling to accompany Ráma in his expedition against Lanca, assumed for concealment the form of this animal. At that time he built this temple, and dedicated it of course to Vishnu, his master. It is said to possess inscriptions on stone of great antiquity, of which the Amildar promised to send me copies. All that has come to hand, however, is one without a date, of which a copy has been given to the Bengal government.

Weather.

At Tuduru there is no village, and only a few scattered houses. I pitched my tents at a ruinous Jangama's Mata, which stands on the left bank of the Tunga. The stream of this river never dries, but is not applied to irrigate the fields. In the morning there were two very heavy showers of rain from the eastward, with much thunder, and little wind. At this season usually, once in eight or ten days, similar rains are said to happen. The prevailing winds come from the west, and are strong and dry.

1st April.—I went four cosses to Baikshavani Mata. The road is April 1.

near the left bank of the Tunga. After leaving the cultivated CHAPTER country near Tuduru, which is pretty extensive, I entered a forest of trees and Bamboos, almost equalling in stature those of the wes-  $\frac{\text{April 1.}}{T_{cak}}$  forests, tern Ghats. Here were many fine Teak trees, more indeed than I and Tunga have ever seen in any one place. They might be of value, could river. they be floated down the Tunga to the Krishna, and so to the sea; which I think might probably be done by supporting the floats with Bamboos. The Tunga at all times contains water; but in the dry season the channel, being full of rocks, will not admit floats. In the rainy season the river swells prodigiously, and is said to be in most places eight or ten feet higher than the top of the rocks. Its stream is then exceedingly rapid and muddy, and filled with large trees swept away by the flood; while in some places rocks come very near the surface. These circumstances would, no doubt, render the navigation in boats very dangerous, but they do not seem to me likely to impede well-constructed floats of timber, strengthened and buoved up by Bamboos. If this should be found practicable, I know of no place that would answer better, for rearing a Teak forest, than the banks of the Tunga near Tuduru, where close to the river there is much excellent soil, which is considered as useless. As there are already on the spot many fine Teak trees, all that would be required would be, to eradicate the trees of less value, which I look upon as a necessary step to procure any considerable quantity of Teak in a well regulated government. In the wilds of America, or the dominions of Ava, where a few inhabitants are buried in the recesses of an immense forest, a considerable supply of timber may without trouble be procured; but in a well cultivated country, without much pains bestowed on rearing the proper trees, it is in vain to think of supplying the extensive demands of the shipbuilder.

In this forest the road is in several places defended by fortifica- Face of the tions; for, although not hilly, it is a pass called Uluvadi. These country. fortifications were erected by Hyder, with a view probably of

XVIII. April 1. Manday Gudday.

CHAPTER stopping marauders. After leaving this pass, I came to an extensive plain of rice ground, in which stands Manday Gudday, a scattered town surrounding a ruinous mud fort. It formerly was considerably larger, but suffered much from Purseram Bhow's army, into the course of whose destructive route I have again come.

Tundu flowers, a dye.

Near the town I observed many fine trees of the Tundu, or Cedrella Tuna Roxb: MSS. Its flowers, as I have mentioned at Bangalore, are used for dveing. It is said, that they are collected by Mussulmans, who gather them every morning as they fall from the tree, and afterwards dry them on mats exposed to the sun. The price at present is said to be so low, that none are collected.

Sandal.

East from the plain of Manday Gudday, I passed through a forest which contains much sandal-wood, but no Teak. Indeed, I have never seen the two trees in the same place.

Face of the country.

On passing this forest, I came to an open country, in which is situated Baikshaváni Mata, where there is no village; all the houses are scattered on the different farms, which is the usual custom throughout the principalities (Ráyadas) of Sudha and Nagara, as well as in the country below the western Ghats.

Sirabhactars.

The Mata belongs to the Sivabhactar Jangamas, one of whom still resides in it. The village is considered as his property, but he pays the usual taxes to government. He is dependent on the Umblay Guru, who lives near Shiva-mogay. None of these Matas seem to be older than the government of the Kilidi Rájás. Long before their accession, it is true, the greater part of the cultivators were Sirabhactars, and no doubt had among them many Jangamas; but they were probably in too great poverty to be able to erect religious buildings of any consequence.

Want of people.

The people here say, that if there were a sufficient number of cultivators the greater part of the woods might be cut, and the land, which these now occupy, might be converted into dry field; but at present about one third of the rice land is unoccupied. It would not however appear, that the country was ever sufficiently

populous to cultivate more than the rice lands, with a very little CHAPTER of the adjacent high ground, and a few small plantations. At this distance from the Ghats, both Betel-nut and sandal-wood become April 1. scarce. Great quantities of the latter grow in the low woods between Hodalla and Tuduru.

Here the quantity of rain also diminishes; and rice cannot be Weather. cultivated without small reservoirs, sufficient to contain a supply of water for two months after the cessation of the rains; for the rains last four months only; and all the kinds of rice that are cultivated here require six months to grow.

2d April.—I went a long stage, called five cosses, to Shiva-mogay. April 2. The first two cosses of this road are in a forest of very fine trees, State of the country. many of which are Teak. On leaving this, I entered an open country extending very far to the eastward. The greater part of it seems to be fit for cultivation; but at present a want of inhabitants renders the greatest part of it a waste. One coss from the forest is Gajunuru, a fort and village on the left bank of the Tunga.

On the plain between this and Shiva-mogay was fought a battle Battle of between Purseram Bhow, and Mahomet Reza, usually called the Simoga. Binky Nabob, or burning Lord; as, from his activity, he was usually employed by the Sultún to lay waste any country that might be of use to his enemies. Purseram had advanced as far as Fatah Petta, hoping that the garrison of Nagara would run away, and leave him the spoil of the city; but as they preserved a countenance which he did not like, he marched toward his left, in order to join Lord Cornwallis before Seringapatam. At this place he was met by Mahomet Reza, who had 5000 horse, and 10,000 foot, with eight guns. An engagement took place, in which the Mussulman was defeated, and compelled to retire to Nagara with the loss of four or five hundred men. This is the account of the natives of Shiva-mogay, little inclined to favour either party. From the field of battle, Purseram advanced to Shiva-mogay, and after a siege of two days

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CHAPTER took the fort. His march, as usual, was marked by devastation, famine, and murder. The town at that time contained 6000 houses, the whole of which were destroyed; the women were ravished, and the handsomest carried entirely away. Such of the men as fell into the hands of the Marattahs were killed, and of those who escaped the sword a large proportion perished of hunger; every eatable thing having been swept away by those whom people in Europe are pleased to call the gentle Hindus. These ruffians did not even spare the Kudali Swami, who is the Guru of all the Marattah Bráhmans of the Smartal sect, and who is by them considered as an actual incarnation of the deity. His Matam, or college, was plundered and burnt; but this cost the Peshwa dear. The enraged Swami held out threats of instant excommunication, and was only pacified by a present of 400,000 Rupees. Tippoo had the satisfaction of taking one half of this sum, which was the assessment levied from the Swami on account of the Nuzzur that Lord Cornwallis exacted.

Charity of a great Brahman.

The Swami is said to have been of great use in the famine, and to have employed the utmost of his influence in collecting money to support the starving wretches. He daily fed 3000 Bráhmans, and other religious mendicants; for, according to the Hindu doctrine, it is the charity which is bestowed on religious men that chiefly procures favour in the eyes of the gods. In his distributions the Swami is said to have expended six Lacs of Rupees, or 60,441 l. 13s. 4d., most of which was collected in the Marattah states.

Shira-mogay, or Simogay.

On the fall of Seringapatam, the unfortunate Shiva-mogay became a prey to Dundia, who remained in it fifteen days, and plundered the inhabitants very completely. Many of the neighbouring villages he burnt. On going away, he put a garrison in the fort, which was stormed by Colonel Stephenson, who hanged the commandant. The Amildar who gave me the foregoing account is said to have distinguished his courage on this occasion. The town now contains about 500 houses, and is increasing fast. Its proper name is disputed. In the public accompts it is called Shiva-mogay; but

some Bráhmans of the place say, that its name is properly Shimuggay (Simoga of the English). This signifies sweet-pot. Such an absurd name is said to be owing to its having been the residence of one of April 2. the saints called Rishis, who lived entirely on the roots of grass, which he pounded in a pot, and called the mixture his Shimuggay. The whole time that the Rishi did not employ in preparing this simple diet was of course passed in prayer and other acts of devotion.

CHAPTER

of the Tunga.

From Mangalore Hyder brought to Shiva-mogay many carpenters, Navigation and built a number of lighters of about eight tons burthen. They are strong, and flat-bottomed; but, as the greater part of them have been allowed to remain on the bank where they were built, I doubt not that they were found very useless. From the account of the river, which I have given, this will readily be believed; the attempt is however no impeachment on the sagacity of Hyder, who, having been educated in a place remote from every kind of navigation, could have no idea of what boats could perform, nor of what obstacles would prevent their utility. The only object that could strike him was the immense advantage of carrying down the river the timber, and bulky produce of this country; from whence even the Betel-nut and the pepper require many cattle to go loaded, that must again return empty. To attempt dragging any thing up such a torrent as the Tunga, would be vain; but, after having seen the boats, and known that some of them have been actually navigated down the river, I have no doubt of its being practicable to carry down floats; and on these perhaps many bulky articles of commerce might be transported.

In this neighbourhood the manufacture of cotton cloth begins; for Manufacnone is made to the westward. In all the villages of this district (Taluc), very coarse cloths, for country use, are made by the Whalliaru, and by a class of the Sivabhactars, who are called Bily Muggas.

Every village has different grain measures. Those of the Kasba, Grain measures. or chief town of the district (Taluc), are as follow:

## A JOURNEY FROM MADRAS THROUGH

CHAPTER XVIII. April 2. First, Those used by the farmers.

901 cubical inches are equal to 1 Mana, or Seer.

16 Manas make 1 Colaga.

20 Colagas make 1 Candaca, which contains  $13\frac{4+3+6}{1000}$  bushels. Second, Those used in the Bazar, or market for retail:

18 Sultany Seers make 1 Colaga.

20 Colagas make 1 Canduca; which therefore, if the Sultany Seer were at the true standard, ought to contain  $12\frac{49.5}{1000}$  bushels; but in fact the two Candacas are the same, and this measure is divided by the farmers into 320 Manas, and by the shopkeepers into 360 Seers.

In the open country round Shiva-mogay, according to the account of its intelligent and obliging Amildar, the hills and barren ground do not occupy more than a third of the surface. Near the river the greater part of the arable lands are rice grounds; far from it the dry-field prevails. On the whole, the quantity of ground fit for the cultivation of rice is about equal to that fit for dry grains. Not above one third of the whole arable land is now under cultivation, and the rice ground is more neglected than the dry field. This is not owing to rice being less profitable to the cultivator, but to the contrary cause; for the devastation of the Marattahs fell heaviest on the best parts of the country; while the inhabitants of the villages situated among the dry field were near the forests to make their escape.

Wateredlands. The wet lands are in general of a light soil. Although the rains are less copious than at Nagara, so that artificial irrigation would be of great utility, little care has been taken with that branch of agriculture. The people here allege, that the plaius are so small as to render the construction of reservoirs too expensive. This seems to be one of the usual excuses held out by indolence; as no where in Karnata have I seen so much level country. No dams have been made on the Tunga; and in fact its channel is so wide, and so deep under the level of the country, that they could be made

only at a great expense; but then, I am persuaded, it would be CHAPTER found that they would irrigate a proportionably large extent of ground. The greater part of the rice is raised by the rain water April 2. alone, and of course there is only one crop; so that during six months the people are almost wholly idle. A few farmers have small reservoirs, which give a supply of water to the crop when the rains are less regular than usual; and where the reservoirs are somewhat larger, their water supplies in the hot season a few plantations of Areca and sugar-cane. The extent, however, of both these is so inconsiderable, as scarcely to deserve notice. The plantations of palm trees contain only coco-nuts and Arecas, without pepper; and their produce is of so bad a quality, that it will answer only for country consumption.

The kinds of rice cultivated here are,

Rice.

Sampigy Dala, produce in a good crop 10 seeds.

Betta Candala, - 12 seeds.

Caimbutty, - - 9 seeds.

Sanabutty, - - 9 seeds.

\*All these require six months to grow. They are all large grained, except the Sanabutty, which sells five per cent. higher than the others. The lowest ground is used for the Sanabutty; the highest is used for the Caimbutty. The Candaca of land is the quantity supposed to require a Candaca of seed, and is quite indefinite in size; more and more seed being sown in proportion to the goodness of the soil. This seems agreeable to reason; the contrary was, however, at first asserted by the cultivators, and throughout the country is indeed a usual cry with that class of people; but I was cautioned by the Amildar not to credit such assertions. The produce of a good and that of a bad field, each of one Candaca, is nearly the same; but the good one, being much smaller, and requiring less expense of cultivation, can afford a higher rent. Accompanied by the Amildar, I measured a field of the poorest soil, said to require eight Colagas of seed, and found it to contain 152,084 square feet;

April 2.

CHAPTIR so that the Candaca in such a soil would be 380,210 feet. The acre would therefore sow  $1\frac{536}{1000}$  bushel. The produce of this field last year, which was a favourable season, was 5 Candacas, or 121 seeds, or  $19\frac{\tau}{5}$  bushels an acre. In the preceding year the crop was bad, and produced only 3 Candacas, or  $7\frac{1}{2}$  seeds, or  $11\frac{12}{100}$  bushels an acre. This account I think is true, the Amildar being well informed, and apparently inclined to give me assistance. What the extent of a Candaca land of the two superior qualities is I did not attempt to ascertain: the people said it was much less.

> The cultivation of all soils and all kinds of rice is the same, and the unprepared seed is sown by a drill. Immediately after harvest, the ground is once ploughed. When the rains commence, during the two months following the vernal equinox it is ploughed again twice, smoothed with the implement called Coradu, which is similar to that of Banawási (Plate XXIX. Fig. 72.), and then hoed twice with the Heg Cuntay (Plate XXVIII. Fig. 75.), which is drawn by two oxen. This removes the grass; after which the clods are broken by drawing the Coradu twice over the field, which in some measure serves as a rolling-stone. The dung is then spread; and after the first good rain the seed is sown with the drill or Curizy, and covered with the Coradu. At this season the rain comes in showers, between which are considerable intervals. On the third day after having been sown, the field is hoed with the Heg Cuntay, which here is called also Cambutigay. On the twentieth day, when the seedlings are nine inches high, the Coradu is used again; then the Edday Cuntay (Plate XXVIII. Fig. 76.); then the Coradu, and finally the harrow which is made of a bunch of thorny Bamboos. On the thirtieth day, more grass having sprung, the Edday Cuntay is again used, the rows of young corn passing between the hoes; and this must be repeated as often as the grass springs. In the third month the water is confined, and then for the last time the Edday Cuntay must be used. The mud raised by this is smoothed by the Coradu; but in this operation, the same implement is called Aravasi.

All these weedings are not sufficient, and the remaining grass must CHAPTER be removed by the hand and weeding-iron. The rice is cut with the straw, and for two days is allowed to lie loose on the field. It April 2. is then put in ricks, without having been bound in sheaves, and remains there until trodden, which may be done any time in the course of three months. It is always preserved in the husk, and when wanted for consumption is cleaned by a hand mill of the usual form, but made entirely of timber, which removes the outer husk; but the inner one, or bran, must be separated by beating in a mortar. Eight measures of clean rice, as usual in India, are equal in value to twenty of that which retains the husk.

In a few places, where there is a moist black soil, the rice-ground Second crop produces a second crop of Callay (Cicer arietinum), and of Hessaru of pulse, (Phaseolus mungo). The seed for both is one fifth of the quantity of rice that is required to sow the field; and, as the soil is rich, will probably be about half a bushel the acre. The Callay produces five seeds, and the Hessaru four. For the former, the field is ploughed once in the month preceding the winter solstice. The seed is dropt into the furrow after the plough, and in three months ripens without farther trouble; and this is no additional labour, as the field must at any rate have been ploughed. For the Hessaru, the field after the rice harvest must be ploughed twice. In the month following the shortest day, it must be watered from a reservoir, and smoothed with the implement called Coradu. As a mark for the sower, furrows are then drawn through the whole field, at the distance of four cubits; and the seed having been sown broadcast is covered by the plough. The field is then smoothed with the Coradu, and in four months the crop ripens.

Near Shiva-mogay the cultivation of dry grains begins to be of Dry-field. importance. The following kinds are cultivated.

Ragy, or the Cynosurus Corocanus, with its concomitants Avaray (Dolichos Lablab), Tovary (Cytisus Cajan), Punday (Hibiscus Cannabinus), Lin, and Udu (Phaseolus Minimoo Roxb: MSS.)

CHAPTER XVIII. April 2. Huruli, or Dolichos biflorus.

Shamay, or Panicum miliare Lamarck.

Navonay, or Panicum italicum.

Harica, Paspalum frumentaceum Roxb: MSS.

Barugu, Panicum miliaceum.

Harulu, Ricinus palma christi.

Huts' Ellu, or Verbesina sativa Roxb: MSS.

Wull' Ellu, or Sesamum.

Udu, or Phascolus minimoo Roxb: by itself.

Jola, or Holcus sorghum.

The only ones, that are raised in a quantity deserving much attention, are the Ragy with its concomitants, and the Huruli. About three fourths of the fields are sown with the first crop, and one fourth with the last mentioned. In giving an account of the present state of the country, the others may be altogether neglected. They might, however, deserve much attention from any person who wished to try experiments for the improvement of agriculture. The best soil is reserved for Ragy. The Huruli is sown on poor soils, or on the Ragy fields when, owing to a want of rain, the crop of that grain has failed. Here the crop of Huruli is not thought to injure the following one of Ragy, which is contrary to the opinion that is commonly received in most parts of the country. In the present system of Hindu agriculture, however, very many opinions must be commonly held, without any fair trial having been made to ascertain how far they are well founded. Both Ragy and Huruli fields are sown every year without rest. The Huruli is a very uncertain crop; for, by either too much or too little rain it is spoiled; so that, although very high priced, it gives little profit.

Ragy.

At Shiva-mogay there is only one kind of Ragy, and one mode of cultivation. In the month following the summer solstice, the field is ploughed twice, and smoothed with the Coradu. It is then ploughed and smoothed again, and hoed with the Heg Cuntay. After this, it is harrowed with the rake drawn by oxen. Eight days afterwards,

it is again hoed with the Heg Cuntay, and is allowed to rest fif- CHAPTER teen days. Then throughout the field furrows are drawn at the distance of about seven inches, and into these the Ragy-seed, mixed April 2. with dung, is placed very thin with the hand; a small quantity being dropped at about every ten inches. In every seventh furrow are put the seeds of Avaray, Tovary, and Punday intermixed, or of Udu by itself. The field is then smoothed with the Coradu, and with the bunch of prickly Bamboos. In eight days, when the young plants have come up, the spaces between the rows are hoed with the Edday Cuntay (Plate XXVIII. Fig. 76.), and again smoothed with the Coradu and bunch of twigs. These operations must be repeated twice, with an interval of eight days between each time. After the third the field is harrowed with the rake drawn by oxen, and after another interval of eight days this is again repeated. In the fourth month, the weeds are removed by the hand: in five months the crop is ripe. It is tied up in sheaves; and as the rainy season is not then quite over, it is dried with some difficulty. When the Ragy is in flower, the crop is apt to be spoiled by heavy rain; which may be a reason why it does not thrive well to the westward. The produce of Ragy in a good crop is reckoned to be ten seeds, which, unless the seed is sown much thicker than usual, is very poor, This is probably in some measure the case, as at Shiva-mogay this crop is allowed little or no manure; but the people who gave me the account certainly concealed the quantity of produce, as the rent paid for the Ragy-land amounts to the value of almost ten seeds. All the dry-field being at a distance from the town, I had no opportunity of ascertaining the extent of a Colaga of Ragy-land.

For Huruli, the field, having been previously manured, is ploughed Huruli. three times during the month which precedes the autumnal equinox, at the interval each time of three days. The seed is sown broadcast, and covered with the Coradu. It ripens in four months; four seeds are reckoned a good crop, and three a middling one.

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CHAPTER XVIII. April 2. Wages and labour.

The greater part of the cultivation is carried on by the tenants, and their own families. In agriculture, some hired servants, but no slaves, are employed. The yearly wages for a labouring servant are from four to five Ikeri Pagodas, one blanket, one pair of shoes, and a handkerchief, amounting in all to about two guineas. He finds his house and victuals. In weeding time, women are hired, at four Seers of rough rice a day. A man, when hired by the day, gets five Seers. These wages are very high, when it is considered that no servant works here more than six hours. The labourers gave me the following account of the manner in which they pass their time. About eight o'clock of our day they rise from bed, and smoke tobacco; they perform their evacuations, and ablutions; and having been purified, they worship the gods. They then eat, an operation in which two hours are expended. They then rest themselves half an hour, when they proceed to the field, and work six hours. On their return, they again pray, and take a little of any cold victuals that they have ready. They then look after the cattle, and give them water and fodder. The labour of the day is now over; and the workman, having again washed and prayed, takes his supper, and about seven o'clock goes to bed, where he remains thirteen hours. This is their employment during the six months of toil. In the remaining half of the year, little cultivation being carried on, they repair their houses, lay in a stock of firewood, carry out dung, and do other little jobs about the farm. Masters, of course, work still less.

Tenures.

In this vicinity there are two kinds of tenure. The arst comprehends gardens, and lands formerly granted in *Enam*. Both of these the occupants have a right to sell. *Hyder* laid half the usual rent upon the lands held by *Enam*, and this tax was increased by the *Sultán*; but *Purnea* has again reduced it to *Hyder's* assessment. The other tenure is that of what are called *Shist*, or valued lands; these are the absolute property of the government; and the

occupants may be turned out at will. Each field is valued at a certain rent to be paid in money, which was first determined by Sivuppa Nayaka. The Rany Viru Magi added a half of the amount, and April 2. Hyder doubled her assessment; but no partial raisings upon any man's possessions have been permitted. Rice ground pays from four to eight Sultany Pagodas a Candaca; at this rate, the field which I measured, being of the worst soil, pays about 3s. 8d. an acre; its produce in a good crop being about ten bushels of clean rice, which is reduced to eight by deducting the expense of cleaning. Dry-field pays from sixteen to twelve Pagodas a Candaca: the produce, therefore, must be much greater than the ten seeds stated by the cultivators; for ten Candacas of Ragy are only worth about seventeen Pagodas.

Four ploughs are here reckoned a large stock; and require four Stock. men, two boys, and eight or ten oxen. These four ploughs are said to be able to cultivate one Candaca and a half of rice land, with one Colaga of dry-field; but, even allowing for the extreme indolence of the labourers, this must be under-rated in the very worst soils.

The breed of cattle, when compared with that of the hilly country to the west, begins to improve at Shiva-mogay. None, however, that are bred in this district, are fit for the carriage of goods; but the oxen are of a short thick breed, well adapted for ploughing rice ground. Some are exported to the westward. The oxen are not wrought more than four or five hours in the day. From about the end of July till toward the end of January, they are fed on grass, some of which is cut, and at night is given to them in the house. During the remainder of the year they are fed on straw, and husks of Huruli; to which, when they are in danger of perishing, some of that grain is added. Very few buffaloes are employed in the plough; but many females are kept for giving milk, and the young males are exported. Immediately on leaving the forests of the western hills, asses become numerous. A few sheep and goats are

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CHAPTER to be seen, but they are not bred in the country; very few indeed are reared on the west side of the Tunga-bhadra. For the use of traders, the public reserves some pasture land; and for each head of cattle they pay two Dudus a month. The farmers send their cattle to pasture in the hills and woods, where they pay nothing.

Manure.

The cattle are never littered; and the only manure used is their dung, collected in a pit, together with the grass and straw which they did not eat in the night. To these are added the ashes and sweepings of the farmer's house.

Strata.

At the entrance into the open country, the Laterite seems to stop. The last that I have seen was at Baikshaváni Mata. Between that place and Shiva-mogay the strata are not very observable. In some places they appear to run east and west, in others the rock seems not to be stratified. In one place only, since I came up to Karnata, have I observed the large veins of quartz so common to the eastward, and I saw none in any place below the western Ghats.

April 4. Appearance of the country.

4th April.—I went four cosses to Kudali. The country all the way is plain; but it contains many detached hills, some of which, toward the north, are pretty high. The whole country is bare, and almost entirely waste.

Inhospitable disposition of the natives.

Mid-way I came to a village, where the inhospitable disposition of the natives fully manifested itself. Near this village, I overtook a Sepoy lying in the utmost agony from a rupture. Having with some difficulty reduced it, the pain in his groin was succeeded by a violent colic, which contracted his limbs; and, had any exercise been at all proper for a man in his condition, rendered him totally unable to walk. I therefore went into the village, in order to procure a cot or bedstead, of which a litter could be readily made. As I had left all my attendants with the sick man, except an interpreter, the villagers held me in contempt. I found the Gauda, his brother, and some head men of the village, all Sivabhactars, standing in conversation, and wrapped up in their blankets. Having made known to them my case, the Gauda replied, that they had no

cots, and his brother talked very loud, and in an insolent manner. CHAPTER This was checked by the coming up of a superior officer of revenue, who informed me that there were cots in every house; but neither April 4. offers of payment, nor threats of complaint, were of more avail than humanity. In excuse for these people it may however be said, that the Sepoy belonged to the Bombay army, a detachment of which had enabled Purseram Bhow to commit all his cruelties. Not that the Bombay army had any share in these excesses; but without its assistance he either would not have ventured into the country at all, or would have been assuredly defeated at Shiva-mogay.

About a coss from this inhospitable village, I crossed the Tunga, and from thence to Kudali some part of the country is cultivated. The principal crops are Jola and cotton.

Kudali, or the Joining, is an Agraram, or village given in Enam Kudali. to the Bráhmans, and is situated between the Tunga and Bhadra rivers at their junction, whence the place derives its name. It was plundered and burned, as I have already mentioned, by a party of the Marattah army, who put all the Súdra inhabitants to the sword, although the place is quite defenceless, nor did the people attempt to make any resistance. After this, the Bráhmans went to complain to the Bhow, who gave each of them one Rupee as in duty (Dharma) bound.

I found, that the Guru or Swami was at Hara-punya-hully, em- Brahmans. ployed in begging, as it is called. He had with him all his principal disciples; so that the Bráhmans who remained at Kudali were not men of great intelligence; but they gave me a copy in the Marattah character, of the Sankara Acharya Cheritra, or an account of the life and actions of that very celebrated personage. It is esteemed a book of great authority, and has been delivered to the Bengal government.

The Bráhmans whom I found at Kudali said, that Sankara appeared Sankara on earth in that character only once, and that he lived about two his succesthousand years ago. At the time of his coming, the sect of Buddha sors.



and other heretics were very numerous; and most of the Bráhmans who were then living had fallen into the error of worshipping the sun, moon, and stars. The Matam, or college, of Sankara Acharya was at Sringa-giri, and he appointed one Sannyási only to be his successor, and to occupy his throne. The Matam of Sringa-giri is still called the throne of Sankara; but each Swami that occupies it as his successor has a peculiar name, although they are all acknowledged to be gods, and incarnations of Iswara. The successors of Sankara Acharya have at different times found it necessary to appoint agents for the management of their remote followers; and, to render these agents sufficiently respectable, it has been found necessary to reveal to them the Upadésa peculiar to the rank of Sannyási. By this mean a portion of Iswara is incorporated with their bodies, in such a manner that the worship offered to them becomes of equal efficacy with the worship of that portion of the deity which remains in heaven. They are not supposed to be possessed of any extraordinary power, which indeed would be a pretension very difficult to support with credit for ages. Several of these agents, who managed their followers with skill, established Matams of their own, and appointed successors, who, according to their success, either acknowledged a dependance on the Sringa-giri throne, or have pretended to be equal to its Swami. Among these, the most conspicuous of whom I have heard is the Swami of Kudali. About 400 years ago, the first founder of this Matam was appointed a Sannyási by the Sringa-giri Swami, and was entrusted with the management of all the Smartal of the Marattah nation. These all continue to consider his successors as their Gurus; and the present opulence and power of the Marattah Bráhmans have raised the Mata of Kudali to a greater splendor than that of Sringa-giri.

Inscription.

I procured from the *Bráhmans* of *Kudali* a copy of an inscription engraven on a copper-plate, and belonging to the *Swami*. It is dated *Sal*. 1043, in the reign of *Purundara Rájá*, of the *Cadumba* family at *Banawási*; and a copy has been given to the government in Bengal.

At Kudali are three temples of the great gods, all reckoned cele- CHAPTER brated by the Bráhmans, and all accompanied by miraculous traditions. The buildings are mean, and have the appearance of being April 4. ancient. The oldest, according to tradition, is that dedicated to temples, Brahméswara, one of the names of Siva. Many Yugams ago, it rose spontaneously from the earth. In the same manner the second sprang up three Yugams ago, and is dedicated to Narasingha, one of the incarnations of Vishnu. At this there is an inscription on stone, but it is no longer legible. The third, compared with the others, is modern, and was built by Ráma only a few hundred thousand years ago, and dedicated to Siva, under the name of Raméswara, in order to wash away the sin which Ráma had incurred by killing Walli king of Kiskinda, a place that is near Vijaya-nagara, and is now called by the vulgar name of Humpay. This happened immediately after Ráma's return from Lanca, or Ceylon. When I tell the Bráhmans here, that the English have now conquered this celebrated island, they do not venture to call me a liar; but what they think is evident.

At the temple of Raméswara are four inscriptions on stone, of Inscriptions. which one only is entirely legible. It is written in the Nagara character, but in the Karnataca language intermixed with Sanskrit. A copy of it in the character of Karnata has been delivered to the Bengal government. Another, that is partly legible, is also in the Nagara character. Two, that are in the character of Karnata, are only legible in part. The one is dated in Cara Sal. 1214, in the reign of Vira Narasingha Ráya Maha Ráya. Who this prince was I cannot say. The date is 44 years before the foundation of Vijayanagara, according to Ramuppa's chronology. The other is in the year of Sal. 1242; the Rájá's name, however, is not legible.

5th April.—I went four cosses to Sahasiva-hully. I recrossed the April 5. Tunga immediately above its junction with the Bhadra, where both river, rivers are nearly of an equal size, and even at this season contain considerable streams. The united rivers form the Tungabhadra,

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CHAPTER the channel of which is very little, if at all, wider than that of either of the parent streams: but its water is of course more copious. The water at this season is sunk very deep in the channel; so that the forming dams for irrigation would be very expensive.

Face of the country.

The country on the west side of the river is in general level, but is interspersed with hills. The whole is exceedingly bare. Near the river are many small villages, each provided with a round tower, near which the houses are crowded for protection. The cultivation near these villages is pretty considerable, and at present is confined almost wholly to the dry grains, about two thirds Ragy and Tovary, and one third Jola and Harulu. The other crops are of little importance. On the higher lands, near the hills, there is no cultivation. The soil in many places there is indeed very poor; but in others it is a fine red earth, reckoned particularly favourable for Ragy; and, if there were people, would be cultivated for that grain. The greater part of the tanks have gone to decay, so that there is very little wet land; and, even when the country was in its best state of cultivation, irrigation seems to have been much neglected. The Kilidi family, to whom this part of the country belonged, from having lived in a district where artificial watering was not requisite, seem not to have been sensible of its advantages. The Amildar says, that by constructing reservoirs much dry-field might be converted into rice ground. Below Sahasiva-hully, the river taking a bend to the south-west, I crossed it at the angle, and ascended the right bank to that village. Its name signifies Along with Siva, as it is supposed to be a place where that deity resided some time together with his wife. It has a small mud fort, and about a hundred houses. In this open part of the country there are very few fences, which in many points of view is a great loss. The crops here rarely fail from want of rain, and the epidemic disease among cattle is seldom so general as to the eastward. Tigers seem to be more destructive here than in the woods. The want of game makes them bold, and they frequently carry away the inhabitants from their beds.

This part of the Nagara Rayada entirely resembles the Mysore CHAPTER country. The cultivators live in villages, their cattle are large and white, they rear sheep, the country is naked, and the people subsist April 5. Inhabitants. chiefly on dry grains. Many of the inhabitants are Cunsa Woculigas, a laborious and intelligent class of farmers, strongly contrasted with the Sivabhactars of the west, who appeared to me to be as stupid and lazy a class of men as I have ever seen.

The hills here, however, are not so rugged as toward Mysore; Strata. but the strata run north and south, and contain many lumps of quartz. In all the open country, where there is no Laterite, the limestone nodules abound. Although the natives in general think that calcareous stone in the ground diminishes its fertility, I have an idea that the want of this substance in the countries to the westward, more than any absolute sterility in their soil, may be the cause why the dry grains do not thrive.

Before the invasion of Purseram Bhow, this country was in a Desolation. very good state. After his destructive march, not above one fourth of the inhabitants remained alive, and these were left destitute of every thing which the Marattahs could either carry away or destroy. The wretched remnants of population had again begun to recover, when Dundia came among them. He did not put any one to death; but he plundered the houses, and even burned some of the villages, the inhabitants of which he suspected of concealing their property.

The dry-field of this village is very hard, and full of small stones, Dry-field. being what is called Darray; yet it seems to be productive, or at least the people seem willing to acknowledge the real returns which they obtain from its cultivation. Almost every kind of dry grain is raised on it, without attention to rotation, or any idea among the farmers that one grain is more exhausting than another. The soil is never rested, and contains limestone; but it is well dunged. The two great crops are Ragy and Jola. This has been a remarkably favourable year, and the Ragy produced forty seeds.

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April 5.
Allowance of grain for a labouring

A hard labouring man is supposed to eat daily the following quantities of the different kinds of grain; the *Mana* of this place containing  $84\frac{3.75}{1000}$  cubical inches.

1½ Mana of Ragy, which is weekly	Peck. 1, 6489
1 Mana of Jola	$1, \frac{0989}{10000}$
1 Mana of cleaned Shamay -	$1, \frac{0989}{10000}$
13/4 Mana of cleaned rice	$1,\frac{923}{1000}$

The allowance of Jola is reckoned the most nutritious.

1 Ikeri Pagoda purchases 192 Manas Ragy. 1 bushel costs  $12\frac{51}{100}$ .

120 ditto Harulu -  $20\frac{4}{100}$ .

120 ditto Tovary -  $20\frac{4}{50}$ .

160 ditto Jola -  $15\frac{4}{50}$ .

Rent and produce.

Having ascertained these preliminaries, I went to the fields with the cultivators, and officers of revenue; and found, that in the public accompts they were not valued by any measurement, nor by the quantity of seed which they were supposed to require; but that each field was rated at a certain rent. Having fixed on one that pays two Rupees, or half a Pagoda yearly, I found that it contained 55608 square feet. The soil is very stony, and apparently poor. The rent is at the rate of 3s.  $1\frac{s-r}{1000}d$ . an acre. The farmers gave me the following account of its average produce, and seed, in four different kinds of cultivation.

			Seed.			٠	Produce.				
						Of the Field.		Of an Acre.			
Crop.		Of the	Of one Acre.						Value.		
		Field.	٩		Increase Folds.	Quantity. Value.		ue. Quantity.	Gross.	Deducting seed and rent.	
1st	Ragy Avar <b>a</b> y	-	Manas. 12 4	Bush. dec. 0,3689 0,12296	Pence dec. 4,7347 not sold.	20 15	Manas. 240 60	Sul Pag. An 1 4 not sold.	Bush. dec. 7,378 1,8445	Pence dec. 94,694 not sold.	Pence dec.
	Total	-	16	0,489186			300	,	9,2225		0
2d	Ragy Harulu	-	12 12	0,3689 0,3689	4,7347 7,5755	20 5	240 60	1 4 0 8	7,378 1,8445	94,694. 37,8775	
	Total	-	24	0,7378	12,3292	*	300	1 12	9,2225	132,5715	82,3673
3d	Jola - Tovary	-	6 5	0,18445 0,1537	2,8408 2,3671	$   \begin{array}{c c}     20\frac{1}{3} \\     12\frac{1}{5}   \end{array} $		0 12 <sup>t</sup> / <sub>5</sub> 0 8 <sup>g</sup> / <sub>15</sub>	3,7505 1,9675	75,763 30,3	
	Total	-	11	0,33815	5,2079		186	1 4115	5,718	88,063	44,9801
4th	Shamay	-	24	0,7378	not sold.	10	240	not sold.	7,378	not sold.	not sold.

CHAPTER XVIII. April 5.

I here received from Subaia, a Bráhman of Holay Honuru, a short Ráya Paditti, of which the chronology is very different from that of Ramuppa. Subaia says, that the original was copious, but was burnt by the Marattahs. The present short extract was made up from books and memory, and inaccuracies must therefore be expected. The general chronology is that of the eighteen Puranas. The following is a translation:

Ráya Paditti, or chronological table.

" The Kali-yugam will contain 432,000 years. Particulars:

Yudishtera era	-	-	3,044 years
Vicrama -	-	-	135*
Salivahana	-	-	18,000
Naga Arjuna	-	-	400,000
Kali Bupati -	-	-	821
•	Tot	tal-	432,000

\* Query-10,135?

CHAPTER Of this there have elapsed to the present time (being Raudri of Salivahana 1722), 4901 years. Particulars:

Yudishtara era - - 3044

Yudishtara e	era	-	-	-	3044
Vicrama	-	-	-	-	135
Salivahana		•	-	-	1722
					4901 years

Particulars of the Ráyaru family.

Woragulla Pritapa Rájá Son of Campila Rájá Son of Comara Rájá

The end of his reign was in the year of Sal. 1150, A. D. 1227. In the year Servadavi of this Rájá Woragulla Pritapa Ráya the house guards of the treasury were Hari-hara and Buca Ráya. According to his order, these two men came to Vijaya-nagara. The year Servadavi is the commencement of the kingdom of the Ráyaru. This year, on Monday the 5th of Chaitra, they placed the pillar (a ceremony similar to ours of laying the foundation stone) for building Vijaya-nagara. The Rájás were placed on a throne of jewels.

Here follows a Slokam, signifying, "In this manner thirteen princes sat on the throne, governing every cast according to its own customs, and hearkening to the word of God with pleasure."

## Particulars:

		I articulars	•
1	Hari-hara Ráya	8	Virupacsha Ráya
2	Buca Ráya	9	Deva Ráya
3	Hari-hara Ráya	10	Rama Rájá Ráya
4	Virupacsha Ráya	11	Malicarjuna Ráya
5	Buca Ráya	12	Rama Ráya
6	Deva Ráya	13	Virupacsha Ráya
7	Rama Rájá Ráya		

Total 13 princes reigned 232 years, till the year of Sal. 1382, M. D. 1459.

After that came the following kings.

Prowuda Ráya reigned 12 years. He was a son adopted from Penu-conda, and died in the year Nundina of Sal. 1394, A. D. 147\frac{1}{2}.

After that Vira Narasingha Ráya reigned 10 years. He died in the year Chubucrutu of Sal. 1404, A. D. 148 $\frac{1}{2}$ .

After that Solva Narasingha Ráya reigned 12 years. He died in the year Anunda of Sal. 1416, A. D. 1493.

After that Achuta Ráya reigned 3 years. He died in the year Pingala of Sal. 1419, A. D. 149.

After that for 9 months there was a Nava Nayakara. This literally means nine Náyakas or petty princes; but implies an anarchy, where every chief is contending with his neighbour, and plundering the vicinity.

After that came the following kings.

Krishna Ráya reigned 40 years. He died in the day time on the 5th of the moon Kartika, being Monday, in the year Hevalumbi of Sal. 1460, A. D. 1537.

After that Sedasiva Ráya reigned 2 years. He died on the Amávásya, or last day of Margasírsha in the year Shervari of Sal. 1462, A. D.  $15\frac{3}{40}$ .

After that, Rama Rájá reigned 24 years. He died on Wednesday the 14th of the dark moon in Magha, in the year Ructachi of Sal. 1486 (A. D. 1563), and the city Vijaya-nagara was destroyed.

Total seven princes 103 years.

Grand total twenty princes 335 years.

The chronology will be found totally incompatible with the inscriptions. A copy of the original has been delivered to the Bengal government.

6th April.—I went three cosses to Baswa-pattana, in order to April 6. avoid a steep mountainous road, called a Ghat, that lies in the direct Appearance route between Sahasiva-hully, and Hari-hara. On the open country try. through which I passed, there are scattered several small hills. The soil in general seems to be capable of cultivation; but in other parts

CHAPTER XVIII. April 5.

XVIII. April 6.

CHAPTER the rock comes to the surface, and much of it is waste. The farther I advanced into the open country, I observed that the villages are more strongly fortified. The country is very bare, and, like that to the eastward, is covered with bushes of the Cassia auriculata, and Dodonæa viscosa.

> Baswa-pattana was formerly a part of the dominions of Kingalu Nayaka, the Terricaray Polygar. His successors were expelled by Renadulla Khan, who was succeeded by Delawer Khan, both Mogul officers. Delawer Khan resided here twenty years, and under his government the place seems to have been very flourishing. Hewas expelled by the Marattahs, who held it for seven years, when they were driven out by Hyder. This Mussulman destroyed the fort, in order to prevent it from being of use to the Marattahs. who in their next incursion destroyed the town; and till after the fall of Seringapatam it continued waste. The fort has now been repaired, and about two hundred houses have been erected in the town. It has two reservoirs, one of which is tolerably large. South east, about two cosses from Baswa-pattana, is one of the most celebrated works of this kind, which was erected by a dancing girl from the gains of her profession. It is called Solicaray, and the sheet of water is said to be three cosses in length, and to send forth a constant considerable stream for the irrigation of the fields. It is built on a similar plan with the reservoir at Tonuru, near Seringapatam. A bank has been erected between two hills, and thus confines the water of a rivulet which had originally found a way between them.

Baba Bodeen. and Vira Belalla Ráya.

Near the fort is a mosque, celebrated among the Mussulmans for being the first place where Baba Bodeen took up his abode. He afterwards went, and resided on a hill toward the south, which now is called after his name. The people of the mosque say, that he was a saint of the greatest reputation, who, although he performed a number of miraculous things, suffered many persecutions from Vira Belalla, the infidel king of this country. The saint at length invited Jan Padisha, a prince of the Faithful, from the north, and

the infidel was taken prisoner. The saint then put the Rájá and all CHAPTER his family into a pit under his hill, and there they still continue to live, suffering the punishment due to their want of faith.

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Near my tent a farmer was at work, expressing the juice from Sugar cane. sugar-cane, and boiling it to form Jagory. He said that his field contained a Wocula land. The taxes amounted to 20 Pagodas, or 81. 2s. 3d. The whole expense he calculates at 26 Pagodas, or 101. 10s. 11d. The crop season will last 30 days; and on each he will boil three times, getting 2 Maunds of Jagory from every boiling. He therefore expects to get 180 Maunds, which sells at the rate of 31 Pagodas for 10 Maunds. The whole produce therefore will be 63 Pagodas, or 25 l. 11s.  $1\frac{1}{2}d$ ., leaving a neat profit of 6 l. 17s.  $11\frac{1}{2}d$ ., or 17 Pagodas, or very nearly 27 per cent. on the gross produce. I did not measure the field. The cane was Maracabo.

7th April.—I went three cosses to Malaya Banuru. This last word April 7. Face of the is a common termination in the names of villages in this part of the country. country, and signifies a place behind any other; thus Malaya Banuru signifies the place behind the hill. On the left of the road, are the low bare hills which form the Ghat between Sahasiva-hully and Hari-hara, and which render that road very bad; but among the hills are many villages, and cultivated places, which from their situation are said to have escaped better than those in the plain. All to the right of this day's route is a fine level country, but it is exceedingly bare of trees and fences. Near the road at least nine tenths of the soil appear to be good; but a very large proportion of the country is waste, having been desolated by Purseram Bhow. The natives say, that two-thirds of the whole plain are of so poor a soil as to be unfit for cultivation. They are very unskilful in making reservoirs, and of course are negligent in the cultivation of rice, and never take a second crop. On being asked the reason of this, they say, that in the dry season the soil is too hot for cultivation. There is, however, no end to the foolish reasons which unskilful farmers assign for their conduct. Sugar-cane is a good

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CHAPTER deal cultivated, but the kind is the Maracabo, which yields a very small quantity of juice, and that contains little saccharine matter. When the farmers are asked a reason, why they do not cultivate the Putta-putty, or Restali, they say, that these canes are so sweet, that it is impossible to keep the wild hogs from devouring them. Little or no credit can therefore be given to the reasons assigned by such farmers for their practices, or for the state of the country; especially, as is generally the case, when it is found, that no two people give the same reason; for the ignorant and lazy are in general abundantly unwilling to confess their weaknesses, and, rather than acknowledge them, assign some random excuse for their conduct.

Malaya Banuru.

Terricaray. Polygars.

Malaya Banuru has a small fort surrounded by a Petta, which contains about two hundred houses. It formerly belonged to the Terricaray Polygars, who were at one time very powerful; but their territory became a prey to various invaders. The Mussulmans of Sira took Baswa-pattana. The Sivabhactars of Ikeri took from Mainhully to Lacky-hully. The Mysore Rájá took Banawara, When Hyder seized the remainder, it consisted of Terricaray, with the adjacent country to the value of a hundred thousand Pagodas a year. Hyder permitted the family to remain at Terricaray with a yearly allowance of thirty thousand Pagodas. The whole of this was stopt by the Sultán. On his fall, one of the family returned, seized on the fort, and intended to set himself up as an independent prince, He was, however, betrayed by some of his ragamuffin followers, who, after wounding him, hanged him by the orders of the new government. Some of the family now remain, but they have no pension nor allowance.

Saline earth.

In some of the wells here the water is saline, and culinary salt has formerly been made at the place. The saline earth is found in low moist places. In this respect also the strata here agree with those to the eastward. No saline earth nor springs are to be found in the hilly western tract, nor in the country below the western Ghats.

8th April.—I went a very long stage, called four cosses, to Hari- CHAPTER hara, and by the way crossed a large empty water-course, and afterwards a wide channel containing a considerable stream, which April 8. comes from the Solicaray, and is therefore called the Solicaray holay. Appearance of the coun-It falls into the Tungabhadra immediately above Hari-hara, and try. never dries, except in very extraordinary seasons. The country in general near this day's route is plain, with a few hills scattered at great distances. Much of it is what the farmers of Malaya Banuru consider as totally useless; but the people of Hari-hara are of a different opinion, and think that two thirds of the whole level country is fit for cultivation, and would be employed in that way were there a sufficient number of inhabitants. A great proportion of it has, however, been long waste; for far beyond the reach of human-memory the country has been a scene of warfare, and the wars of the natives are carried on in a most barbarous and destructive manner. The country is exceedingly bare, and at this season is very ill supplied with water.

The bank of the Tungabhadra opposite to Hari-hara forms a part Marattah of the Marattah dominion, and at present belongs to Appa Saheb, the son of Purseram-Bow: the natives here speak in raptures of the Savanuru district, including Darwara, Hubuli, and Nilagunda, and compare its air and fertility to those of Cashemire. The territory south of the Varada, although fertile, is greatly inferior to the other. Both are fast becoming desert.

I remained three days at Hari-hara, which was formerly an Agra- Hari-hara, ram belonging to the Bráhmans of its celebrated temple of the same name. After the death of Rám Rájá, and the destruction of Vijayanagara, it became subject to the Adil Shah dynasty, and was given in Jaghire to a Sheer Khan, who built the fort. On the conquest of the Decan, it was taken by the Savanuru Nabob, Delil Khan, who was an officer of the court of Delhi. From the house of Timour it was taken by the Ikeri Rájás, who were expelled by the Marattahs; and these again, after fifteen years possession, were driven out by Vol. III, Ss

CHAPTER XVIII.

Hyder. Since that time these free-booters have taken it thrice; the last time was by Purseram Bow. He did not kill any of the people, nor did he burn the town; but he swept away every necessary of life so completely, that many of the inhabitants perished from hunger. They have since enjoyed quiet. The fort contains the temple, and a hundred houses occupied by Bráhmans; the suburbs contain three hundred houses of the low casts. The temple, for a Hindu place of worship, is a tolerable building, but is kept in the usual slovenly manner. Many families live within its walls, and the area is defiled by cow-dung, mud, broken bricks, straw, dunghills, and other similar impurities. The idol resembles that of Sankara Narayana at Gaukarna, having part of the attributes or symbols of Siva, and part of those of Vishnu. Its name also implies its being a representative of both deities; for Hari is an appellation of Vishnu, and Hara one of the titles of Siva. Within the walls of the temples are twenty fine inscriptions on stone.

Manners of the people. The most numerous class of cultivators near Hari-hara, and as far at least as Savanuru, are the Sivabhactars. There are scarcely any Marattahs among them, that is to say, Sudras of pure origin belonging to Maháráshtra Désam. Very few of the poorer inhabitants marry, the expense attending the ceremony being considered as too great. They content themselves with giving their mistress a piece of cloth; after which she lives with her lover as a wife, and both she and her children are as much respected, as if she had been married with the proper Mantrams and ceremonies: very few of the women live in a state of celibacy, to which indeed in most parts of India, I believe, they are seldom subjected. Few of the men go to foreign countries, and the rich have always more wives than one, which makes up for the men who live as bachelors.

The tenants, I am told, are remarkably fickle, being constantly changing from one side of the river to another, and of course at each time change their sovereign. They appear to me to be remarkably stupid, but they pique themselves on being superior to

their northern neighbours, who, they say, are no better than beasts. Even the Bráhmans here are stupid, which is certainly a defect not common in that sacred order of men. Out of the hundred houses, I could not get one man who could copy the inscriptions at their temple with tolerable accuracy. During my stay I employed twelve Bráhmans, and two Jangamas, paying them whatever the Amildar judged proper; and he kept a man with them to rouse their industry; but I obtained copies of four inscriptions only; and it was necessary to have these corrected by my interpreter, although I could ill spare his services.

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Of the inscriptions that I had copied here, the most ancient is Inscriptions. dated in Sal. 1444, according to the Slokam in which the date is involved.

The next is dated Sal. 1452, in the reign of Vira Pritapa Achuta Ráyā.

The next is dated Sal. 1453, in the reign of Achuta Ráyá.

The last is dated in Sal. 1477, in the reign of Vira Pritapa Sedasiva Deva Maha Ráyá.

All remarks that have been suggested by these inscriptions have already been anticipated in my commentary on the Râyâ Paditti of Ramuppa.

This year the crops have been remarkably bad, owing to too Season. much rain; a circumstance of which I have not heard a complaint in any other part of *Karnata*.

The common currency here being gold Fanams, and thirteen of Money-these exchanging for an Ikeri Pagoda, this must be valued at the quantity of pure gold contained in the thirteen Fanams, which is somewhat more than it is actually worth. The Rupee is worth one fourth of a Pagoda.

The Cucha Seer here weighs 24 Rupees. The Maund of cotton Weights. contains 48 Seers, or is  $29\frac{12}{100}$  lb. nearly. The Taccady contains 36 Seers, or is  $21\frac{84}{100}$  lb. This is the weight used by the farmers. The Bazar, or market Maund, contains 40 Seers of 24 Rupees.

CHAPTER XVIII. April 8. Liquid Measure. Dry Measure. Land Measure.

A Cucha Seer of oil, &c. measures  $16\frac{1125}{100000}$  cubical inches. The grain measure is founded on the Chitty of 1593 cubical inches;

4 Chitties make 1 Gydna; 20 Gydnas make 1 Colaga; 20 Colagas 1 Candaca, which contains 118 8 8 3 bushels.

Land here is estimated by Mars, the extent of which the natives have two methods of ascertaining. The most common is, to call a Mar that extent of ground which requires 21 Gydnas of Jola for seed. I measured a field said to require twelve Gydnas of seed, and found it to contain 17,67,684 square feet. According to this, the Mar is 3682671 square feet, or somewhat less than eight acres and a half. The other method of ascertaining the extent of a Mar is by counting the number of rows of pulse or Acadies contained in it, when it has been sown with Jola. A square field containing 120 of such rows is called a Mar. If the rows are from 3 to  $3\frac{1}{3}$  cubits distant, this extent would coincide with that given by my measurement. I did not ascertain this to be the case at Hari-hara, but I found it to be the actual distance in other parts of the neighbourhood.

Harvest price of the produce.

The merchants here give the following as the average rate at which the produce of the country sells by wholesale immediately after harvest:

	Cotton	wool	with tl	he seed per	Mar	und, 1 Pogoda Cwt. 62, 41 Pence	
	Do. clea	ared :	from d	0	do.	12 Fanams do. 315, 6 do.	
	Colton	seed			do.	½0 Pagoda do. 18,72 do.	
	Jagory	p	-	-	do.	4 Fanams do. 138, 25 do.	
One Ikeri Pagoda purchases		Gyd do. do. do. do. do. do. do. do. do. do	18 12 10 20 20 16 10 20 18 12 12	of Jola Avaray Tovary Hessaru Madiky Huruli Alasunda Callay Navonay Sujjay Gur Ellu Harulu Ragy Rice	<b>\</b>	pence 16,378 per bushel 18,298 27,307 32,757 16,378 16,378 20,473 32,757 16,378 18,298 27,307 27,307 16,378 32,757	
	į	do.		Wheat	j	36,396	

In this neighourhood much cotton thread is spun. The women of CHAPTER the cultivators spin part of the produce of their husbands farms; and others receive the cotton wool from the merchants, and spin it April 8. Spinning of for hire; but the women of the Bráhmans are as averse from spin-cotton wool. ning, as their husbands are from holding the plough. The merchant always purchases the cotton with the seed, and employs people to clean it. From four Maunds of raw cotton he gets one of cotton wool, at the expense of four Fanams, which is one third of the value of the whole cotton thus cleaned. The instrument is a small mill, consisting of two horizontal cylinders moved by a perpetual screw, and turned by the hand; while a semi-cylindric cavity behind forces back the cotton to the person who feeds the mill. (See Plate XXVII. Fig. 74.) The rudeness of the machinery, as usual in India, renders the expense of the operation great, in comparison with the value of the raw material. The Maund of cotton wool, in beating with a bow, the manner universally used in India and China for preparing it for the wheel, loses an eighth part, expense included; that is to say, the merchant gives forty Seers of cotton wool to the cleaner, who returns thirty-five fit for spinning. When this is spun, the thread weighs only from thirty to thirty-two Seers, owing I suppose to its having been imperfectly cleaned. The coarsest thread made here costs 83 Fanams for the spinning of the 35 Seers of prepared wool, which has been procured from 40 Seers of raw cotton. At this rate, to make a pound of cotton wool into thread, costs a very little less than 23 pence, and it loses in the operation from one fourth to one fifth of its weight. The thread is remarkably coarse. The finest made here costs double the former price. When a woman does no other work, she can in one day spin three quarters of a seer of the coarsest kind; and therefore she makes about 1 to 99 penny a day.

From this part of the country, cotton and thread are the principal Commerce. exports, and there are few traders of any note. Two months before crop season, the merchants advance to the poor cultivators, and



CHAPTER charge for interest half a Fanam on each Pagoda, or about 23 per cent. per annum. They say, that they are contented with this profit, and when the crop is ripe take so much of the produce, at the market price, as pays the advance with interest. The farmers however allege, that when they receive advances, what the merchants call the market-price is lower than what a man, who is not necessitous, can get for his cotton. According to their account, the common price of cotton in the seed is 7 Taccadies for the Pagoda, or 711 pence for the cwt., which is a little lower than the price stated by the merchants.

> The great cultivation here is that of dry grains. The extent of land fit for the plough is very great; but a small proportion only is occupied, and in the best of times much has always been waste. If any farmer, or even an intelligent officer of revenue, be asked, why such or such a piece of ground is not cultivated, he will immediately say that it is impracticable, and assign some reason for this being the case. At first, I was inclined to pay much attention to these reasons; but finding that two people seldom gave the same reason, and that what two men, equally qualified by experience, alleged, was often totally contradictory, while no difference was observable between the soil and situation of the fields now cultivated, and those that are condemned as useless, I began to doubt; and after having questioned many natives, and having considered carefully what they said, I am persuaded, that the soil may be rendered productive, wherever it is not too hard or steep for the plough. The natives talk of one third of the land near the Tungabhadra being useless from these two causes; but I think that they over-rate its extent. In the land of many villages the soil is very full of small stones, especially of quartz; but the natives of these places are far from reckoning these useless; on the contrary, they allege that the stones are advantageous by keeping the soil cool, and retaining the moisture. In other places, these stones are reckoned a loss, as is the case at Hari-hara.

The ground here is divided into three kinds. The first, called CHAPTER Eray, consists of a black mould containing much clay, and is valued in the rental at one Pagoda a Mar, or at 111 pence an acre. The April 8. second kind of land, called Kingalu, or red soil, is valued at \(\frac{3}{4}\) of a qualities of Pagoda a Mar, or at 81 pence an acre. The third kind, called Cul soil, and Maradi, or stony soil, is valued at \(\frac{1}{2}\) Pagoda a Mar, or at 5\(\frac{3}{4}\) pence an acre. This was the account given me at my tents; but when I went to a field to measure it, accompanied by the owner, the Amildar, and the Shanaboga with the public rental, I found that it paid 15 Pagodas, or at the rate of  $3\frac{1}{3}$  Pagodas a Mar, or nearly Ss. an acre. In general, it was of a fine black soil; only about one acre of it was rather stony, although the whole was reckoned of the first quality. The immense difference in the rent, as stated at my tents, and again in the field, did not strike me at the time, so that I got no positive explanation; but it, no doubt, arose from the following circumstance. This Shist, or valuation of the country, was first made by the Ráyarus. It was increased by the Savanuru Nabobs in the proportion of 8 to 3; and Hyder added to this an increase of  $\frac{1}{8}$  part. Both he and his son imposed some new assessments; but these were not included in the rental, and have been remitted by Purnea. The people at the tents mentioned the tax imposed by the Ráyarus, which by way of eminence is probably called the Shist; while at the field the whole land-tax that is now levied as brought into the accompt. The Mar of land of the best quality pays therefore  $3\frac{\tau}{8}$  Pagodas, or at the rate of 3s. an acre; the Mar of the 2d quality pays  $2^{\frac{5}{2}}$ Pagodas, or at the rate of 2s. 3d. an acre; and the worst pays  $1\frac{9}{10}$  Pagoda a Mar, or 1s. 6d. an acre. Rice-ground pays no higher than dry field; so that the only advantage government has by wateredland, is an excise of three Pagodas on every 1000 sugar-canes planted. Some soils here contain saline matter; and if the water be allowed to lodge on low spots, these become so impregnated with salt, as to be of little value for cultivation; but with proper pains this may In some of the clay-land, there is a kind of soil, be avoided.

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which, though it is black, and to all appearance of the kind called *Eray*, yet it does not retain water, and very soon becomes dry; but, by a proper management of the manure, it may be rendered productive.

Division of village lands. The three kinds of ground being of very different qualities, every man's share of each is scattered up and down in various places, in order to make the assessment fall equally; but hence arises an inexplicable obscurity in the accompts, and a great hindrance to improvement. All the cultivators live in fortified villages, and each man's share is scattered in small patches through the village lands.

The Gaudas, or chiefs of the villages, are hereditary; but in case of their incapacity, the villages may be let to Gutigaras, or renters. These renters and Gaudas force the cultivators to labour more than they are willing, which is a pernicious practice. The extreme indolence of the people in this neighbourhood is, however, an excuse that bears at least the appearance of reason. 'The Amildar says, that without compulsion they would not cultivate more than  $\frac{2}{3}$  or  $\frac{3}{4}$  of what they are able. A subsistence is all that they look for, and with little labour that can be procured. Superfluities, or riches, they have some reason to consider as mere temptations to the plunderer: so long as a man cultivates his fields, he cannot be deprived of them; but they cannot be mortgaged, or sold, to pay his debts. If he allow his lands to become waste, the government can give them to any person who will undertake their cultivation; but the original proprietor may at any time resume them, when he is able to find sufficient stock.

Size of farms.

The greater number of the farmers here have only one plough each; but all such as have not more than three ploughs are reckoned poor men, and are in general obliged to borrow money to pay the rent, and to carry on the expenses of cultivation. The crop is a security to the lender, who is repaid in produce at a low valuation. Farmers who have 4, 5, or 6 ploughs, are able to manage without borrowing, and live in ease. Those who have more stock are

reckoned rich men. Each plough requires one man and two oxen, CHAPTER and can cultivate two Mars of land, or about 17 acres. In seed time All the April 8. Servants and harvest, some additional labourers must be hired. farmers, and their children, even those who are richest, Brahmans wages. excepted, work with their own hands, and only hire so many additional people as are necessary to employ their stock of cattle. A servant's wages are from six to nine Jimshiry Pagodas a year, together with a blanket and pair of shoes. The Jimshiry Pagoda is four Dudus worse than that of Ikeri, which is rather less than  $1\frac{1}{3}$  per cent. The wages are therefore from 2l. 7s. 10d. to 3l. 11s. 9d. Out of this they find every thing but the shoes and blanket. Men labourers get daily half a fanam, or 31d, and women receive one half of this hire, which is seldom paid in money, but is given in Jola at the market price. The man's wages will purchase daily about a quarter of a bushel. The people here work from eight in the morning until sun set, and in the middle of the day are allowed twenty-four minutes to rest and eat. The cattle work from eight in the morning until noon. They are then fed for an hour, and work from one until about five o' clock.

Many of the farmers keep no cows, but purchase all their cattle. Cattle and They, of course, can sell at least one 'half of their straw to the manure. Bráhmans of the town, who in general keep many milch cows, and who in return sell the young oxen and the manure to the farmers. Although the cattle are always kept in the house, except during the two months immediately following the rains, no litter is used. Their dung is collected in pits, with the sweepings and ashes of the family, and sells for from six to twelve Dudus for the load of a cart which is drawn by eight oxen, but which does not appear to contain more than a single-horse cart. The price is from about 5d. to half that amount. The farmers also hire flocks of sheep to manure their fields, and say, that for folding his flocks on a Mar of land, they give the shepherd one Colaga of Jola; this, however, must be a gross exaggeration.

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Jola, with its accompanying grains.

The most considerable crop in this neighbourhood is Jola (Holcus sorghum), which is always accompanied by one or more of the following articles, Avaray (Dolichos Lablab), Tovary (Cytisus Cajan), Hessaru (Phaseolus Mungo), Madiky, a kind of pulse that seems to be peculiar to this part of the country, and of which I have seen only the seed; Huruli (Dolichos biflorus), and Alasunda (Dolichos Catsjang). These articles being intended chiefly for family use, a portion of each is wanted, and every man puts in his Jola field a drill or two of each kind.

Jola.

Jola thrives best on black clay, but is also sown on the red earth, and even sometimes on the stony soil. In Chaitra, the field is hoed with a Heg Cuntay (Plate XXVIII. Fig. 75,) which requires from six to eight oxen to draw it; for this is the month following the vernal equinox, when the soil is very dry and hard. In the following month the field is ploughed once, and then manured. In the month preceding the summer solstice, the seed is sown after a rain by means of the drill; while the rows of the accompanying grains are put in by means of the Sudiky or Acadi. The drill here differs from that of Banawasi, (Plate XXVI. Fig. 73,) in wanting the iron bolts that connect the bills with a wooden bar which crosses the beam. The Sudiky is a bamboo with a sharp point, which is tied to the drill, and through which the labourer drops the seed of the pulse, as he follows that implement. After having been sown, the field is smoothed with the Bolu Cuntay, a hoe drawn by oxen, and entirely resembling the Heg Cuntay, but of a lighter make. On the 20th day the field is weeded with the Edday Cuntay, (Plate XXVIII. Fig. 76), and on the 28th day this is repeated. In five months the Jola ripens, without farther trouble. The Mar of land usually produces 7 Colagas of Jola, or 56 fold, worth 7 Pagodas; deduct for rent 31 Pagodas, and for seed 1 Pagoda, and there remains to the cultivator for stock and labour 43 Pagodas, or about 68 per cent. of the gross produce, besides the pulse and straw; but this last must be allowed to go for manure. Besides, in favourable seasons, the

farmer from the high-rented Jola land procures a second crop of CHAPTER Callay, (Cicer arietinum) as follows.

If after harvest there be any rain, the field is ploughed in the April 8. month preceding the winter solstice. It is then ploughed across, and by means of the sharp pointed bamboo the seed is dropt into the furrows after the plough, and is covered with the Heg Cuntay. The Mar of land requires 8 Gydnas of seed, and produces 4 Colagas, or 10 seeds. This, deducting the seed, is a neat produce of 72 Gydnas, worth 7- Pagodas. It is only from the very best ground that this can be taken, and each farmer's share of this kind is very small.

A few rich spots are reserved solely for the cultivation of Callay, and these are cultivated in the following manner. In the month following the vernal equinox the field is ploughed once, then manured, and in the following month is hoed with the Heg Cuntay. Between that period and the month preceding the shortest day, the grass is ploughed down twice, and the seed is sown with the sharp bamboo following the plough, and covered with the Heg Cuntay, as before described. It ripens in three months, and produces 8 Colagas; which, deducting seed, leaves 152 Gydnas, worth 15 pagodas; from which if 31 be taken for rent, the cultivator has better than 12 Pagodas for his trouble and stock.

Cotton is raised entirely on black soil, and is either sown as a Cotton. crop by itself, or drilled in the rows of a Navonay field. In the former case, two crops of cotton cannot follow each other, but one crop of Jola at least must intervene. In the 2d month after the vernal equinox, the field is ploughed once, then manured, then hoed with the Heg Cuntay; and the grass is kept down by occasional hoeings with the Bolu Cuntay, until the sowing season in the month preceding the autumnal equinox. The seed is sown by a drill having only two bills, behind each of which is fixed a sharp pointed bamboo, through which a man drops the seed; so that each drill requires the attendance of three men, and two oxen. The seed, in order to allow it to run through the bamboo, is first dipt in

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cow-dung and water, and then mixed with some earth. Twenty days after sowing, and also on the 35th and 50th days, the field is hood with the Edday cuntay. The crop season is during the month before, and that after the vernal equinox. The Mar of land requires three maunds of seed, worth  $\frac{1}{20}$  of a Pagoda. The produce is 50 Tacadies, at 7 for a Pagoda, and therefore amounts to  $7\frac{1}{7}$  Pagodas. From this deduct  $\frac{1}{20}$  of a Pagoda for seed, and  $3\frac{1}{8}$  Pagodas for rent, and there remains to the cultivator for trouble and stock very little less than 4 Pagodas. When these weights, measures, and values, are reduced to the English standard, the produce of an acre appears very small. The seed is about  $10\frac{1}{9}$  lb. worth two-pence. The produce is about  $1\frac{3}{1000}$  cwt. worth, according to the cultivators,  $82\frac{1}{4}$  pence: deducting 36 pence for rent, and two-pence for the seed, there will remain for the cultivator  $44\frac{1}{4}$  pence, or about 53 per cent. of the gross produce.

Navonay, or Panicum Italicum.

Next to Jola, the most considerable crop in this neighbourhood is Navonay, which is cultivated on both the black and red soils, but by far most commonly on the latter. On the black soil it is usually accompanied by cotton in the rows between the drills; on red soil, it is accompanied by rows of Jola, Sujjay, (Holcus spicatus) and Gur' Ellu, which is the Huts Ellu of Seringapatam (Verbesina sativa Roxb. MSS.). In black soil, the ploughing commences in the month following the vernal equinox. After having been ploughed, the field is manured, and in the following month is hoed with the Heg Cuntay, and, after eight days rest, with the Bolu Cuntay. In the month following mid-summer, the seed is sown with the drill, and the accompanying grains by means of the sharp bamboo. The seed is covered by two hoeings with the Bolu Cuntay, one lengthwise and the other across. On the 20th and 28th days the weeds are removed by the Edday Cuntay. In three months the crop is ripe. In the red soil, the ploughing does not commence until the beginning of the rainy season; but the seed time, and all the process of agriculture, are the same as in the black soil. The Marcof land requires for

seed 5 Gydnas of Navonay, worth 4 Pagoda; together with one CHAPTER Maund of cotton seed, worth  $\frac{1}{20}$  Pagoda; or  $\frac{3}{4}$  Gydna of Jola, worth Pagoda; or 1 Chitty of Sujjay, worth part of a Pagoda; or 1 April 8. Chitty of Gur' Ellu, worth 1 of a Pagoda. The produce in a middling crop is 12 Colagas of Navonay, worth 12 Pagodas, together with 15 Tacadies of cotton, worth  $2\frac{1}{2}$  Pagodas; or  $1\frac{1}{2}$  Colaga of Jola, worth  $1\frac{1}{2}$ Pagoda; or 1 Colaga of Sujjay, worth 11 Pagoda; or 1 Colaga of Gur' Ellu, worth 12 Pagoda. It must be evident from this, that the people who gave me the account diminished the real produce of the Jola, which would never be the common object of cultivation, while Navonay was so much more profitable.

Sujjay is here the next most common crop, and is always accom- Sujjay, or panied by Huruli, or Alasunda, or Tovary, or Hessaru. This is the Holeus spicrop commonly taken from the red soil, or that of the second qua-In the month preceding the summer solstice, the field is ploughed once, then manured, and then hoed with the Heg Cuntay. At the end of the month the seeds are sown with the drill, and covered with the Bolu Cuntay. On the 20th and 28th days, the field is weeded with the Edday Cuntay. In three months the crop is ripe. The Mar requires for seed \(\frac{1}{2}\) Gydna of Sujjay, worth \(\frac{1}{26}\) Pagoda; together with 2 Gydnas of Huruli, worth 1 Pagoda; or 1 Gydna of Alasunda, worth  $\frac{1}{16}$  Pagoda; or 3 Gydnas of Tovary, worth  $\frac{1}{4}$  Pagoda; or  $1\frac{1}{2}$  Gydna of Hessaru, worth  $\frac{3}{20}$  of a Pagoda. The average produce is 12 Colagas of Sujjay, worth 131 Pagodas; together with 11 Colaga of Huruli, worth 1 Pagoda; or 1 Colaga of Alasunda, worth 17 of a Pagoda; or 2 Colagas of Tovary, worth 31 Pagodas; or 1 Colaga of Hessaru, worth 2 Pagodas. The rent is about  $2\frac{1}{3}$  Pagodas. From these data, the share which the farmer gets for his stock and labour may readily be calculated. For instance, the gross produce of a Mar sown with Sujjay and Huruli is 142 Pagodas; while the rent and seed are rather more than 21 Pagodas, or 174 per cent. of the gross produce. This is another proof, that the cultivators concealed

CHAPTER the real produce of Jola and cotton, which are their most common XVIII. crops.

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Huruli, or what the English of Madras call Horse-gram, is at Hari-Dolichos biflo- hara the next most usual crop, and is cultivated entirely on the poorest and worst soil, which pays as rent 1 page 1 Pageda for the Mar. The field is ploughed once in the end of the 2d month after the summer solstice. In three or four days afterwards it is ploughed again; and with the sharp bamboo the seed is dropped into the furrow, after the plough, in rows about 9 inches distant from each other. It is then covered with the Heg Cuntay. On the 20th and 28th days, the hoe called Edday Cuntay is employed to remove weeds, and in five months it ripens without farther trouble. A Mar of land requires for seed five Gydnas, worth 4 Pagoda; and the common produce is 3 Colagas, worth 3 Pagodas; so that the farmer has here only  $1\frac{3}{\sqrt{6}}$  Pagoda out of 3 of the gross produce; but he gives no manure, and the trouble is very small, and performed at a season when little else is doing.

Harulu.

On the 2d quality of soil some considerable quantity of Harulu, or Ricinus, is raised. In the month preceding the summer solstice, when the rainy season commences, the field is ploughed once. Fifteen days afterwards the seed is dropped into furrows made by the plough, in rows two cubits distant from each other, and is covered by another furrow. At the end of a month from sowing, the weeds are removed by the Edday Cuntay; and every 15 days afterwards, until the month preceding the autumnal equinox, the intervals between the rows must be ploughed. At this time the plauts begin to flower; and the fruit ripens at various times between the month following the autumnal equinox, and that following the winter solstice. A Mar of land requires 21 Gydnas of seed, worth 34 of a Pagoda. The produce is six Colagas, worth ten Pagodas. It is sold to the oil-makers, who extract the oil by boiling, as is the usual practice in India. The seed is first boiled for about an hour, when

it bursts a little. It is then dried in the sun three days, and beaten CHAPTER into flour in a large mortar. The flour is then put into a pot with a little water, and boiled for about two hours. The oil floats above April 8. the flour, which forms a thick mass in the bottom of the pot. The oil is very bad, and thick. Two Gydnas of seed give sixteen Seers, Cucha measure, of oil; so that a bushel gives about 2 wine gallons.

Ragy (Cynosurus corocanus), Shamay (Panicum miliare E. M.), Harica (Paspalum frumentaceum Roxb. MSS.), Baragu (Panicum miliaceum), Wull' Ellu (Sesamum), and Udu (Phaseolus minimoo Roxb. MSS.), are also cultivated at Hari-hara; but in such small quantities, that a particular account of each will not be required.

The usual daily allowance of grain for one person's eating, is  $\frac{1}{3}$  Allowance of Chitty, or about 27 bushels, a year. The Navonay and Sujjay are grain for a chiefly consumed by the Bráhmans, and other people in easy circumstances, as being a more light and delicate food; while the labourers feed upon Jola, or Ragy, purchased from other districts. straw, being the most common, is reckoned the most wholesome fodder for cattle.

The watered lands are here of little importance; for in the whole Watered district, which produces annually 15,000 Canter' Raya Pagodas, there are no dams, and only six reservoirs. The rains are quite inadequate to the cultivation of rice. Very little of this grain is therefore sown. Orders, however, have been issued by Purnea to erect dams on the Solicaray Holay. The Amildar says that there are three places in the district where reservoirs might be constructed with advantage. He thinks that forming dams on the Tungabhadra would be attended with great expense; nor could they be so constructed as to irrigate much ground. Below Hari-hara indeed, towards Anagundi, there are very fine ones, which supply with water rice-grounds worth 100,000 Pagodas a year. These are situated partly in the territories of the Nizam, and partly in those lately ceded to the Company.

Sugar-cane is here the most considerable irrigated crop, as it Sugar-cane.

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CHAPTER requires but a small supply of water. In the intervals between the crops of cane, a crop of rice is taken, should there be a sufficient supply of water; but that is seldom the case, and the intermediate crop is commonly some of the dry grains. The land, when cultivated for grain, pays the usual rent; when cultivated with sugarcane, it pays three Pagodas for every 1000 double cuttings planted. Land that pays 10 Pagodas of rent is called a Wocula land, which, as it plants 6000 double cuttings, pays, when under sugar-cane, 18 Pagodas, with two Pagodas for the use of the boiler, making in all a rent of 20 Pagodas for the Wocula, as stated by the man at Baswapattana.

> Th eaccount that follows was taken from a principal accomptant (Sheristadar), who says that he is proprietor of a field, and is well acquainted with the process. The cane may be planted at any time; but there are only three seasons which are usually employed. One lasts during the month before and another after the summer solstice. This is the most productive and most usual season; but the cane requires at this time longer to grow, and more labour, than in the others; so that, although it pays the same tax only, it yields to the cultivator but little more profit. The other two seasons are the 2d month after the autumnal equinox, and the 2d month after the shortest day. Those crops arrive at maturity within the year. I shall confine myself to an account of the process in the first season. The kind of cane cultivated is the Maracabo, of which, according to the Sheristadar, 4800 canes are required to give one Maund, or about  $24\frac{1}{4}$ lb. of Jagory. When asked why he does not raise a better kind, the Sheristadar says, that the soil is too poor, and the climate too dry; both of which are, to all appearance, ill founded excuses for an obstinate adherence to old custom. In the second month after the vernal equinox, the field must be watered, and eight days afterwards it is ploughed once. After another rest of eight days, it must be ploughed again with a deeper furrow, four oxen having been put into the yoke. After another interval of eight days it is

ploughed, first lengthwise, and then across, with a team of six oxen. Then, at the distance of three, or three and a half cubits, are drawn over the whole field furrows, which cross each other at right angles. In order to make these furrows wider, a stick is put across the iron of the plough. In the planting season, two cuttings of the cane, each containing two eyes, are laid down in every intersection of the furrows, and are covered slightly with mud. The furrows are then filled with water, and this is repeated three times, with an interval of eight days between every two waterings. A little dung is then put into the furrows; and when there happens to be no rain, the waterings once in the eight days are continued for three months. When the canes have been planted forty days, the weeds must be removed with a knife, and the intervals are hoed with the hoe drawn by oxen. This operation is repeated on the 55th, 70th, and 85th days, and the earth is thrown up in ridges toward the canes. In the beginning of the fourth month, the field gets a full watering. Fifteen days afterwards, the intervals are ploughed lengthwise and across; and to each bunch of plants a basket or two of dung is given and ploughed in. The weeds are then destroyed by a hoe drawn by oxen; after which, channels must be formed between the rows; and until the cane ripens, which varies from fourteen to seventeen months, these channels are filled with water once in fifteen days. The crop season lasts from one month to six weeks. The mill is excessively rude, being two cylinders moved by a perpetual screw, and turned by a beam, to which four oxen are yoked. The Wocula land plants 6000 double cuttings, and the bunch springing from the two cuttings planted at each intersection contains from eight to twenty canes. The average may be fourteen, or altogether 84,000. These, at 4800 for the Maund, should produce not quite eighteen Maunds, which is only one tenth part of that which the man at Baswa-pattana mentioned, and he may be considered as having given a true account. The Sheristadar however, on being pressed, acknowleges 120 Maunds; but he is evidently a liar, and no dependence Vol. III. Uu

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CHAPTER cen be placed on what he says concerning the produce. I did no get any satisfactory account concerning the extent of ground called a Wocula; but there is no reason to suppose any difference between the Wocula of Baswa-pattana and that of Hari-hara. If we take 6000 squares, of  $3\frac{1}{2}$  cubits, as the extent of a Wocula, it will give  $3\frac{3}{4}$  acres, which pay a tax of 20 Pagodas, or at the rate of 2l. 2s. 9d. an acre.

April 11. Appearance of the country.

April 11th-I went three cosses to Dávana-giri. Near the road, three small hills excepted, the whole country is fit for the plough. Much of it however, even where the soil is of that fine black mould called Eray, would appear never to have been cultivated, and is overgrown with bushes. The soil of a very small proportion indeed, so far as I can judge, appears to be too barren for cultivation; much of it, however, is Marulu, or a poor stony land, and some of it is a red soil, fit for the cultivation of Ragy.

Dávana-giri.

Dávana-giri contains above 500 houses, and a new Bazar (or street containing shops) is now building. In the centre of the town is a small mud fort. Some years ago, it was a poor village; and its rise is owing to the encouragement given to settlers by Apojee Ráma, a Marattah chief, who, having entered into the service of Hyder, obtained the place as a Jaghire. He died without heirs, but Tippoo continued to give encouragement to settlers, and ever since it has been gradually increasing. It is the first place in the Chatrakal principality (Ráyada) towards the west; and the Amildar of the district (Taluc) usually resides at it, although properly it is not the Kasba, or chief town.

Manufactures.

Cumlies.

At Dávana-giri some coarse cotton cloths are made; and at every village of the district three or four looms are employed in the manufacture. The staple commodity, however, of the Chatrakal principality consists of Cumlies, or a kind of blankets which in their fabric greatly resemble English camblets. They are four cubits broad, by twelve long, and form a piece of dress, which the natives of Karnata almost universally wear. They are not dyed, but are of the natural colour of the wool, which in the finer ones is almost

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always a good black. The best are made at Hara-punya-hully, in the territory lately ceded to the company, and at Dávana-giri. Each of the blankets, made of the wool from the first shearing of the sheep, April 11. sells for from two to twelve Pagodas, or from 16s.  $2\frac{1}{4}d$ . to 4l. 17s. 4d. Those at four Pagodas are the finest made for common sale; and these, with all of an inferior value, are brought to weekly markets, and purchased by the merchant for ready money. If any of a higher value are wanted, advances must be made. The great excellence of these blankets is their power of turning rain; and, the finer they are, the better they do this. Some have been made, that were valued so high as from two to three hundred Rupees, and that were considered to be impenetrable by water.

Before the sheep are shorn, they are well washed. The wool, wool. when it has been shorn, is teased with the fingers, and then beaten with a bow, like cotton, and formed into bundles for spinning. This operation is performed both by men and women, partly on the small Hindu cotton wheel, and partly with the distaff. Some tamarind-seeds are bruised; and, after having been infused for a night in cold water, are boiled. The thread, when about to be put into the loom, is sprinkled with the cold decoction. The loom is of the same simple structure with that usual in India. The new made cloth is washed by beating it on a stone; and, when dried, is fit for sale. From this account of the process it will be evident, that the great price of the finer kinds is owing to the great trouble required in selecting wool sufficiently fine, the quantity of which in any one fleece is very small.

Dávana-giri is a place of considerable trade, and is the residence Commerce. of many merchants, who keep oxen, and send goods to distant Carriage. places. Some of the merchants hire their cattle from Sivabhactars, Mussulmans, and Marattahs, who make the carriage of goods a profession, and are called Badigaru. The load is reckoned 8 Maunds of 48 Cucha Seers, or about 233lb., and the hire is estimated by this quantity, whatever load the owner may choose to put on his cattle.

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CHAPTER The hire for a load to any place near, is one Fanam, or almost 72 pence, for every Gau or Gavada of 4 cosses, which amount upon an average, I suppose, to between 12 and 14 miles; but to the great marts at a distance there is a fixed price; for instance, the load from Sagar, near Ikeri, to Wallaja-petta, near Arcot, costs 3 Pagodas, or 1l. 4s.  $4\frac{1}{2}d$ . The distance may be about 320 miles.

Customs.

Far from considering the customs exacted at different places on the road as a burthen, the traders here consider them as advantageous; for the custom house is bound to pay for all goods that may be stolen, or seized by robbers, within their respective districts. This seems to be an excellent regulation, which is in general use throughout the peninsula.

Trade with Arcot.

The most valuable trade here is that which is carried on with Wallaja-petta. The goods carried from hence are Betel-nut and pepper, and those brought back are Madras goods, imported from Europe, China, Bengal, and the Eastern Islands, together with salt, and some of the manufactures of the coast of Coromandel.

Trade with the Nagara principality.

There is also a great trade carried on between this and Nagara, and Sagar. From thence are brought Betel-nut and pepper, and from this are sent Cumlies, salt, and Madras goods.

Trade with the ceded district.

Next to these, the trade with Rayá-durga, and Hara-punya-hully, in the newly-ceded district, is the most considerable. The exports from Dávana-giri are coco-nuts, Jagory, tobacco, turmeric, Betelnut, pepper, and Capsicum. The returns are, a little cotton wool, and cloth, Cumlies, and a large proportion of cash.

Trade with the Mysore principality.

To Caduru, and other places south from this, are sent cotton, cloth, and Terra Japonica; and from them are brought coco-nuts, tobacco, turmeric, fenugreek, garlic, and Danya, a carminative seed. The manufacturers of this neighbourhood frequently carry their blankets to Seringapatam.

Trade with the Marattah country.

Merchants from the Marattah territories beyond the Tungabhadra bring hither silk cloths, cotton, Terra Japonica, and wheat; and take away Callay (Cicer arietinum), Jagory, and coco-nuts. At present this trade is at a very low ebb; parties of the Marattah troops CHAPTER seizing on whatever they meet. As these are not robbers, but persons regularly employed by government, the custom-house is not April 11. held answerable for their depredations.

From this it would appear, that the trade of Dávana-giri chiefly consists in exchanging the produce of one neighbouring country, for those of another. The only articles of export produced in the neighbourhood are Cunlies, Jagory (inspissated juice of sugar cane), and Callay (Cicer arietinum).

April 12th.—To-day I was prevented from advancing by no less April 12. than seven of my people having been seized with the fever in the course of the night, and from its being impossible, without some delay, to provide means for their being carried. Fevers have of late been very prevalent among my servants, although the country is perfectly dry and clear. The weather is now very hot in the daytime, with strong irregular blasts of hot wind, which often comes in whirls. The nights are tolerably cool. Early this morning we had a very heavy rain, with much thunder, but little wind.

As I was detained here, in order to save time I sent for the principal sheep-breeders in the neighbourhood, and obtained from them the following account. Throughout the principality, and in the neighbouring country of Hara-punya-hully, which belongs to the Company, sheep are an object of great importance, and are of the kind called Curi in the language of Karnata. They are keptby two casts, the Curubaru, and Goalaru. A man of either cast, who possesses a flock of sheep, is by the Mussulmans called a Donigar. The Curubaru are of two kinds; those properly so called, and those named Handy or Cumly Curubaru. The Curubaru proper, and the Goalaru, are sometimes cultivators, and possess the largest flocks; but they never make blankets. The Handy Curubas abstain entirely from cultivation, and employ themselves in tending their flocks, and manufacturing the wool. The flocks kept by the two former casts contain from 30 to 300 breeding ewes; those of the Handy Curubas

CHAPTER XVIII. April 12. contain only from five to one hundred and fifty. All the shepherds have besides some cows, buffaloes, and Maycays, or long-legged goats; but the sheep form the chief part of their stock. They are pastured in waste places; for which a Hulibundu, or grass renter, is appointed by government; and to him each family pays a certain rent, fixed by an old valuation of their property. This rent varies from  $\frac{1}{2}$  a Fanam to 20 Fanams a year, or from  $3\frac{1}{4}d$ . to 12s.  $5\frac{3}{4}d$ . It is said, that changes in the quantity of a family's stock are not common, and that it is rare for a man to possess thirty more or less than his ancestor had at the time of the valuation. If any man's flock, however, should increase much above the number originally belonging to the family, the Hulibundu may increase the tax. The office of Hulibundu is not hereditary; but there are certain families of shepherds hereditarily annexed to the Hulibundu of each district; that is to say, they must pay their tax into his office. They are at liberty to pasture their flocks wherever they please, even into the territories of a different sovereign. Thus a shepherd of this place may feed his flocks in Hara-punya-hully; but he pays his rent to the Hulibundu of Chatrakal.

The sheep are allowed no food but what they can procure in the pastures, which are open uncultivated lands containing a few scattered bushes, but which are here called Adavi, or forests. In the rainy season, the sheep at night are driven into folds made of prickly bushes. In the dry season, they are at night confined on the arable lands, for the purpose of manuring them; and, as a reward, the cultivator gives victuals to the shepherds and their dogs. Four rams are reckoned sufficient for a hundred ewes. Owing to the temperate nature of the climate, the females breed at all seasons indifferently, and they bear six months in the womb. They have their first lamb at eighteen months old, and breed once a year, but never have twins. After bearing three lambs, the ewe is sold. If allowed to live, she would breed five times, but afterwards she would not be saleable. Sheep are never fattened for the market, farther than

can be done by pasture, with which in India a sheep seldom becomes fat; but I think the meat of those here is better than I have seen any where else in India, where the animal has not been stall-fed. For April 12. stall-feeding, they are preferred by the gentlemen of Madras, who used formerly to be supplied from Bengal.

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The males, except those intended for breeding, are sold by the shepherds when under two years of age. At a year old, the best males are selected for breeding, the others are castrated. A female at one year old, sells for about a quarter of a Pagoda, or rather more than two shillings, and continues of the same value until after having had her third lamb. A male of a year old is worth the same money. A wether two years old is worth about a third of a Pagoda, or 2s. 81/2 d. A good ram for breeding sells for half a Pagoda, or rather more than four shillings.

The fleece is shorn twice a year; in the second month after the Wool. shortest day, and in that which follows the summer solstice. The first fleece is taken when the sheep is about six months old, and is by far the finest in quality. From this alone can Cumlies, of any considerable fineness, be made. Every successive fleece becomes worse and worse, and does not increase in quantity. The sheep are never smeared. They are commonly black; and the deeper this colour is, the more valuable the wool is reckoned. The finer blankets are all of an excellent native black, without dye. Each fleece weighs from  $1\frac{1}{2}$  to 3 Seers, or from  $\frac{31}{100}$  of a pound, to  $1\frac{82}{100}$ lb. The fleeces, as shorn, are divided into three qualities; which sell for 13, 8, and 7 Fanams the Maund; or for 11. 11s.  $2\frac{1}{2}d$ ., 19s.  $2\frac{1}{2}d$ ., and 16s.  $9\frac{1}{2}d$ . for the hundred weight.

The Handy Curubaru, or in the singular number Curuba, are a cast Handy Culiving in the Hara-punya-hully and Chatrakal districts, and are of rubaru. Karnata descent; but many of them have now settled on the banks of the upper part of the Krishna river, in the Marattah dominions. All those who have settled in that country being horse-men, they are called Handay Ravalar, a name pronounced Rawut by the



CHAPTER Mussulmans, and by them frequently applied to every kind of Curuba. In this country they confine themselves entirely to the proper duties of their cast; which are, to rear sheep, and to work up wool into blankets. They can eat with the other tribes of Curubaru, but do not intermarry with them. They are allowed a plurality of wives, and their women continue to be marriageable after the age of puberty. Widows may live with a second husband as left-hand wives (Cutigas), and their children are not thereby disgraced; for in this tribe there is no inferior Cutiga cast. A woman who commits adultery is always excommunicated; nor can her paramour take her for his Cutiga. The Handy Curubas eat sheep, fish, venison, They hold pork to be an abomination, and look upon the eating of the flesh of oxen, or of buffaloes, as a dreadful sin. They are allowed to drink spirituous liquors. When a Curuba dies, his property, as is usual with that of all Hindus in Karnata, is divided equally among his sons; and his wives and daughters are left entirely at the discretion of the males of his family.

The Deities, whom this cast consider as their peculiar objects of worship, are Bira Deva, and his sister Máyava. Bira is, they say, the same with Iswara, and resides in Coilasa, where he receives the departed spirits of good men. Bad men are punished in Nuraca, or by suffering various low transmigrations. There is only one temple of Bira, which is situated on Curi-betta, or the sheep hill, on the banks of the Krishna, near the Poonah. There is also only one temple dedicated to Máyava. It is near the Krishna, at a place named Chinsulli. Once in ten years, every man of the cast ought to go to these two temples; but a great many do not find leisure for the performance of this duty. These deities do not receive bloody sacrifices, but are worshipped by offerings of fruit and flowers. The priests (Pújáris) at both these temples are Curubaru; and, as the office is hereditary, they of course marry. Once in four or five years they go round, distributing consecrated powder of turmeric, and receiving charity. Besides the worship of the deities proper to the cast, the Curubas offer sacrifices to some of the destructive spirits, such as CHAPTER Durgawa, Jacani, and Barama Deva. When sick, or in distress, they vow sacrifices to these spirits, provided they will no longer exert April 12. their baneful influence. The Curabaru have no trouble from Pysachi; and ordinary Butas, or devils, they believe, are expelled by prayer addressed to the deities of the cast. At Hujiny, in the Hara-punya-hully district, resides Rávana Siddheswara, the Guru of this cast. His office also is hereditary; and he is able to read, an extent of knowlege to which no other person of the tribe has pretensions. The Guru attends at feasts and sacrifices, to receive his share, and punishes transgressions against the rules of cast by fine and excommunication. At the principal ceremonies of the Curabaru, such as marriages, building a new house, or the like, the (Panchanga) astrologer of the village, who is a Bráhman, attends; and, having read the prayers (Mantrams) proper on the occasion, receives the accustomed due.

April 13th .-- I went what was called four cosses, but the stage April 13. was exceedingly long, and I halted at Coduganar. Except two small Appearance of the hills between which I passed, all the country near this day's route country. is sufficiently level for the plough, and very little of it appears to be too barren for cultivation. Some of the soil is black clay, some is red mould, but by far the greater part of it is poor stony land. I saw several villages, but a very small proportion of the country is cultivated, and from time immemorial much has been waste. A long continued scene of Indian warfare has prevented by far the greater part from having been cultivated. The most severe loss, however, that the natives remember, was what they suffered in Purseram Bow's invasion, when the whole Chatrakal principality was reduced to nearly a desert. The Amildar of Mahiconda, who met me at Coduganar, says, that almost the whole country is capable of cultivation, and with manure will produce either Ragy or Jola.

In the forenoon a leopard was killed by the people of the village Leopard, or in a garden near the town, and brought to my tent in great triumph, with every thing resembling a flag, and every instrument capable

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of making a noise, that could be collected. First he had been shot in the belly, and then he was driven to the banks of a reservoir, where he stood at bay; and, before he was killed, wounded three of the men who attacked him with spears; one of whom was severely torn. He agreed very well with the description in Ker's translation of Linnæus, and was about four feet from the snout to the root of the tail. He had killed several oxen; and in this country, it is not unusual for leopards to attack even men. Although I have called this animal the leopard, there is reason to think that it does not differ from the panther of India; for I am persuaded that we have no larger spotted animal of the feline genus. The Indian panther and leopard I consider, therefore, as two names for the same animal. The African panther may, however, be different, as certainly is the hunting leopard of India.

April 14. Face of the country.

14th April.—I went a very long stage, called four cosses, to Aligutta. For some way, near the middle of this day's route, the road passed among low hills that are rather barren. On both sides of these there is a great deal of fine land; for much of the soil is of the fine black mould called Eray. Almost the whole is waste, owing chiefly to the invasion of Purseram Bow. Many of the fields, however, would appear to have remained longer uncultivated, which is attributed to invasions by the Marattahs that happened during the government of Hyder. I do not think that more than a tenth part of the arable fields is now occupied. Ragy and sugar-cane seem to be what the farmers attend to most; yet there is much land fit for Jola and cotton. Some sheep are reared; but all the wool is sent to other places, where it is manufactured. In the villages of this district are scattered a few weavers of coarse cotton cloths. In the Chatrakal principality there are no plantations of palm-trees; but there are many gardens in which kitchen stuffs (Tarkari) are raised. Among these, the carrot thrives remarkably well, and in flavour is superior to any that I have seen in India. Aligutta is a sorry place, situated among some rocky heights that are fortified. Contiguous

to it is a very good reservoir. Distant from it about three cosses CHAPTER to the south, is a reservoir, which in size almost equals Solicaray, and is named Bhima Samudra, or the sea of Bhima, who was one of the April 14. five sons of Pandu, celebrated in Hindu fable.

15th April.-I went a very long stage, called also four cosses, and April 15. encamped in the plain near Chitteldroog, as we call it. Most of the country through which I passed is tolerably good, but very thinly peopled, and poorly cultivated. After having passed over a low ridge of hills, I came to a small rivulet, named Jenigay holay, which has its source from Bhima Samudra, and from various mountain torrents. It runs towards Gudi-cotay, the chief town of a district in this principality, and contains water at all seasons. It forms some fine reservoirs, and in several places is also conveyed by canals to irrigate the fields for cultivation.

The plain of Chitteldroog is two cosses and a half from north to Chitteldroog. south, and one coss from east to west; the coss here being at least four miles. It is every where surrounded by low, rocky, bare hills, on one of which stands the Durga, or fort, formerly the residence of the Polygars of this country. By the natives it is called either Sitala-durga, that is to say, the spotted castle, or Chatrakal, which signifies the umbrella rock; for the Umbrella is one of the insignia of royalty. During the government of the Ráyarus, the tributary Polygars of Chatrakal, who by descent were hunters (Baydaru), governed a country valued at 10,000 Pagodas a year, or 3120l. 8s. 4d. On the decline of the royal family of Vijaya-nagara, these enterprising hunters, by gradually encroaching on their neighbours, increased their territories until they became worth annually 350,000 Pagodas, or 109,213l. 10s. 10d. The Moguls had no sooner settled at Sira, than they began to covet the Chatrakal principality, which being entirely an open country ought to have fallen an easy prey to their cavalry. Sida Hilal, Nabob of Sira, made the attempt, and besieged the town for two years, but without success. He then retired to Sira, having received a promise of an annual tribute, the

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CHAPTER payment of which he probably did not expect. Hyder, soon after taking Bidderuru, attacked Chatrakal. The first siege lasted five months, and was unsuccessful. After the second siege had continued six months, there was little prospect of success, and Hyder had recourse to corruption. Partly by money, and partly by the influence of a common faith, he obtained the treacherous assistance of a Mussulman officer, to whom the Rájá had given a high military command. At this time the town was very large, and filled a great portion of the plain; but owing to the removal of its court it has since gradually decayed. Still, however, it is a considerable place, and seems to receive particular encouragement from Purnea. It is now confined entirely within the walls, which are near the foot of the rock. They were strengthened by Hyder; and the town, after the peace granted by Lord Cornwallis, having become a place near the Marattah frontier, Tippoo had employed Dhowlut Khan, one of his slaves, to add much to its strength. The new works are now completing, and will render it totally impregnable against such invaders. Indeed, as it was before, Purseram Bow made no attempt to besiege it, that kind of warfare being little adapted for his troops, or indeed for those of any native prince; for the walls that resisted the two years siege of the troops of the haughty Mogul, were built entirely of mud. From the hereditary Shanaboga of this place, named Shimuppa, I received a history of the Polygars of Chatrakal, which I have delivered to the Bengal government.

April 16. Sickness prevalent in the hot weather.

16th April.—I unfortunately found, that the Subadar, or chief officer of the principality, was absent, and that his inferiors were little disposed to render me any assistance; of which I was much in want, owing to the number of my people who were sick, and who were daily attacked with fevers. The whole neighbouring country is reckoned exceedingly unhealthy, although it is perfectly dry and clear; and indeed, ever since I have come upon the open country near the Tunga, my people have been suffering very much. The natives say, that every country is unhealthy in which the black soil called Eray abounds. In the neighbourhood of Chatrakal there is CHAPTER also a deficiency of water. To reach it, the wells must not only be very deep, but all that is procurable is of a bad quality. This may April 16, be in part attributed to the common nastiness of the Hindus, who wash their clothes, bodies, and cattle in the very tanks or wells from which they take their own drink; and, wherever the water is scanty, it becomes from this cause extremely disgusting to a European.

Finding that the agriculture of this country differed in nothing material from that at Hari-hara, and Dávana-giri, and wishing to remove my people to a more healthy situation, I determined to make no longer stay at the inhospitable Chatrakal, but to go to Heriuru, where the air and water are reckoned wholesome.

17th April.—I went two cosses to Siddamana-hully, a mud fort April 17. containing sixty houses. The first half of the way led through the of the counplain of Chatrakal, which is mostly uncultivated, but consists of a try. fine black soil. Beyond the hills surrounding this plain, toward the east, is an extensive level bounded by Nunnivala hills and fort. The soil most common in this plain also is black. The number of inhabitants now in the country is not above a third part of what were in it before the Marattah invasion. The two great articles of cultivation here are Jola (Holcus sorghum) and Navonay (Panicum italicum), of which about equal quantities are raised. The next most considerable crops are Sujjay (Holcus spicatus) and cotton. The quantity of wheat and Callay (Cicer arietinum) is small. There are no reservoirs, but some might be constructed. Near the village is said to be a place where one might be built that would water as much land as would sow 10,000 Seers of rice. The chief (Gauda) at Siddamana-hully is a Sivabhactar, as indeed is common in this principality; for since the overthrow of their chief by Hyder, the Baydaru have become almost extinct.

18th April.-I went three cosses to Imangula, and had on my right April 18. all the way a prolongation from the hills on which Chatrakal stands.

XVIII. April 18.

CHAPTER The country near my route is chiefly level, and most of the soil is black; but it is almost entirely waste, and has very few tanks. Near Imangula is a small one toat waters some rice ground.

Eggs of fishes very tenacious of life.

Although almost every year, before the commencement of the rainy season, this tank becomes dry, and has no communication with any rivulet, yet it contains many small fishes, all of which are caught whenever it dries. It would appear, that their eggs, although no doubt they become dry with the mud and stones, retain life, and are hatched so soon as they are moistened by the next rain. This shows the practicability of transporting the eggs of fishes from one country to another with very little trouble.

Imangula. Practice of swinging before idols.

Imangula is a large fort, but much space within is empty, and it contains only about 90 houses. The chief (Gauda) is hereditary, as is usual throughout the Mysore Rájá's dominions, and he acts as Pújári to the image of the village god. Almost every village has a peculiar deity of this kind, and most of them are believed to be of a destructive nature. That of Imangula is Kalikantama, a female deity. To her image an annual feast is given by the Gauda, who offers sacrifices, while her wrath is appeased by the people, who are swung round before the shrine, as they are suspended from the end of a lever by a hook of iron, that is passed through the skin of their backs. This cruel worship is never performed before the great gods; and the Bráhmans of the south consider it as an abomination, fit only for the groveling understandings of the vulgar.

Singular manner of cultivating the dry field.

In the black soil which forms a large portion of the fine plains east from Chatrakal, a singular manner of cultivation prevails. The plough used is drawn by from eight to sixteen oxen, and is heavy in proportion. In Plate XXIX. Fig. 80, is represented one that was drawn by eight oxen, the iron of which weighed 12 Seers, or about 71lb. The largest is exactly of the same shape, but much stronger, and its iron is double the weight. The reason of the number of cattle which the farmers here employ seems to be, the hardness acquired by the black soil in the dry and hot season during

which the labour must be performed. After the commencement of CHAPTER the rains it becomes so sticky, that cattle cannot walk on it. In many parts of the Marattah country, I am told, the same mode of April 18. cultivation prevails, and that the plough is often drawn by 12 yoke of oxen, worth each from sixteen to twenty Rupees. With the strong team in use here, the field every third year receives two or three ploughings. In the two intermediate years it is only hoed with the Cuntay. It requires no manure, and is never rested, but constantly gives a crop of Jola (Holcus sorghum) or Navonay (Panicum italicum), which are sown without any attention to rotation. On the year in which the field is ploughed, rows of Callay (Cicer arietinum) accompany the Jola; but in the two intermediate seasons nothing is sown with this grain. The Navonay is always accompanied by rows of cotton, at the distance of two cubits and a half. Both seeds are sown with the drill. The crop on the second year after ploughing is reckoned the best. When the country becomes inhabited and acquires a good system of agriculture, this part of the Chatrakal principality, which consists of Eray, or black soil, seems likely to be a source of great wealth; but its present desolation must for a considerable time keep it poor, and, adding to the natural unhealthiness of the climate, will make the increase of population slow.

April 19th.—I went three cosses to Heriuru, near which a great April 19. change takes place in the appearance of the country. The soil is Appearance of the counmostly stony, and at this season exceedingly parched; so that there is try. scarcely any grass, and the only green things to be seen are a few scattered Mimosas.

Owing to the sickness among my people, and an accident having Delay owing befallen my horse, it became impossible for me to proceed farther; to sickness. and as I had found it impracticable, when at Sira, to procure a palanquin bearer there, it became necessary to wait until some conveyance should be sent from Seringapatam. This delayed me fourteen days, nor could a set of bearers by any means be procured at

April 19.

CHAPTER Seringapatam. I should have been reduced to the necessity of walking, had not the Dewan obligingly sent a positive order for the bearers of Sira to enter into my service. The common bearers of India are unwilling to enter into the service of a traveller, although the wages he gives are immense, when compared with what they get at home; for he takes them far from their families, to places which they consider as another world. All objects of enquiry having been soon exhausted, while the desert nature of the country precluded any resource from botany, my stay at Heriuru proved very tedious.

Climate.

The winds in the day-time were hot, and came generally from the south. Slight whirlwinds from the same quarter were common. At night the winds were westerly, and tolerably cool. There were a few slight showers of rain, with some heavy squalls of wind, which changed all round the compass, and were accompanied by a terrible cloud of dust.

Fish.

I procured much comfort from a small clear stream, called the Vedawáti, in which I cooled myself every evening, and whence I procured the three species of Cyprinus from which the accompanying figures (Plates XXX. XXXI. XXXII.) were taken, and of which the following are the scientific characters:

## 1. Cyprinus Carmuca B.

C. cirrhis duobus; corpore elongato; capite callis tuberculato; radiis pinnæ analis octo, dorsalis undecem.

Karmuka Telingorum.

Habitat in fluviis Karnatæ. Piscis aliquando tres pedes longus.

2. Cyprinus Ariza B.

C. imberbis cauda bifida; corpore elongato; maxilla inferiore carinata; radiis pinnæ analis septem, dorsalis duodecem.

Kincla Minu Tamulorum

Bangun Batta Bengalensium.

Arija Telingorum.

Habitat in fluviis Indiæ australis. Pisces hos numquam vidi trium palmorum longiores.

## 3. Cyprinus Bendelisis B.

C. cirrhis duobus; cauda biloba, corpore elongato, semi-fasciato; radiis pinnæ dorsalis novem, ani undecim.

CHAPTER XVIII. April 19.

Bendelisi Telingorum.

Habitat in fluviis Karnatæ. Pisciculus digiti longitudinem vix exsuperans.

This fine little river seldom or never dries up, and comes from Sakra-pattana. Its water is clear, and is reckoned wholesome. Four cosses below Heriuru it is joined by the Cuttay-holay, which comes from Muga-Nayakana-Cotay and Hagalawadi, and forms the boundary between the Chatrakal principality and Sira. Although this receives a small stream from Sira, yet in the hot season it commonly becomes dry. The natives here say, that the Vedawáti joins the Utara Pinákani, or northern Pennar, after having received the Jaya-mangala river, which comes from Nandi-durga; but this is a clear proof of their extreme ignorance in topography. The Vedawáti is the river which Major Rennell calls Hogree, and it joins the Tungabhadra.

Heriuru signifies "a head place." It is situated on the east side Heriuru. of the Vedawáti, and during the government of the Chatrakal Rájás contained 2000 houses, with an onter and inner fort, and several temples of the great gods, one of which is of considerable size. This temple, called Gunavunti, possesses an inscription engraven on stone, dated Sal. 1332, in the reign of Deva Ráya; of which a copy has been delivered to the Bengal government. In the reign of Hyder, the town suffered considerably from the Marattahs, and was plundered by Purseram Bow. The ravages of this chief were followed by a dreadful famine, which swept away all the inhabitants. When the British army arrived last before Seringapatam, about 50 or 60 houses had again been occupied. Some of the dealers in grain that followed the camp found their way even to this distance, and plundered the wretched inhabitants. At the same time Barama Nayaka, a chief of the Chatrakal family, assembled some banditti,

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April 19.

CHAPTER and entered the territories of his ancestors, to try what could be done. He had constant skirmishes with the Sultan's garrison in Chatrakal, and in each of these two or three villages were plundered by one or other of the parties. After the capture of Seringapatam. this chief wisely entered into the service of the Mysore Rájá, and is now employed in the command of 3000 men acting against a Polygar, who by us is called the Bool Rájá. When Colonel Dalrymple arrived with his detachment, giving protection to this part of the country, the number of inhabited houses in Heriuru was reduced to seven. About 300 have since been rebuilt, and the place is the chief town of a (Taluc) district.

Strata.

The strata at Heriuru run nearly north and south, and are almost quite vertical. The basis of the country is somewhat between an argillite and schistose hornblende. It contains no veins that I observed; but in some places I saw large amorphous masses of reddish fat quartz imbedded in its substance. When exposed to the air, it readily decays, and is then covered with a cinereous crust. For building, it is a very poor stone; at least what is near the surface; but in a temple of Iswara without the walls I observed some pieces of it that have been squared, and resemble much the fine hornblende slate from Batuculla. It is probable, therefore, that by digging quarries excellent materials for building might be procured. Of these, however, there is no want any where in Karnata.

The only other common rock here is called the Black stone, and it may be considered as forming large beds between the strata of the argillaceous hornblende slate. This is an earthy quartz or hornstone, impregnated with hornblende. When exposed to the air, its masses do not readily acquire a crust, but separate into irregular quadrangular pieces, truncated at both ends. In the fissures may sometimes be observed yellow shining nodules, which I take to be the mica aurata. It contains no other venigenous matter, and does not cut with the tools of the natives; but from the angular shape

of its fragments, the smooth surface with which they break, and CHAPTER, its great durability, it is excellently fitted for rough walls.

The Seer measure used in the market (Bazar) here for grain contains 761 cubical inches; 72 Seers make one Wocula or Colaga. The sures. farmers measure is founded on another plan: 2 Seers make 1 Arecal which contains 1765 cubical inches; 2 Arecals make one Gydna; 16 Gydnas make one Wocula; and 20 Woculas, or Colagas, make one Candaca, which therefore contains a little more than 521 bushels, The Wocula of the (Bazar) market, and that of the farmers, are commonly considered as the same; but in fact the former contains 5508 cubical inches, and the latter 5652.

The following is the average price of grain, calculated to the Price of nearest farthing.

		Cantor	Raya	Pagodas.					pence
		Cunter	ituya .	_					
1 Candaca of	Sujjay w	orth	-	8	The	bushel	is wo	orth	$11\frac{1}{2}$
	Huruli	-	- 1	8	-		11-1		$11\frac{1}{2}$
	Navonay	, -	-	8		-	-		111
	Harica	-		5	-		10		74
v .	Wheat	-	-	18	-		-		26
	Ellu		_	15	-	-	-		213
	Callay v	vorth	-	12	-	-	-		174
	Ragy	-	-	8	-	-	-		$11\frac{1}{2}$
	Paddy,	or roug	gh rice	8	-	-	-		111
	Ricecle	ared fi	omthel	husk18	-	-	-		26

Cotton, cleared of the seed, is worth 12 Fanams for the Maund of 48 Seers, each weighing 22 Dudus, or 11. 10s. 81d. a hundred weight.

In this neighbourhood, the cultivation of dry field is the grand Dry field. object, and differs very considerably from that in the western parts of the principality, where the black mould prevails. Here all the land is a poor stony soil. In some places it contains nodules of limestone; but these are considered as unfit for any kind of cultivation.

The whole lands are the property of the government. Some are Tenures. still called Enam, but this is merely in remembrance of their former

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CHAPTER tenure; for the holder of the Enam has no fuller right than any other tenant. No lands can be sold, mortgaged, or let to sub-tenants. They are let from year to year, and the possessions are changed from man to man at the pleasure of the officers of revenue; but the rent of each field is fixed by an old valuation. The cultivators never at any time gave more than this rent; and being at present few in number, considerably less is exacted, in order to encourage them to cultivate as much land as possible; for they are totally inadequate to the cultivation of the whole.

Plough of land.

The extent of dry-field is estimated by the plough, and all ploughs are said to be of nearly the same dimensions. I measured one, which I found contained 562,280 square feet, that is, very little less than 13 acres. One plough can not only cultivate this extent, but also a little of the watered land, the rent of which is paid by a division of crops. In doing this, the officers of revenue (Amildars) say, that it is impossible for the government to be defrauded, which appears to me incomprehensible. I have myself no doubt, partly from the division of crops, and partly from the power which they have of changing the cultivators possessions, that the officers of revenue have very lucrative appointments. The rent on dry-field at present amounts to from 10 to 60 Fanams a plough, or at from 53 to 342 pence an acre. That which I measured was an exceedingly poor stony field, and paid 34 Fanams a year, or 182 pence an acre.

The Sultan's management of the revenue.

The rent paid to Tippoo did not amount to one half of the valuation; for all parties united to defraud him, each getting a share. Although, during the Sultan's government, the rent fell thus light on the cultivators, they were, even by their own account, much worse off than they are at present; for there was no end to the arbitrary exactions which the lord lieutenants (Asophs) levied. The most intolerable of these, however, arose from the contribution which the Sultan demanded, to make good the sum that he was bound to pay to Lord Cornwallis by the treaty of Seringapatam. Tippoo ordered three millions (crores) to be collected; and the

people here say, that by paying their share of this they would not CHAPTER have been distressed. In place of three crores, however, ten were collected, and of these seven were embezzled by the officers of April 19. revenue. These again were obliged to bribe their superiors; but Tippoo did not molest them, and many of the Brahmans are said still to possess very considerable sums which were then accumulated. Hyder and his son acted on totally different plans. The father protected the cultivator, but was very apt to squeeze his officers in an arbitrary manner. The Sultan seldom molested his officers, but he cared not how much they fleeced the people. He, however, was probably ignorant of the lengths to which they went, especially after his unsuccessful war with Lord Cornwallis; from which period he was almost inaccessible to his subjects, and continued to brood over his misfortunes in sullen solitude.

Four ploughs are here reckoned a large stock. Two ploughs are Size of farms. common; but by far the greater part of the farmers have one only; and many, as is indeed usual in every part of the country, are necessitated to unite their stocks before they can furnish two oxen, and the miserable implements which are necessary to accompany one plough. The extent of land cultivated here by one plough is greater than usual in India; for it requires little labour. I am persnaded, however, that in every part of Karnata a plough, fully wrought, is capable of labouring at least thirteen acres of dry field; from six to seven acres may be taken as the average extent of a plough of watered-land. Each plough requires two oxen and one man, and additional women must be occasionally hired.

At Heriuru there are no slaves. Most of the labour is performed Wages and by the families of the tenants; but a few hire men servants by the servants. year, and in seed time and harvest employ women by the week. A man gets from 50 to 70 Fanams a year, or from 1l. 11s. 21d. to 21. 3s.  $8\frac{1}{4}d$ . This is paid entirely in money, without any addition, except that, for himself and family, he generally obtains room in

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CHAPTER his master's house. Women get one Fanam, or 71d. a week. Advances to servants are not common, and of course they are entirely free.

Hours of labour

The hours of labour in this country are from eight in the morning until noon, and from two o'clock till sunset; in all, about eight hours. The labourers get up about sun rise; but an hour is spent in their evacuations, in which all Hindus are excessively tardy; and another hour is spent in ablutions, prayer, marking their faces with consecrated ashes or clay, and in eating their breakfast. They eat three times a day, their principal meal being at noon.

Sujjay.

The most common article of cultivation is the Holcus spicatus of Lintiaus, called by the natives Sujjay, or Cambu. It is generally accompanied by Huruli (Dolichos biflorus). The custom here is, to cultivate the Cambu fields three years, and then to give them a fallow of the same duration; and while thus allowed to rest, they pay no rent. Each man's farm is therefore divided into two portions; one of which is cultivated, and the other fallow. Other dry grains are also sown on the Cambu field, and that without any attention to rotation. The only manure that is given is, for some nights, to make a flock of sheep sleep on the field. They are not folded, but merely gathered together by the shepherds and their dogs. After the first heavy rain in the two months following the vernal equinox, the Cambu field is ploughed, lengthwise and across, with two oxen in the yoke. After the next rain this is repeated. It must be observed, that the rain must be of considerable duration; for in this arid soil and season the heaviest shower produces no sensible effect. After the second ploughing, the field is hoed with a Heg Cuntay drawn by four oxen. When the rainy season has fairly commenced, which happens about the summer solstice, the seed is sown with the drill, the Cambu being put in the Curigy, and the Huruli in the Sudiky. After having been sown one month, the field is weeded with the Edday Cuntay; and after an interval of eight days this is again

The Cambu in five months ripens; the Huruli is a month CHAPTER later. Thirty-two Seers of Cambu, and six Seers of Huruli, are sown on one plough of land, and produce about 1280 Seers of the former, April 19. and 128 of the latter. The produce is therefore worth 80 Fanams for Sujjay, and 8 for Huruli; in all, 88. The seed and rent may on an average amount to about 36 Fanams, or about 40 per cent. of the gross produce. An acre of ground, at this rate, will produce nearly four bushels of Cambu, and 4 of a bushel of Huruli; a strong proof of a miserable soil and wretched cultivation, yet the former is allowed to produce 40, and the latter above 21 fold; but I have already pointed out the fallacy of judging, concerning the productiveness of either soil or crop, by means of the increase on the seed that has been sown.

In a few places of this district (Taluc) cotton is put in the (Aca- Cotton. dies) rows between the drills of Cambu; but it requires a much richer soil than is to be usually found, and is thought to exhaust the land. The quantity raised in the country is not equal to the consumption. In a few places Harulu, or Ricinus, is put in the drills with Cambu.

The next most considerable crop is Navonay, or the Panicum ita- Navonay. licum. The field is ploughed twice in the month following the summer solstice, and at the end of the month it is hoed with the Heg Cuntay. In the following month, after a heavy rain, the seed is sown with the drill; and a month afterwards the weeds are removed by the Edday Cuntay. In three months it ripens, but is a very uncertain crop; for it is liable to be spoiled by either too much or too little rain. A farmer who has a plough, and sows 32 Seers of Sujjay, commonly sows 2 Seers of Navonay, and, when the season is favourable, will get 3 Colagas, or 96 seeds; which, after deducting the seed, is worth 113 Fanams. This, I suspect, ought to be considered as a part of what the plough of land produces, and will make its gross amount 100 Fanams; from which is to be deducted less than  $36\frac{1}{2}$  Fanams for seed; and rent. The gross value of the

XVIII. April 19.

CHAPTER produce of an acre of poor land, such as that I measured, by this estimate, will be about 4s. 10d. By the people here, the straw of Navonay is reckoned better fodder than that of Cambu, which is indeed exceedingly coarse. The grain of the Cambu is reckoned the most nourishing food for labouring men; while that of Navonay is preferred by the Bráhmans, and others, who are not under the necessity of performing hard work.

Horse-gram, or Dolichos biflorus.

With respect to quantity, the other crops are very trifling; but, as each man cultivates some of them, 'at seasons when his stock would be otherwise idle, they are of importance, as reducing the price of labour. The most considerable of them is that of Huruli, or Horse-gram, which Purnea has lately encouraged, in order to procure a plentiful supply for the cavalry that are stationed towards the Marattah frontier. The land employed for the purpose is the poorest in the country, and gets no manure. In the second month after the autumnal equinox, the field is once ploughed. About the beginning of the following month, it is ploughed again, and the seed is dropped into the furrows, after the plough, by a sharp pointed bamboo (Sudiky). It is then covered by a hoeing with the Heg Cuntay. The seed is sown twice as thick as that of Cambu, ripens in three months, and produces five folds; one half of which goes to the public revenue. The produce of an extent of land equal to one plough is therefore worth twenty Fanams; of which ten go for rent, two for seed, and eight to the farmer. The produce of an acre is about one bushel, and is worth less than a shilling.

Harica.

On the same kind of soil, and in the year following the Horse-gram, is sown Harica, or the Paspalum frumentaceum Roxb. MSS. In the second month after the vernal equinox, the field is ploughed, and the seed is dropped into the furrow, after the plough, with the sharp bamboo, and covered with the Bolu Cuntay. Three months afterwards, the weeds are removed by the Edday Cuntay. It requires much rain, and eight months elapse before it ripens. Four Seers

of seed produce two Woculas; but I do not know the extent of CHAPTER ground required. The rent is ten Fanams for the plough of land.

In the bottoms of reservoirs, when they are dry, are sown wheat, April 19. Ellu, or Sesamum, and Callay, or Cicer arietinum. For rent the government takes one third part of the produce.

The quantity of rice-land in the Chatrakal principality is very Rice-land. small. In this district (Taluc), eight or ten villages are partly employed in this kind of agriculture; and in favourable years they have two crops from the same field, which is not the case any where to the westward. There were formerly five reservoirs. Two of them have lately been put into repair; one is now undergoing that operation; and money has been allotted for the two others. There are many places in which new ones might be formed with great advantage, were there stock sufficient to cultivate the lands which they would irrigate; but, in the present desolate state of the country, all expense bestowed on erecting new reservoirs would be fruitless. In the principality there are a few Betel-nut gardens, which are cultivated in the same manner as those to the southward, which I have already described; but the soil here is little favourable for the Areca. Having formerly given a full account of the cultivation of rice in the neighbouring Taluc of Sira, it would in this place be superfluous to say any thing on the subject. The revenue is paid by a division of the crop.

The village cattle during the whole year are kept in the house, Cattle and but are not littered. Their dung is collected in pits, and mixed with the ashes and other soil of the family. This manure is reserved for the rice-land. The dry field gets nothing, except the dung of the sheep, which, at any season, are herded on it at night. A flock of 500 in two nights are supposed to manure fully a plough of land. The farmers say, that when they have not sheep of their own they hire in the flocks of the shepherds, and give them two or three Fanams for manuring the plough of land. But this is

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CHAPTER denied by the shepherds, who allege, that, except permission to feed their flocks on the fallow lands, they get nothing; and this, I believe, is true. The want of attention to increase the quantity of manure is a gross defect in the agriculture of Heriuru, and may account for the wretched produce of its field.

Sheep.

The Donigars in this neighbourhood keep a good many sheep. Some very rich families possess 1000 ewes, and 200 Maycays. in middling circumstances have four or five hundred ewes. Those who have from fifty to a hundred only- are reckoned poor. The wool is much coarser than at Dávana-giri, nor will even the first shearing make fine Cumlies. The sheep are also smaller, and by the natives are reckoned inferior meat; but, whether or not this would coincide with European taste, I cannot say. This inferiority of the sheep and wool is attributed to the difference of soil; for all over the good sheep country, especially in the Harapunya-hully district, the Eray, or black soil, is prevalent. The natives, when asked how much it is usual for the meat or fat of a good sheep to weigh, stare with as much astonishment, probably, as that with which an English feeder would behold a butcher who was ignorant of what he considered to be so obvious a matter of enquiry. The sheep here are never driven into a house. In the rainy season they are taken to the wastes, and at night are secured by a fence of dry thorns, to keep off the tigers, which are very numerous among the bushes; for in the neighbouring forests there are no trees. In the dry season, the flocks are at night brought near the villages, and kept on the arable lands. Even there, according to the account of the shepherds, it is necessary to surround them with a fence of thorns. At this season the sheep must have drink twice a day, at noon and in the evening. In the rainy season they are never brought from the wilds; but folds are raised in the driest spots that can be found, and within the enclosure of thorns the shepherds erect for themsclves small huts. The rent is on the same footing as at Dávanagiri, and varies from 1 to 40 Fanams, or from 71 pence to almost 25 CHAPTER shillings a year, according to the value of the flock. A flock containing, young and old, 500 sheep and 50 Maycays, requires four April 19. men and four dogs. These are able to drive away small animals of the feline kind, but have no arms that would enable them to attack the tiger or leopard. In the rainy season, the ewes are milked, and four of them give daily a Seer, which contains 72 cubical inches, or a little more than an ale quart. It sells for three Dudus a Scer, or  $1\frac{1}{2}d$ , a quart. It is of the same value with cow's milk, and is made in a similar manner into Ghee, of which 22 Rupees weight requires eight Seers of milk; that is to say, to make one pound of butter, boiled into Ghee, requires 143 quarts of milk, ale measure. Cheese, for which ewes milk is best fitted, is not known at Heriuru; nor any where, I helieve, in India, except where it has been introduced by Europeans. The ewes breed once a year, but at all seasons indifferently. After having given five lambs, they are sold, and then bring from 2½ to 3 Fanams, or from 18½ to 22½ pence. The males are emasculated at eighteen months old, and are sold from six to eighteen months afterwards. They are never fattened, except by the natural pasture; and it is only during the rainy season that they are in tolerable condition. In the dry season the fields produce scarcely a green herb. A wether at two years old brings five Fanams, and one three years old brings six Fanams, or double the price of a ewe. Lamb is never used. Seven Fanams, or 4s.  $4\frac{1}{2}d$ ., is reckoned a high price for a breeding ram; which ill-judged economy, probably, contributes to render the breed worse than that of Chatrakal.

In the wastes of this part of the country some Goalas keep herds Cows. of breeding cows. They are never brought near the villages, and are exceedingly fierce; so that no dog nor stranger can with safety approach them, and the males attack and kill the tiger. To the Goalas, however, they are very tractable, and follow, like dogs, the man who leads the herd to pasture; while the other Goalas follow,

April 19.

CHAPTER to bring up the young, and the stragglers. Some of the cows are however so vicious, that no milk can be taken from them. They are all white, but are not fit for carriage, being too small. They are very hardy in the plough, or machine for raising water called Capily; but are rather unruly, even after emasculation; so that an ox of this breed does not bring more than 40 Fanams, 1l. 4s. 11 1d.; while the more tractable, but weaker cattle, bred in the villages, sell for from 60 to 70 Fanams, or from 1l. 17s.  $5\frac{1}{4}d$ . to 2l. 3s. 8d. Bulls for breeding sell for from 50 to 80 Fanams, or from 1l. 11s. 21d. to 21. 9s. 11d. The forest males are emasculated when between two and three years old; and are sold off at four, when they are fit for labour. The cows have a calf once in two years, and generally breed five times. In the rainy season, a cow gives daily 11 Seer. or 90 cubical inches, and in the hot season \(\frac{1}{2}\) Seer, or 36 cubical inches. The village cows being kept in the house at night, and being fed there, give about two Seers a day, or rather more than two ale quarts. These forest cattle are always kept in herds, which contain about 150 young and old, male and female. A herd of this kind requires the attendance of five men. One man carries the milk home to the village, and brings provisions; for the women dare not approach. The other four men lead the herd to pasture. The calves are secured in a fold strongly defended by thorns; and on the outside of this the (Goalas) cowherds build a small hut, in which they sleep surrounded by the cattle, and defended by them from the tigers. When water or grass fail in one part of the country, they remove to another, and are under the grass renter (Hulubundi) of Chatrakal, exactly on the same footing with the (Donigars) shepherds.

Buffaloes.

In the wastes buffaloes are never kept; but in every house the women of the (Goalas) cowherds, and the people of the villages, keep at least one or two female buffaloes; for the greater part of the milk used in the country is procured from this kind of cattle,

Each female ought daily to give three Seers, or a little more than CHAPTER three ale quarts. In the rainy season, this sells at three half pence a quart, in the dry season at two-pence. The village cows and buf- April 19. faloes are pregnant one year, and give milk the other. During the latter, the cow, besides supporting her calf, should give 30 Seers of butter, or 221 of Ghee, worth about 71 Fanams; that is, she gives  $16\frac{68}{1000}$ lb. of butter, or  $12\frac{1}{2}$ lb. of Ghee worth, 4s.  $4\frac{1}{2}d$ . The female buffalo, besides rearing her calf, should give 35 Seers of butter, or  $24\frac{1}{4}$  of Ghee, worth  $8\frac{3}{4}$  Fanams, or  $\frac{1}{6}$  more than the cow. If this be accurate, the buffalo milk must be poorer than the cow's, as she gives one half more. The contrary opinion is commonly entertained.

Although the air and water of Heriuru are reckoned salutary, Sickness and my people were well accommodated, they did not recover their among my servants. health, and all my stock of medicines had been long expended. My cook died rather unexpectedly. His fever never had been severe; the paroxysms had come on as usual in the morning, and, after it was over, had left him tolerably well; but in the evening he suddenly became insensible, was convulsed, and died in about an hour. He was a very thoughtless man, and much addicted to intoxication; those, therefore, who fancy that all spirituous liquors are pernicious, especially in warm climates, will have no difficulty in accounting for his death:

Dicunt ah! nimio pocula dira mero.

But let me add,

Vobis si culpa est bilis, sua quemque sequuntur Fata; quod immeriti crimen habent cyathi.

For my own part, I am, persuaded, that intoxication is much seldomer a cause of disease, than is commonly alleged; and that it chiefly proves injurious to the health of our seamen and soldiers in warm climates by making them imprudently expose themselves to other causes of sickness. The two persons in my service that are most subject to fevers, are my interpreter and painter, although

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CHAPTER from their situation in life they are exempted from all hardships; but from their cast they ought never to taste spirituous liquor, and are really sober men, avoiding not only liquor, but every intoxicating drug. At the same time, a man who takes care of my tents, although he is exposed to all weathers, and at times to much fatigue, enjoys perfect health, and probably keeps off the fever by copiously drinking spirituous liquors, to the use of which he is exceedingly addicted.

Superstitious fear of ghosts.

The arrival of a set of fresh men, and the consequent preparations for our departure, caused great joy among my people, notwithstanding their weak state. When the cook was taken ill, I had given orders to secure his effects for the benefit of his wife and children; but, on inspection after his death, no money could be found. Whether he had been plundered as soon as he became insensible, and that a guilty conscience occasioned fears among his companions, or whether the sudden manner of his death occasioned suspicions, I cannot say; but it was immediately believed that he would become a Pysachi, and all my people were filled with terror. The butler imagined, that the Pysachi appeared to him at night with a black silk handkerchief tied round its head, and gave him instructions to take all the effects of the deceased to his family; upon this, the butler, being a man of courage, put his shoes at the right side of the door, which he considered to be a sure preventive against such intruders. Next night a cattle-driver, lying in all the agonies of nocturnal terror, saw the appearance of a dog enter, and smell round the place where the man had died; when, to his utter dismay, the spectre gradually grew larger and larger, and at length, having assumed the form of the cook, vanished with a shriek. The poor man had not the courage to use the slippers, but lay till morning in a kind of stupor. After this, even the minds of the Sepoys were appalled; and when I happened to be awake, I heard the sentrics, by way of keeping up their courage, singing with a tre-2nulous voice.

## CHAPTER XIX.

FOURNEY FROM HERIURU TO SERINGAPATAM, THROUGH THE WESTERN AND MIDDLE PARTS OF THE MYSORE DOMINIONS.

AY 2d, 1801.—In the morning I went four cosses to Ellady- CHAPTER caray, which is situated among the low hills running S. E. from Chatrakal. I saw no houses by the way; but some must have May 2. been near my route, as in different places I observed a few fields of the counthat were cultivated. I passed through several ruined villages. The appearance of the country is desolate, and it is said never to have been much better, in the memory of man. The soil is entirely poor stony land; and the naked rocks, in a state of decay, come frequently to the surface. The grass in many places is long, but at this season it is quite withered; and the only things green, that are visible, are a few wild date palms (Elate sylvestris), most of which are young. In moist places they grow spontaneously, and produce juice, which is often boiled into Jagory. The hills are of no considerable height, and among them there is much plain ground. By the natives this is considered as of very little use; but to me, much of it appears to be very capable of being rendered productive, whenever labourers and stock can be found.

Between Heriuru and Ellady-caray, the strata are all nearly ver- Strata. tical, and of a slaty structure; but near the surface they are in such a state of decay, that it would be difficult to determine the species. Some appeared to be the same with the quartz impregnated with hornblende, that is found in the western Ghats. The layers or plates are in general very thin. There are no veins of quartz; but

May 2.

CHAPTER many of the strata, or rather thin plates, of which united the strata are composed, are fat quartz. These strata or beds of quartz are from a quarter of an inch to two feet in thickness, and are often stained of a livid colour, which I have no where else observed.

Slate.

The talcose argillite of Heriuru is here very common, and passes at times entirely into pure argillite, like the slate used for the roofs of houses. The transitions from the one stone to the other are so gradual, that it would be difficult to say where the one ends, and the other begins. The slate here is grey, blue, and purple. All that I saw, being near the surface, was in a state of decay, and therefore useless; but that is the case on the surface of the best slate quarries in Scotland.

Iron.

Iron was formerly smelted at Ellady-caray from black sand. which was brought from a hill about two miles to the westward. Much of the vitreous scoriæ remains where the furnaces stood; but the work has been abandoned these sixty years: the want of fewel is indeed a sufficient reason.

Ellady-caray is a small fort with about thirty houses. It has a plantation, containing a few coco-nut palms; and a garden, containing betel-leaf and plantain trees, the verdure of which is very refreshing to the eye of a person coming from Heriuru. Near it there is a pond of dirty water full of reeds; but no tank, as its name would seem to imply. The cultivation consists of Sujjay, (Holcus spicatus), Harica, (Paspalum frumentaceum Roxb:) Navonay, (Panicum italicum), and Huruli (Dolichos biflorus).

Weather.

This day has been cloudy and cool, with a threatening of rain. The natives are persuaded, that it is the commencement of the two months of showery weather which precede the rainy season.

May 3.

May 3d .- I went three short cosses to Chica-bayli-caray; that is, the little hedge tank. The country is very hilly, as we crossed the highest part of the ridge coming from Chatrakal. The soil in general is very poor, and incapable of being rendered arable. I passed a ruined village surrounded by some good land, and a

small fort with eight or ten houses. On the hills, there are a good CHAPTER many stunted trees.

Chica-bayli-caray is a small fort containing about forty houses. May 3. The fields around, although very stony, are arable; and between the stones the soil is good. Near it is a torrent, which comes from the hills, and runs toward the Vedawáti. It is dry in the hot season, but during the rains fills a large reservoir. On its bank is a fine coco-nut garden, where the trees grow to a large size, are well loaded with fruit, and are allowed no water after having been transplanted, and having fairly taken root. The ground of the garden is ploughed every year, and produces Horse-gram, Harica, and other dry grains.

At Chica-bayli-caray is a furnace for smelting iron ore, brought Iron smelted. from a mine called Cudera Canavay, and which is supplied with charcoal from the hills to the westward. The ore is brought upon buffaloes and asses. It is in small slaty fragments, that are broken to pieces with a stone, and thus separated from much sand and earth. These small pieces, when fit for the furnace, are about the size of a hazel-nut. The operation ought to be performed at the mine, to lessen the expense of carriage; but the danger from tigers prevents the people from staying there longer than is absolutely necessary. The number of these ferocious animals having increased of late, has forced the people to relinquish a mine named Buca Sagurada Canavay, which is distant from the other one coss toward the N.W. Even Cudera Canavay has now become very dangerous, and in the course of the last year three people have been destroyed.

The manner of smelting and forging the iron is exactly similar to that used at Doray-guda, which I have described in the seventh chapter of this Journal, Vol. II. p. 35, 38. At the two furnaces here are employed twenty-two men: nine to make charcoal, one to dig the ore, one to bring it from the hill (he is supplied by the proprietor with two buffaloes), one iron-smith at the forging

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CHAPTER furnace, six bellows-men, and four hammer-men. They can smelt twice a day; but the sickness of any one of the party stops the whole operation, and they meet also with frequent interruptions from holidays, and from heavy rain. On such occasions, some of the workmen remain entirely idle, and others take day labour from the farmers. Each smelting requires five baskets of prepared ore, one basket weighing 1172 Dudus, or rather more than 291 lb. The smelting also requires ten baskets of charcoal; each weighing 514 Dudus, or 13-83 lb. The weight of the charcoal is therefore nearly equal to that of the ore; but the imperfection of the furnace renders the operation very incomplete. The metal is never liquefied by the greatest heat which the natives can excite; the particles are only so softened as to adhere together, while the earthy matters are half vitrified. When the smelting succeeds properly, the mass of iron is forged into twenty-one plough-shares; when it succeeds ill, it yields only fifteen. Those pieces of iron weigh on an average 75 Dudus; so that the greatest produce of the ore is less than 27 per cent. of malleable iron; while the workmen sometimes are able to extract little more than 19 per cent.; but this is probably more owing to their want of skill, than to the poverty of the ore. The plough-share is worth \( \frac{1}{4} \) Fanam; so that the iron sells for rather more than 7s.  $3\frac{3}{4}d$ , a hundred weight. The workmen are paid by a division of the iron. Every 42 ploughshares are thus distributed;

To the proprietor	-	-	-	-	11
To the 9 charcoal make	rs	-			9
To the iron-smith -		-′	-	-	31
To the 4 hammer-men		-	-	-	7
To the 6 bellows-men		-	-	-	8
To the miner -	-			, -	1
To the buffalo driver		-	-	-	21
`					40

By this it would appear, that the expense of the fire amounts to  $\frac{9}{42}$ parts of the whole value of the iron. The utmost that a common labourer can make at this work is 11 penny a day; but should the May 3. operation succeed ill, he may get only 1 35 penny. This being very small wages, the workmen have probably concealed some part of their profit. The expenses of the proprietors are as follow;

For bellows -	• -		- 1	Fano	ams 100
For sacrifices -	-	-	-	-	30
For tax to government	-	-	- 1	-	375
					505

For this, when the operations succeed, he is repaid by 45 days. working, and all the remainder of what he receives is clear profit; for the workmen build the huts and furnaces, which are exceedingly rude; and the iron-smith provides hammers, anvils, forceps, and every implement except the bellows.

There is here a small manufacture of horse-shoes and hob-nails. Nail makers, It contains three anvils, at each of which are employed five men; one who manages the iron, and who furnishes all the tools; one who manages the fire; one to work the bellows; one to hammer the iron, as it is held by the foreman; and one who finishes the nail by giving it a head. The utmost that five men at one anvil can make in a day is 1200 nails. The four last mentioned workmen provide charcoal. Their wages are,

To the foreman 2 Jumshiry Pagodas for the month of 30 working days, or rather less than  $6\frac{1}{4}$  pence a day.

To each of the other workmen 1 Pagoda, or  $3\frac{1}{8}$  pence a day. One half of their time is probably employed in preparing charcoal. 36,000 hob-nails cost for manufacturing 6 Pagodas, or almost 21. 6s. 93d.

4th May .- I went one coss south, to see the mine at Cudera Cana- May 4. vay; and having examined it, I returned to Chica-bayli-caray. The Appearance of the counroad passes through a valley surrounded by low hills, and about half tryway there is a fortified village. At the bottom of the hill on which

XIX. May 4. A Jutram of

Hanumanta.

CHAPTER the mine is, there is a plain of a very good soil, which would be the most proper place of residence for the smelters.

> On the road, I met with an image of Hanumanta, going on an annual visit that he makes to his master at a temple called Raméswara. From the neighbouring villages he was attended by all the better sort of inhabitants, male and female, young and old; the Sivabhactars excepted, who abominate both this idol and that of his master Vishnu. The people composing the train of the god were very irregular and disorderly; but they had collected together a number of flags, and insignia of honour, with every thing that could be found in the country capable of making a noise. The men who carried the idol said, that the god would rest himself at a Mandapum near Raméswara, and allow his followers to assemble, and form themselves into some order; after which he would visit the image of Ráma; and, having returned to the Mandapam, he would sit in state, while for his amusement the people played before this building. The Bráhmans would then sell them some victuals, which were consecrated by having been dressed in the temple, and offered to the god with the proper incantations (Mantrams). Having feasted on these, the image would return to his own temple, attended as on his outset. This is what is called a Jatram; and had the image been that of one of the great gods, it would have been carried in a Rath, or chariot; but for Hanumanta a ditter is sufficient.

Mine at Cudera Canavay.

Cudera Canavay, or the horse-hill, is a hummock about a hundred and fifty feet in perpendicular height. The north end is steepest, the slope toward the south being gentle. The east and west sides also are pretty steep. The natives say, that Doray-guda is about ten cosses to the S.E. and that there is a continued ridge of low hills extending the whole way between the two mines; but none of them contain ore.

The surface of Cudera Canavay is smooth, and is not interrupted by rocks. The soil is a poor red earth. I saw only one lump of

hamatites; and that, when compared with the fine masses lying CHAPTER on the surface of Doray-guda, is very poor, and ill-formed. The whole extent of the hill is not great, and the miners have contented May 4. themselves with digging the ore from the surface of the hill near its summit. No shaft nor pit having been made, I cannot form any estimate of the quantity of ore remaining. The mine appears to be much richer than that of Doray; for the quantity of barren stone intermixed with the ore is very small. This barren stone resembles the ore very much; and, no doubt, could the natives extract it, contains much iron. The specimen which I have brought away, has concentric layers somewhat like a log of wood. The superficial earth in most places is not above a foot thick. On digging into it, the miner comes to a mixture of ochres, earth, and ore, in a tabular form. This mixture sometimes extends in depth so far as has been wrought, which no where, that I saw, exceeded five or six feet. In other places the miner meets with large masses of ore, consisting of a number of plates united together like schistus. This by the miners is called black iron-stone. These masses have a tendency to divide into rhomboidal fragments. In other places, the ore is found in a number of flat pieces, divided by fissures into parallelograms, perhaps three inches long, two broad, and one thick. These fragments are placed in layers contiguous to one another; but they are separated by the slightest force, the fissures being filled up with reddish ochre. By the workmen this is called red-ore; and because it is taken out of the mine with the least trouble, it is most esteemed. All the kinds, when broken to small pieces, and rendered proper for the furnace, are quite the same. The manner of working is very simple. The miner forms a cut with a perpendicular surface, and throws all the rubbish down the declivity. He then continues cutting down from the hill, with his perpendicular surface, two or three feet in height. He works with a pick-ax, and cuts promiscuously through earth, stones, and ore. Having brought down a sufficient quantity, he rubs the fragments; and, having picked out the smaller pieces of ore,





CHAPTER he throws down the hill all the earth, ochres, barren stone, and larger masses of ore; for the trouble of breaking any of these into lumps the size of the fist, is greater than that of cutting down more from the hill. I observed nothing like strata in the mine, and look upon the present shape assumed by the ore, as of very recent date. From the rubbish thrown down by former miners, which consists in a great measure of ferrugineous particles, these have, I imagine, united into their present form; and the layers may be often observed intermixed with the roots of vegetables. Indeed, the process is probably now regularly going on; and until the hill be entirely consumed, the mine may be continued to be wrought in the same manner as it is at present.

Strata near the mine.

On the N.E. side of the hill, from which I ascended, the strata are in general vertical, and run from S. easterly to N. westerly. They are of quartz blended with hornblende, forming a hard, very tough, and sonorous stone, intersected with fissures, but free from venigenous matters, and having a slaty structure, with plates from an inch to a foot in thickness. In other places, this stone is not vertical, but has only a dip toward the east. In this I frequently observed the quartz and hornblende disposed in alternate layers; that is to say, certain alternate thin portions of the quartz were less impregnated with the hornblende than those that intervened. From the disposition of these, the stone looked as if at one time it had been fluid, and had then undergone an undulating motion; for the different coloured portions were disposed somewhat like the colours on marbled paper, or like the fibres in a knot of timber. To give a proper idea of this would require a specimen ten feet in diameter; but even in the specimen which I brought away, it is observable, although that has suffered a considerable decay. I had no means of breaking a specimen from the centre of the rock.

Here I also observed a rock of a similar nature, but divided into rhomboidal fragments by wide fissures, some of which were empty, and others filled with veins of fat quartz, which must therefore be of later origin. This resembled the rock described in the seventh CHAPTER chapter of my Journal, Vol. II. p. 43, at Malaiswara Pagoda, near Madana Mada, which is about eight cosses from hence toward the May 4. S.E. There, however, the veins of quartz formed a complete network, involving the fragments of the original stone, which contained little or no hornblende.

5th May. - I went to Muteodu, distant three cosses. On the way May 5. I passed through three little vallies, containing a good deal of rice- Appearance of the ground, with plantations of coco and betel nut palms. These seemed country. to be very ruinous. In the first valley I passed a large fortified village, named Cagala Cutty, which on each side had a fine tank. Where I crossed the second valley, there were also two fine tanks, that supplied the rice-grounds of thirty villages, among which the most distinguished was called Lacky hully. These villages having been laid waste, the valley has since become so infested by tigers, that the few remaining inhabitants are daily deserting it. The third valley is the smallest.

Muteodu is situated in a valley similar to the others, but much Irrigation. wider. Near it is a fine reservoir, which however at a moderate expense might be greatly improved. When the rainy season commences early, this tank supplies water for two crops of rice in the year, and never fails to afford a supply for one crop. The farmers do not commence cultivation until the Tank is full, as then they are secure from all accidents. The Vedawáti is distant one coss to the west. Its banks, according to the natives, afford many places where dams might beformed to great advantage. At a place called Mari Canavay, they say, that by building a mound between two hills 500 yards distant, an immense reservoir might be formed, which would convert a large proportion of the Heriuru district (Taluc) into rice-grounds. It would, however, inundate the present situation of many villages. At Cangundy, in the Garuda giri district, a dam might be constructed for 3000 Pagodas, that in three years would repay itself by the increase of revenue.

XIX.

May 5.
History of the Mutcodu Polygars.

In the reign of Krishna Ráya, a native of Lacky hully, named Ghiriuppa Nayaka, was in the service of the king at Anagundi, and was a person of extraordinary strength and courage. An elephant, having broken loose, had got into the court-house, and could not be secured, until Ghiriuppa boldly seized on him by the tusks, and, having fastened a rope to his trunk, led him to the stables. As a reward for his intrepidity, the king created Ghiriuppa Polygar of his native town Lacky hully, with villages in the neighbourhood to the annual value of 9000 Pagodas, or 3120l. 8s. 4d. His tribute was 300 Pagodas a year, and he was bound to support 700 foot soldiers. In case of war, he left 300 of these in the country for its defence. and for the maintenance of order; and he was bound to join the king's standard with 400 men, whom he commanded in person. While on this service, he received five Pagodas a day, or about 31s. 3d. for his own subsistence; and the same sum for the subsistence of his whole corps. There have been twelve Polygars of this family; and Haluppa Nayaka, the present representative, from whom I have this account, is an elderly man. He says, that the nephew of Ghiriuppa removed the seat of government to Muteodu. When the Chatrakal Polygars became powerful, those of Muteodu, who, although they wear the Linga, are of the same family, submitted to the authority of their kinsmen. Their tribute was increased to 500 Pagodas a year, and they supported the former military establishment. Haluppa married a daughter of the last Chatrakal Rájá; but although she is still living, he has no children. When he observed the power of Hyder increasing, he was induced to assist that artful chief in the first siege of Chatrakal. After that was raised, his father-in-law, justly enraged at his conduct, attacked his country. In the month Ashádha of the year Velumbi, he laid siege to Muteodu, and three days afterwards took it by assault. Having plundered the town, he carried his rebellious son-in-law to Chatrakal, where he was kept in close confinement, but without ill usage, until he was released by

Hyder, who took that city in Magha of the same year, or about the CHAPTER beginning of the year of our Lord 1778. Haluppa, although released from prison, was entirely neglected by Hyder, and never was May 5. restored to any part of his territory; a treatment that he richly merited. He retired at first to Hagalawadi; but twelve years ago he returned to Muteodu, where he occupies a hut, and lives in great poverty. His palace has in a great measure gone to ruin; but some portion of it has been lately repaired for a public office, and for the residence of the Amildar.

The fort of Muteodu never was strong: but in Haluppa's govern- Muteodu. ment it contained about 2000 houses, which are now reduced to 120.

The most remarkable thing about the place is a manufacture of Glass manuthe glass that is used for making the rings which are worn round factory. the wrists of the native women, and are called Ballay in the language of Karnata, and Bangri, or Bangadi, in that of the Mussulmans. The glass is very coarse and opaque, and much moreofit is made than is here wrought up into ornaments. Great quantities of it are bought by the Bangri-makers from the westward. It is of five colours; black, green, red, blue, and yellow: the first is in most demand.

All the materials for making the glass are found in the neighbourhood; but their value cannot be ascertained, as the glassmakers pay a rent for them, and collect them by means of their own workmen; so that they are never sold.

In the hot season, the Soulu Munnu, or soda in the form of a white Soulu Munnu, efflorescence, is found in several places near this, on the surface of or soda. sandy fields. Little of it now remains; for there have been several showers, which have washed away the greater part. For the exclusive privilege of collecting it, the glass-makers pay 48 Ca. Pagodas (141. 198. 8\frac{3}{4}d.) They make it into cakes, in the same manner as the people of Chena-pattana do; a process that I have described in the third chapter of this Journal, Vol. I. p. 150, &c. The intention of making it into these cakes is probably to free it from earthy Vol. III. 3 B

Blay 5.

CHAPTER matter; but for making glass, this is perhaps no advantage, as the earth with which it is mixed is chiefly a quartzose sand. These cakes contain at least one half of their bulk of cow-dung, and from that cause are in fact inflammable. They are prepared for making glass by being burned, and of course afford an exceedingly impure alkali. It might be procured pure by lixiviation, and filtrating it through barrows of earth, as is usually done in India with culinary salt. The only objection to this is the scarcity of fewel, although much of the evaporation might be performed by the sun.

Glass maker's furnace very bad.

The glass-maker's furnace here is rather better than that of Chena-pattana; but still it is extremely rude. The manufacturers say, that when the army of Lord Cornwallis left Seringapatam, they gathered with much pains a great number of broken bottles, which they found where he had encamped. These they thought a treasure; but, after having been at the expense of bringing the bottles to Muteodu, they found, that their furnace was not sufficiently strong to liquefy European glass. The bottles were then reduced to powder, and mixed with alkali; but these materials produced only an useless white mass. Our glass, therefore, is considered by them as useless as our cast iron; for neither of these substances are in a state upon which the fires of the natives have any effect.

Form of the furnace.

The furnaces are constructed in a high terrace, which is built against the inside of the town-wall, and are in form of a dome, or like an oven, eight feet in diameter, and about ten feet in height. The annexed section of one furnace (Plate XXXIII. Figure 81) will assist the reader to comprehend the description. The oven is not arched, but contracted above into a circular opening, about eighteen inches in diameter, by making the upper rows of stones project beyond those below them. At the bottom of the furnace, in the side opposite to the town-wall, is a small opening, through which the fewel is supplied. The crucibles are oblong, as in the figure, and would contain about 51 Winchester gallons. Having been filled with the materials, they are lowered down into the furnace by the

aperture in the top, by which also the workmen descend. They CHAPTER first place a row of the crucibles all round the furnace, with their bottoms to the wall, and their mouths sloping inwards. In this May 5. position they are secured by a bed of clay, which covers the crucibles entirely, leaving their open mouths only exposed. Above this row another is placed in a similar manner, and then a third and a fourth. The furnaces vary in size, from such as can contain fifty crucibles thus disposed, to such as can contain twice that number. The fewel consists of small sticks, which having been gathered a year are quite dry. A quantity having been put in the bottom of the furnace, the workmen ascend, and some burning coals are thrown upon the fewel. By the opening below, fresh fewel is added night and day, until the time allowed for vitrifying the materials has expired. The fire is then allowed to burn out, and the furnace to cool. Afterwards the workmen descend, and take out the crucibles, which must be broken to get at their contents.

The first operation is to make a frit, called Bilizu. The materials Frit, or Bifor this are, powdered white fat quartz 1 part; and prepared soda, or Soulu, 6 parts: the crucibles are filled with these mixed; and the fire is kept up five days. Every crucible gives a Maund of 40 Cucha Seers, or 241lb. of Bilizu.

To make the black glass: for every 40 crucibles, take prepared Black glass. soda 1 Candy, or 18 0 bushels; and powdered frit 1 Candy, or 4 12 bushels: mix them, and fill the crucibles. The crucibles having been put into the furnace, a fire is kept up for eight days and nights; so that the flame rises three cubits above the aperture at the top of the dome. Each crucible gives a Maund, or 241 pounds of glass, of a black, or rather of an intensely dark grass-green colour. It sells for 4 Fanams the Maund, or 11s.  $6\frac{1}{4}d$ . a cwt. It is evident from this, that only 2 of the materials employed are silicious earth; the remainder is the impure salt called prepared Soulu. During the operation, part of this is dissipated; and part of it forms on the surface of the glass a pure white crust, an inch in thickness. This is

CHAPT ER XIX.

used by the inhabitants for culinary salt, but in fact it is chiefly soda.

May 5. Green glass.

To make green glass: for 40 crucibles, take 1 Candaca, or 18 03 bushels of prepared Soulu; 5 Colagas, or 4 5 2 bushels of powdered frit; I Maund, or 24-1b. of the powder of an ore called Kemudu; 4 Seers, or 23-lb. of an ore called Cari-cullu; and 24 Seers, or 13-2 lb. of calcined copper reduced to powder. These materials having been mixed and put into the crucibles, these are properly disposed in the furnace, and a fire is kept up for nine days and nine nights. For the first five days the fewel is added slowly, so that the flame just rises to the aperture; and afterwards it is not necessary to occasion quite so great a heat as for the frit, or black glass. The copper is calcined by burning it, on the fire-place in the bottom of the furnace, during the whole nine days that are required to make this glass. Each crucible produces 1 Maund and 12 Seers of green glass, which sells at 6 Fanams the Maund, or 17s.  $3\frac{1}{4}d$ . a cwt. The saline crust, formed on the surface of this glass, is considered by the natives as unfit for eating,

Red glass.

To make the red glass: for every 40 crucibles, take the same quantity of prepared Soulu, and frit, together with 5 Maunds, or  $121\frac{1}{4}$ lb. of powdered Kemudu. For fifteen days and nights these must be fused with a moderate fire. Each crucible gives  $1\frac{1}{4}$  Maund of glass, which sells for 6 Fanams a Maund, or 17s.  $3\frac{1}{4}$ d. a hundred weight.

Blue glass.

To make the blue glass: for every 40 crucibles, take the same quantity of prepared soda, and powdered frit, as for the others. To these add 24 Seers, or 13 \(^{\text{o}}\_{10}\) lb. of calcined copper, and an equal quantity of powdered Cari-cullu. For fifteen days and nights these materials also must be burned, with a moderate fire. Formerly, the workmen used to put in only twelve Seers of calcined copper, with an equal quantity of a blue substance called Runga. The merchant, however, who supplied them with this article, having died, they have not for some time past procured any, and have been obliged

to make up the deficiency by a double proportion of copper. What CHAPTER the Runga is, I cannot say. The natives know that it is not blue vitriol: it may perhaps be smalts.

May 5.

To make Hulledi, or yellow glass: for every 40 crucibles, take Yellow glass. the usual quantity of prepared soda; add to it 5 Colagas, or 4 52 bushels of native soda, from which all the small stones have been picked, but which of course contains a good deal of sand. For fifteen days these are burned with a slow fire. Each crucible gives a Maund of a wax-coloured glass, which sells for four Fanams a Maund, or 11s. 6td. a cwt. When this glass is wrought up into rings (Bangris), it receives a bright yellow colour by enamelling it with the melted calces of the following metals: 5 parts of lead, and one of tin are calcined together. Then one part of Sotu, or zinc, is calcined in a separate crucible. The two calces are then mixed, and farther calcined, until they begin to adhere together. They are then powdered in a mortar. When the (Bangri) ring-maker is at work, he melts some of this powder; and, while the ring is hot, with an iron rod he applies a little of the powder to the surface of the glass.

6th May .- In the evening of the 5th there was much thunder, May 6th. with heavy squalls of wind from every quarter of the compass, and some severe showers of rain. The thunder continued all night, and the morning looked so threatening that I did not set out till after breakfast. The weather, however, has now become so cool, that I did not feel the least inconvenience from being all day in the open

I had intended going to Hosso-durga, and had sent my spare tents to that place; but, finding it necessary to look after the mines, which produce the ores called Kemodu and Cari-cullu, I was obliged to alter my plan. Neither could I get any accurate information concerning the situation of these mines; some of those even, who were employed in bringing the ore, called them two

CHAPTER XIX.
May 6.

cosses distant, while others stated their distance at three times as much.

May 6. Mine of Caricullu.

I went first in search of the Cari-cullu, and proceeded on the way by which I came yesterday, till I reached the small valley nearest Muteodu, distant from thence about \( \frac{1}{4} \) of a coss, or two miles. Here I passed a small village named Sida Gondana hully, and came to a low hill, which is called Malaya Maluppa, after a temple dedicated to Siva. This hill forms the eastern boundary of the valley, and is of no considerable height. The mine of Cari-cullu is on its ascent, and is readily discernible from a number of bluish-black stones, that lie on the surface of the ground. No excavation has been made. The Cari-cullu is found, in detached masses, on the surface, mixed with the stones. These stones are often so much tinged by the metal, as hardly to be distinguishable from it; but are known by being broken, when their stony nature appears evident. Some of them, when broken, appear internally to have undergone little change, and are evidently fat white quartz; the appearance of the internal parts of others has been so much altered, that had I not observed them in all intermediate gradations, I should never have supposed them to have been of a quartzy nature. The masses of stone are much more numerous than those of the Cari-cullu, owing probably to the quantity of the last that has been removed from the surface. Deeper in the earth it is probably found in a great proportion, but there has been no occasion to make any experiment by digging. The extent of ground which the mine occupies may be about 200 yards square. The Cari-cullu literally signifies the black stone. It is found in masses about the size of the fist, and has a very strong resemblance to the black ore of Manganese. By the usual process, however, for discovering the calx of that metal, I have not been able to obtain any; nor indeed any thing else, except a brown calx of iron. The ore however, when heated, readily gives out a considerable quantity of oxygene.

Immediately N.W. from the mine, and on the declivity of the same CHAPTER hill, is a singular stratum of rock. It has every appearance of a rock that has formed the channel of a river, being water-worn, and May 6. Strata near excavated into round pits or pots, exactly like the rocks on which a the mine. rapid stream has long acted. This is an appearance, concerning which any one, who has been accustomed to a mountainous, wellwatered country, can hardly be mistaken; yet, as the rock is situated on the declivity of a hill, and has a valley immediately below it, and parallel to its course, it is impossible, without a total change having taken place in the face of the country, that it could have formed the bottom of a river. At present there is no stream in the valley. This rock runs nearly north and south, and is quite vertical. It is a Sienite; sometimes of a homogeneous grey colour, and at other times composed of alternate grey and white layers, which last consist of the quartz and felspar entirely. These layers are of very various thicknesses, and are sometimes straight, and sometimes disposed in swirls, like a knot of timber. Although it has the appearance of having suffered much decay, this stone possesses a very high degree of toughness.

Having examined this mine, I returned almost to Muteodu, and Appearance then proceeded south to a small village, named Cadu-caray, three of the country. cosses distant. The country is not hilly, and in most places is fit for the plough; but almost the whole is waste. I saw only one village, named Chica Taycu-lawati; but I passed several small collections of huts belonging to Goalaru, or keepers of cattle. Toward the east was a range of hills, running from Chatrakal to Chica Nayakana hully. Toward the west is a level country, interspersed with a few low detached hills. On the most remarkable of these is placed Hosso-durga, or the new castle.

The soil is in general poor, and the rocky strata frequently come Strata. to view. Among these are very extensive strata of quartz, and of quartz intermixed with felspar of a white colour. Intermixed with

CHAPTER these are *strata* of white quartz, and black mica, disposed in alter-XIX. nate layers, firmly united, and forming a very hard stone.

May 6.
Budihalu
Taluc.

Cadu-caray is in Budihalu district, and is under the management of the Amildar of Muteodu, although it does not form a part of the Chatrakal principality. The Amildar, therefore, accounts to the Subadar of Chatrakal for Muteodu, and to the Dewan of Mysore for Budihalu. In the time of the kings of Anagundi the districts of Budihalu formed the territory of a Polygar, named Shirmia Nayaka, who was of the Goala cast. It was then valued at 12,000 C. Pagodas, or 3744l. 9s. 7d. a year; but of this he paid one half as tribute. After the Mussulmans had taken Sira from the Ratna-giri Polygars, and had made it the residence of a Nabob, or Subadar, they seized on Budihalu, and soon afterwards it was given in Jaghire to Ismael Mummud Khan; he transmitted it to his son of the same name; from whom it was taken by Hyder, after he had conquered Sira. Ismael Mummud Khan raised the revenue to 20,000 Pagodas a year (62401. 15s.  $11\frac{3}{4}$ ). Owing to a want of inhabitants, Purnea has reduced the revenue to 15,000 Pagodas; but were there plenty of cultivators, the former revenue, it is said, would not bear hard on them. North from Cadu-caray is a small river, that never entirely dries, and is named Mavana Canavay holay. It comes from the hills to the westward; and after filling two tanks, runs into the Vedáwati at Niruvugullu.

May 7. Mines on Doda Rashy Guda. Smelting of the orc. 7th May—I went in the morning to examine the mine of Kemodu, and another of iron, concerning which I had received intelligence on the preceding evening. The ore is smelted here in the same manner as at Chica-bayli-caray. When the process fails, a brittle porous mass is obtained, which has a greater resemblance to our cast iron than any thing that I have seen produced in India. This mass is fused in a furnace of lower power, and gives an iron softer than the common kind; and from this soft iron are usually formed the hoes, and other digging instruments of the natives.

Doda Rashy Guda, or great heap hill, which contains the mines, CHAPTER is a peak about three hundred feet in height, and a mile in length, that forms part of a ridge running nearly north and south, and lying May 7. east from Cadu-caray. Between the mine and this village is another of the hill. ridge, on the northern extremity of which is a temple dedicated to Ranga, and named Mavana Canavay, from which the rivulet so called has its source.

Appearance

As I ascended this nearest ridge, the first rock which I met was Strata. an earthy quartz, or hornstone, divided by fissures in all directions, and having some of these fissures filled with veins of white quartz. This rock is not vertical, but dips much toward the east. Further on, the common rock consists of alternate parallel layers, firmly united, of white arid quartz, and of brown iron shot quartz, or hornstone. These layers are sometimes plain, and at others disposed in swirls; and as the stone in decay, by the attrition of its longitudinal angles, has a great tendency to assume a cylindrical form, and always breaks in masses truncated at right angles to the layers, it is often found in pieces which have a strong resemblance to petrified wood. The stone does not break regularly in the direction of the layers, which are disposed in the same line with the strata. These are vertical, and run nearly north and south. I am by no means sure of the nature of the brown part of this stone. It may very possibly be hornblende overcharged with iron; and the Sienite found yesterday nearly in the direction of its strata, strongly confirms this opinion.

Between the two ridges I came to the channel of a rivulet, named Kemodu. Aladi-holay, which at present is quite dry. Heré I found the place whence the glass-makers procure the ore called Kemodu. For about three quarters of a mile the bed of the rivulet is filled with stones of a steel-grey colour. Many of these are the iron ore called Kemodu. It is in water-worn masses, from the size of a man's head downwards, and possesses the external characters of the grey ore of Manganese. When powdered, it is attracted by the magnet.

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XIX. May 7.

CHAPTER Intermixed with the Kemodu are other masses of a similar appearance, but which are useless. On breaking these, they are found to be in all intermediate stages of maturation, from the common rock before described, to almost perfect ore.

Source of the Kemodu.

On ascending the eastern bank of the rivulet, beyond the mine of Kemodu, I came to a conical peak on the eastern ridge; and observed, that all the stones on its side were stained with the steel grey of that ore. I saw none perfect on it; but on breaking the stones I found them in all stages, from the rude rock, to a state approaching to maturity. Indeed, many grains of pure Kemodu were very discernible, imbedded thickly in the substance of these stones.

Common iron

Immediately south from this, is the peak called Doda Rashy Guda, whence the iron ore which supplies the forges is procured. This ore is quite the same with the black kind at Cudera Canivay, but it is disposed in a different manner. It is imbedded in large irregular cavities of the barren stone, or matrix. This consists of plates that are separable without much difficulty, and which, I have no doubt, are the brown layers of the common stone of the hill separated by the white ones having been corroded by iron. It is, no doubt, a primeval rock; and its strata may be traced running in the direction of the meridian, and in general vertically. The ore is similarly composed of plates; and fibres of the roots of plants are found to have penetrated into the interstices; but this, I am inclined to think, has happened after the surface has been exposed by the miners. I also suppose, that the ore has once been the common stone of the hill, and has afterwards been more and more impregnated with iron by some process unknown to us; in the same manner as, I suppose, has taken place in the ore called Kemodu. various gradations from the perfect stone to the perfect ore is the circumstance that induces me to torm this opinion. A portion of the rock, having been cut down with a vertical smooth face about three feet deep, presented an appearance similar to that in

Plate XXXIII. Fig. 82. The central parts are of the ore, and CHAPTER contain the roots of plants between their plates. The upper layers are of the barren matrix. I brought away, as a specimen, the upper May 7. extremity of the ore, with part of the matrix adhering. Owing to the nature of the mine, the manner of working it is somewhat different from that used at Cudera Canivay, and the workmen are forced to dig the ore from under the caverns of the matrix. I no where saw that they had ventured in farther than ten or twelve feet; so that I cannot say, whether or not the internal parts of the hill contain any veins, or rather beds, of ore. Openings have been made in various places for about a quarter of a mile in length, which seems to be the extent of the mine.

Having examined Doda Rashy, I descended by the banks of the Fine reser-Aladi-holay, till it came opposite to the temple of Ranga, where it joins the Mavana Canavay. Here both streams pass between the hill on which the temple stands, and one placed at no great distance to the north. The opening has been filled up by a mound, which, so long as it remained entire, formed a fine reservoir that watered a hundred Candacas of rice-land. The mound has long ago been broken; and it is said, that to repair it would cost three thousand Pagodas, or 936l. 2s.  $4\frac{1}{2}d$ . As Paddy, when very cheap, sells at one Pagoda a Candaca, and as the government receives one half of the produce, which is here on an average forty seeds, even allowing that there should be only one crop in the year, the expense of rebuilding the tank would be repaid by less than two years rent.

voir in ruins.

All over the Chatrakal principality, of which Hosso-durga forms a Effects of low part, the rice crop is of little importance; the rent is no higher and high than that for dry grains, and little labour has been bestowed on irrigation. Here the rent is high, being one half, or even more, of the produce; the fields are very productive, and many excellent Tanks have been constructed. Most of these were made during the government of the Shirmia family.

May 7.
Unhealthiness of the climate.

From this ruinous Tank I went about two cosses to a fortified village, containing about forty houses, and called Doda Tayculawati. It is situated in the open country of the Budihalu district. The country is at present extremely unhealthy, even to those born in it. Almost every family has some person ill with the fever; and no less than eight persons in the house of the Amildar of Budihalu are now labouring under that disorder. The natives say, that the fever will stop immediately after the commencement of the rainy season. This year has been uncommonly unhealthy, owing to its having been unusually hot.

Wild date.

In every part of the Budihala district the wild date (Elate sylvestris) is very common, but is of little use except for fuel. The present number of inhabitants cannot consume a hundredth part of the juice that could be extracted from it. This tree might be a source of considerable advantage, could a good spirit be extracted from its Jagory, of which I think there is little doubt; but from the wretched stills of the natives this can never be expected.

May 3.
Appearance of the country.

8th May.—I went three cosses to Belluguru, and by the way passed two Tunks and villages. All the country near the road is level enough for the plough, and clear from trees; but, the army of Purseram Bow having passed this way, very little of it is cultivated. Some of the soil is rocky; a good deal is rich land; but by far the greater part is poor gravelly land; fit enough, however, for raising Huruli (Doluchos biflorus), Shamay (Panicum miliare E. M.) and other such crops.

Belluguru.

Belluguru is a small fortified village with 150 houses. It suffered less than usual from the Maruttahs, as before the invasion of Purseram its houses amounted to only two hundred. It is a part of the Garuda-giri district, which has long formed a part of the dominions of the Mysore family. Near it is a very large reservoir.

Reservoir.

Owing to the mud deposited by the water, these Tanks fill gradually at the bottom; so that once in three or four years

this mud must either be removed, or an addition must be made to CHAPTER the height of the bank; otherwise the reservoir becomes useless. The mud being an excellent manure for the neighbouring dry May 8. lands, as much of it as possible should be taken away, and spread on them. In other respects, the raising of the bank is the most advantageous manner of repairing a Tank, as it requires the least outlay of money. It offers also another advantage. If the sluice, through which the water is let out to irrigate the fields, were always raised to a level with the mud in the bottom of the Tank, as that was deposited, the extent of ground, which the Tank could irrigate, would always increase. This, it is true, would be attended with a considerable expense, and is never practised; so, in order that the plug which shuts the sluice may be kept clear, there is often a necessity of sinking a well ten or twelve feet in depth. The Tank here receives a stream forced by a dam from a rivulet, that comes from Garuda-giri, and which afterwards falls into a Tank called Belallu Samudra, which is one coss and a half N.W. from Belluguru.

In this district, and in the neighbouring one of Budihalu, all Rice-ground. the rice-ground is cultivated as sprouted-seed. The seed, the natives here say, is sown equally thick in the two districts; yet in Budihalu the land often produces sixty fold, and the ordinary crop is forty seeds; while in this district of Garuda-giri, the usual produce is twenty seeds. I measured a field, said to sow three Colagas of seed, or 2673 cubical inches. It contained 46,636 square feet. The acre, therefore, requires  $1 \frac{1}{1000}$  bushel for seed, and produces here, in an ordinary crop, almost  $23\frac{1}{4}$  bushels of roughrice; while in Budihalu it produces twice, or even three times, as much. In the course of one year, there are frequently from the same field two crops of rice. The grain in the husk is worth one Bahadery Pagoda a Candaca, or  $11 \frac{6}{100}$  pence a bushel. The produce of one crop is, therefore, worth about a guinea an acre.

9th May, -In the evening and night there was much loud May 9.

XIX. May 9. Face of the country.

CHAPTER thunder, with heavy rain from the southward, but little wind. I went four cosses to Garuda-giri, or the hill of Garuda, the eagle on which Vishnu rides. It is often pronounced in the oblique case Garudana-giri, which, by the Mussulmans, is usually corrupted to Gurruna-giri; and in a map which I received, I find it called Gurgan-droog. The country through which I passed is flat, but the soil is rather poor. Almost the whole of it, however, is capable of being cultivated; but by the Marattah invasion it has been quite depopulated, and I passed only two small villages.

History of Yagati.

At one of these villages, named Ana-giri, in the Yagati Taluc, I met the Amildar. He says, that his district produces an annual revenue of 10,000 Pagodas, or 3120l. 8s. 4d. It formerly made a part of the Garuda-giri district, and belonged to the Mysore Rájás. On the occasion of an invasion by the Nizam, Hunnama Nayaka, Polygar of Terri-caray, rendered such assistance to the (Curtur) sovereign of Mysore, that he was rewarded by a cession of the Yagati Taluc, Hyder deprived the Terri-caray family of all their territories. ordered them to reside at Manzúr-ábád, and allowed them an annual pension of 2000 Pagodas, or 625l. 1s. 8d. They were by cast Baydaru, but of a different family from the Rájás of Chatrakal. During the reign of the Sultan, the present heir of the family enjoyed his pension. On the fall of Seringapatam he joined Dundia, and hanged three or four Bráhmans, who were his servants, and who refused to follow him in his mad enterprise. He afterwards repented, and, having submitted, was kept in irons for some time at Seringapatam. About two months ago, the Amildar says, this Polygar was liberated, and received the grant of a pension of thirty Pagodas a month.

Garuda-giri.

Garuda-giri at one time belonged to the Ikeri Polygars, from whom it was conquered by the family of Mysore. These built the Durga, or fort, which occupies the highest part of a short abrupt ridge, that by a strong imagination has been fancied to resemble one of the rude images of Garuda. The suburb (Petta) stands at

the foot of the hill, and is fortified. During the government of CHAPTER Tippoo, it was the nominal capital (Kasba) of an Asoph; but that officer resided at Chica-Nayakana-hully, which is twelve cosses distant. Garuda-giri never was a large place, and at present contains only about forty houses. The Amildar is a Sivabhactar; as are also, according to him, by far the greater part of the neighbouring people: but in the public accompts, to be hereafter mentioned, very few of this sect are reported.

May 9.

In all the country between this and Seringapatam, Ragy is the most common crop; and the cultivation of that grain prevails all the way towards Baba Bodeens hills, where the rice and betel-nut country begins. The rice-ground, according to the Amildar, produces on an average twenty fold.

In this part of the country there are many sheep, but few black Shepherds. cattle. The shepherds and their families live with their flocks. The men wrap themselves in a blanket, and sleep in the open air among the sheep. The women and children sleep under hemispherical baskets, about six feet in diameter, and wrought with leaves so as to turn the rain. At one side a small hole is left open, through which the poor creatures can creep, and this is always turned to leeward, there being nothing to cover it. I have not in any other country seen a habitation so very wretched.

Throughout the Chatrakal principality the roofs of the houses are Houses. terraced with mud, and this custom also commonly prevails over the eastern parts of Mysore, Sira, and Colar; but the fashion here is pent roofs. Although in every part of Karnata the materials for building huts are excellent, yet those with pent, and those with terraced roofs, look equally mean and rugged.

In a hill lying south from Garuda-giri, and called Hiricul, there Lac and are found both sandal-wood and lac. Owing to the increasing sandal. number of tigers, the collecting of this last has of late been given up.

10th May.- I went two long cosses to Banawara. The country May 10. May 10.
Appearance of the country.

through which I passed is scarcely any where too steep for the plough; but it is almost entirely waste, and much of it is overgrown with the wild date, which at present is only used for firewood. The chief cause of the desolation which is here visible is said to be the rapacity of the Marattahs. Within the memory of man this country has suffered two inroads, one about thirty years ago by Trumbaca Mana, and another by Purseram Bow.

Banawara.

Banawara is one of the best mud forts that I have seen; and, owing to its strength, it escaped from the fangs of the Marattahs. It is situated in a fine open country, on the side of a large Tank which is at present dry. 'The people are very subject to fevers, which cannot be attributed to the black clay; for the soil is dry and sandy. It formerly belonged to Hari Hara Swameswara Raya, a Polygar descended from Belalla Ráyá, and of course of a most ancient family of the Jain religion. The ruins of their palace still occupy a considerable space, and are surrounded by a very high wall, which even now is in good repair. The buildings within have been mean, and are almost entirely ruinous. This family was destroyed by Ballu Khan, a Mussulman chief. He was expelled by a Bayda named Timuppa Nayaka; he again was driven out by the Shivabhactars of Ikeri; and from them the place was taken by Chica Deva Ráya Wodear of Mysore, the 7th in ascent from the Curtur whom Hyder confined. On that chief's getting possession of the government, Banawara contained about 2000 houses; but most of the inhabitants, with those of five other towns, were removed to occupy a new city, named Naga-puri.

Naga-puri.

In order, probably, to secure these people and their effects from the Marattahs, Hyder built the fort of Naga puri in a small valley, which is about half a coss in extent each way, and is surrounded on all sides by low hills, like those of Chatrahal. These hills appear to extend about two cosses from east to west, and three cosses from north to south. Naga-puri, which stood three cosses from Banawara, was found to be excessively unhealthy; and its situation did not

prevent it from being plundered by the Marattahs. Hyder, there- CHAPTER fore, eighteen months after having built it, allowed the people to return to their former abodes.

May 10.

Tippoo bestowed some attention in encouraging the people of Ba-Banawara. On the fall of Seringapatam, Hunnama Nayaka, an uncle of the Polygar of Terri-caray, seized on the fort, and kept possession for two months and a half. On the approach of a detachment of British troops, his followers dispersed; and the newly appointed Amildar, who was in the neighbourhood with 300 Candashara, seized him, and hung him up directly. At present, Banawara contains 500 houses, many of which are inhabited by Bráhmans.

The cultivators being scarce, the officers of revenue fall on a Lands forced curious plan of increasing the appearance of cultivation, and of thus cultivators. getting credit for having their districts in good condition. This is a very common practice, I am told, in every part of the south of India, and is as follows. In place of letting at the full rent, to the few inhabitants that remain, as much land as they can cultivate, the Amildars give no man more than what his family originally possessed; but, when he has finished the cultivation of his paternal farm, the tenant is forced to plough and sow as much of the waste fields as he can; and, in order to increase the quantity, no money rent is demanded; but the government is contented with a share of the produce, which is very small, the cultivation having been performed in a very imperfect manner.

Some of the rice-lands here are let for a money rent, and some Division of by a division of crops, which the Amildars allege is much the best crops. mode of assessment in a country where the quantity of rain is so uncertain. If the rains do not come, the tenant cannot pay his rent; and if they come in abundance, it is but fair, that the government should reap a part of the benefit. This reasoning is specious; but the division of crops, except under the immediate inspection of a small proprietor, gives such opening to fraud, that it ought to be utterly discarded. For the uncertainty of the seasons an easy

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May 10.

remedy occurs. As, before the cultivation commences, it is exactly known, what extent of ground the water in the *Tank* will irrigate, those persons, in case of a scarcity of rain, may be exempted from rent, who cannot cultivate their fields; and there is no occasion for any favour being shown to those who can get a supply of water.

Rice-land.

In this district (Taluc) good rice-land lets at twenty Bahadury Pagodas a Candaca, which the cultivators say is equal to the value of one half of the grain produced; for they acknowledge, that this ground produces forty fold, and value each Candaca at one Pagoda. This, however, is a low valuation; for the Candaca here contains 24,480 cubical inches; so that at this rate the bushel of rough rice would cost rather under  $8\frac{1}{2}d$ . The produce of the soil here, and in the Budihalu district, is acknowledged to be nearly the same; while in the intermediate district of Garudagiri, the people acknowledge only half the quantity. The people of Banawara say, that their neighbours did not impose upon me; but that their soil is actually inferior. I measured a plot, which was said to require a Colaga of seed, and found that it contained 23,255 square feet. At this rate, the acre will require for seed 1 0 6 7 bushel nearly, which agrees very well with the measurement at Belluguru. The acre here produces 42 - bushels of rough rice, and pays 15s. 1d. of rent, which is reckoned the value of one half of the grain produced; but this is valued by at least one fourth too little.

Tobacco.

In the neighbouring districts of Garuda-giri, Banawara, Caduru, Hárana-hully, Honawully, and Chin'-ráya-pattana, the cultivation of tobacco is very considerable. It is exported in large quantities to all the countries toward the north and west. It is sown in the dry field, cultivated for Ragy and other similar grains, of which a crop must intervene between every two crops of tobacco. When the season proves very wet, it cannot be cultivated, and it requires a good Ragy soil. A few small stones do no harm, but it will not grow on

the hard soil called Darray; and, in fact, the soil of the first quality CHAPTER is that usually employed, though sometimes the tobacco is planted on the best fields of the second quality. In the three months following May 10. the vernal equinox, the field ought, if possible, to be ploughed ten times; but some of these ploughings are often neglected. After the 4th or 5th time, sheep and cattle must for some nights be kept on the field for manure. During the last fifteen days of the second month after midsummer, small holes are made throughout the field. They are formed with the hand, and disposed in rows distant from each other 11 cubit; and in every hole a young tobacco plant is set. This being the rainy season, the tobacco requires no watering, unless during the first ten days from its having been transplanted there should happen to be two succesive fair days. In this case, on the second fair day, water must be given with a pot. On the 15th day a little dung is put into each hole, and the field is hoed with the Cuntay. Every fourth or fifth day, until the tobacco is cut, this is repeated, so as to keep the soil open and well pulverized. At the end of a month and a half, the top shoots of the plants are pinched off, and every eight or ten days this is repeated; so that six or seven leaves only are permitted to remain on each stem. In the month preceding the shortest day, it is fit for cutting. The stems are cut about four or five inches from the ground, and are then split lengthwise; so that each portion has three or four leaves. These half stems are strung upon a line, which is passed through their root ends; and then for twenty days they are spread out to the sun and air. Every third day they are turned, and they must be covered with mats should there happen to be rain; but at this season that seldom comes. The tobacco is then taken into the house, put into a heap, and turned four or five times, with an interval of three days between each time. It is then fit for sale, and by the merchants is made up into bundles, which include the stems. It is sold by weight; and on an average the farmer gets one Sultanu

May 10.

CHAPTER Pagoda for every four Maunds, each containing 40 Seers of 24 Rupees weight. This is at the rate of very nearly a penny a pound, being 9s.  $3\frac{1}{2}d$ , a hundred weight. In order to prepare the seedlings. a plot of ground must be dug in the month which precedes the longest day. It must be then cleared from stones, and separated by little banks into squares for watering, in the same manner as in this country is done to kitchen gardens. The tobacco seed is then mixed with dung, and sown in the squares, which are smoothed with the hand, sprinkled with water, and then covered with branches of the wild date. Every third day it must be watered. On the 8th day the plants come up, and then the palm branches must be removed. If the plants be wanted soon, they ought to have more dung, and to be kept clear from weeds. With this management, they are fit for transplanting in from a month to six weeks. If they are not wanted for two months, or ten weeks, the second dunging is omitted, and the growth of the plants is checked by giving them no water for eight days after they come up.

Value of land cultivated for tobacco.

A Wocula of Ragy land plants 4000 tobacco stems, and in a good crop produces 16 Maunds, worth four Sultany Pagodas. This ground would sow one Colaga of Ragy, and produce two Candacas, or forty fold, worth 2 Pagodas. The Colaga or Wocula-land, of the first quality used for tobacco, pays a tax of one Pagoda; of the 2d quality it pays 4 of a Pagoda; of the 3d, or worst quality, it pays half a Pagoda. I measured a field said to require 1\frac{1}{2} Colaga of Ragy for seed, and found it to contain 15,000 square feet. The Wocula land, therefore, should contain 100,000 square feet; but, if a Wocula plants 4000 tobacco stems at 1½ cubit distance, which I found to be the actual thickness, more than one fourth of this extent cannot be allowed for it. The number of 4000 plants, that can be put in a Wocula of land, was afterwards confirmed to me at Jamagullu. I am quite uncertain, however, whether the actual measurement, or a calculation founded on the number of plants, ought to be preferred. By the former, the acre of the first quality of land would pay a

little more than 3s. 6d. as land tax, and would produce 169 lb. of CHAPTER dried tobacco, worth 14s.  $0\frac{1}{3}d$ ; or it would sow almost two gallons of Ragy seed, and produce almost ten bushels, worth 7s.  $0\frac{1}{4}d$ . On the May 10. other supposition, the rent, seed, and produce, would be four times as great; but that would render this land almost as valuable as rice ground, which cannot be the case.

11th May .- I went three long cosses to Jamagullu. The country May 11 is rather more broken than that through which I have come for Appearance of the the last two days, and is equally deserted. The wild date has even country. overgrown much of the rice-land. Jamagullu at present contains about eighty houses, and has a fort. Before the invasion of Triumbaca Mama, it was a large place, but has never since recovered.

Here is a temple dedicated to Narasingha, and built entirely of Temple built Balapum, or potstone. It is highly ornamented after the Hindu by Sholun Raya.

fashion, and on the outside every part of its walls is covered with small images in full relievo. Both the general structure of the fabric, and the execution of the component figures, are utterly destitute of either grandeur or elegance; indeed, I have not yet had the good fortune to meet with a Hindu image that was tolerable. This temple is said to have been built by Sholun Raya, and the architect that he employed was named Jacanachery. This prince lived about a thousand years ago; and having killed a Bráhman, in order to wash away his sin, he employed twenty years in travelling between Kási and Raméswara, and in rebuilding temples. The one here entirely resembles in its style the others that I have seen which are attributed to the repentance of this personage. It has an inscription on stone, but that has been defaced. The annual revenues formerly belonging to the temple amounted to 250 Ikeri Pagodas (1001. 6s.  $4\frac{1}{2}d$ .). These were entirely removed by the Sultan. Purnea allows it 50 Canter' Ráya Pagodas a year in money, or 15l. 12s.  $0\frac{1}{2}d$ .

Many of the strata around this are of potstone. They are quite Strata of vertical, and run north and south in the usual direction of the potstone. other strata of the country. In general, the potstone breaks into

May 11.

CHAPTER small fragments, and is full of fissures; but in the neighbouring country there are many quarries, where masses of great size may be procured. It forms an excellent material for building, being very easily cut, and at the same time being excessively tough. The good kinds resemble entirely the stone at Maru-Hully, described in the eighth chapter of my Journal, Vol. II. p. 146; and, in fact, are somewhat between a hornblende and a potstone.

Climate and

For the two last nights there has been much thunder, but no rain. To-night there was both thunder and very heavy rain. The soil here is very fertile; for the farmers acknowledge 50 fold to be the usual crop of both Ragy and rice, that have been sown on good ground properly cultivated. From what I have stated at Banawara, the produce by the acre, at this rate, may be easily estimated.

Bull Rajas.

The fort of Jamagullu was built by a Baydaru Polygar, named Eijuru Vencatuppa Nayaka. His family were related to the Polygars of Raya-durga, and south and west from hence possessed very considerable territories. Jamagullu was taken from them by the Mysore family, who annexed it to Banawara, under which it has ever since continued. In the reign of the Sultan, the descendants of Eijuru Vencatuppa had no lands, but still retained the title of Bull Rajas, and had an annual pension of 5000 Pagodas (1560l. 3s. 91d.). On the fall of Seringapatam, Kristuppa Nayaka, the heir of the family, seized on Manzúr-ábád, Bailuru, and other parts of his ancestors dominions, and has made an obstinate struggle to retain them. In this he has had little success, and he has lately been forced to retire to the almost inaccessible forests near the Ghats.

May 12. Weather.

12th May .- I went to Hullybedu, a stage of about 10 miles, but it is called only two cosses. By the last night's rain the rivulets were swollen, and the natives consider the rainy season as commenced; but for the first two months, showers once only in four or five days are expected. On this day's route much of the soil is good, but the country is quite deserted. By the way I observed some small hills, consisting entirely of calcarious tufa, mixed with a little earth. Hullybedu, at present, is a small mud fort, with a suburb (Petta)

containing about eighty houses, and abounding with beggars. It CHAPTER stands on the side of a large Tank, that waters a great deal of fine rice-ground, much of which is planted with sugar-cane, and some May 12. with palm gardens. This Tank was formerly in the centre of a great city, which was named Dorasamudra, and was the residence of several of the Belalla Ráyas, who once reigned over a great part of the peninsula of India. According to the natives, the walls of this city may be traced, extending three cosses in circumference; and the site of the palace is shown, and is readily distinguishable by having been placed in an inner fort, or citadel.

The Belallu family having been originally Jain, some traces of Jain, that religion still remain. There are here several people of that persuasion; and within a common inclosure there are three of the temples called Busties. Here are three inscriptions; one defaced, and two legible. I had the latter copied, and left the copies that they might be written in a fair hand; but they were not forwarded, according to promise.

The most remarkable building at Hullybedu is a temple of Siva Fine temple erected by Vishnu Verdana Ráya. From an inscription on the wall, this must have been before the year of Sal. 1203, or A. D. 1282. A copy of this inscription has been delivered to the Bengal government. This temple is built of similar materials, and in a similar style of architecture, with that at Jamagullu; but is larger, and more crowded with ornaments. Its walls contain a very ample delineation of Hindu mythology; which, in the representation of human or animal forms, is as destitute of elegance as usual; but some of the foliages possess great neatness, as may be seen by a drawing made of part of one, and given in Plate XXVII. figure 83. The temple has long been without a Pújári, or public worship, and has gone so far to decay, that it would be repaired with great difficulty. This is a pity, as it much exceeds any Hindu building that I have elsewhere seen.

Before the temple are placed two images of the Baswa, or bull of Fine stones. Siva. The one is of Balapum, or the potstone impregnated with

CHAPTER XIX. May 12. hornblende, of which the temple is built, and which does not admit of a marble polish. This stone, which as usual represents the bull in a lying posture, is sixteen feet long, ten feet high, and seven feet broad. The other image is not quite so large; but its materials are finer, and admit of a marble polish. It seems also to be a potstone, or perhaps a tale impregnated with hornblende, and contains small irregular veins of a green shining matter. Its general colour is black, with a tinge of green. Some of the pillars in the inner part of the temple are of the same fine black hornblende that is used in Hyder's monument, and are highly polished. Some of them reflect objects double, which by the natives is looked upon as miraculous. These temples having been built when this was the seat of empire, and the inhabitants for many centuries having had no occasion for such costly materials in their buildings, the knowlege of the quarries from which they were supplied has been lost; and the natives believe that the stones were brought from Kási, on the banks of the Ganges.

Rock called Caricullu.

A very common rock here is called by the natives the black-stone (Caricullu). It seems to be a hornblende porphyry; but the basis, having a slight degree of transparency, probably consists of an intimate union of hornstone, or quartz, with hornblende. It is black, with a greenish tinge, and greasy appearance, and contains white felspar in pieces of various sizes. It sometimes also contains veins of quartz, and on that account might perhaps be called a Sienite. It does not cut well for fine buildings; but breaks into quadrangular masses, which, from their being excessively tough and durable, make excellent rough work. For the same reason it is frequently hollowed out into the mortars of oil mills.

May 13.
Appearance of the country.

13th May.—I went three cosses to Bailuru. The country is very bare; some of it is hilly, and full of stones; much of it is a good Ragy soil; but very little is cultivated. I crossed a small river called the Bhadri, which comes from Baba Bodeens hills, and runs into the Cavery. It never dries entirely, and receives the water

from all the country south from Banawara. To the west of the CHAPTER Bhadri river the country is called Malayar, or the hills; while that on the eastern side is called Meidán, or the open country. I remained May 13. at Bailuru, taking an account of the cultivation there, as an example of that which prevails in the hilly region whence the Cavery has its sources.

The nature of the Malayar country resembles that of the sea coast Country below the western Ghats, in so far as rice is the principal object of called Manager. cultivation, and as little attention is paid to the rearing of dry grains upon which the people to the north and west of the Bhadri chiefly subsist. In the Malayar country, however, there are no pepper gardens, nor plantations of betel-nut palms, for which it seems as well fitted as the Nagara principality. It is said entirely to resemble the Codagu Ráyáda, or Coorg country. At Bailuru there is no brickstone, and the country abounds with the calcareous tufa. The hills are overgrown with wood, and are considered as quite useless. The vallies only are cultivated.

On the Bhadri there was formerly a dam, the water from which Rice-ground. irrigated forty Candacas of rice-land; but this has gone to decay, and to repair it would require two or three thousand Pagodas, or about ten years rent. The rains in all the Malayar country are very heavy, and in general bring one crop of rice to maturity; but unless there be small Tanks to give a supply for any intervals of fair weather that may occasionally happen, the crops are rather uncertain. This circumstance occasions the rice-lands to be divided into two kinds; the one, called Niravery, is supplied from Tanks; and the other, called Mackey, depends entirely on the rains.

Each kind of rice-ground, according to its soil, is divided into Rent and three qualities. The extent is estimated by what are called Can-quantity of seed. dacas; but these vary much in size, and in general require much more seed than one Candaça. A Candaça of Mackey is always larger than one of Niravery; and the rent not only depends on the nature of the soil, but on the extent of the Candaca. The Candaca of grain,

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## A JOURNEY FROM MADRAS THROUGH

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it must be observed, contains 4095 cubical inches, and consists of twenty Colagas, each divided into nine Cucha Seers. I measured a field of rich Mackey land, which was called a Candaca, and required thirty Colagas of rice-seed. It not only produced annually a crop of rice, but one also of Callay (Cicer arietinum); on which account it paid a rent of three Ikeri Pagodas a year, which is the highest rate in this district (Taluc). I found that it measured 64932 square feet. At this rate, an acre would sow 1 155 bushel, and pay 16s. 21d. as rent. I then measured a field of Niravery, of a very poor soil, but well supplied with water. It is said to require thirtythree Colagas of seed, and its rent is also three Pagodas. In order to make up for the poverty of soil, a quantity of dry-field is thrown into the field, and pays no additional rent. This dry-field sows four Seers of Ragy, (Cynosurus corocanus), and two of Huts' Ellu (Verbesina sativa, Roxb: MSS.). I found, that the Niravery contained 28566 square feet, and the Ragy ground 7100 square feet. The rent upon the acre, including both kinds of ground, is therefore 11. 9s.  $6\frac{1}{2}d$ . The seed of rice is at the rate of  $4\frac{792}{1000}$  bushels an acre; that of Ragy at the rate of rather more than one peck  $1\frac{17}{100}$ ; and that of Huts' Ellu at the rate of about half a peck an acre. In the following table will be seen the kinds of rice cultivated here.

Kind.	Land.	Cultivation.	Quality.	Months required to ripen.
Hassoday	Niravery	Dry-seed	Large	8
Chipiga	do.	do.	do.	7
Kiaseri	do.	do.	do.	7
Cumbara Kiaseri		14.00	do.	7
Balla Mulligay	Niravery		Middle sized	
Sana Butta Bily	do.	do.	Small	8
Do. Kempu	do.	100	do.	7
Modara		All 3 methods	Coarse	7
Kirwiunna	Niravery	Dry-seed transplanted	do.	8
Putta Butta	do.	Dry and sprouted-seed	Small	8

On Niravery, land, or that which has a supply of water from CHAPTER Tanks, the rices most commonly cultivated are Kiriwunna and Hassoday. All the three kinds of cultivation are in use; but in May 13. ordinary seasons the dry-seed is by far the most prevalent. In land. extraordinary wet seasons a good deal is transplanted, and some is sown sprouted.

The cultivation of the dry-seed is conducted as follows. In the Dry-seed.

month following the winter solstice, the ploughing commences, and in the course of two months the operation is eight times repeated. The little banks, inclosing the plots for confining the water, are then repaired, and the field is manured. In the month preceding the vernal equinox, after a shower of rain, the clods are smoothed with the Ada, or Gydday Maram, which is the same implement with that which at Nagara is called Noli, Plate XXIX. Figure 79. Eight days afterwards the field is again ploughed, and again smoothed with the Ada. The seed is sown by the drill, according as the rainy season commences, during the two months and a half which follow the vernal equinox. It is then covered by the Ada. On the 23d day after having been sown, the field is hoed with the Edday Cuntay, Plate XXVIII. Figure 76, and this is repeated twice, with an interval of four days between each time. The field is then inundated by confining the water, and the Cuntay is drawn a 4th time in the mud. On the day following, the soil is smoothed with the Ada. Eight days afterwards, the field is drained until the weeds can be removed by the hand. After a month or six weeks, this must be repeated. The rice is cut with the straw, and trodden out by oxen. It is sometimes sold by the cultivators in the husk, and sometimes after having been cleaned, eight parts of. which are equal in value to twenty parts in the husk. The farmers estimate their rough rice at six Candacas for a Bahadury Pagoda, or their rice at 30 Seers for the Rupee; but in the market (Bazar) none is sold lower than 23 Scers for a Rupee. The wholesale price for rough-rice, therefore, is a small fraction less than  $8\frac{1}{2}d$ . and

May 13.

CHAPTER for rice a small fraction more than 1s. 9d. a bushel. This, however, is only the price for which necessitous persons sell it at harvesttime; the average value is probably a fifth part more. farmers say, that on a good soil the crop is about 25 Candacas on a Candaca land, which, according to my measurement, is about 725 bushels an acre, worth 2l. 11s.  $9\frac{1}{2}d$ . deduct for seed 3s.  $4\frac{1}{2}d$ . and for rent 11. 9s.  $6\frac{1}{2}d$ . and there remain to the tenants, for stock and labour, 18s. 21d.

Advantage of

Nothing can better show the great error into which the Hindu sowing thick, farmers fall, in sowing too little seed; a practice which seems to have arisen from their usual poverty, and from the coustant cropping of their land, which, without plentiful irrigation, or rich manuring, is thereby too much exhausted to produce a full crop. The farmers here, probably, under-rate their produce as much as their neighbours; but as they sow their seed almost four times as thick, they have from the same extent of land at least three times as much produce. It is true, that here they speak of a small increase of seventeen or eighteen fold, while in other places they talk largely of an increase of forty, and even sixty seeds; but here an acre produces for the support of man from sixty-five to seventy bushels of rough rice; while in the others from twenty to twentyfour may be considered as a usual crop.

Transplanted crop.

When the rains are heavy, a good deal of rice is raised by transplantation. For every Candaca land, two Candacas of seed must be sown; and the produce of this, on the best land, is only twenty-one or twenty-two Candacas.

Sprouted seed.

Very little sprouted-seed is sown; but it seems to be the cultivation that would answer best. For a Candaca land fifteen Colagas of seed are sufficient, and the produce is little less than in the dryseed. The reason that the natives assign for neglecting the sprouted-seed cultivation is, that it requires the ploughing to be performed while the field has by irrigation been reduced to mud, and that their cattle are not adequate to this labour. The cattle

however, are not worse than those of the sea-coast, where the dry seed is seldom sown.

CHAPTER

On the Mackey land, or that which depends entirely on rain for Mackey land. a supply of water, the seed is always sown without preparation, and managed exactly in the same manner as on the Niravery. The produce, on the best land, is 22 Candacas from thirty Colagas sown on a Candaca field. According to my measurement, this makes the produce of the acre rather more than 28 bushels, worth 19s. 10d. deduct 1s.  $4\frac{1}{2}d$ . for seed, and 6s.  $2\frac{1}{2}d$ . for rent, and there would only remain 2s. 3d. for stock and labour; but it must be observed, that my estimate of the rent is formed from a very rich field, that produces a second crop of Callay, and that the rent of fields giving only a crop of rice is not more than half as much as what I have here stated.

The Callay, or Cicer arietinum, is sold as it ripens; so that the farmers cannot, or at least will not, say what the produce is.

The only dry crop cultivated here is Ragy mixed with Huts'Ellu. Dry-field. When the rains are scanty, these thrive very well; but the seasons are often so wet, as to destroy them all together. The whole quantity sown is very small. The ground is ploughed four times, and then manured during the month following the vernal equinox, or in the beginning of the next month. The field is then ploughed twice more. The Ragy seed is sown with the Curigy, or drill; while the Huts' Ellu is disposed in rows, by means of the Sudiky, or sharp pointed Bamboo tied to the drill. After this, the field is smoothed with a plank, and harrowed with a bunch of thorns. On the 12th day it is hoed with the Cuntay, and this is repeated four times, with intervals between every two, of from five to eight days. The produce in a good crop is said to be forty seeds of Ragy, and nine of Huts' Ellu. According to my measurement, this will make the produce of an acre  $16\frac{7}{10}$  bushels of Ragy, and  $1\frac{1}{8}$  bushel of Huts. Ellu.

The lands here, both dry and watered, are let by a fixed rent in

May 13. Tenures.

CHAPTER money, according to an old valuation. They are seldom kept separate; but a little of the dry field is thrown into the contiguous plots of rice land. In this district, the Bráhmans have lands in free gift (Enam) to the annual value of 500 Pagodas; and a Mussulman has an estate of the same nature worth 24 Pagodas. These lands may be transferred by sale. All the remainder is the property of the Government; but, if a farmer pay the full valuation, he cannot legally be turned out of his possession. Many of them, however, will not consent to give the full rent, and these may be dispossessed whenever a better tenant offers. The Niravery is valued at from two to three Bahadury Pagodas a Candaca. The Mackey, except where it is extraordinarily rich, is only valued at from 1 to  $1\frac{1}{2}$  Pagoda.

Price of \*bour.

In the Malayar there are no slaves. Most of the labour is carried on by the farmers, and their own families. Servants are hired by the year, month, or day. A man's wages when hired by the year are annually three Pagodas, a pair of sandals, a blanket, and daily a meal of ready-dressed rice; worth all together about five Pagodas, or about 21. He eats another time daily, but this is at his own expense. A servant hired by the month gets half a Pagoda, or about four shillings, without any addition. The daily hire is  $\frac{1}{3}$  of a Canter'-raya Fanam, or 21/2d. Hired servants work from eight in the morning until six in the afternoon; but half an hour's intermission is granted, to give them time to eat some ready-prepared victuals.

Stock.

Each plough requires two oxen, and one man, and can cultivate two Candacas of land. Suppose these to be of the best quality, then the rent will be six Pagodas, the man's hire five Pagodas, extra labour at seed-time and harvest three Pagodas, seed half a Pagoda: total expense, besides interest for the stock, fourteen Pagodas and a half. The produce, according to the farmers, is fifty Candacas, worth  $8\frac{1}{3}$  Pagodas. From this it is evident, either that the farmers

greatly over-rate their expenses, or under-rate the produce and CHAPTER extent of the land cultivated by one plough; and probably they do both; but what the real state is, I could not ascertain.

The only manure used here is from the dunghill, in which, with Cattle and all the cow-dung, the ashes and sweepings of the house are collected. manure. The cattle sleep the whole year in the house, but are never littered, which is a very great defect in the agriculture of a country. On the Malayar side of the Bhadri rivulet, the size of the cattle diminishes, and sheep will not thrive; and in that country neither asses nor swine are bred.

A considerable trade is carried on between Bailuru and Jamál- Commerce. ábád. The goods imported from the country below the Ghats are betel-nut, ginger, pepper, Cassia (Laurus), Cachora (Acorus), Casturi (a kind of turmeric), turmeric, and salt. The goods sent from Bailuru are tobacco, Jagory, capsicum, cummin seed, Danya, (a seed like anise), tamarinds, iron, grain, buffaloes, onions, mustard, cotton cloth and thread, and blankets (Cumlies).

I found here two men whom an officer now stationed at Arcot Cochineal. employed in rearing cochineal. They have been in this country one year, have sent to their employer fifteen Maunds, have fifteen Maunds ready for sale, and, before the insects have consumed all the Nopals (Cactus) that are near the town, they expect to have ten Maunds more. When this happens, they will carry two men's load of branches filled with the insect, and apply these to the Nopals of some other place; where they will remain until the insects breed, and consume all the plants. The Nopals have been raised by the farmers as fences round their gardens, but were sold by the officers of revenue for four Bahadury Pagodas, or about a guinea and a half. So soon as all the plants have been consumed, such of the insects as have not been collected will perish; and the Amildar says, that he will then compel the farmers to plant new hedges of the Nopal; but I suspect that few plants will be reared, unless the farmers get a large share of the profits, as indeed they ought in reason to do. The hedges

XIX. May 13.

CHAPTER will grow up in three years, when it is expected that some other person rearing the insect will come and buy the plants.

> This seems to me to be the most rational plan of any that has been hitherto proposed for rearing the cochineal in India; and to be deserving of the attention and encouragement of government. The men employed here say, that the young insects ought to be put upon the new hedges immediately after the rainy season is past. In six months they will have increased so, that they may begin to be collected; and a year more will elapse before the whole plants are consumed. During the course of this year, whenever a leaf is fully loaded, it ought to be cut, and the insects scraped from it with a small stick, and collected in a basket. While they are in this, a little boiling water is poured on them, by which they are killed. They are then well agitated in the basket, to remove the hair with which they are covered, and dried for two days in the sun, when they are fit for sale. These men say, that, all expenses included, the cochineal, thus prepared, will cost here three Madras Pagodas a Maund of forty Seers, each weighing twenty-four Rupees; which is rather less than 11d. a pound. The cochineal is of the bad kind that has lately been introduced into India, and the plant is the Cactus that is the aboriginal of the country.

History of Bailuru.

Bailuru, or Bailapuri, as it is called in the Sanskrit, is situated at a little distance from the Bhadri river, and has a good fort built of stone, and a suburb (Petta) which contains about six hundred houses.

In order to get some historical information, I assembled the Bráhmans who are proprietors of free estates (Enams); but I found them, as usual, grossly ignorant. They either could not or would not read any of the inscriptions that are at their temple; and I was obliged to employ my interpreter to get one of them copied. It contains a grant of lands from Narasingha Ráya, son of Vishnu Verdana, to Narasingha Swami, one of the incarnations of Vishnu), and is dated in the year of Sal. 1095. A copy has been given to the

Bengal government. I found among the Bráhmans a poor man who CHAPTER had no Enam, and whose poverty had sharpened his understanding: he read the inscriptions with the utmost facility, and I set him to May 14. work at them on the second morning of my stay; but I found his industry not equal to his intelligence; and in the evening, when I went to see what progress he had made, I found that he had scarcely commenced; and all the idle Brahmans of the place having asembled on the occasion, the day had been passed in conversation. I found, however, that he possessed a manuscript that had been written by his ancestors, and which, he says, contains an account, collected from the inscriptions here, of the repairing the temple of Cayshava Permal by Vishnu Verdana Ráya in the year of Salivahanam 1039; and of all the gifts made to that celebrated place of worship by the three sons of this prince. This manuscript was in a very old character; but the Bráhman's necessities induced him to follow me to the next stage, and to give me a copy, which has been presented to the government of Bengal.

The temple in its present form was built by Vishnu Verdana, after his conversion by Ráma Anuja Acháryá, of which I have given an account in the seventh chapter of this Journal, Vol. II. p. 81. It is in good repair, and is a large building, which, although inferior to those of Hully-bedu and Jamagullu, is much ornamented after the Hindu fashion.

The Bráhmans whom I had assembled say from tradition, that this country, meaning Karnata, was divided among nine brothers of the Belalla family, who were all destroyed by the Turcs, except one young man. The Mussulmans found it afterwards necessary to restore this prince to the dominions of his ancestors; and on his first accession he was called Bita Deva Rúya; but afterwards, having rebuilt the temple here, and that of Siva at Hully-bedu, he took the name of Vishnu Verdana. He sometimes resided at the one place, and sometimes at the other; but Hully-bedu seems to have been by far the largest town. He had great success against the Vol. III.

XIX. May 14.

CHAPTER Mussulmans, and expelled them entirely from all the country south from the Krishna. His son Narasingha governed quietly, and was succeeded by his son Vira Belalla, who was destroyed by a Mussulman prince that Baba Bodeen invited. His residence had been chiefly at Bellagami. The Mussulman prince is by the Bráhmans called Hussein Khan. He took up his abode in the great temple here, and was succeeded by his son Runnadulla Khan. This Mussulman was expelled by two of his Hindu officers, named Rama Ráya and Achuta Ráya, who established themselves at Anagundi. They were succeeded by their two brothers Krishna and Narasingha Ráyáru. Here these Bráhmans are jumbling together all the traditions of the country. What follows has more resemblance to probability.

The Rayaru distributed all their dominions among their servants. The ancestor of the Mysore Rájás, for instance, was the person who made the king's bed. The person who carried the Betel box was Vencatadri Nayaka, ancestor of Krishtuppa, the present Bull Rájá. The chiefs descended from Vencatadri were originally of considerable note in the country, and had three places of residence, Bailuru, Sakra-pattana, and Narasingha-pura. When driven from these by the Mysore family, they retired to the hills of Manzur-ábád, around which they possessed a territory worth annually 18,000 Pagodas, or 5616l. 13s. 4d. Hyder rendered them tributary, and the present heir was driven by Tippoo into the Marattah dominions. Five years afterwards he solicited a pardon, which was granted, and he was taken into the service on an allowance of 2000 Pagodas a year. This was afterwards increased to 5000. On the fall of Seringapatam, he demanded the restoration of his ancient family domains; which was refused, and he was offered the same allowance that he received from the Sultan. The people here think that he would be satisfied with being put on the same footing that he was in the reign of Hyder; but, as a war has commenced, he is not likely to get any thing. At first he had some success, and seized on Bailuru, but he is now cooped up in the woods of the western Ghats.

15th May.—I went three cosses to Haltoray. I first recrossed the CHAPTER Bhadri, and then proceeded through a country fine by nature, but very bare. It does not seem so destitute of cultivators as most parts May 15. through which I have lately come; but at least one half of the arable Appearance of the lands are waste. There is much rice-land. Some of the Tanks are country. large; and the crop which they irrigate is raised chiefly in the dry season, after the quantity of water which they are to collect for the season has been ascertained. A great part of the rice-land is Mackey, which is cultivated in the rainy season, without a supply from Tanks. The farmers here acknowledge forty seeds as the usual produce of good rice-lands. The dry ground is very fit for Ragy; and on the east of the Bhadri much of that grain is raised.

Near Haltoray are some fine Betel-nut gardens, the property of a Sankety kind of Sri Vaishnavam Bráhmans, called Sankety. They are all Vaidika; Bráhmans. but are not on that account exempted from gross ignorance, and they never read any thing, except accompts, or letters on business. They are originally from Dravada proper, and now speak a strange mixture of the Tamul and Karnata languages.

Having assembled these Bráhmans, they gave me the following account of their gardens.

Betel-nut plantations are found no farther west than Haltoray, and Plantations. from thence they extend all the way to Sira. As soon as the garden begins to produce, the proprietors pay one half of the nut, as rent to government, and are at the whole expense, not only of rearing the plantations, but of forming the wells and Tanks by which these are watered. The government gets no share of any other part of the produce, which consists of plantains and Betel leaf. A man may sell his garden; but if he allows it to become waste, the soil is . public property. The plantation is not allowed to die out; but, when one tree decays, a new one is planted in its stead. After the trees have grown up, they are allowed neither dung nor water: but the garden is hoed three times in the year; and once in five years the channels for carrying off superfluous water are cleared, and

May 15.

CHAPTER some fresh earth is put on the beds. When Betel leaf is reared upon the palms, the garden must be regularly watered and manured, and on that account becomes more productive. Pepper vines, it is said, have been tried here, but without success. The Bráhmans say, that in the Malayar district they have in vain tried to rear the Betel-nut palm. How this should have happened I cannot understand, as the climate there very exactly resembles that of Nagara, Perhaps the Bráhmans have neglected to shelter the young plantations from the setting sun, which in the open country, owing to its greater coolness, is not requisite. A garden of 300 bearing Arecas produces ten Maunds of boiled Betel-nut, worth one Bahadury Pagoda a Maund, or 11.17s. 21d. a cwt. To give one Maund of prepared Betel requires 4000 nuts; so that the average produce, acknowledged by the proprietors, for each tree of a bearing age, is 1331 nuts, that are worth, when boiled, 31 pence, of which one half is paid for rent. That this may be the amount received by government is very probable; but few will be inclined to credit that it really exacts the fair half of the produce.

Sandal.

Sandal-wood trees are planted in the hedges that surround these gardens. The government has the sole right of cutting and disposing of this article of commerce; but the proprietor of the garden expects for his trouble in rearing it, and with justice receives, a gratuity. The planted Sandal is here reckoned of as good a quality as that which has grown spontaneously.

Haltoray.

Haltoray is a ruinous mud fort, but it contains some good houses, which belong to the Sankety Brahmans. Most of the other houses are in ruins, and were reduced to that state by the troops of the Sultan; who, in their marches to and from Mangalore and Nagara, frequently passed this way. The discipline of this prince did not extend to prevent his troops from being rapacious, even in his own territory. In Hyder's government the people had no reason to complain of the army. Haltoray was never a large place. name is thus explained: Hal signifies milk, and Toray a stair

leading down to a Tank or river. It formerly belonged to the CHAPTER Hasina district; but when the conquests of the Mysore family extended that length, it was annexed to Bailuru. Before this family rose to power, Hásina, Gráma, Chin'-raya-pattana, and Narasingha-pura, belonged to the ancestors of Krishtuppa Nayaka, the Bull Rájá. At Haltoray are the ruins of a temple dedicated to Bira Lingu, a deity of the Curubaru. There are at it two inscriptions on stone. One of them is partly legible; and of all that could be made out in a connected form I procured a copy, which has been delivered to the government of Bengal. It is dated in the year of Sal. 1116, and in the reign of Boca Rájá, of whom I have no where else heard.

May 15.

In this vicinity robbers have for many years been very numerous. Aray, or They are the farmers in the Malayar, or hilly country to the west-robbers. ward, and are all of Marattah extraction, on which account they are by the Brahmans called Aray; for, in the Arabi or Tamul language, that is the name of a Marattah. These ruffians come in bands of from twelve to twenty men, and steal, or rob, whatever comes in their way. Murder and torture are frequently added to their other outrages. At present, this class of men have entirely given up agriculture, and have entered into the service of Krishtuppa, the Bull Rájá; nor are the troops of the Mysore Rájá able to prevent small parties of them from issuing out of the woods, and committing occasional depredations.

16th May.-I went three Sultany cosses to Hásina, which derives May 16. its name from one of the Saktis that is the village deity (Gráma Appearance of the Devata). The country through which I passed is fine Ragy land, country. but very little of it is cultivated.

In good rice-land at Hásina, twenty seeds are reckoned the usual produce. In this district, since the Marattah invasion, not above a fourth part of the former cultivators remain.

The natives say, that formerly the rains were so copious, that by Change of means of small Tanks a great part of the country could be cultivated climate.

XIX. May 16.

CHAPTER for rice. These Tanks were only sufficient to contain eight or ten days water, and to supply the fields when such short intervals of fair weather occurred. For forty years past, however, a change having taken place in the climate, no rice has been cultivated. except by means of large reservoirs. The truth of this allegation is confirmed by the number of small Tanks, the ruins of which are now visible; and by the plots of ground levelled for rice that are near these Tanks, and which are now quite waste.

Masina.

Hásina formerly stood at some distance from its present situation, toward the south; but one of the Anagundi Ráyarus, being here on a hunting party, discovered, by the usual means of the hare turning on his dogs, that the place where it now stands was male ground. He therefore built a fort on the auspicious ground; and, while he was thus employed, an image of Siva rose out of the ground, and was called Virupacshéswara, after the celebrated idol at Anagundi. A temple was of course built over the image, and it is called Siddhéswara. At this temple two inscriptions on stone remain. The one, in the reign of Achuta and Krishna Ráyaru, is dated in the year of Sal. 1454. The other is in the reign of Sedasiva Ráya, son of Achuta Ráya, and is dated in the year of Sal. 1412, but that is evidently a mistake of the copyist for 1512, the Karnata cyphers for four and five having a strong resemblance. Copies of these inscriptions also have been delivered to the government of Bengal. The place was originally in the Polyum, or feudatory estate of the ancestors of the Bull Rájá. It was taken from them by Renadulla Khan, a Pattan, whose family held it sixty years. This family of Mussulmans seems to be the same with that which the Bráhmans of Bailuru confounded with the prince who destroyed Vira Belalla Ráya. The Mussulmans were expelled by the Sivabhactars of Ikeri, who held Hásina a hundred years. The Mysore family then kept it ten years; but were obliged to restore it again to the descendants of Sedasiva, the chief of Ikeri. Thirty years afterwards, hovever, they finally annexed it to their territories, and this happened 180 years ago. The whole

of the periods in this tradition seem to be lengthened out greatly CHAPTER beyond the truth.

The fort at Hásina is by far the best that I have ever seen con- May 16. structed of mud and rough stones, and is in excellent repair. Hyder made the covered way, and a central battery, or cavalier, which serves as a citadel. In his reign the fort contained about fifteen

hundred houses, and in the suburbs (Petta) there were five hundred. At present, in both places there are only five hundred houses, of which one hundred are occupied by Bráhmans, and twenty by Jain. These have a temple of the kind called Busty, which is by far the neatest place of worship in the town. At Hásina there are

scarcely either trade or manufactures.

17th May.-I went two Sultany cosses to Grama, which signifies May 17. merely a village. It is, however, the Kasba, or capital of a Taluc Grama. (district), and is a considerable mud fort, containing about two hundred houses. It would not appear to have ever been more populous. It was not taken by Purseram Bhow, but suffered exceedingly in Triumbaca Mama's invasion. The officers of revenue say, that only one fourth part of the arable lands are waste. The rainsnever were so copious here as to admit of the cultivation of rice without large reservoirs; but the soil is abundantly good, and, according to its quality, produces from 15 to 40 seeds, both of rice and Ragy. The best Ragy land lets for eight Sultany Fanams a Colaga; which of course, at forty seeds, produces two Canducas.

· 18th May.—I went, what appeared a long stage, to Chin'-raya-pat- May 18. tana. It was called four Sultany cosses. The country is naturally Appearance of the pretty; but, like all that between Bailuru and Seringapatam, it is country. exceedingly bare, and has hardly either trees or fences. Some of it is hilly, and much of it poor land; but, to me, by far the greater part of it appears to be arable. Not above one fourth part is now cultivated. On the way, there is one considerable village. Near the road are several fine Tanks; and the quantity of rice which this district produces almost equals that of Ragy. These Tanks also

May 18. Chin'-raya-pattana,

CHAPTER supply water to several palm gardens; and a considerable quantity XIX. of sugar-cane is raised on the land that they water.

Chin'-raya-pattana signifies the city of the little prince, one of the names of Vishnu, who has a temple there. At this is an inscription on stone, of which a copy has been given to the Bengal government. It is dated in the year of Sal. 1400, in the reign of Virapacsha Maha Ráyaru.

Mysore fumily.

The fort is well built of stone and lime, and was made by a man named Baswa-rajya, in the service of Canterua Nursa Rájá Wodear. This was the first prince of the Mysore family who acquired great power. From the inscription, of which a copy has been given to the Bengal government, and which is engraved on a stone at Chin'raya-pattana, it would appear, that this Rájá had acquired this town on or before the year of Sal. 1561, or of Christ 163, and that then he acknowleged no superior. Here is also another inscription by the Mysore family, a copy of which has been delivered with the former. It is dated in the year of Sal. 1585, and in the reign of Deva Rájá Wodear, who, I believe, was the prince that extended the conquests of this family to Banawara, Garuda-giri, Budihalu, and other districts toward the north-west. Previous to the conquest by the Mysore family, Chin'-raya-pattana was a Gramam belonging to the Bráhmans of Vishnu's temple; and it was subject to a Polygar, whose name the present inhabitants do not remember, but who must have been the ancestor of the Bull Rájá. Purseram Bhow did not attempt to take it, although the garrison consisted only of 500 Candashara; but the taking of towns was not his object. With a small suburb (Petta) it contains between eight and nine hundred houses, of which sixty are inhabited by Bráhmans, and 200 by the Candashara that form the garrison. It has a weekly fair, but no considerable trade.

Cycle of sixty years.

I procured from the Bráhmans here a table of the years that compose their cycle, to which I have often referred. I annex the years of Salivahanam, and of the Christian era, in which, according to the

Bráhmans of this town, each year of the present cycle commences. CHAPTER It must, however, be observed, that very great variations take place concerning this in different parts, and also apparently in the May 18. same part at different times; which renders this chronology of cycles of very little use to the historical antiquary.

,	Year of Christ.	Year of	Cycle.	Year of Salivahanam.	Year of Christ.	Year of Cycle.	Year of Salivahanam.
	1747 1748 1749 1750 1751 1753 1754 1755 1756 1757 1758 1759 1760 1761 1762 1763 1764 1765 1766 1767	Prabava Vibava Sucla Promoduta Projotapati Anghirsa Srimoca Bava Iva Dat'hu Ishura Bohudania Primadi Vicrama Vishu Chitrabanu Suabanu Tarana Partiva Veya Servajittu Servadavi Virodu Vicrotu		1669 1670 1671 1672 1673 1674 1675 1676 1677 1678 1679 1680 1681 1682 1683 1684 1685 1686 1687 1688 1689 1690 1691	1777 1778 1779 1780 1781 1782 1783 1784 1785 1786 1787 1788 1790 1791 1792 1793 1794 1795 1796 1797 1798 1799 1800	Hevalumbi	1699 1700 1701 1702 1703 1704 1705 1706 1707 1708 1709 1710 1711 1712 1713 1714 1715 1716 1717 1718 1719 1720 1721
1	1771 1772 1773	Cara Nundina Juja		1693 1694 1695	1801 1802 1803	Durmati Dundubi Rudrodagari	1723 1724 1725
1	1774 1775 1776	Visia Munmuttu Durmutti		1696 1697 1698	1804 1805 1806	Ructachi Crodona Acchaya	1726 1727 1728

In Nepal, the year 1802 was Srimoca; whereas at Chinroj p attana it was Dundubi; a difference of 11 years.

19th May.—I went two Sultany cosses to Sravana Belgula. To May 19.

Appearance of the country appears to be almost entirely waste, although the of the country.

May 19.

CHAPTER Amildar will only allow that one fourth part of all the arable land in his district is unoccupied; but it must be always remembered, that very few of the native officers have an idea of any lands being arable, except such as are rated in public accompts. By the way I passed several fine Tanks; and the rains have already been so considerable, that one of the Tanks has been filled, so as unexpectedly to overflow, and break down its bank, which has deluged all the subjacent fields.

Sravana Belgula.

Sravana Belgula is a village containing 120 houses, and its name is said to signify here is the white Solanum; for in its neighbourhood a species of that plant grows very copiously.

Jain.

This place is celebrated, as being now the principal seat of the Jain worship, which once was so prevalent over the greater part of India. In the village is a Matam belonging to a Sannyasi, who claims a precedency over the person with whom I conversed at Carculla. This Sannyási and his chief disciples were absent when I was at Sravana Belgula. Near the village is a Tank, a very handsome work. It was built by a Jain merchant of Seringapatam. Near the village also are two rocky hills. On the one, named Indra Betta, is a temple of the kind called Busty, named Bundara; and a high place (Betta), with a colossal image of Gomuta, Ráya. This I was not able to visit, owing to an inflammation that attacked my eyes the day before, and rendered the light almost intolerable. I sent my painter and interpreter to inspect the hill. The painter gave me the accompanying sketch of the image, Plate XXXIV. Figure 84, for the accuracy of which I cannot answer. Its height is seventy feet 3 inches. Sir Arthur Wellesley, who has visited the place lately, thinks the drawing rather more clumsy than the image. He is of opinion, that the rock has been cut until nothing but the image remained. The interpreter brought copies of six inscriptions on stone, which have been given to the Bengal government. I then sent him to the other hill, named Chandra-giri, on which there are said to be fifteen Busties, or temples belonging to the Jain. There

he found many inscriptions on stone; but having no time to copy CHAPTER them, he contented himself by noting down the dates and princes reigns of those which were in best condition. A copy of these May 19. notes also has been given to the Bengal government. From two of these dates it would appear, that Vishnu Verdana Ráya continued to reign in the years of Sal. 1045 and 1050.

Having assembled the most learned Jain here, they gave me a copy of a writing on Palmira leaves, which they said was a copy of an inscription on copper belonging to the Sannyási, their Guru. It is dated in the year of the Kaliyugam 600, and in the reign of Rájá Mulla, king of the south. A copy has been delivered to the Bengal government. They say, that the Betta, or high place, with its colossal image, were made by a certain Chamunda Ráya, descended from whom were the nine Belalla Rájás. The first eight of these princes resided chiefly at Hully-bedu. The 9th lived at Tonuru, and changed his religion to become a worshipper of Vishnu. I have already given the history of his conversion, according to the Bráhmans of Tonuru. I shall now relate what the Jain say on the subject. This prince had become enamoured of a dancing girl, who, having been educated in the temples of Vishnu, had a great respect for the Bráhmans that follow the doctrines of Vyasa. This prostitute one day artfully upbraided the king, by saying that his Guru would not receive any thing out of his hands. The king insisted that the Guru respected him more; and at length it was determined, that if the Guru accepted the present of the king, then the favourite should change her religion; but if the present was rejected, that the king should receive the Sri Vaishnavam Bráhmans as his spiritual guides. On the first visit that the Guru made to court, the matter was decided. The king had lost a finger; and it being an abomination with the Jain Bráhmans to take any thing from the hands of a mutilated person, the offerings of the prince were rejected with obstinacy. The king then, according to his promise, destroyed all the Jain and their temples, and, having taken the name of Vishnu

May 19.

CHAPTER Verdana, built many temples in honour of his new god. Among these is that at Bailuru, which, according to an inscription already mentioned, was built, or repaired, in the year of Sal. 1039, which must have been after the conversion of this prince.

> The Jain of this place differ considerably from those of Tulava. They deny that the Bunts of Tulava are Sudras, and say that they are Vaisyas. They will not indeed acknowledge that any Sudras belong to their sect. A person of any of the three casts into which they are divided may become a Sunnyási, or act as a Pújári. The office of Purbhita only is exclusively in possession of the Brahmans. The Jain originally inhabited all the six Khandas of the world. This, in which we live, is Aria, or Bharata-khanda; and at present few Jain remain in it; but there are still many in two Khandas, named Puruovideha, and Aprovideha; which, they say, mean the east and west. They judge of these places from their books; for they have had no communication with the Jain there, nor can they give any geographical account of their situation. The books in highest authority among the Jain are called Sara, and they are three in number; the Gomuta, the Triloca, and the Lubda Saras. These they consider as holy, as the other Bráhmans do the Vedus. They were composed by Ady Brahma, or Adyswara, one of the perfect beings who has become a Sidaru, and who must not be confounded with the Brahma of the followers of Vyasa, who is looked upon by the Jain as a Devata only, and is the chief servant of Gomuta Ráya. Next in authority to the Saras, is a commentary on them in 24 Puranas, or books, composed about 1700 years ago by Jenaseanu Acharieru, a Sannyási.

> My eyes now became so very painful, that I could bear the light no longer. I was obliged to leave this place, therefore, with a much less perfect knowledge of its antiquities than I could have wished; and I proceeded to Seringapatam, where I continued some days in great pain, and unable to read or write. By the way I passed one night at Sindy-gutta, and another at Tonuru. At this last place I

obtained from the Brahmans an extract from a book called Guru CHAPTER Para, written by Rám' Anuja Achárya, partly in Sanskrit, and partly in the Tamul. The words of the former in the Grantha character, June 2. those of the latter in the Arabi, or vulgar letters. This extract, of Acharya which a copy has been delivered to government, contains a life of this extraordinary personage; who, according to his own account, was born in the year of Sal. 939. It is therefore certain, that both he and his convert, Vishnu Verdana, must have lived to great ages; as the king would appear, from the inscriptions above mentioned, to have been living in the year of Sal. 1050.

3d June.-My eyes having now so far recovered as to allow me June 3. to write, I resolved to set out on my return; and accordingly sent my tents a little way, intending to sleep at them, and in the morning to proceed; but in the afternoon there came a severe storm of thunder, wind, and rain, which kept me another night with my kind and hospitable friends in Seringapatam.

During my stay there, I procured the Caneh Sumareh of the Caneh Suma-Mysore Rájá's dominions. It contains a list of villages, public edifices, houses, families, ploughs; and a few other particulars, with a classification of the inhabitants in each Taluc, or district. In this, due attention is neither paid to cast nor possession; nor can great reliance be placed on the accuracy of its statements. I have, however, thrown as much as relates to the population and stock into the form of a table; as a nearer approximation to the truth than any that has been yet given.

June 3.

CHAPTER Abstract of the Caneh Sumarch of the Territories belonging to the XIX. Rájá of Mysore.

Talucs in the Chatrakal Rhyada.	Families.	Houses.	Ploughs.
Kasba Chatrakal	3824	3859	1330
Onaji	2014	2043	1338
Mola-calu-muri	1510	1533	669
Mahi-conda	2995	3080	2417
Heriuru	2305	2403	2224
Gudi-cotay	2967	3019	1690
Cânacupay	2918	3072	1915
Bhima-samudra	1186	1382	602
Tulloc - ,	1656	1645	9031
Holalu-caray	2143	2414	1528
Doddery	2297	2297	1144
Muteodu	1355	1409	994
Hosso-durga	2109	3164	5021
	29289	31320	19705 1/2

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Talucs in the Nagara Ráyada.			
Hyder Nagara Kasba	4870	4960	2696
Shiva-mogay, or Shimogay,	5368	5368	3209
Surabha	1584	1584	1055
Chandra-gupti	3119	3150	1302
Tavanundy	1354	1455	904
Ananta-para	1896	1899	1303
Honali	2963	2973	2305
Holay-honuru	3219	3219	2413
Udaguni	4452	4452	3098
Shíkári-pura	3760	3768	1931
Ikeri and Sagar	4691	4691	3365
Cumashi	3091	3585	1649
	- 0	9071	6224
China-giri and Baswa-pattana	9071		
Daniwasa and Lacky-hully	4138	4138	2582
Hari-hara	1931	2164	1011
Holalu	595	700	321
Copa	6612	6612	3944
Anawati	3544	3544	2138
Cowl-durga	6615	6615	5017
, and the second	72873	73948	46467
	12010	, 0010 1	10101

## MYSORE, CANARA, AND MALABAR.

Talucs in the Pattana Ráyada.	Families.	Houses.	Ploughs.
Mahásura Nagara	5653	5748	3352
Mahásura Ashta-grám	4527	4527	2280
Pattana Ashta-gram	5075	5075	3078
Hardena-hully	3701	3701	1592
Bucana-caray	1512	1394	1098
Bettada-pura	3252	3105	2500
Taiuru and Moguru	5054	5056	27701
Arculagodu Conanuru	4416	4337	3707
Nunjinagodu	963	960	445
Edatory	2188	2188	1678
Priya-pattana	2507	2431	1569
Goruru	2627	2612	2473
Kanyakarna-hully vulgo Cancan-hully	3728	3633	2996
Honganuru :	1186	1186	513±
Ellanduru	2652	4464	829
Callalay	3893	6265	1999
Ki-caray	2079	2114	1664
Cayragodu	4731	4932	2708
Sosila and Talacadu	4204	4324	2338
Gundal and Tirucanambi	7025	7235	3914
Capala-durga	583	604	453
Tonuru and Mail-cotay	3153	3196	2385
Mahá-ráyana-durga	2071	2071	1136
Malawally	4033	4075	2743
Cuttay Malalawady	2142	2162	1481
Cotagala	1589	1590	1050
Hegodu-devana-cotay	6251	6251	4123
Sali-grúma	1177	1261	1015
Narasingha-pura	5664	5893	3448
Maduru	4415	4415	2621
Deva-Ráya-Durga	5359	5364	4052
Budhi-cotay	2971	4347	2297
Ercalavy	2873	4432	2089
Magadi	4426	4326	3522
Sunacul	1092	1557	687
Silagutta	5566	7848	3729
Devund-hully	4449	4976	3857
Bhairawana-durga	934	934	931
Coruta-giri	2092	2182	1152
Total carried over	131813	142771	8627.5

CHAPTER XIX.
June 3.

CHAPTER
XIX.
June 3.

Pattana Ráyada continued.	Families.	Houses.	l Ploughs.
Brought over	131813	142771	86275
· Chin'-ráyan'-durga	2399	2849	1838
Chica Bala-pura	5503	8184	3652
China-pattana, vulgo Chenapatam	5069	4950	3514
Colar	7059	10209	4922
Hosso-cotay	8408	14681	5666
Madhu-giri	4803	4950	2540
Pauguda	4452	4981	1596
Ambaji-durga	5188	8472	3574
Hulicullu	923	1251	796
Nidjagul	3146	5165	2807
Nellavungul	2766	4498	2416
Gudibunda	4160	4879	2346
Anicul	2484	4147	1599
Poda Bala-pura	7166.	10187	5201
Hangaluru	11532	17506	8245
Mahá-kálí-durga	1766	2320	1497
Jangama-Cotay	2684	3909	1596
Guma-Najada-Pallia	3187	4147	2005
Malavagul	7623	10012	5990
Rama-giri	1757	1798	1905
Huliuru-durga	4803	4803	3394
Tayculum or Maluro	5988	8783	4081
Tamcuru	3855	3840	2854
Honawully	3492	2664	4545
Budihalu	1598	2181	1130
Niddygul	2598	2601	1207
Sira	6673	6593	2756
Nughi-hully	1786	1786	1416
Caduba	3992	3998	3336
Bailuru	7447	7447	5741
Gubi	1237	1319	781
Gráma	1817	1881	1609
Hebburu	2754	4131	2122
Garudana-giri	1449	1673	1103
Banawara	2483	2611	1875
Sakra-pattana	2270	2265	1526
Turiva-caray	3738	4782	2658
Hárana-hully	2598	3071	2280
Chin'-raya-pattana	3684	3994	3731
Cunda-Caray	1481	1483	1216
Carried over	89551 3	343772	198341

Pattana Ráyada continued.	Families.	Houses.	Ploughs.
Brought forward  Belluru	289551	343772	198341
	2329	3315	1919
	3604	3716	2357
	2266	2461	1697
	4268	4992	2963
	4505	4459	3484
	5832	7317	3878
	3013	3013	2317
	3536	3855	3011
	3422	3666	2333
Chica Moğuluru	4893	5175	3528
	1782	1833	1106
	2128	2638	1708
	331129	390152	228642

CHAPTER
XIX.
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June 3.

Recapitulation.  13 Talucs in Chatrakal Ráyada 19 Ditto in Nagara Ráyada 91 Ditto in Pattana Ráyada		29289 72873 331129	31320 73948 390152	19705½ 46467 228642
	Total	433291	495420	$294814\frac{1}{2}$

I also procured from my friend Captain Marriote a history of the History of Mysore Rájás, which the present Dalawai composed in the Marattah Rájás. language. A copy has been presented to the government of Bengal.

Seringapatam I found recovering apace. Some more openings for parades, and other public uses, have been made in the town; but it still continues to be a sink of nastiness. The suburb called Shahar Ganjam is increasing rapidly, and care has been taken to form the streets wide and straight. A new magistracy has just now been established, under the superintendance of Captain Symmonds, an establishment that was much wanted; for the officers of the garrison have neither time nor inclination to investigate civil affairs. Provisions are good, and, bread excepted, are cheap. Artificers have

June 3.

CHAPTER been assembled, and are now busy in preparing military stores; such as gun-carriages, leather accoutrements, tents, and cordage of the aloe leaves (Agave vivipara). This employs many people, and will turn out a great saving to the Company. Trade is beginning to be restored, and considerable quantities of the produce of Malabar again pass this way. The lands are increasing in value; and people, who had formerly deserted to adjacent districts, are now returning, and with the utmost eagerness are reclaiming their former possessions. This climate, however, continues to be very unhealthy; and a damp is thrown on every thing by the sickness of the Resident, Colonel Close. Owing to this, I have been much disappointed by not receiving any answers to the queries which I proposed.

## CHAPTER XX.

## JOURNEY FROM SERINGAPATAM TO MADRAS.

[UNE 4th.—Early in the morning I left Seringapatam; on coming CHAPTER to where my tents had been pitched, I found, that in the storm of the preceding night they had been blown down, and that my people were dispersed into the neighbouring villages. I was, therefore, necessitated to halt a day, in order to put my tents into some kind of repair, and to reassemble my people. In this I had great difficulty, most of them being intoxicated.

Kari-ghat, near which I halted, is a high peaked hill, which Strata of consists chiefly of schistose mica, that is composed of white quartz, and silvery mica, disposed in an undulating manner. When the stone is split in the direction of the strata, the mica is most conspicuous, and makes a very beautiful appearance.

Kari-ghat.

5th June. - I went three cosses to Banuru. The country through June 5. which I passed belongs to the Pattana Ashta-grám district. Near Appearance of the coun-Kari-ghat, I passed chiefly through rice grounds watered by the great try. canal, and bounded toward the north by low hills at no great distance from the Cavery. Two cosses from Kari-ghat, I passed the Array caray, the great reservoir in which the canal terminates, and which, collecting the superfluous water of that noble work, irrigates much land. From thence to Banuru the level country widens, and is mostly arable; but little of it is watered. It looks very well, many of the fields being enclosed, and interspersed with Babul Babul tree. trees (Mimosa indica Lamarck). These do, not injure the corn

June 5.

CHAPTER growing under them, and hinder so much ground only from being productive as is occupied by the diameter of their stems. Although it does not grow to a large size, the Babul is very useful in making the implements of agriculture. Its bark is valuable to the tanner. At reasonable distances, therefore, throughout the Ragy fields, young plants of it are allowed to grow.

Banuru.

Banuru, under the government of Hyder, contained five hundred houses, which are now reduced to one hundred and fifty. In order to prevent it from being of use to Lord Cornwallis, it was plundered by Tippoo's troops; and in the late war it was again plundered by the dealers in grain (Lumbadies) who followed Colonel Read's detachment. It has a very fine Tank, that receives a branch from the great canal.

Rent of dryfield.

Not having been satisfied with the former accounts which I received of the rent of dry-field in this part of the country, I took the officers of revenue and the farmers to the field. They say, that the rent varies from two to ten Sultany Fanams for what is called a Wocula or Colaga land, according to the quality of the soil, of which there are four distinctions. They confess that in general the Wocula land sows more than a Colaga of seed, which contains thirty-two Sultany Seers. The poorer soils not only pay less rent, but in them the extent of a Wocula land is greater than in a rich mould. I found great difficulty in getting them to say any thing upon which I could depend; but at length I got a measurement, which I believe, so far as it goes, may be considered as accurate. I measured a field, said to sow forty-eight Seers of Ragy, besides Avaray, Tovary, and the like, and which in the books of revenue is rated at one Colaga and a half. The rent was twelve Fanams for grain, 25 per cent. on the above for straw, and a certain quantity of grain, which was originally paid in kind; but in place of it four Fanams are now added to the rent. The whole field measured 109,848 square feet, and paid nineteen Fanams, or at the rate of 4s.  $8\frac{1}{3}d$ . an acre. It was divided into two portions of 60,480 and 49368 square feet; which, although thus unequal in size, and apparently CHAPTER of the same soil, were estimated at the same value, and were allowed the same quantity of seed. The soil was of the best June 5. quality, and was a fine red earth, which in favourable seasons is very productive of Ragy. The seed is at the rate of  $2\frac{6A}{100}$  pecks an acre. This is about 112 per cent. thicker than what was given by my former measurement at Seringapatam; but in such accounts as a traveller in *India* can procure, that is no material difference. To this we must add one fourth part of the above quantity of the seed of the accompanying pulses.

sandy; but there is much rice-land, supplied chiefly by canals from the river. That of Sosila, according to an old valuation made by Deva Ráya, amounts to what was estimated to sow five hundred Candacas of seed, at 225 Seers each. This land is watered by a canal coming from Rám Swami Anacut, which dam is two cosses below the island of Seringapatam. The farmers commonly employ the dry-seed cultivation, which requires only 4 of the Candaca of seed for the extent of land called a Candaca. They find, however, by experience, after three or four crops cultivated in this manner, that the soil is improved by taking a transplanted crop. They have only one crop of rice in the year, and that grows in the rainy season, as is usual with land watered by canals from the Cavery. Good land produces 25 Candacas of rough rice from the Candaca land. The rent of the whole, good and bad, is on each Candaca land 51 Candacas of rice in the husk for the grain, and  $7\frac{1}{2}$  Fanams for the straw. The Candaca of rice in the husk is worth fifteen Fanams.

The rent, therefore, is eighty Fanams for the Candaca; and the average rent and seed makes only 28 per cent. of the produce of the best land, besides the straw, which from the vicinity of Seringapatam sells very high, and therefore pays part of the rent. The lowness of this tax, compared with that at Seringapatam, where the rice-

6th June.—I went two Sultany cosses to Sosila. The country is June 6. plain, with a few small hills interspersed. Some of the soil is very lands.

CHAPTER XX.
June 6.

grounds pay ten seeds, is owing to the want of a sufficient supply of water; so that one quarter of the fields cannot produce rice, and are cultivated for Ragy.

Appearance of the country.

A little Jola and cotton are raised here, in the same manner as on the opposite side of the river, which I have described in the eighth chapter of this Journal. The dry lands seem mostly waste; and the country which I saw to-day is neither so well wooded nor so well enclosed as that through which I passed yesterday. Sosila is a town that contains about 250 houses, and has a large fort constructed of mud and rough stones. It is situated on the banks of the Cavery, opposite to the junction of the Kapini, and has long been subject to the Mysore family.

June 7.

7th June.—I went three cosses and a half to Kirigavil. The country through which I passed is mostly dry arable land; but much of it is waste. I crossed one small ridge of hills, consisting of naked rocks of white granite. Kirigavil has once been a large village; but after the affair at Malaxully the Sultan, in order to prevent it from being of use to the army under General Harris, destroyed it, and few of the houses have been rebuilt. The greater part of its inhabitants are Mussulmans; for, during the former government of the Mysore Rájás, it was given in Jaghire to a Mahomedan family in their service. The heir of this family now lives at the place, and has a considerable pension from the Company, for which he appears to be grateful.

June 8.

8th June.—I went three cosses to Malawully. All the country through which I passed seems capable of cultivation; and there are vestiges remaining to show that the whole has once been ploughed, and enclosed with quickset hedges. Much of it is now waste, and the fences are very ruinous. There is little irrigation.

Malawully.

Malawully is a large mud fort, separated into two portions by a transverse wall. The upper portion, reserved for the Bráhmans, is in good repair; but the works made to defend the low casts have become ruinous. This place formerly belonged to the Rájás of

Talacadu, which is said to be only four cosses distant; a circumstance CHAPTER which from the maps I cannot explain. The Talacadu Rájás were conquered by those of Mysore, and this must have happened previous June 8. to the year of Sal. 1595; as there is here an inscription of that date, in which Deva Rájá Bupala, commonly called Deva Ráya the great, is styled sovereign of the country. A copy of this has been given to the Bengal government. After the conquest, a village, half a coss east from Malawully, and named Ancanahully, was given to the Talacadu Rájá in Jaghire. This the family retained till the government of Hyder, when they were obliged to fly; and the people here are ignorant of the place to which they have retired.

Hyder gave Malawully in Jaghire to his son Tippoo, and of course Orchards of it enjoyed considerable favour, and contained a thousand houses. the late Sultans. Adjoining to the town is a very fine reservoir, that gives a constant supply of water to a fruit-garden which the Sultan planted. This is of great extent; but the soil is poor; and some of it is indeed so bad, that the trees have died, and the ground has been again converted into rice-fields. The establishment kept in this garden consists of one Daroga, or superintendant; one writer; and ten labourers, who, as they cultivate the rice-fields, are not able to keep the fruit trees in decent order, much less to prevent the walks from being in a most slovenly condition. The trees are 2400 in number; and of these one half are Mangoes. They are loaded with fruit, and some of the oranges are very fine. The Mangoes that I saw were but ordinary. One kind, if the account of the superintendant is to be credited, is very curious. "It annually produces two crops, one in the hot season, and the other during the rains. In the centre of the garden is a small, but neat cottage (Bungalo), from which grass walks diverge in all directions.

About two miles sonth-west from Malawully is a large reservoir, Engagement near which the Sultan made a trial of his army with that of General at Malawully. Harris. After having by this found that his troops were totally inadequate to face the English, he shut himself up in Seringapatam,

June 8.

CHAPTER The trial was absurd; but it is said, that Tippoo was not to blame. The officers whom he sent to reconnoitre, with the flattery usual among the natives, gave him false information, and induced him to bring his forces down into the open country, on the supposition of the English army being a small advanced party which he could intercept. Before he was undeceived, he had advanced so far, that he must have either engaged, or lost all his guns. Being afraid of dispiriting his people by the sacrifice of his artillery, he preferred the former. While, therefore, he began to withdraw his guns, he formed his army and made an attack with a part of it, which was entirely lost; but with this sacrifice he was able to carry off all his guns, and to bring away the remainder of his troops without much disorder. After the action, Tippoo sent and destroyed Malawully; and only about five hundred of its houses have as yet been rebuilt.

June 9. Appearance of the country.

9th June .- I went four long cosses to Hulluguru. For the first half of the way the country resembled that through which I came yesterday. Afterwards it became poorer and poorer, and was covered with low Mimosas. At one coss distant from Huluguru, is the Madura river, which was so much swollen by the rains, that the loaded cattle had some difficulty in fording. It never dries entirely, and has its source from a large Tank at Caduba, near Gubi. Its proper name is the Caduba.

Iron mines.

Between Malawully and this river are two villages, Bana-samudra and Halasu-hully, at which iron ore is smelted; and from thence Seringapatam receives its chief supply. I was in search of the forges; but was informed that they were at Hulluguru; nor was I undeceived until I had gone too far to return. On my arrival at Hulluguru I found no smelting forges; but a manufacture of iron boilers for sugar works, and of the common implements of agriculture. The iron comes from mines near Chenapatam and Rama-giri.

Hulluguru.

Hulluguru is an open village, containing about 120 houses. Both in the invasion under Lord Cornwallis, and in that under General

Harris, it was burned. It is situated three cosses south from Capala- CHAPTER durga, and four north from Baswana kéda, a ford in the Cavery one coss below the junction of the Caduba with that river. The road certainly leads nearer the Cavery than, from the situation of the principal stages in the best maps, I have, for want of better authority, placed it.

June 9.

There are in this neighbourhood two hills producing sandal wood: Baswana-Betta, in the Malawully district, from which this year were procured 250 trees; and Capala-durga, which produced somewhat less. No more will be obtainable for eight years. On these hills there are no valuable timber trees, but abundance of bamboos.

10th June. - I went two Sultany cosses to Satnuru, through a June 10. pretty wide valley, with hills on both sides of the road. The soil Appearance of the counis in general poor, and much of it is over-run with low Mimosas, try. and other bushes. From Capala-durga, Satnuru is distant one coss; and is a poor open village, containing about thirty houses, of which ten are occupied by Mussulmans. These are now betaking themselves to agriculture. In the public accompts, Satnuru is called an Usul Grám, or principal village; but in India we must guard against high-sounding names. The chief (Gauda) is the poorest creature that I ever saw. Half a coss from Satnuru is a forge for smelting the black sand ore of iron.

11th June. I went three cosses to Canicarna-hully, commonly June 11. called Cancan-hully. The former name is universally said by the natives to be the proper one; but the derivation which they give of it seems very forced. Canicarna, they say, is the genitive case of Canicar, which in the Tamul language signifies a proprietor of land: and Hully, in the language of Carnata, is a village. \* The road by which I came passes through a valley, in some places narrow and rocky, and in others wide, partly cultivated, and partly overgrown with low trees. The hills surrounding it are very rocky, and are said to be much infested by tigers.

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<sup>\*</sup> The name of this village is properly Kanya-karna, composed of two Sanskrit words, Kanyá virgin, or the goddess Bhawani, and Karna ear.

June 11.
Cancan-hully,
and Jagádeva Ráya of
Chena-pattana,

Cancan-hully is the residence of an Amildar, and is a pretty fotr built by Jagá-deva Ráya of Chena-pattana, whom, in the tragical story of Sivana Samudra, I have already mentioned, as having been in his time one of the most powerful princes of this neighbourhood. A Bráhman here possesses a grant of land from Imudy Ancusha Ráya of Chena-pattana, son of Pedda Ancusha Ráya, son of Jagá-Deva Ráya. He acknowledges the superiority of Sri Ráma Deva of Penu-conda, son of Sri Ranga Ráya, who must have been one of the royal family of Vijya-nagara, that on the destruction of the empire retired to Penu-conda, and by the Polygars of this vicinity was nominally acknowledged as a master. This grant is dated in Sal. 1546, which, according to Ramuppa, is 35 years after the destruction of Vijya-nagara.

Rájás of Mysore, or Mahásura. The descendants of Jagá-deva were subdued by the Mysore family. At a temple here are two inscriptions on stone. The one is in the reign of Chica Deva Ráya Wodear of Mahásura, for so in all inscriptions is Mysore written. The word is said to signify the great warrior. The other inscription is in the reign of Deva Ráya Wodear, who in the year of Sal. 1589 grants certain lands to a Jangama's Matam; for the Mysore family are much under the influence of that priesthood, as all the females wear the Linga; although the reigning prince declares himself a follower of the Sri Vaishnavam Bráhmans.

Krishna Ráya of Mysore rebuilt the great temple of this place; which, as usual, is supposed to have been of great antiquity. According to fable, it was founded by Valmica, a celebrated Bráhman, the author of the Ramayena, who lived in the Tritaia Yugam, many hundred thousand years ago. Previous to the invasion by Lord Cornwallis, the country was fully cultivated. The devastation was commenced by Tippoo, who blew up the works in order to prevent them from being useful to the British army. After this the Anicul Polygar ravaged the country, Colonel Read having invited him back to his dominions. According to the accounts of the Amildar, this gentle Hindu has rendered two fifths of the whole

arable lands a waste; and, from the small number of inhabitants, the CHAPTER beasts of prey have increased so much, that, during the two last years of the Sultan's government, eighty of the inhabitants of June 11. Cancan-hully were carried away by tigers from within the walls of the fort. These have been since repaired, and the people can now sleep with safety. To keep off these destructive animals, every village in the neighbourhood is strongly fenced with a hedge of thorns. On the approach of the army under General Harris, Tippoo burned the town, and he did not allow to escape this favourable opportunity of destroying an idolatrous place of worship. He broke down the Mandapam, or portico of the temple, and nothing remains but the gateway, and the shrine; to destroy which, probably his workmen, durst not venture. Cancan-hully at present contains about two hundred houses. Before the invasion of Lord Cornwallis there were at least five hundred. It stands on the west side of the Arkawati river.

The river Arkawati comes from Nandi, and passes through the Arkawati. great Tank named Nagaray caray at Doda Bala-pura. It then passes Magadi and Rama-giri, and falls into the Cavery six cosses from Cancan-hully, and one coss below the ford, or passage of Baswana Kéda. For three months in the hot season, it contains no stream; but, by digging a little way into the channel, good water may always be procured.

12th June.—Having been troubled with an irregular tertian June 12. fever ever since I left Seringapatam, I halted to-day at Cancanhully, in order to take medicine. I employed my time in taking some account of the state of agriculture, in which I was assisted by the Amildar.

A great impediment to good cultivation arises from a practice, Villages. very common in India, of all the farmers living in towns and villages. The fields that are distant from the houses cannot receive manure, and of course produce little, and pay a small rent. It is true, that in the revenue accompts all the lands, according to the

June 12.

CHAPTER quality of the soil, are valued at the same rate; but no one will give more than a fourth of the valuation for lands that are distant from his village. Indeed, the present number of inhabitants is not adequate to cultivate more than the fields that are near the towns,

Wages.

Most of the cultivation is performed by the hands of the farmers, and of their own families. A few hired servants, but no slaves, are employed. A man servant gets annually of Ragy four Candacas of 200 Seers of 72 inches, or nearly  $26\frac{1}{2}$  bushels, worth at an average 28 Fanams, with 12 Fanams in money. In all, he receives 40 Fanams, or 1l. 4s.  $11\frac{1}{2}d$ . The hours of work are from  $6\frac{1}{3}$  in the morning until noon; and from two in the afternoon until sun-set. The number of holidays allowed is very small; but the servant occasionally gets four or five days to repair his house. At seed time and harvest, a day-labourer gets from 1/3 to 1/4 of a Fanam, or from  $2\frac{1}{2}d$  to rather more than  $1\frac{1}{2}d$  a day. Women get daily from  $\frac{1}{4}$ to + of a Fanam, or about 1-d.

Stock, and size of farms.

No farmer here has more than six ploughs. Those who have four, or more, are reckoned very rich. For each plough, one man and two oxen are kept. The Amildar says, that each plough can cultivate ten Woculas of dry-field, of which one half will be Ragy land; or that it will cultivate five Colagas of dry-field, and five of watered land. The chiefs of villages (Gaudas) say, that, if a man cultivates five or six Colagas of rice land with one plough, he can sow no dry grains. The account of the Amildar (chief of a district) is evidently that upon which most dependance ought to be placed.

I measured a field said to require seven bullas, or 13 Woculas of Ragy for seed, and found it to contain 73884 square feet. The Wocula or Colaga land contains at this rate 42218 square feet; and the plough, if confined to dry-field, should cultivate only 9.7 acre. The rate of seed on rice ground has been ascertained at Ráya-cotay by Colonel Read from actual experiment; and, according to my information, the five Colagas here, at this rate, would sow almost an acre and a quarter. So that a plough can also cultivate 14 acre of rice land, and 4 50 acres of dry field. This small quantity, it must CHAPTER be observed, is the estimate of the Amildar: that of the Gaudas June 12. deserves 10 attention.

The quantity of watered land here is not considerable; but a Sugar-cane large proportion of it is employed to raise sugar-cane. This is all of the Restali kind; the Puttaputti not having as yet found its way into this district. The rent is paid by a division of the crop. The government should have one half, and usually receives 500 Seers from the Wocula land, or about 11 cwt. an acre. This is so great a return, that I suspect some mistake. After sugar-cane, the ground must be cultivated with rice one year, before sugar-cane be again taken.

When, in a favourable season, the Tanks are filled, two crops of Rice lands. rice might be procured from the same ground in the course of one year; but the farmers, being few in number, can cultivate one half of the rice grounds only at one season, and the remainder afterwards; nor can the inhabitants of the villages, where dry grains only are cultivated, be induced to settle near the watered lands, although the profits on these are much greater to the farmer than those on Ragy land. The natives of Karnata seem indeed to be immoderately attached to their birth-place; and so many of them having deserted their native huts during the reign of Tippoo is a strong proof of his tyranny.

Ragy (Cynosurus corocanus) pays a fixed rent, which in the lands Ragy and near the villages varies from five to two Fanams a Wocula land. which, at the rate of my measurement, would be from 3s. 21d. to 1s. 31d. an acre. Shamay (Panicum miliare. E.M.), the next most common crop here, pays one half of the produce as rent. According to the Amildar's account, a Wocula land of the best quality. produces as follows:

Seed Ragy Wocula 1 produce 2 Candacas worth 14 Fanams.

The rent is 5 Fanams, or not quite 28 per cent. of the produce ...

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June 12.

The same land cultivated with Shamay, which is done in places that are too distant to manure, requires  $1\frac{1}{4}$  Colaga of seed, and produces 15 Colagas, worth 6 Fanams, of which the government gets one half. Although this requires less trouble than the Ragy, the farmer has most profit by the latter grain.

Coco-nut plantations.

On the banks of the river above Cancan-hully, there are many coco-nut plantations. A few Arecas are intermixed; but in a general point of view, these are of no importance. The coco-nuts are sold in the shell to the people of the Bára-Mahál. The ground is the property of government; but the trees belong to the farmer; and so long as these grow, the public has no right to the soil. When an old tree dies, another is planted in its stead, and must be watered for six or seven years; after which it begins to bear, and requires no more irrigation. They live for about a century, and are in full vigour for one half of that time. They are never cut until they are These palms, in this country, are never manured with salt, and eight months in the year produce ripe fruit. In the month following the summer solstice, owing to the cold and rain, all the fruit which is then on the trees falls off; and during the three following months none arrives at maturity; but there are plenty of green nuts, which contain a juice fit for drinking. Each of the trees annually produces from 10 to 200 nuts, which are worth five Fanams a hundred. Of the produce the government takes one half. Some of them are planted on dry-field, and others on watered land, and the soil under the trees is cultivated with the appropriate grains. If the trees be sufficiently thick, the crop of grain is poor, and the farmer is allowed to keep the whole; but, if he neglect his gardens, and have only a few trees scattered through a large space of ground, the government takes one half of the grain also; which is but reasonable. There is, however, no space defined for each tree; their being too distant, so as to allow a demand of rent for the grain, is left to be determined at the discretion of the Amildar,

which is an error. The Amildar says, that they may be planted at CHAPTER five or six fathoms distance from each other. At 36 feet, an acre will plant about 33 trees; the produce of each of which may be estimated at five Fanams, or a little more than three shillings. It is very seldom, however, that a piece of ground is fully planted.

June 13th .- I went three cosses to Malalawady, a village of the June 13. Chena-pattana district. The greater part of the country through State of the country, which I passed is overgrown with low trees and bushes, and very little of what is arable is actually cultivated. By the way I crossed three times the channel of a small river named the Swarna-réká. It comes from Anicul, and joins the Arkawati a little above Kanyakarnahully. Mulalawady is a small town, with a ruinous fort. Before the invasion of Lord Cornwallis, it contained three hundred houses. Tippoo, in order to prevent its being of use to his enemies, burned it. Most of the wretched inhabitants perished from hunger and disease; and although it met with no disturbance in the last war, it now contains only sixty-eight houses.' It stands eight cosses from the Carery, and is surrounded by some good dry fields. Ragy and Horse-gram form the chief part of the crops, sell at about the same price, and are equally used in the common diet of the inhabitants.

June 14th .- I went four cosses to Tully. Soon after leaving Mala- June 14. lawady, I entered a hilly country, which continued until I reached territory. Tully, the first place in the districts belonging to Karnata that have been added to the Company's province of the Bára-mahál. To-day I crossed the Swarna-réká again three times.

Tully is an open village near a small fort, and contains about Tully. sixty houses. Before the invasion of Lord Cornwallis it contained about five hundred. After the capture of Bangalore, many of the inhabitants retired to Tully, and obtained from the Sultan a guard of five hundred horse, and two thousand foot. The detachment from the British army at Hoss'uru, having heard of this, marched all night, and at day-break surprised Tully. The garrison were roused

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June 13.

in time to be able to run away without loss, for they did not attempt to resist. The assailants obtained a great deal of plunder, and destroyed the town. An officer (Phousdar) of Tippoo's came some days afterwards, and dug up a large quantity of grain that had been concealed under ground. A party of dealers in grain (Lumbadies) came after this, and swept every thing clean; so that a large proportion of the inhabitants perished of hunger. During the government of Tippoo, few of the remainder came back; but most of them retired to the Bára-mahál, in order to obtain Colonel Read's protection. They are now daily returning.

Denkinacotay family. Tully formerly belonged to the Denkina-cotay Polygar, who, from being possessed of a town named Bala-hully, took the title of Belalla Râya; but he was no relation of the Belalla monarchs of Karnata. He was deprived of his dominions by Jaga Deva Râya of Chenapattana, whose successors were in their turn expelled by the Mysore family.

Districts annexed to the Báramahál. Tully forms a part of the Denkina-cotay Taluc, which with several other districts of Karnata were annexed to the Bára-mahál after the fall of Seringapatam. These districts are the Talucs of Hosso-uru, Denkina-cotay, Kella-mangalam, Ratna-giri, Vencata-giri-cotay, and that portion of the Alumbady Taluc which lies on the left of the Cavery, together with the Polyams, or feudatory lordships, of Punganuru, Pedda-Nayakana-Durga, Bagaluru, Suli-giri, and Ankusagiri.

Polygars.

All the *Polygars* have been restored to their estates, and put on a footing very similar to that of the *Zemindars* of Bengal. They pay a fixed rent, or tribute, for their lordships; but have no jurisdiction over the inhabitants, for whose protection an officer (*Sheristadar*), appointed and paid by the government, resides at each lordship. The establishment of officers of revenue and police are paid by the *Polygars*, whose profits may now be about a fourth of the revenue; but, as the country recovers, these will greatly increase.

In this district the natives of the Bára-mahál will not settle, on CHAPTER account of the coldness of the climate during the rainy season, which they find not only very disagreeable but also unhealthy.

The chief officer, Tahsildar, of Denkina-cotay, a very sensible man, State of says, that at present he has 2700 ploughs, and that it would require cultivation. 6000 more to cultivate the whole arable land in his district. proportion of waste land in the other districts of Karnata, which have been added to the Bára-mahál, is nearly similar; and, so far as I can judge, I think they are in as good a state as the best districts now belonging to the Mysore Rájá, and infinitely better than any of those through which the Marattah army passed.

The Tahsildar estimates the land in his district that is too steep or Barren lands. rocky for the plough to be about a fourth of the whole.

In the neighbouring woods some black sand ore is smelted into Iron. iron.

South from hence, in the Alumbady district, is a hill producing Sandal. sandal wood. Captain Graham, the collector, sold to a renter all the trees that were fit for cutting, and received for them S00 Pagodas. The condition of the sale was, that only the old fullgrown trees should be cut; but the fellow has taken every stick of any size, and there will be no more fit for cutting in less than ten years.

In the woods west from Tully, the Lumbadies, after a trading Lumbadies. expedition, refresh their cattle for eight or ten days. They then carry to Dravada, or the low country, a cargo of Ragy, Avaray, Tovary, Ellu', and Hessaru, and return from thence with a cargo of salt and a little rice.

In this district all the reservoirs for irrigation are in repair, but Watered seven or eight of them only are of any consequence. Indeed, the cultivation of rice, in these districts annexed to the Bára-mahál, is by no means important. There are, however, many Cuttays, or small Tanks, from which the water is raised by machinery to irrigate

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Manufactures.

Tarkari, or kitchen gardens, a most valuable kind of cultivation. There are also many plantations of coco-nut and Areca palms.

All the manufactures of the annexed districts, except at Bagaluru, are coarse, and fit only for the use of the lower classes. A great supply for the rich comes from Saliem, and from Bangaluru.

Brahmans.

The temple of Gópúla at Tully, as appears by a (Sumud) deed now extant, was built, or rebuilt rather, by Vira Rájaia son of Dalawai Dodaia, in the reign of Krishna Ráya Wodear, the Curtur of Mysore, and in the year of Sal. 1640. Although little more than 80 years old, it has fallen into great decay. Its Rath, or chariot, is remarkably indecent, and has now become useless, the whole property of the temple having been reassumed by Hyder and Tippoo. The Bráhmans on this account are not a little clamorous; but the want of endowment seems to have sharpened their wits, and I found among them some very intelligent men.

Mysore family, its divisions, and customs.

These Bráhmans informed me, that the males of the Mysore family are divided into two great branches, the Rájá-bundas, and the Callalays. A Rájá-bunda man can marry only a Callalay girl, and the men of the Callalay family are only allowed to marry the daughters of a Rájá-bunda. The head of the Rájá-bundas is the Curtur, or sovereign. The head of the Callalays is the Dalawai, whose predecessors, although they always acknowledged the superiority of the Curtur, yet frequently possessed all the authority of the state. When any action is said to have been performed by such or such a Mysore Rájá, it is by no means necessarily implied, that the actor was one of the Curturs; for the Dalawais also enjoyed the titles of Mysore Rájá, and Wodear. Some of the males of each family are of Vishnu's side, and some of them of Sira's; but none wear the Linga, and all acknowledge the Bráhmans as their Gurus; and the Curtur, immediately on ascending the throne, in whatever religion he may have been educated, always adopts the ceremonies at least of the Sri Vaishnavam. The ladies of both families wear the

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Linga, refuse the authority of the Bráhmans, and are under the CHAPTER spiritual guidance of the Jangamas. This is one of those circumstances which among any other people would be considered as June 13. extraordinary, but which in the religion of the Hindus are common. The Mysore family are of Karnata extraction, and were not introduced by the Telingana princes who so long governed this country.

The Rajawar, or Rachewar, must not be confounded with the Rachewar. Rájá-bundas, although they pretend to be Kshatriyas. They are originally from the north of India, and probably from the country which in our maps is called Rachoor.

The Brahmans conducted me to a fine Tank, and showed me an Property of inscription, from which it appeared, that this reservoir had been constructed by a Banijiga merchant of Naga-mangala, a town in government. this vicinity. The work was done in the reign of Achuta Ráya, and in the year of Salivahanam 1452, which agrees very well with the chronology of Ramuppa. The whole ground irrigated from the Tank was originally intended for the use of religious men, Jangamas. Bráhmans, &c; but it has now fallen into the powerful hands of the state, which afflicts its former proprietors by applying its revenue to the administration of justice, the defence of the country, and other such worldly purposes.

seized on by

The reservoir is filled by a small torrent named the Sanat-kumára, Irrigation, which comes from a hill at a little distance toward the N.W. and, after going through many Tanks, and watering much rice land, falls into the Cavery near Alumbady.

15th June.—I went three cosses to Panch-akshara-pura. hame is derived from some foolish charm, and signifies the five-lettercity. The place is a small village without a shop. The country country. is quite open, and consists mostly of lands fit for cultivation, with many small Tanks, and spots of irrigated land, and palm gardens; but, on the whole, it is very bare. One half at least of the arable land is said to be waste; but it seems to be in a better condition

June 15.

CHAPTER than most of the dominions of Mysore. Panch-akshara-pura was plundered and burned by some part of the British army under Lord Cornwallis; and on the approach of General Harris it suffered the same fate from Tippoo. This year an epidemic fever has been very destructive; it raged with the utmost violence for the five months preceding the vernal equinox, but is now on the decline.

June 16.

16th June.—I went three cosses to Kellamangalam, and by the way crossed two barren ridges covered with wood. Much of the intermediate arable land is waste.

Lumbadies, or Banjaries.

These woods and wastes are much frequented by the traders in grain called Lumbadies, or Banjaries, who even in the time of peace cannot entirely abstain from plunder. In the small villages near the forest, they occasionally rob, and commit murder; nor is it safe for one or two persons to pass unarmed through places in which they are. On account of their services during the two last wars, they have hitherto been treated with great indulgence. This has added audaciousness to the natural barbarity of their disposition; and, in order to repress their insolence, it was lately necessary to have recourse to a regular military force.

Districts added to the Bára-mahál.

I remained two days at Kellamangalam, taking an account of the state of its neighbourhood, as an example of that which prevails in the territories annexed to the Bára-máhal.

Kellamangalum.

Kellamangalam is a small fort with two reservoirs, and two suburbs (Pettas), and is the residence of a Tahsildar; for the country here is exactly under the same excellent administration that prevails in Coimbetore. Before the invasion of Lord Cornwallis, it contained five hundred houses; but, having been burned, both then, and in the late war, most of the inhabitants had dispersed, when Captain Graham, the collector of the Bára-mahál, took possession. Since that time three hundred houses have been rebuilt. Kellamangalam and Hosso-uru, which now form two districts, originally belonged to the Polygar of Bagaluru. Both these places, being rather weak, were long ago seized upon by the Mysore Polygars; but Bagaluru

resisted all their attempts, and until the government of Hyder was not subjected to the authority of Seringapatam. In the war of Lord Cornwallis, the heir of Bagaluru joined Captain Read, and was very serviceable to him in procuring provisions for the army; and on the peace he followed that gentleman into the Bára-mahál. When, by the fall of Seringapatam, Bagaluru was annexed to this province, he was restored as Polygar (feudatory lord) to such part of the family domains as Hyder had seized; but the two districts of Kellamangalam and Hosso-uru are considered as the property of the state.

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The Candaca here is equal to The Maund of betel-nut to  $5\frac{693}{1000}$  bushels  $30\frac{335}{1000}$  lb.

Weights and measures.

The Maund of tobacco and Jagory to  $24\frac{2-6}{1000}$  lb.

The following is given by the traders, as the average price of the most common articles of commerce, which are chiefly the produce of the country.

Average price of the produce of the country.

	1		, ,	
	Sultany Fanams.		Shillings.	Pence and
,	and		🗒	decimal
	2 2		S	parts.
Rice in the husk, per Candaca	8	per bushel	0	10,523
Ragy, Cynosurus corocanus, do	8	do	0	10,523
Avaray, Dolichos Lablab, do	11	do	1	2,46933
Tovary, Cytisus Cajan, do	12	do	1	3,785
Hessaru, Phascolus Mungo, do	20	do	2	2,30825
Udu, Phuseolus Minimoo Roxb. do.	16	do	1	9,0465
Callay, Cicer avietinum, do	35	do	3	10,039
Shamay, Panicum miliare, E. M. do.	4	do	0	5,261425
Ellu, Sesamum, do	30	do	3	2,56363
Huts' Ellu, Verbesina sativa Roxb. do.	14	do	1	6,46933
Huruli, Dolichos biflorus, do	5	do	0	6,577
Harulu, Ricinus, do	18	do	1	11,67792
Wheat, do	40	do	4	4,61425
Danya, a seed like anise -	16	do.	1	9,0465
Womum, a seed like cummin, do.	32	do	3	6,093
Salt, do	28	do	3	0,93866
Tobacco, per Maund	7	per Cwt.	20	1,944
Jagory of sugar-cane, do	4	do	11	4,7
Boiled Petel-nut, or Areca, do	25	do	57	2,05

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Oxen fit for the plough sell for from 30 to 40 Fanams, or from 19s.  $8\frac{1}{2}d$  to 1l. 4s.  $11\frac{1}{2}d$ .

June 16.
Dry-field measure.

A sheep or goat fit for killing costs three Fanams, or 1s.  $10\frac{1}{2}d$ .

Here the dry-field forms by far the greatest part of the arable land. Its extent is estimated by the quantity of Ragy seed that it requires. On measuring a field, said to require six Colagas of seed, I found it to contain 168,249 square feet; the Colaga, therefore, is nearly equal to  $\frac{1}{100}$  parts of an acre.

Rent.

In every district, the dry-field of each village, according to its soil, is divided into three qualities. In some villages, of course, the best lands are of no more value than the worst in others; which occasions a great difference in the assessment, or rent. The valuation of the best lands in some villages is ten Fanams a Colaga, while in others it is only three. The rent at this place, for the best dryfield, is six Fanams the Colaga; for the second  $4\frac{1}{2}$  Fanams; and for the third 3 Fanams; or 5s.  $9\frac{3}{4}d$ , 4s.  $4\frac{1}{2}d$ , and 2s. 11d. an acre.

Farmers forced to cultivate by the Wudary.

It is the land near the villages only that can be let at this rate. The farmers are not at all willing to cultivate any of the distant fields; and after they have cultivated as much of the fields near the villages as they are able to do at a proper season, and in a proper manner, it is the peculiar duty of a low village officer, named here the Wudary, assisted by the watchman (Toty), to compel them to cultivate a certain portion of these remote fields; which receive no manure and little labour, and pay only a trifling rent, or a share of the produce in kind.

Crops taken from land of the best quality. When the rainy season commences early enough, the first quality of dry-field is reserved for Ragy, and its accompaniments. If the rains are too late, this land is sown with Shamay; and should the season for that grain pass, it may be sown with Haruli. The seeds that are sown along with Ragy are Avaray, Tovary, Pundrica (Hibiscus cannabinus), and Harulu. This last is seldom used; but in every field a portion of each of the others is commonly sown.

Ragy, &c.

After the first rain in spring, the field gets a double ploughing;

that is, once lengthwise, and once across. Eight days afterwards, CHAPTER this is repeated, and then the manure is given. In eight days more it gets two other double ploughings. After a rain in the month June 16. following the summer soistice, the seed is sown with the drill, or Curigay, and rows of the accompanying grains are put in by means of the pointed bamboo (Sudiky). The field is then harrowed with a bunch of thorns. On the 15th day afterwards, it is broken with the hoe drawn by oxen, and called here Guntivay; and six days after that, the hoe is used in a direction crossing the former at right angles. On the 35th and 40th days, the same is repeated, and the weeds are then removed with a spade. The Ragy, four months after sowing, is ripe. It is cut with the straw, and trodden out by oxen. Its straw is reckoned better fodder than that of rice, and the grain in a storehouse will keep ten years; whereas after a third part of that time rice in the husk is quite spoiled. Along with a Colaga of Ragy, may be sown  $1\frac{3}{16}$  Colaga of Avaray, or  $\frac{1}{8}$  Colaga of Tovary. The Pundrica is sown in very small quantities. Its bark makes a bad rope for the use of the farm, and its acid leaves are used in the family as a green; but in the account of the produce it may be altogether overlooked. The seed for an acre is 442 bushels of Ragy, with  $\frac{525}{1000}$  parts of a bushel of Avaray, or  $\frac{0.55}{1000}$  parts of a bushel of Tovary. The produce of a Colaga land is 20 Colagas, of Ragy, worth 8 Fanams, and 5 Colagus of Avaray worth 23 Fanams; in all 103 Fanams; which is probably greatly under-rated by the farmers who gave me the account, as it is not double the amount of the rent.

When the rains begin later than usual, this first quality of land, Shamoy, ealled Awal Bumi, is sown with Shamay, and produces about the same quantity of that grain as it does of Ragy; but this produce is only worth four Fanams, which is only two thirds of the rent, and the field next year requires an extraordinary quantity of manure.

When the rains fail altogether, or nearly so, Huruli or Horse-gram Humilia is sown, to prevent or mitigate the horrors of famine.

June 16. Second quality of soil. Ragy, &c. On the second quality of dry-field, or Duim Bumi, Ragy and its accompaniments are frequently sown. The produce is only one half of what it is on the first quality of soil, which would amount to no more than the seed and rent. The farmers here evidently conceal at least one half of the produce; forty seeds of Ragy being allowed, in the neighbouring districts, as the common produce of a good soil. In place of Avaray or Tovary, on this kind of land, Navonay, or common millet (Panicum italicum), is sometimes sown in the drills of Ragy fields.

Shamay.

On the second quality of soil, however, the most common crop is Shamay. After the first rain of spring, the field gets five double ploughings, with an interval of six days between each. Shamay is not allowed manure, is sown broad-cast during the two months which follow the summer solstice, is then ploughed in, and the field is harrowed with the rake drawn by oxen. The seed required for a Wocula land is half a Colaga, or  $\frac{221}{1000}$  parts of a bushel for an acre. On this soil it produces only 20 seeds, or two Fanams worth of grain. The rent is four Fanams and a half; from which an estimate may be formed of the veracity of my informers.

On this soil Hessaru, Udu, Ellu, and Harulu, are also sown, but in no considerable quantities.

Horse-gram, third quality of land.

In bad seasons *Huruli* is sown on this second quality of land; but in neither the first nor second qualities of soil does it thrive so well as on the poorest fields, where in common seasons it forms the usual crop. In the two months preceding the autumnal equinox, the field gets two double ploughings. The seed is then sown broad-cast, and is covered by the plough. The seed required for a *Colaga* land is half a *Colaga*, or  $\frac{1237}{1000}$  bushel an acre. The produce is ten seeds, or five *Colagas*, worth  $1\frac{1}{4}$  *Fanúm*. This is evidently as much under-rated as the others, the rent being three *Fanams*.

On this kind of ground, small quantities of *Huts' Ellu* and *Harica* are also sown.

The dry-field is frequently let to those who cultivate gardens

watered by the Yatam. A garden consisting of five Woculas, or a CHAPTER little more than three acres, can be watered by one Yatam, on the balance of which one man walks. This man and two others are June 16. adequate to cultivate the whole. It lets for only one or two Fanams Tarkari a Wocula more, than if it were cultivated for Ragy. These gardens kitchenare partly cultivated by Tigular, that is, persons whose ancestors gardens. were originally of Dravada Désam, and who live entirely by the profession of gardening; and partly by the farmers who cultivate the fields. The articles raised in these gardens for sale are, wheat, Maize, Ragy, Tovary, Mentea, or fenugreek, Nayla, Sunicai, or Arachis hypogea, onions, garlic, turmeric, tobacco, poppies, Cossumba or Carthamus tinctorius, capsicum, and the carminative seeds Danya and Womum, together with greens, cucurbitaceous fruits. and other kitchen stuffs for the use of the cultivators' families. The articles produced in these gardens, that are exported, are wheat, Danya, Womum, poppies, Cossumba, tobacco, garlic, and turmeric.

Although most of these gardens are dry-field, and are watered by the Yatam from wells, yet some are on rice-land, and receive their supply of water from a reservoir. The ground is in constant crop, and often produces at the same time four or five articles.

Tobacco is cultivated not only in gardens, but also in rice-land Tobacco. and dry-field. In the first and last cases, the cultivator pays the usual rent. When it is cultivated on rice-land, the state gets one half of the produce. When raised on dry-field, the water must be brought in pots from the nearest well. In the month preceding the summer solstice, the field is ploughed fourteen or fifteen times. In the month following, furrows at the distance of two cubits are drawn throughout the field, and are filled with water. In these, young tobacco-plants from the seed-bed are placed, at nine inches distance, and a little dung is put at their roots. The young plants are then covered with broad leaves, and for four times are watered once a day. The leaves having been removed, the plants for three

June 16.

CHAPTER times get water once in four days; and even again on the 20th day, should the rainy season not have then commenced. At the end of the month the whole field is hoed, and the earth is thrown toward the plants in ridges. At the end of the second month this is repeated, and at the same time all the leaves, except from six to nine, are pinched from every plant; and all new leaves, that afterwards shoot from the centre, are once in eight or ten days removed. When it begins to whiten, the tobacco is fit for cutting. After having been cut by the ground, the stems are allowed to lie on the field until next day, when they are spread on a dry place, and exposed to the sun. Here the tobacco remains nine days and nine nights. On the 10th morning some grass is spread on the ground; on this heaps of the tobacco are placed, and the roots are turned toward the circumference. The heap is covered with straw, and pressed down with a large stone. In these heaps the tobacco remains for nine days. The stems are then removed from the leaves, of which from six to ten, according to their size, are made up into a small bundle. These bundles are again placed in a heap, covered with straw, and pressed with a large stone. Every evening the heap is taken down; and, each bundle having been squeezed with the hand, to make it soft, the whole is again replaced as before. On the fifth evening the tobacco is spread out all night to receive the dew. Next day the heap is rebuilt, and this process of heaping, squeezing, and spreading out to the dew, must be in all performed three times; the tobacco is then fit for sale. The larger leaves of this tobacco seem to me to be well cured for the European market, being not so dry as usual with that cured in India, but moist and flexible : of the flavour I am no judge. A Wocula land in a Tarkari garden produces twenty Maunds of cured tobacco, worth, according to the merchants, 140 Fanams. According to this, an acre produces about 6 cwt. 2 grs. 25 lb. worth 6l. 15s. 81d. The cultivators, however, only value their tobacco at five Fanams a Maund. The tobacco is cut in the 1st and 2d months after the autumnal

equinox. For three successive years, three crops of tobacco may CHAPTER be taken from the same field: but before a fourth crop, some other article must intervene for at least one year; and after this June 16. plant, even in gardens, no second crop is admitted.

The most common crop in these gardens is garlic, followed by Common poppies, Cossumba, and radishes. The manner of conducting this cultivating will suffice to give an idea of the progress made in gardening, which gardens. much exceeds that in managing arable lands. In the month preceding midsummer, the plot intended for garlic is dug with a hoe. It is then dunged, and ten days afterwards is again hoed. It is then divided into small squares, which, in order to confine the water, are separated by low banks; and between every two rows of squares, channels for conveying the water from the Tank, or well, are constructed. In each of these squares, lines are then drawn at four inches distance from each other; and in these, at similar distances, are placed single cloves of garlic, which are covered by smoothing the area of the square with the hand. The squares are then filled with water; and once a day, for eight times, this is repeated. On the tenth day a little dung is given; and, when it does not rain, some soils require water every third day, while others only require it once every fourth day. Care must be taken to remove the weeds, as they spring. In the month following the autumnal equinox, the roots are full grown, and are then dug up.

After a month's rest the plot is again hoed and manured. On the tenth day the hoeing is repeated, and then the little squares and channels for watering the plot are formed. The poppy seed, having been mixed with an equal quantity of dust, is then sown in the squares, and covered by drawing the hand over the mould, which gets a little manure and water. At every two cubits distance, all over the small banks that separate the squares, a seed of the Cossumba is then placed, and the interstices are sown with radishes. For the first eight days, the squares are allowed, morning and evening, a little water. Afterwards, for twenty days, they are

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June 16.

irrigated once in twenty-four hours, and then every fourth day. At the end of the first month, the weeds are removed with the end of a sharp stick, and a little manure is given. Any weeds that afterwards appear must be plucked as they spring.

Radishes.

At the end of the second month the radishes are pulled.

Poppy-seed.

Some few poor Tigular make opium; but in general the poppy is allowed to ripen its seed, without receiving injury in its fruit; for the operation of extracting opium diminishes the quantity of seed; and here this is much esteemed, and enters largely into the sweetmeats and cakes which the wealthy eat.

Opium.

In the beginning of the third month the poppies are fit for producing opium. The fruit is scratched with a thorn; and the juice that exsudes, after it has thickened by exposure to the air, is scraped off with a shell, and seems to be very good opium. According to the cultivators, this sells at fifteen Fanams a Seer, which is about fifteen shillings a pound. How such an enormous price can be required for it, I cannot conceive, except on the supposition of the late government having prohibited, by severe penalties, the use of this intoxicating substance.

Post.

Where the seed has been allowed to ripen, the husks, or capsulæ, are beaten with Jagory and water, so as to form an intoxicating liquor, which in the Marattah and Karnata languages is called Post, and which is much used for inebriation both by Mussulmans and Hindus.

Cossumba.

In five months the Cossumba pushes out its flowers, which are collected at three different times, between each of which is an interval of eight days. The petals, flosculi, are not pulled until they are in a state of decay; so that their removal does not prevent the seed from coming to maturity. It is either eaten parched; or beaten with a little water into an emulsion, which is mixed with boiled rice and Jagory, and forms a dish called Paramana, that is a favourite delicacy with the natives. The flosculi, after having been pulled, are dried in the sun two or three days, and are then

old to the dyers at half a Fanam for the Seer, or at about sixpence CHAPTER a pound.

The extent of the watered lands is estimated by the quantity of rice which they require for seed. I measured a field, said to require lands. three Colagas, and found it to contain 33146 square feet. At this rate, therefore, the Candaca of land is 5 0.74 acres, and the acre requires nearly 1+ bushel of seed.

On this ground, rice forms by far the most common crop, and in favourable seasons two crops of this grain are procured from the same field. That which grows in the rainy season is called Hainu; that which grows in the hot weather is called Caru. quantity of water for either crop is not sufficient to irrigate rice, a crop of some other grain is sown in its stead.

The kinds of rice cultivated here are as follow:

' Kinds,	Quality.	Months required for this crop.	Crop in which it is cultivated.
Gydda Byra Doda Byra Doda Caimbutty Sana ditto Indigay Potapalu Cari Nellu	Thick grain - Large grain - ditto. Small grain - Large grain - ditto. ditto.	6 7 6 6 5 4 4	Hainu and Caru. Hainu ditto ditto Hainu and Caru ditto ditto ditto ditto

The length of time required for each kind of rice includes the time that is occupied in the whole process of cultivation.

The Hainu crop, which grows in the rainy season, is commonly Gydda, or Doda Byra; and the former also most usually composes the crop of the dry season, except where the Doda Byra has preceded it; in which case, some of the kinds that are more quick of growth must be used. The grains that require six or seven months take

XX. June 16. Hainu crop.

CHAPTER two more ploughings than those that come to maturity in less time, which is the only difference in the process of cultivation. The only cultivation in use here is the Mola, or sprouted seed.

In order to cultivate Gydda Byra in the rainy season, the field is watered in the month preceding midsummer; and then, having been drained, it is ploughed first lengthwise, and then across. Next day the double ploughing is repeated, and the field is inundated. On the fifth day the field is again drained, the double ploughing is repeated, and then the water is again admitted. These steps are repeated on the 8th, 11th, and 14th days. At the 3d or 4th double ploughing the field is manured with dung; and immediately after the last it is smoothed with a plank drawn by oxen (Maram), sown broad-cast with the prepared seed, and then covered two inches deep with water. On the third day after sowing, the field is drained, and sprinkled with dry dung, which has been rubbed to dust. On the fifth day an inch of water is admitted, and ever afterwards the field is inundated; the depth of water being increased as the rice grows, and care being taken that the young plants should be never entirely covered. On the 20th day the field is harrowed with the rake drawn by oxen; and on the 30th, 40th, and 90th days, the weeds are removed by the hand. At this last weeding, all superfluous stalks are destroyed by pinching them between the toes. When ripe, this crop is cut with the straw, and put up in heaps. Next day it is trodden out by oxen. The straw is sometimes spoiled by the rain, and thrown into the dung-hill; but at other times it is preserved for fodder.

Caru crop.

The cultivation for the crop raised in the dry season is quite similar to that before described; but the ploughing season is different. The straw of this crop is always well preserved, which renders it valuable; but the quantity of grain is smaller.

Produce.

On good soils, the crop raised in the wet season produces forty fold of Gydda Byra, or almost forty-five bushels an acre, worth 11. 19s. 41d. In the crop cultivated in dry weather, on good soils the produce is thirty seeds, or rather more than 331 bushels an acre. CHAPTER The rice of both crops keeps equally well, and is of equal value.

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If a man beat out his own grain, a Candaca of rough rice gives Expense of half a Candaca of clean grain; but if he hire labourers, they return removing the him only four tenths of a Candaca of clean rice; so that a fifth of the grain is the expense of removing the husks; and this may be considered as the expense of this operation that is usual in every part of India. The operation is commonly assisted by boiling, and is performed by beating the grain in a mortar with a stick five or six feet long, three inches in diameter, and shod with iron.

The quantity of seed required for bad land is the same with that Seed. given to good; and in neither does the quantity actually sown measure a Seer more or less than that contained in the estimate of the public accompts. When the rains commence rather late, the crop cultivated immediately afterwards is taken of some of the kinds that grow quickly; otherwise, those which are slow of growth are always preferred.

When soon after the commencement of the rainy season there is Grains subnot in the Tank a quantity of water sufficient for a crop of rice, in stituted in place of the its stead the following grains are cultivated: Ellu, Hessaru, Udu, Hainu crop. and Jola.

Of these, Ellu is most used. In the second month after the ver- sesamum. nal equinox, the field is ploughed twice. On the sixth day it is again ploughed twice; then with the first rain in this, or the following month, the seed is sown broad-cast, and covered with the plough. In three months the crop ripens without farther trouble. It is supposed to injure the following crop of rice. A Wocula of land requires - Colaga of seed, and produces two Colagas, or 16 seeds. For an acre, therefore, the seed will be 14 parts of a bushel, and the produce about 21 bushels, worth 7s. 21d.

The other grains are cultivated exactly in the same manner.

The seed required for a Wocula land is 4 Colaga of Hessaru, which Phaseolus produces three Colagas; or twelve seeds. The acre, therefore, Mungo.

June 16. Phaseolus minimoo Roxb.

CHAPTER requires 2 parts of a bushel for seed, and produces 3 166 bushels worth 7s. 41d. This, next to Ellu, is the most usual crop.

Udu is the next most common crop, and its seed is sown of the same thickness; its produce is one third less. An acre, therefore, produces 2 345 bushels, worth 3s. 111d.

Holcus sorghum.

The quantity of Jola raised is very small. The seed and produce, owing to the imperfect manner of cultivation, are not greater than those of Udu.

Grains substituted in place of the Caru crop.

When the water in the Tank is not sufficient to raise a crop of rice in the dry season, the following grains are raised in its stead, Hessaru, Callay, and Jola.

Phaseolus Mungo.

Hessaru is the most common. In the month preceding the autumnal equinox, the field is ploughed twice in one day; which on the third day is repeated. On the 6th or 7th day it is ploughed once, the seed is sown broad-cast, and covered by the plough. In three months it ripens. The seed for a Wocula land is the same as in the rainy season; but it produces twelve fold, or 3 166 bushels an acre, worth about six shillings.

Cicer arietinum.

Much less Callay is sown, as it requires the very richest soils. The field, in the month preceding the shortest day, gets four double ploughings, with an interval between each of two days. A few days afterwards the seed is dropped into the furrows, after a plough, at nine inches distance, and is covered by another set of furrows drawn by a second plough. In three months it ripens. A Wocula land requires 1 Colaga of seed, and produces one Colaga. The seed for an acre is therefore  $\frac{14}{100}$  parts of a bushel, and the produce  $1\frac{12}{100}$ bushel, worth 4s. 31d.

Holcus sorghum.

The quantity of Jola sown is very small, and not more productive than in the rainy season.

Division of crop.

The rent on watered land is paid by a division of the crop, and the following is the manner in which that is conducted with a Rashy, or heap of rice, which usually contains the produce of five Colaga lands, and may amount to about 7\frac{1}{2} Candacas, or more than 400 bushels.

Colagas. CF	IAPTER
The Shanaboga, or village accomptant, gets 1	^^.
with a bundle of unthrashed corn.	ne 16.
Toty, a watchman, all that adheres to the Chaps or marks, and $1\frac{1}{2}$	
with some straw.	
Nirgunty, or conductor of water 21	
Wudary, a kind of beadle 11/2	
Gauda, or chief of the village 2	
Ditto for the annual sacrifice which he makes to the village god 1	
Ditto for marking the heaps 1	
Washerman, barber, and blacksmith 2½	
The temples in the village 1	
To poor Bráhmans, and other religious mendicants - 1	
1.4.3.	
174,	

or, on account of the first share, say 15 Colagas, or ten per cent. The remainder is divided equally between the public and the cultivator; but while this is doing, the latter makes a spring at the heap, and usually carries off about four or five Colagas. government pays for the Tanks, or canals, by which the ground is watered, as will be hereafter explained.

In this country a considerable quantity of sugar-cane is raised. Sugar-cane. There are four kinds; Restali, Puttaputti, Mara-cabo, and Chittuwasun. The soil required for each kind is different; so that they continue to be all cultivated, although the quantity of Jagory given by the two last is a fourth less than that which the two first kinds afford. The Jagory of the Restali sells higher than that of the others, and the Puttaputti cane is preferred for eating without preparation. The Restali and Puttaputti, with a fifth kind, called Cari-cabo, and nearly related to the Puttaputti, require a rich soil. The Maracabo and Chittuwasun will grow any where, and will thrive even on a middling soil.

The Restali and Puttaputti are cultivated as follows: in the Vol. III. 3 M



CHAPTER month after the shortest day, the field is twice ploughed. On the 4th, 8th, 12th, and 16th days, it gets two double ploughings. With a billet of wood the mould is then broken small, and is manured with dung. After this the field is ploughed twice, and, in order to distribute the water, it is formed into ridges with channels between them. These channels are nine inches wide and deep, and nine inches apart. The cane intended for seed is cut into pieces, each containing three joints. The channels having been previously filled with water, a row of cuttings is laid in each, and sunk into the mud of its bottom, so as just to be covered. The cuttings are placed horizontally, in a line parallel to the channels, and their ends are nine inches from the ends of those which are nearest. Every fifth day the channels are filled with water. On the 10th day the weeds are removed with a spade. On the 20th day the field is hoed, and the earth from the ridges is thrown down upon the plants between the rows, so that channels are formed where at first the ridges were. The leaves of the young canes are at this time about nine inches high, and they require no water until the 30th day; when channels are formed so as to wind in a serpentine manner, with two rows of canes between each bend, as is explained by the sketch in Plate XXXIII. Figure 85. When there is no rain, these channels must be filled with water, once in eight days, until the cane be ripe. When the stems begin to appear, they are brought together in clusters of from three to five, and bound round with leaves, so as entirely to exclude the light; and this must be carefully done, as the stems rise from the ground; otherwise the rind will be thick, and the quantity of juice very small. The crop season begins in the second month after the shortest day of the second year, and in the course of thirty days all the canes must be cut. The space occupied by this crop, therefore, is fourteen months. A Wocula land produces eight Maunds of Jagory, and plants a thousand cuttings. The acre will therefore plant 3942 cuttings, and produce about 6 cwt. 3qrs. 7lb. worth 3l. 17s. 4d.

The Mara-cabo and Chittuwasun, which is also called Hullu-cabo, are cultivated exactly in the same manner; only they do not require to be tied in clusters, and they ripen a month earlier. A Wocula of land produces only five Maunds of Jagory; so the acre produces 4 cwt. 1qr. 4lb. worth 2l. 8s.  $7\frac{1}{4}d$ .



Between every two crops of sugar a crop of rice must intervene; but this is reckoned better than usual where no cane is cultivated.

The rent of sugar-cane is also paid by a division of the crop, which is conducted as follows with a field that may produce about 360 Maunds, and about which eight or ten farmers will be concerned.

Daily expense.	Seers.	Fanams.
Rent of the iron boiler belonging to the government - Mill rent Nirgunty, or conductor of water Shanaboga, or village accomptant Iron-smith, as a workman Ditto as priest, or Pújári of Ganésa Oil, butter, and quick-lime	$ \begin{array}{c} 1\frac{1}{2} \\ 1\frac{1}{2} \\ 1\frac{1}{2} \\ 1\frac{1}{2} \\ 1\frac{1}{2} \\ 0\frac{3}{4} \\ 0 \end{array} $	1 1 0 0 0 0
	81	$2\frac{1}{2}$

The mill commonly goes 60 days, and produces daily 6 Maunds.

		Fanams.
Daily expense at 60 days, cash at $2\frac{\tau}{2}$ .	-	150
Jagory at 8½ Seers—Maunds 12¾ at 4 Fanams	-	51
		201
Total produce, 360 Maunds at 4 Fanams		1440
	lance	1239
Annual expense for each mill,		
Custom-house		5
Carpenter and iron-smith,		5
Sacrifice of two lambs,		1.
This deducted from the former balance,		14
	-	1239
leaves a balance of - Fanams,		1225
•		1223

June 16.
Plantations of Areca palms.

which is divided equally between the farmer and the state, as proprietor of the soil.

In this part of Karnata there are a good many Betel-nut, or Areca plantations. To carry off the water, the ground is divided by channels into beds. In the centre of each bed is set a row of plantain trees (Musa), and at each side a row of young Arecas. When these grow up, the plantains are sometimes allowed to remain; and sometimes they are removed, and then the beds are cultivated with the plants called Tarkari, especially with turneric. The man who makes the garden is at the sole expense of inclosing, digging, and planting. Sometimes he also makes the Tank or reservoir; but in this case, should the rent be paid by a division of the crop, he gets a fourth part of the government's share; or should the rent be paid in kind, he gets a proportional deduction.

Produce, according to the officers of government.

The chief officer of the district (Tuhsildur), and the farmers, differ exceedingly in their account of the produce. The former says, that a Candaca land should plant 2000 Arecas, which should produce 50 Maunds of boiled nut. One Bulla contains 120 nuts in the husk. The Candaca, therefore, contains 9600 nuts; which, when peeled, measure 8 Colagas of raw nut; and these, when boiled, weigh  $2\frac{1}{2}$  Maunds. The 50 Maunds will therefore require 192,000 nuts; so that every tree will give 96 nuts. At this rate, an acre will plant  $394\frac{1}{5}$  trees, and produce  $37843\frac{2}{10}$  nuts. These, as they come from the tree, will measure  $20\frac{443}{1000}$  bushels; when peeled, will measure  $8\frac{270}{1000}$  bushels; and when boiled, will weigh 299lb., worth 71. 12s.  $9\frac{1}{2}$ d. I have entered into this detail, that the reader may be able to compare all the foregoing accounts concerning the produce of the Areca.

Produce, according to the cultivators. The proprietors of the garden allege, that a Candaca land will plant only 1000 Arccas, and 500 plantain trees. The produce they state at 12½ Candacas, or 120,000 nuts; which, for each tree, is at the rate of 120; but they probably reckon only a certain proportion of the whole trees, excluding the others, as not productive, while the Tahsildar includes every one.

All these plantations formerly paid one half of the produce as CHAPTER rent; but Tippoo agreed with some of the proprietors for a rent in money, which was to be fixed by a kind of jury, as before described. June 16. A Candaca of land, in this manner, pays from 100 to 120 Fanams, or at the rate of from 15s. 6d. to 18s. 7d. an acre. By this, according to the Tahsildar's statement, the government is a great loser; as it got at least one half 'of the produce, or 25 Maunds a Candaca land, worth 575 Fanams. The cultivators acknowlege themselves well pleased with the change. They say, that when they have a fixed rent they are industrious, knowing that the rent must be paid, and that whatever more they can get will be their own; but with the division of crops, however slothful they may be, they are sure ~ of something.

The ground cultivated for Betel-leaf is rice-land, and pays four Betel-leaf, Fanams a Colaga, or 9s. 10d. an acre; which is much about the Piper Betle actual receipt of the government when the land is cultivated with rice.

In these districts, the property of all the soil is vested in the Tenures. state, except in the Polyams, and a few small free estates (Enams), free estates. which have been granted to Vaidika Bráhmans, to the temples, to pious Mussulmans, to the petty officers of police and revenue, and to a set of men called Caray cuttu Codigy, who have acquired this property by constructing reservoirs, and keeping them in repair. The Enams of the petty officers, such as Gaudas, Shanabogas, Nirgunties, and the like, are saleable; but the office, which is hereditary, is always transferred with the land.

When a rich man undertakes at his own expense to construct a Lands reservoir for the irrigation of land, he is allowed to hold in free granted to those who estate (Enam), and by hereditary right, one fourth part of the erect Tanks, lands so watered; but he is bound o keep the reservoir in repair. lic worke, Such a proprietor is called Caray-cuttu Codigy. The Tanks to which there is a person of this kind are notoriously kept in better repair,

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June 16.

than those which the government supports, either when they have been constructed originally at the public expense, or when the Enam of the founder, from a failure of heirs, has reverted to the sovereign. The reason assigned for this by the natives is perfectly satisfactory. They say, that they can compel the holder of the free estate to perform his duty; but the state has no master. It would seem adviseable, therefore, to encourage the rich natives to undertake this business; and, where the Enam has reverted to the government, it would be better to sell the estate to some other family, than to retain it and repair the Tank; and, if the practice of raising the rent by a division of crops be still continued, it would be yet more advantageous for the public to grant the Caray-cuttu Codigy one fourth of the government's share of the crop, which ought to be the same as his half of the produce of a fourth part of the land. This would not only prevent the free estates from growing in size, a thing that very usually happens, but it would be a check upon the revenue officers who superintend the division. A few free estates (Enams) have been granted to those who have built forts, and undertaken to keep them in repair.

Stock, and size of farms.

Five ploughs are here reckoned a great stock. Each plough can cultivate five Colagas (1½ acre) of rice land, and five Colagas (3½ acres) of dry-field. This is all that the farmers will voluntarily undertake to do; but, when they have completely laboured this extent, the beadle (Wudary) is sent, and compels the lazy fellows to cultivate five Colagas more of dry-field. This is done in a very slovenly manner, as might be expected; and the custom, although established by long practice, seems to me very prejudicial.

Wages.

Most of the labour is performed by the farmers and their own families. A few rich men hire yearly servants; and at seed-time and harvest additional daily labourers must be procured. There are no slaves. A ploughman gets annually 3½ Candacas of Ragy (20 bushels), worth 28 Fanams, with a hut; and 16 Fanams in money.

His wages, besides a hut, are therefore 1l. 7s. 51. The additional CHAPTER expense attending a plough is 31 Fanams for implements, and 2 seeds for the hire of day-labourers, or one Candaca of grain, worth June 16. eight Funams, for what the plough will cultivate; in all 5514 Fanams. Add 30 Fanams for the rent of the dry field, and we have 851 Fanams of expense, besides the interest of the value of the two oxen, which, however, is a mere trifle. In an ordinary year, the produce, after deducting the seed and the government's share of rice, with the stoppages for village officers, according to the fa mers will b

s will be:				ranams.
Ragy 55 Colagas, worth		-	-	22
Avaray 19 Colagas -		0 -	-	101
Rice, Hainu crop, 85 Colagas	-	-	-	35
Caru crop, 571 Colagas	-		-	23

Fanams 90

This amounts to just about the expense; but I have mentioned that the produce of the dry grains is in this account under-rated by at least one half; and I have not brought into the account the half produce of the five Colagas which the farmers are compelled to cultivate, and which costs little or no additional expense.

The farmers in general consent to advance money to their Condition of servants for marriages, and other ceremonies. This money is repaid by instalments out of the wages that are given in cash; for the people here are not anxious to keep their servants in bondage, by a debt hanging over them. A day-labourer, whether man or woman, gets daily \(\frac{1}{2}\) Colaga of rough rice, or \(\frac{3.56}{2.000}\) parts of a bushel. Of this, it must be observed, one half is composed of husk.

Leaves are not in use here as a manure. The cattle are never Manure, littered; but the straw which they do not eat, the rice straw that rots, with that of Hessaru, Ellu, and the like, are all collected together in one pit with the dung, ashes, and other soil of the house. A great defect in this manner of procuring manure is, the not

CHAPTER
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June 16.
Cattle.

using the *Hessaru* straw and leaves for litter. Sheep and goats are at night gathered on the arable lands, but are not confined by folds, which seems also an error.

In this neighbourhood there are no herds of breeding cattle, but every farmer keeps some cows and female buffaloes, the profit of which is clear gain. Many Bráhmans, and other rich people, keep, for the milk, a considerable number of both cows and female buffaloes. The males, when fit for labour, are sold; so that a considerable number are exported from hence. The breed is bad, and fit only for the plough. The dealers in grain (Lumbadies) have a great many cattle, male and female; but they are no better than the common breed of the villages, and would not be used for carriage by the merchant, still less would they be fit for the camp. The farmers keep a good many sheep and goats, which during the day are fed in the woods, and at night sleep on the arable lands near the villages. Asses are numerous, and lean swine are common. The lower casts in every part of Karnata eat pork; the swine, therefore, are not here employed as scavengers, which in some parts of India is the case. The number of cattle in these districts was formerly very great, especially in the villages of Alumbady that are surrounded by woods; but the stock has been exceedingly reduced by an epidemic distemper, that raged after Lord Cornwallis invaded the country, and by the depredations which in the last war the troops of the Nizam, and the Lumbadies, committed.

Seasons.

The only account of the seasons that I could procure here was as follows. For one month before, and two after, the vernal equinox, the weather is clear and hot. In the two months of midsummer, the weather is cloudy, and cold, with thunder, lightning, rain, and strong winds from the west. This is the season that now prevails, and to the feelings of a European it is exceedingly agreeable. The air resembles that of a cloudy day in an English summer. In the two months before the autumnal equinox, the rains are very heavy, and come from the west, and the air is not so cold as in the two

precedin months. In the two months after the autumnal equinox, CHAPTER there are moderate rains, which probably come from various directions, as on this point the natives have made no observation. June 16. These rains are, however, part of the monsoon which comes from Madras. In the three remaining months, the weather is cool, with fogs and dews in the mornings, but clear days, which no doubt appear hot to a European.

The strata, the whole way between Seringapatam and Kéllamangala, Strata. lie north and south, and are all vertical. Many of them are grey granite. In the eastern part of Karnata I have observed no potstone. The nodules of lime-stone are very common, as is also ironore in the form of black sand.

18th June. - I went two cosses to Waragan-hully. The country June 18. consists of low rocky hills overgrown with brushwood. Interspersed of the are considerable portions of arable land. Of this, according to the country. Tahsildar, the soil of the first or best quality forms a fifth part; of the second quality, two fifths; of the third and fourth qualities. each one fifth.

The soil of the best quality is sown entirely with Ragy, and its Produce of accompaniments; and should produce forty seeds, which is double of the first the quantity admitted by the cultivators of Kellamangalam; but quality. there is no observable difference in the soil, climate, or cultivation; and there can be no doubt, that the crops in the two places are nearly equally productive.

On the second quality of land are sown Ragy (Cynosurus coro- Produce of canus), Shamay (Panicum miliare E. M.), Harica (Paspalum frumentaceum Roxb.), Navonay (Panicum italicum), Ellu (Sesamum). Udu (Phaseolus minimoo Roxb.), and Hessaru (Phaseolus Mungo). Ragy on this land produces twenty seeds. When the rains fail, it is sown with Huruli, and Huts' Ellu. Navonay produces ten seeds, and the seed is sown as thick as that of Ragy. Shamay produces the same quantity as Ragy, that is, one Candaca from a Colaga land, and requires only three quarters of a Colaga for seed.

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CHAPTER

June 18. Produce of the 3d quality. On the third quality of dry-field are sown Huts' Ellu (Verbesina sativa Roxb.), Huruli (Dolichos biflorus), Udu (Phaseolus minimoo Roxb.), and Hessaru (Phaseolus mungo). A Colaga land sows a quarter Colaga, and produces twenty seeds. Huruli gives the same increase, and is sown four times as thick.

Produce of the 4th quality. On the fourth quality of land nothing is sown except *Huts' Ellu*, and it produces only five seeds.

This account, I believe, may be relied on, and applied to correct the information given at *Kellamangala* relative to dry grains, the produce of which the farmers at that place were most interested to conceal.

Colonel Read Waragan-hully is a small village in the Ratna-giri district, which has been placed under the management of the Tahsildar of Ráyacotay, one of those native officers who have been brought up under Colonel Read, and who are much superior to those with whom one usually meets in India.

ascertains the quantity of seed. He says, that at  $R\acute{a}ya$ -cotay, where all the lands have been actually measured, the quantity of seed required for the different grounds was ascertained by Colonel Read, assisted by the most intelligent natives.

Ragy.

One Colaga of Ragy was found to sow forty Guntas, each of which was 35 feet 2 inches square. Although this is a trifle more than an acre, the chain with which I measured may have stretched a little, so as to make the difference; and I think it probable, that the Colaga is exactly an acre. The Puddy of Ráya-cotay contains  $52\frac{67}{100}$  cubical inches. The acre therefore sows rather less than  $\frac{1}{10}$  of a bushel.

Rice.

Ten square Guntas, or one rood, sow a Colaga of rice; so that an acre sows  $\frac{4}{10}$  of a bushel. This differs greatly from my measurement; yet there is no apparent reason, why the seed should be sown of a different thickness at Ráya-cotay, and Kellamangala. Unless the Tahsildar has mistaken, it is evident that Colonel Read's measurement is the one on which by far the greatest reliance ought to be placed.

In every part of the country under his management Colonel Read CHAPTER succeeded, without much trouble, in introducing a uniform standard for weights and measures.

Ratna-giri and Ráya-cotay formerly belonged to Jaga-deva Ráya of measures of Chena-pattana. From him they were taken by a Marattah; and by Col. Read. from him again by the Mysore Rájás. The people in this neighbour- Telinga hood speak about an equal proportion of the dialects of Telingana introduced. and Karnata, although it is situated in the latter country; but the Polygars and all their followers were of Telinga descent, which has occasioned the mixture.

June 18. Uniformity introduced language

19th June.—I went three cosses to Ráya-cotay, where my survey June 19. ended; but I shall continue to note down what I observed on my Bara-mahal and Dravada return to Madras. Ráya-cotay is the last place in Karnata Désam, Désam. and is commonly reckoned in the Bára-mahál, because it was added to that province by the peace which Lord Cornwallis granted to Tippoo. The twelve places properly constituting the Bára-mahál are all in Dravada Désam, which is bounded on the west by the Ghats, and on the east by the sea. These 12 places are, Krishna-giri, Jacadeo, Varina-ghadá, Cavila-ghada, Máhú-raj'-ghada, Bujunga-ghada, Catoraghada, Tripaturu, Vanambady, Gagana-ghada, Sudarashana-ghada, and Tatucallu. Ghada, it must be observed, signifies a fort, and Giri a hill. On the fall of the Ráyaru of Anagundi, the Bára-mahál, with Ráya-cotay and many other districts, became subject to Jaga-deva, the Polygar of Chena-pattana. On the overthrow of this powerful family, its territories were divided between the Nabob of Cudapa, or Curpa, and the Rájás of Mysore. The former took the Bára-mahál, and the latter the dominions of the Chena-pattana family that were situated in Karnata. Hyder annexed the Bára-mahál to the dominions of Mysore.

In the war of Lord Cornwallis, Ráya-cotay was taken by Major Ráya-cotay. Gowdie, and has ever since continued in the possession of the British. Being the chief key to Karnata, pains have been taken

XX. June 19.

CHAPTER to strengthen the works, which consist of a high fortified rock, and a fort at its bottom. Comfortable houses have been built by the officers, who enjoy very good health, although surrounded by rocks, hills, and woods.

Mildness of the air in Karnata.

The air of Ráya-cotay is very temperate. The commanding officer, Colonel Leighton, informed me, that in April last, which was a hot season, and which is the warmest month in the year, Fahrenheit's thermometer in the shade never rose higher than 82°. At the present season, it is usually about 72° at noon, and 64° at day-break.

Language.

The people of Ráya-cotay, being on the frontier, speak a strange mixture of the languages of Karnata, of the Tamuls, and of the Telingas.

June 20. Appearance of the country.

20th June. - I went 17 miles to Krishna-giri. The road is good, and most of the way leads through narrow defiles among hills covered with brushwood. The descent is very gentle. Towards Krishna-giri I crossed the Dakshana Pinakani, or Pennar. The former is the Sanskrit, the latter the vulgar name of this river. Near Krishna-giri the country consists of a plain, in which are scattered high rocky hills.

Krishna-giri.

That on which the fort of Krishna-giri is situated is about 700 feet in perpendicular height, and remarkably bare and steep. Much of the plain is rice-ground; but the soil, although well watered, is in general poor. A new village has been founded, excellent roads have been made, and convenient houses for the European gentlemen have been built. The weather at this season is cool, with strong westerly winds, which bring many clouds to mitigate the power of the sun.

June 21.

21st June.—I remained at Krishna-giri with Captain Graham. the collector, a gentleman educated in the school of Colonel Read. My intention was, to have returned from Krishna-giri to Madras by the way of Gingee; but Captain Graham prevented me from

adopting this plan, by informing me, that the country through CHAPTER which I must have passed had become so desolate, that I should find great difficulty in procuring a subsistence.

June 21.

22d June.—I went twelve miles, by an excellent road, to Mala- June 22. paddy. The country, like that near Krishna-giri, consists of a plain, of the in which are scattered high detached rocky hills. The soil of the country. plain is poor, and much of it is waste, and overgrown with brushwood. Malapaddy, although placed in the heart of the Bára-mahál, Malapaddy. never belonged to that province, and has long been annexed to Arcot. The Nabob has given it in Jaghire to the husband of one of his sisters. It is a very sorry place. Here the language of the Tamuls is almost the only one that is spoken.

Appearance

23d June.—I went about fifteen miles to Tripaturu. The plains June 23. on this day's route are wider than those I saw yesterday, and are also better cultivated. The hills are lengthened out into ridges. Tripaturu is a large open village, containing some good houses Tripaturu. neatly roofed with tiles. This is to be seen no where in Karnata, and these roofs have been probably constructed by workmen from Madras, where a long intercourse with Europeans has greatly improved the natives in all the arts. At this place an attempt was made by Colonel Read to introduce the manufacture of sugar, and the rearing of silk-worms. A Mr. Light, from the West Indies, and a native of Bengal, were procured to superintend; but both have failed.

24th June.—I went fourteen miles to Vanambady, a village June 24. fortified with a mud wall. It looks well, as it is surrounded by Vanambady. trees, of which the Bára-mahál has in general very few, and as it is situated on a fine plain surrounded by hills. It is placed on the banks of the Palar, or milk river, which in the Sanskrit is called Cshira Nuddi. It has its rise near Nandy Durga, or the Bull-castle, and in the rainy season frequently commits great devastation. It rises highest when the rains prevail on the coasts of Coromandel. At present its channel is apparently quite dry; but, by digging a

June 24.
Many inscriptions on stone.

small canal in the sand of its bed, a stream of water is procured. In Vanambady are two temples of some note. At that of Iswara are above twenty inscriptions on stone, some of which are said to be of great antiquity, being of the age of Vicrama Ditya. At the temple of Vishnu, under the name of Allaha Perumal, are six inscriptions carved on the wall. I had only time to procure copies of three, and unfortunately commenced with such as are of little importance. One, of which a copy has been given to the Bengal government, contains the grant of a village to Allaha Perumal, from Narusingha Deva Maha Ráya, dated the 2d of Magha of the year Servajittu, but no era is annexed. The second, of which also a copy has been given to government, is dated Parabova of Sal. 1460, Chaitra 12th. By this, Naia Deva, son of Vira Pritapa Sedásiva Ráyaru, gives a village to Allaha Perumal on account of the decease of his father. The third, also delivered to government, is dated 15th Kartika of the year Visuavasu, being of the era of Sal. 1464. By this, Vencatadri Rájá, and Rama Rájá, grant each a village to the god, on account of the decease of their departed parent, Sedásiva Ráya. These persons granting the villages, probably, were of the house of Anagundi, although this is not ascertained by any thing in the inscriptions; but the date cannot be reconciled with the chronology of Ramuppa.

Appearance of the country.

The country through which I came to-day is tolerably well cultivated, and resembles what I saw yesterday. The air, although warmer than at Ráya-cotay, is still temperate; for clouds and strong westerly winds moderate the violence of the sun.

June 25.
Amboor.

25th June.—I went thirteen miles to Amboor. The road leads through a fine valley watered by the Palar. Near Vanambady, this valley seems to be tolerably well cultivated and inhabited. Near Amboor, it is overgrown with Palmira trees (Borassus), and seems to be mostly waste. This is, no doubt, owing to the devastation which Hyder committed in his two inroads into what we call the Carnatic; for near Amboor the Bára-mahál ends, and the territories

of Arcot commence. The road all the way from Krishna-giri is CHAPTER excellent, and very level. Amboor, having been long a frontier place, is a town built under the protection of a hill fort that still June 25. retains a British garrison.

I here found a Jesuit Missionary, a native of France. He has a Jesuit Missmall flock, who seem to be in great poverty; but, by their contributions, I imagine they are able to support him. He is educating one of them to be his successor, as Guru; for so he is called by his converts. He favoured me with his company at dinner, and was a very lively, pleasant man. To avoid offending the prejudices of the natives, he abstains from the use of beef.

26th June.—I went thirteen miles to a small village named June 26. Anavun Nelluru. The road is good, and leads through a very Anavun. pretty valley, watered by the Palar. There is a good deal of riceland, most of which seems to be occupied; but the dry-field forms a large part of the arable land, and is much neglected.

A good deal of indigo has been lately introduced. It grows Indigo. on the higher parts of the rice-land, from which, in the rainy season, a crop of grain will be procured.

The whole of the rice land is irrigated by means of canals, which Irrigation. are either dug across the dry channels of rivers, below the surface of which a small stream is always found; or conducted from places in which subterraneous springs have been discovered. These canals are here called Cashay. A canal supplied from a river, in which there is a perennial stream above ground, is in the Tamul language called Vakial.

27th June.—I went eleven miles down the Palar to Viranchi-pura, June 27. an open town situated on the south side of the river. It formerly Viranchiwas a large place, and possessed many public buildings, both Hindu and Mussulman; but all these have suffered much, from the towns having been repeatedly destroyed in Hyder's wars. A large temple of Iswara has escaped, having been surrounded by a very large and strong wall of cut granite, that excluded irregulars; and

XX. June 27.

CHAPTER Hyder took no delight in the destruction of temples. On the walls of this temple, there are many inscriptions, which are written in the Grantham character, and some of them are said to be of great antiquity. The Bráhmans promised to send me copies, but this they neglected to do. They were very clamorous in complaining against the Nabob, although he annually allows the temple 2000 Pagodas, or 800l. The town seems to be recovering fast.

June 28. Vellore.

28th June .- I went eight miles, and halted at a little distance east from Vellore. There I visited the buildings preparing for the families of Hyder and Tippoo. They are built with accommodations similar to those used by Mussulmans; and the architecture is more elegant, and the apartments are more commodious, than those in the palace of Seringapatam. The building would have been still more elegant, had not the custom of those who were to occupy it required long dead walls, and narrow staircases, with other things that by us are considered as deformities.

In order to give the reader a correct idea of the countenance of the Indian Mussulmans, I have procured the accompanying ENGRAVINGS (PLATES XXXV. XXXVI. XXXVII.) of Fatah Hyder, the eldest but illegitimate son of Tippoo, said to be remarkably like his father and of Sultan Mohay ud Deen, and Moiz ud Deen, the two eldest legitimate sons of that prince.

June 29-Wallajapetla.

29th June. - I went about fourteen miles to Wallaja-petta, or Wallaj'-abad, on the north side of the river, about two miles from Arcot. The valley leading from Vanambady to Vellore, or Velluru, opens here into a level country containing both dry-field and rice-ground. The weather in the day, although there are strong winds from the west, is very hot. There are occasional showers of rain, that have brought forward the crop of Bajera (Holcus spicatus), which is that commonly raised on the dry-field.

June 30.

30th June .- I remained at Wallaja-petta, in order to give my people rest. This town was built by the orders of the late Nabob, Mahummed Aly Wallaja, and called after his own name. The

people were removed from Laal-petta and other places, which with the Mussulman princes of India is a common practice. Soon after it had the misfortune to fall into the hands of Hyder; but on the restoration of peace, the Nabob heaped benefits on his favourite, and it has risen to a great size, and is regularly built, rich, and populous. Its fortifications are mouldering to decay; but, as the place is now far from an enemy, it is not soon likely to regret the loss. Almost the whole of the trade, between the country above the Ghats and the sea-coast, centres here; and a larger assortment of goods can, it is said, be procured at Wallaja-petta than in any town of the peninsula, Madras itself not excepted. Provisions are plenty and cheap.

1st July.—I went a short stage to Wochuru Choultry, having July 1.

passed through a fine country very well irrigated from numerous of the countreservoirs. Owing to the excellent supply of water, some of the tryrice-ground is even now in crop.

Wochuru is an inn (Choultry) with a pent roof of tiles, and was Choultry. built for the accommodation of travellers. This kind of building, in the native language, is called Chauvadi, from which perhaps the English term Choultry is derived. The same kind of building, which consists of one long hall open in front, is also used by the native officers, for the place in which they transact business. When behind the hall there is a square court, surrounded by buildings for the farther accommodation of travellers, the inn is by the natives called Chitteram; by the English this also is called Choultry. Every where within 40 or 50 miles of Madras such useful buildings are very common, and have been erected and endowed by the rich native merchants of that flourishing city.

At Wochuru there is also a very handsome Tank, formed by digging a square cavity into the soil. Its sides are lined entirely with cut granite in the form of stairs. Such a Tank, when intended for the accommodation of travellers, or of the people of the neighbourhood, in the Tanul language is called Colam; in the Karnataca

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XX. July 1.

CHAPTER dialect it is called Cúntay; and by the Telingas, and southern Mussulmans, it would be called Gunta, Similar Tanks, that are within the walls of a Covil, or temple, are called by the Sanskrit names Calliany, Sarovara, Tirta, or Puscarany.

July 2.

2d July.—I entered the Company's Jaghire, and went to Conjeveram, which by the natives is universally called Kunji. The country has more verdure than it had last year when I visited it. The rains usual about this season had not then commenced; but they have this year been unusually favourable.

Weather.

All over the coast of Coromandel, it is common in May, June, and July, to have occasional showers, and at some period of that time to have even three or four days heavy rain, which somewhat cools the air, and enables the cultivation for dry grains to take place. The weather now, although hot, is cloudy, with strong winds from the west. Such weather usually prevails about this time for eight or ten days; and at Tanjore is well known to precede the rising of the Cavery, which is at the highest when the periodical rains prevail in Mysore. These clouds seem to be an extension of those which before and during the violence of the monsoon collect over the western Ghats. When these have poured down, and have occasioned the swelling of the river, the rains even in Karnata abate, and the weather clears in the countries below the eastern Ghats. until October, when the easterly monsoon brings on the proper rainy season of the sea-coast. In the interval, the weather at Madras is often excessively hot, and the sea breeze frequently fails; or, what occasions more uneasiness, blows from the south, and is then called the long-shore wind.

July 3. Dubashies of Madras.

3d July .- I went to Vira Permal Pillay's Chitteram, or inn built by Vira Permal, a Madras Dubashy. At Madras there are three casts of Sudras, who act as Dubashies, that is, interpreters. The persons of the first cast seem to be somewhat analogous to the Káyastas of Bengal, and are called Canaca-pullays, which by us is commonly written Canacopily or Canacoply; and this name by

Europeans is also frequently extended to all persons, whether CHAPTER Bráhmans or Sudras, who follow the same profession. The Canacapillays are a cast of the Tamuls of Dravada, and throughout that July 3. Désam were originally in possession of the hereditary office of village accomptant, in the same manner as the Bráhmans possess the similar office of Shanaboga above the Ghats, or as the Kayastas of Bengal possessed the analogous office of Canongo. The next cast, who follow the business of Dubashies, are the more learned Goalas, or Yadavas. Some of these are of Telinga, and others of Dravada extraction, and the proper business of the cast is to tend herds of black cattle. The Dubashies of this cast, however, have given up all communion with those who follow the original profession of their tribe; and value themselves very highly, as being related to the god Krishna, who was born of a Goala woman. On this account they all assume some of the names of Vishnu, such as Ráma Pillay, Narayana Pillay, &c. The third cast, who perform the business of Dubashies, are the Vaylalars, of the labouring class among whom I have in the tenth chapter of this Journal, Vol. II. p. 329, given an account. Those who are men of learning have separated from the cultivators, and call themselves Modalies. They are a Tamul tribe, and more numerous in Chéra Chóla, and Pandava, and I believe in the adjacent island of Ceylon, than in Dravada. Each of these casts pretends to a superiority of rank over the others; and as, at Madras, they are all possessed of great wealth, many ingenious arguments from the books which they esteem sacred have been advanced, to support their various pretensions, which frequently occasion bickerings, and always great heart-burnings and bad neighbourhood. The pride of cast is indeed that which is most prevalent with the Hindus; and there is scarcely a creature so wretched or ignorant, but who on this account holds in the utmost contempt many persons in easy circumstances, and respectable situations; for the rank of the different casts is by no means well ascertained; the only one

July 4.
Sri Perma-

point that is clear is, the immensurable superiority of the Bráhmans above the rest of mankind.

4th July.—I went to Sri Permaturu, or Varam-phuthur, a celebrated temple and Agrarum, or abode of Bráhmans, which is situated about a mile out of the road; but I was desirous of visiting a place rendered remarkable by its having given birth to Ráma-Anuja Achárya. The temple has from government an annual allowance of 250 Pagodas, or 100l; but this would be totally inadequate to the maintenance of the fifty-three families of Vaidika Sri Vaishnavam Bráhmans who live in the place. By the contributions of the sect, however, they are supported in considerable affluence. The Amin, or civil officer, having assembled the Bráhmans whom he considered as most learned, they said, that originally there was at the place a small temple of Vishnu; but that, after the celebrity of Ráma Anuja had thrown lustre on the place of his nativity, the temple was enlarged, and received an image of this great teacher. In the reign of Krishna Ráyaru it was enlarged to the present size, which is very considerable. This was done by Paran Cusha, a Yecang, that is to say, a Satany who has assumed Sanyási, and dedicated his life to religious austerity. It was afterwards repaired by a Dubashy of Madras; and at present is putting in complete order, at the joint expense of a Dubashy and a Satany. There are at this place no inscriptions of any antiquity; but it is reported, that when Paran Cusha enlarged the temple some were buried in the earth. Near this is the spot where the great man was born. A stone chamber has been erected over it; and between this and the temple is one of the finest Mandapas, or porticos, that I have seen erected by Hindus. It is of great size, and supported by many columns; but, as usual, it is neglected, and has become ruinous and dirty. Adjoining to the place where Ráma Amija was born, is a temple dedicated to a prophet named Curat' Alvar.

The Sri Vaishnavam believe in eighteen great prophets, ten of

whom are called Alvars, and eight Acharyas. Some of the Alvars CHAPTER were Sudras; nay even Parriar have arrived at this dignity; but all the Acháryas were Bráhmans, and among others was Ráma July 4. Anuja. In order to prove himself an Alvar, a man must abstain prophets from women, and all carnal delights; and give a proof of his being worshipped by the Sri divinely inspired, by foretelling some very great and extraordinary Vaishnavam. event that is about to take place. When this has happened, and his inspiration has been thus fully established, he delivers in poetry some histories concerning the gods; and by the Sri Vaishnavam these are received as canonical. This sect erect images of the eighteen prophets; nor can a Bráhman of this kind perform worship, eat, or sleep, in any temple, where such an image is not to be found. From the Sri Vaishnavam these images receive divine honours, but not from either Smartal or Madual; nor do these two sects acknowledge the prophecies to be of divine authority. It is, however, admitted by all parties, that these personages are mentioned in the eighteen Puranas as very holy and extraordinary men.

Eighteen

Although the Brahmans of the south frequently asserted to me, Eighteen that different events of the Kali-yugam are mentioned in the Puranas. eighteen Puranas, yet I was inclined to doubt this; as they thought, perhaps, to confirm the truth of what they were relating, by referring to so high an authority. Having consulted a learned Pandit in Bengal, he says that my doubts are well founded, and that in the writings published by Vyása no particulars of the history of this degenerate age are to be found. The books quoted by the Bráhmans of the south as the eighteen Puranas, were probably the Ityhuss, or the Upu-purana, which give an account of the transactions of the Kali-yugam. Other learned persons allege, that the Upu-purana is also the work of Vyása; for all such matters are subject to innumerable doubts.

I have already mentioned, that the book called Guru Para, or Guru Para, Guru Parum Paray, of which, while at Tonuru, I obtained an extract Rama Anuja. CHAPTER XX.
July 4.

that contained the life of Ráma Anuja, is said to have been written by that personage. In it, according to the Bráhmans of his native place, he modestly writes, that he is an incarnation of four deities. The book contains also a similar account of the lives of the other seventeen prophets; and the Bráhmans here look upon it as of excellent authority, although several of these prophets lived after Ráma Anuja was dead. The Bráhmans here, on consulting their copy of the Guru Para, agree with those of Tonuru concerning the year in which their chief was born, namely, in the year of Sal. 939 A. D. 1016.

Sri Vaish-

The Sri Vaishnavam look upon their Gurus, both Sannyásis and hereditary, as men highly favoured by God; but not as actual divinities. They have the power of exempting from future transmigrations all persons on whom they bestow Upadésa and Chakrantikam. The souls of the happy people who are thus exempted from change live in a heaven called Veicunta, and there serve Vishnu. This sect do not admit of the absorption of the spirits of good men into the essence of the deity, a doctrine that seems to prevail chiefly among the worshippers of Siva. The Sri Vaishnavam say, that Brahma is the son of Vishnu, and the father of Siva; but they pray to Vishnu alone, as the preserver of all living beings, and as the supreme deity.

Heretical sects.

Before the appearance of Ráma Anuja, the most prevailing sects in this neighbourhood were the followers of Buddha, and the Charvaca. Both now seem to have become quite extinct.

Rent and tenures of rice-ground. The officer of revenue (Amin) says, that the Tank here waters 1000 acres of land, each containing 100 Guntas of 24 feet square. The extent of irrigated ground is therefore rather more than 1322 English acres. This land pays 1700 Pagodas a year to the government, and 600 Pagodas to temples, revenue officers, &c. &c; in all, 2300 Pagodas, worth at the Tower mint 845l. 12s.  $10\frac{1}{2}d$ . which is at the rate of 12s.  $9\frac{1}{2}d$ . an acre. This land is private property, and may be either sold or mortgaged, in a manner exactly similar to that

used in Malabar. An acre, according the nature of the soil, will CHAPTER mortgage for from 5 to 100 Pagodas; which shows, that the rent is very moderate, considered as such; but considered as a land tax July 4. it must be allowed to be very high. Each village now pays a fixed rent, for which all the proprietors are jointly answerable. Among themselves, they determine each man's share by some old valuations.

The hereditary Canaca-pillay here gave me a copy of an old Réjà Paditti-Rájá Paditti belonging to his family. A copy has been delivered to government, and I here give a translation.

"The form of the Kali-yugam will be as follows. The Kali-yugam will contain 432,000 years. The men of this age will be four cubits high, and live 100 years.

Particulars of the names of the Rájás in the Kali-yugam.

Parachittu Maha	Rájá, g	grands	on of	Dharn	ıa Ráje	á, and s	on of	
Abimunna, re	igned	-		-	-	64	years.	Dynasty of
Jennamya Jya	-	_ <b>-</b>	-	-	-	143		the Deva Ráyas.
Rájá Narendra	-	-	-	-	-	140		1tugus.
Saringa Panry	-		-	-	-	214		
Susta Studica M	aha Rá	já	-	_1	-	154		
Vicrama Ditya	-			_	- '	1746		
Salivahanam	-	-	-	-	-	80		
Boja Ráya	-		-	-	-	144		
Danta Chicrave	rti	-	_	-	-	62		
Tribuvana Chicr	averti	-			_	57		
Shanda Deva M	aha Rá	iú	_	_	_	60		
	3							

Total of the government of 11 Deva Rájás, 2864."

The whole account of this dynasty is evidently full of error and confusion. Some person of no discernment has probably extracted it from the books esteemed sacred. The eras of *Vicrama* and

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CHAPTER Salivahanam, two of the best established points in Hindu chronology, are by this account most horribly distorted. The author has followed an opinion, commonly prevailing among the Hindus, of a great monarchy, that extended all over India under princes descended from Yudishtara the son of Paudua, and which commenced with the beginning of the Kali-yugam; that is, according to the chronology usually adopted here, 3100 years before the birth of Christ; but with regard to the era of the Kali-yugan the Bráhmans differ considerably. This dynasty the author supposes to have reigned 2864 years, or until the year 236 before the birth of Christ. However, to return to our author.

Dynasty of Sholun of Naraputti.

"After this Naraputti, Gaja-putti, and Ashaputti, three thrones. Ráyaru, kings were established.

> Naraputti throne was possessed by Iltinga Shohun

Utinga Sholun		-	-	39 y	ears.
Culatunga Sholun	•		-	18	
Rajaendra Sholun		-	-	11	
Tiramudi Canda Sh	olun	-	-	13	
Carical Sholun	-	-	-	21	
Arundavan Sholun		-	-	13	
Womyuru Sholun	-		-	17	
Shayngun Sholun	-	-	-	15	
Munalinda Sholun		-	-	12	
Mavanedi Canda S.	holun		-	15	
Vacula Sholun	*		-	14	
Alaperinda Sholun		-	-	8	
Tiraveratu Sholun	-		-	15	
Arleunu Cadamay	Canda	Sholu	- 5	62	
Jeyum Canda Sholu	n	-		12	
Kirimi Canda Sholi	ın	-	-	20	
Tondaman Sholun			-	12	
Buddum Cuttum Si	iolun	-	-	45	

Shomuman Sholun	reigned 11 years.	CHAPTER
Ghingui Conda Sholun -	- 11	XX.
Sundra Pandia Sholun -	- 40	July 4.
Pottapu Sholun	- 24	
Shingu IVullanda Sholun	14	
Deva Sholun	- 10	
Shaynahutti Sholun -	- 15	
Vira Sholun	- 30	
Shayngaru Sholun -	- 24	

Total of the Sholun Rájás 27, who reigned 534 years."

Here we have a dynasty that no doubt existed, and of which many traces remain in Karnata, Dravada, and the countries toward the south. It is probably not mentioned by Ramuppa, because Tulava did not belong to the throne of Naraputti. Our author makes its end to have been in the year of our Lord 298. The tradition at Jamagullu, where one of the temples built by a prince of this family remains, makes them to have been about five centuries later. There is also some reason to think, that the Sholun Permal, from whom Cheruman Permal, the viceroy of Malayala, rebelled, was one of this family. If so, the tradition of Malayala agrees with that of Jamagullu, and fixes the last princes of this family to have lived about a thousand years ago. After the overthrow of this Sholun dynasty, Karnata and Dravada seem to have been separated from the southern portions of the Naraputti sovereignty; for our author goes on thus:

" Chéra,	Chola,	and.	Pandava	Désas	were	possessed	$_{\mathrm{by}}$

Udiamara Maha Rájá	-	-	18 years.
Jeyadeva M. R.	-	-	19
Lohita M. R.	-	-	10
Gungadira M. R.	-	-	11
Vama Deva M. R.	-	-	13
Terupulinda M. R.	-	-	34
Puttaviran M. R	-	- 0	43
	70		

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Dynasty of the Maha Rájás who governed Madura, Tanjore, and Coimbetore. CHAPTER XX.
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Sri Devanata M. R.	-	-	38 years.
Malica Arjina Maha	Rájá	reigned	7
Adi Raer -	-	-	13
Maha Sustra M. R.	-	-	16
Visuveshura M. R.	- ()	-	8
Chindrabuti M. R.	_	-	9

Total, 13 princes of Chéra, Chola, and Pandava, who reigned 239 years."

This brings the chronology down to the year 537 of the Christian era, to which we must add 500, the probable error. It was, perhaps, this dynasty that erected the palace of Madura, which in greatness and elegance is said to exceed all other remaining Hindu buildings, and would indeed seem to be an admirable work. The last dynasty of Madura Rájás, named Trimula Nayakus, were Polygars, who on the fall of Vijaya-nagara assumed independence.

Belalla Rayarus who governed Karnata.

## " Belalla Ráyar dynasty.

Rájá Belalla Ráyen	-	reigned	18 years.
Vira Belalla Ráyen	-	-	11
Chenna B. R	-	-	22
Deva B. R	-	-	14
Vishnu Verti B. R.	-	-	28
Hurry B. R	1	-	19
Imudi B. R	-	-	17
Visia B. R	-	-	16
Buca B. R.	-	-	22
China Buca B. R.		•	8

Total, 10 Canudia Belalla Ráyar governed 175 years."

The residence of this, and most of the following dynastics, being far removed from *Madras*, little accuracy relative to them is to be expected in this *Rájá Paditti*. Our author's chronology brings the end of the *Belalla Ráyar* government to the year of the Christian era 712. But *Vishnu Verti* is no doubt the same with *Vishnu Verdana*,

who, although younger, was contemporary with Ráma Anuja, born CHAPTER in the year of Sal. 939, or 1016 of the Christian era. This confirms the tradition at Jamagullu, and Malayala, concerning the time of July 4. the Sholun Rájás, and brings all the other dynasties much lower down than the Rájá Paditti places them.

## " Adeva Rájás government.

Adeva Rajás.

Sri Ranga Adeva Ráyaru reigned	25 years.
Vira Narayana A. R	23
Wobala A. R	21
Siruvaynguda A. R	22
Pirungei Endia A. R	15
Canda Gopala A. R	32
Narasingha A. R	13
Cambuli A. R	15
Bucun A. R	22
Vira Narasingha A. R	12
Narasingha A. R	8
Duia A. R	12
Sri Pandia A. R	9
Vasu Deva A. R	12
Siric Virindi A. R	15
Cutia Deva A. R	14
Rájá Visia Bujinga A. R	12
Shalica Narayana A. R	10
Pritivadi Bacukera Shadicun A. R.	87

Total, 19 Adeva Ráyás, governing 370 years."

There can be little doubt, but that this dynasty is the same with the 18 ancestors of Pritapa Rúdra, mentioned in the Ráya Paditti of Ramuppa; in such loose hints as can be procured of Hindu history, the difference of one person being of little importance. The immoderate length of the last reign is probably owing to some

CHAPTER XX.
July 4.

mistake; and then the coincidence between the two Ráya Padittis will be greater; for Ramuppa allows only 211 years for these princes. The Sri Permaturu Ráya Paditti brings this dynasty down to the year of the Christian era 1082; but that must be corrected as above. It then goes on to state, that

Pritapa Rudrun. "Uricundy Pritapa Rudrun governed 58 years, and Anna Pemma Ruddi 77 years."

It is probable, that Anna Pemma may have been a prince descended from Pritapa Rudra, who established himself here after the overthrow of that king by the Mussulmans, and was not brought under subjection to the first prince of Vijaya-nagara; for Hari-hara the first is not mentioned in this succession of princes.

Tuluva Rayar

## " Tuluva Ráyár government.

Buca Ráyar	•	reigned		14 years
Vijia Buca Ráya	-	-		13
Hari-hara R.	-	-		14
Casi Deva R.	-	-	-	8
Rama Deva R.	-	-	-	7
Virupacshi $R$ .	-	•	-	5
Malica Argina	R	-	-	7
Rama Chandra	Ráyar	-	-	9
Shalava Conda I	Deva Maha	Rájá	-	14
Deva Ráya Mah	a Rájá			15
Cambudia Deva.	M. R.	-	-	5
Comara Cambudi	a M. R.	-	-	4
Sholava Canteru	a Deva M.	$R_{\cdot}$ -	-	6
Sholava Narasin	gha Deva	M. R.	-	40
Imudia Dharma	Ráyar	-	-	11
Piravida Deva A	Iaha Ráye	ı -		30
Rama Chindra A.	I.R.		-	18
Vicunta M. R.				19

Padma Nava Maha Ráya	reig	gned 6 years.	CHAPTER
Damudera M. R	-	16	$\sim \times \times \times \times \times \times \times \times \times \times \times \times \times \times \times \times \times \times \times$
Narasingha M. R	-	- 11	July 4.
Vira Narasingha M. R.	_	- 21	

Total, 22 Tulava Ráyas, governing 293 years."

This brings the chronology down to the year of Christ 1510. The account here given of this dynasty is remarkably different from that of *Ramuppa*, and is totally unsupported by such inscriptions as I have collected. The author then proceeds to the celebrated *Krishna Ráyaru*, as of a distinct family.

#### " Ráyar government.

Krishna Ráyar	_	governed	20 years.	Krishnà Rayar.
Achuta Ráyar	-		13	
		To	otal 33.	Růma Rhjů.
Ráma Rájá -	-		22	200,000 20000
Tirumala Deva N	Iaha Rá	yar -	8	
Sri Ranga Deva	M. $R$ .		14	
Peria Vencata Pi	iti Maha	ı Ráyar 🕒 -	29	
Ráma Deva M. I	₹		15	
Anagundi Vencat	a M. R.		12	
Sri Ranga M. R.	-		5	
7 Raids from Ra	ma Ráid	i to Sri Ran	ga, who governed	105

Total 7 Rajás from Ráma Rájá to Sri Ranga, who governed 105 years."

Total from the beginning of the Kali-yugam till the year Veya, 4748.

Ráma Rájá is, no doubt, the prince who was killed on the banks of the Krishna, and whose death was immediately followed by the destruction of Vijaya-nagara; which, according to this chronology, would have happened in the year of the Christian era, 1565. According to Ramuppa, however, that event happened about the year 1588; and in this point, I imagine, his chronology is not

CHAPTER materially erroneous. The princes that follow Ráma Ráyaru are probably those of a branch of the Anagundi family; which, after the fall of Vijaya-nagara, settled at Chandra-giri, north from Tripathi, July 4. and which for some time possessed a considerable territory in that vicinity.

Mussulmans. " Afterwards, beginning with the year Servajittu (that is, the year following Veya, or 1648), were the Turcanum (that is to say, the Mussulmans.)

The Golconda Rájá, called Toluta Abdulla, reigned 26 years.

Hussun Cudumusta reigned 14 years. Total of the Golconda government, 2 reigns and 40 years. Total from the commencement of the Kali-yugam 4788 years (A. D. 1688).

Afterwards, from the year Parabava in the month Kartika, were the Delhi Sultans, Ashaburi Padishas.

Aburung Shai governed 19 years. His sons were Asumudar, Salem, and Cam Bucshi.

> Asumudar governed 3 months. Salem governed 3 years. Cambucshi did not govern. Baba Shean governed 6 years.

The government of 4 kings of Delhi continued in all 28 years and 3 months, ending in the year of the Kali-yugam 4816 (A. D. 1716.)

After this, in the month Ani of the year Munmutta, came other Rájás."

The author's knowledge of the Mussulman kings, living at a great distance, has been very imperfect.

5th July.—I returned to Condatura, and on the day following July 5. arrived at Madras; having observed, ever since passing the Ghats, more and more signs of improvement, the nearer I approached this European city.

> I was here greatly disappointed at not finding any answers returned to the queries which I had proposed to the gentlemen

who managed Bára-mahál and Coimbetore; as I had depended on CHAPTER this assistance, and as their great knowledge and abilities would have enabled me to correct many errors into which I must have fallen, and to obtain much information which a traveller cannot procure.



#### APPENDIX.

REPORT of the PRODUCTIONS, COMMERCE, and MANUFACTURES, of the SOUTHERN DISTRICTS in MALLEAM (Malayalam) framed by the Resident at Calicut, agreeably to the Instructions of the Commissioners appointed to inspect the Countries ceded by Tippoo Sultan on the Malabar Coast; and comprized under the following Heads, viz.

1st, ACCOUNT of the several ARTICLES of COMMERCE produced or manufactured, and which are also consumed in the Country.

In calculating the probable profit on the following List of Articles, a deduction must be made for Inland Duties, Customs, and other Charges, which are very considerable, but which cannot be accurately ascertained; for this reason, the difference between their respective local value, and when ready to be sold at, or exported from, the sea-coast, has been put down as the profit arising on the trade. Many of the Articles inserted in this List, are of too trifling a nature to yield any advantages worth mentioning in a commercial point of view.

Natural Productions of the Soit.	Local Vatue.	Probable Profit arising on the Trade.	Explanatory Remarks.
Bette-Nuts - Black Wood - Bamboos	230 reas per 1000 3½ rupees per candy 2 rupees per 100	{ When dried and pre-} } pared, 50 per cent. } 200 per cent. 50 ditto	100 reas == 1 rupee
Buzarbut-Nuts,a country-	18 rupees per candy	25 ditto	
Betle-Nut Leaves Butter Coco-Nuts	1 rupee per 4000 6 rupees per maund 14 rupees per candy	25 ditto 25 ditto 3 rupees per mill (1000)	Extremely variable in their Prices
Cardamums, 1st sort Ditto, 2d ditto Ditto, 3d ditto Ditto, 4th ditto	800 rupees per candy 600 ditto ditto 450 ditto ditto 300 ditto ditto	80 per cent 50 ditto 40 ditto 20 ditto	Little used in the Country. — Vide List of Goods exported.
Cassia (Laurus)	30 to 40 rupees per candy	50 ditto	Occasionally bought up by the Europe Ships; and which, in London, they mix with the real Cinnamon.
Coir, Rope of Coco-Nut	18 rupees per ditto	50 ditto	
Capoor Catchree	3 rupees per maund	10 ditto	A Country Medicine
Colenzun	12 rupees per candy	5 ditto	Used in Medicine
Cassia Leaves (Laurus)	10 rupees per ditto	25 ditto	Horse Gram. Dolichos biflorus
Chowla -	2½ rupees per ditto	50 ditto	A Country Grain, Holeus Sorghum
Castor Seed -	13 ditto per maund	25 ditto	Ricinus
Dry Ginger	35 rupees per candy	50 to 100 ditto	
Eggs -	1½ rupees per 100	25 ditto	
Honey	5 rupees per maund	50 ditto	
Heavy Pepper -	t00 rupees per candy	80 per cent. last year : now 100 per cent.	It is said, that the French at Mahé now give 210 rupees per candy
Jack Wood	1½ rupee per candy	100 ditto	rlocarpus
Jeer Kulchla -	5 ditto ditto	Not to be ascertained	A Medicine
Jeer Mui	12 rupees per canay	Not to be ascertained	Kind of Nnts used in Medicine
Jinjety Seed Jacks Fruit	21 rupees per robin	50 per cent.	esamum
Kud Ebrumee -	8 per a rupee 10 rupecs per candy	Not to be ascertained	Artocarpus
2237 41140	, apecs per canag	TO TO DE ESCETATIBLE	
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	-			
Natural Productions of the Soil.		Local Value.	Probable Profit arising on the Trade.	Explanatory Remarks.
Light Pepper -		100 rupces per candy	100 per cent.	The Reason of Light Pepper bearing apparently so high a Price, is from the vast Quantity of it which goes to one candy in weighing it.  A heavy hard Wood, which sinks in the Water; occasionally used by Tippoo in
Lowlungar Wood	-	t ½ rupees per candy	Not to be ascertained	launching his Ships, to put beneath them when hauled into the Water. Hopee Buch. MSS.
Man (Mann)		2 rupees per rabin	50 per cent.	Phoseolus Mungo L.
Mug (Mung)		2 rupees per 100	Not to be ascertained	Mangifera
Mangoes, Fruit Nag Kasur, Flower of Cas		35 rupees per candy	25 per cent.	
	1		[ Variable, and not ]	In great demand for large
Poon Wood for Masts	-	5 to 100 rupees per piece	to be ascertained	Ships, Callophyllum
Paddy, or Rough Rice	_	t rupce per robin	50 per cent.	
Plantains, or Bananas		5 rupees per 100	Ditto	Musa
Plantain Leaves	-	1 ditto per ditto	25 ditto	Musa
Sapun Wood	-	10 ditto per candy	60 ditto	Used in Dying, Guilandina Sapan
Teak Wood (Theca)	- 1	3 rupees per ditto	200 ditto	Fide Remark at the End of this Report
, , , ,	- 1	25 rupees per candy	50 to 100 per cent.	E Report
Turmerick Tamarinds	]	10 to 15 rupees per ditto	50 per cent.	
			Ditto	∫ Produced in small Quantities.
Toor, a Grain	-	t½ rupee per robin	Bitto	Cytisus Cajan
White Pepper	-	220 rupees per candy	175 ditto	Picked from the heavy Pepper; and produced in small Quan- tities.
Jams, a Fruit	-	10 ditto ditto	25 ditto	Calyptranthes Jambulana
MANUFACTURES.				
Bees Wax	-	8 rupees per maund	25 per cent.	Produced in small Quantities
Baskets -	-	30 to 60 per a rupee	5 ditto	
Coco-Nut Oil	-	3 rupees per maund	50 ditto	Ditto ditto
Castor Oil -	-	Variable	25 rupees per cent.	Made of Coco-Nut Husks
Coir Ropes	-	25 rupees per candy 27 ditto	40 ditto	Trade or cook tract trains
Ditto Cables Coura -	-	30 ditto	25 ditto	Dried Kernels of the Coco-Nut
Chunam (Lime)	-	2 rupces per 1000 noye	t0 ditto	
Cadzans -	-	5 rupees per 1000	25 ditto	Mats, made of the Coco Leaf
Dammer (Resin)	-	13 rupee per maund	to ditto	
Dry Coco-Nuts		47 rupees per 1000	Not to be ascertained	Produced in small Quantities
Gold	-	Variable Ditto	Ditto	Ditto ditto ditto
Iron -	-	5 rupees per maund	15 per cent.	Ditto ditto ditto
Jenjily Oil (Sesamum) Jagory of Toddy		17 rupees per candy	25 ditto	Inspissated Juice of Palm Trees
Mats of Bamboos	-	11 rupee per corge of 20	25 ditto	
Red Betle-Nuts	-	30 rupees per cwt.	25 ditto	
Ditto Chuqueenee ditto		45 ditto	30 to 50 ditto	
Rice, boiled	-	t3 rupee per robin		The only Cloth manufactured
Small Cumberbands	-	1 rupce per piece	Not to be ascertained	in the Country.
Summer Heads, or Chie	Iries	Variable	Ditto	Parasols
Toddy -		3 rupee per maund	20 per cent.	Juice of Palm Trees
Twine -	-	25 rupees per maund	25 ditto	Produced in small Quantities
Toor Dholl, a Grain		2 rupces per robin	25 ditto	{ Ditto ditto ditto, Cyti-
Towker -	-	16 rupees per candy	25 ditto	Ditto ditto ditto
Wax Candles	-	22 rupees per maund	25 ditto	
White Betle-Nuts	-	34 rupees per candy	-5 unto	

#### 2dly, ACCOUNT of GOODS EXPORTED, and to what Places.

· Natural Productions of the Soit.	Local Value.	Whither exported.	Probable Profit.	Explanatory Remarks.
Betle-Nuts Black Wood Bamboos	230 reas per 1000 3½ rupees per eandy 2 rupees per 100	To all Places in India Ditto Different Places along the Coast	Not to be ascertained 50 per cent. Ditto	Plerocarpus
Black Grum, a Pulse	21 rupees per robin	Ditto ditto	t5 ditto	{ Very little produced in the Country
Buzarbut Nuts	18 ditto per candy	To all Places in India	20 ditto	A Country Medicine
Betle-nut Leaves	t rupee per 4000	To all Places along the Coast	2 ditto	,
Butter	6 rupces per maund	Bought up in small Quanti-	to ditto	
Cardamums, 1st sort 2d ditto 3d ditto	800 rupees per cwt. 600 Ditto 450 Ditto	Ditto and Europe	Not to be ascertained	
4th ditto	(300 Ditto	P		Very little produced
Cassia (Laurus)	30 to 40 rupees per cwt	Ditto and ditto	Ditto	in the Country
Coco-Nuts	14 rupees per 1000 18 rupees per cwt	To all Places in <i>India</i> To all Places in <i>India</i>	5 per cent. Not to be ascertained	
Coir Coco-Nutrope, 2d sort Capoor Cutchree	3 rupees per maund	Ditto and China	Ditto	Used in Medicine
Colenzun	12 rupees per candy	Ditto	Ditto	Ditto ditto
Cassia Leaves (Laurus)	10 rupees per candy	Ditto	5 per cent.	Horse Gram. Dolichos
Cultee, a Pulse	13 rupee per robin	Different Places along the Coast	Ditto	biflorus
Chowla (Holcus Sorghum)	인축 ditto	Ditto	Ditto	A CountryGrain; very little produced in the Country
Castor Seed	13 rupee per maund	Ditto	Ditto	
Dry Ginger	35 rupees per cat	To all Places in India  S Bought up in small Quanti-	Not to be ascertained	
Eggs -	1½ rupee per 100	ties by Vessels	Ditto	
Honey	5 rupees per maund	Ditto ditto ditto	Ditto	{ Very little produced   in the Country
Heavy Pepper	100 rupees per eandy	Europe, and all Places in Iudia	Ditto	
Jack-wood Jeer Kutchla	1½ rupee per ditto 5 ditto	To all Places in India Ditto	10 per cent.	Artocarpus
Jeer Moi	12 ditto	Ditto	Not to be ascertained }	Used in Medicine
Jenjily Seed (Sesamum)	2½ rupees per robin	Ditto	Ditto	{ Very - little produced in the Country
Jacks, Fruit	S per a rupee	Ditto	Ditto	Artocarpus
Kud Ebramee	to rupees per candy	Ditto Ditto	Ditto	-
Light Pepper Limes	2½ rupees per cwt	Ditto and Coast	50 per cent. 5 ditto	
Lowlungar Wood	th rupee per candy	Ditto	t0 ditto	
Mug, Phuseotus Mungo Mangoes Fruit	2 rupees per robin 2 rupees per 1000	Ditto ditto To all Places in <i>India</i> and Coast	5 ditto	Ditto ditto
Nagkesur, or Flower of		To all Places in India	Ditto	(Very little produced
Cussia }	35 rupees per candy	Somboy, and bought up by ?		{ Very little produced in this Country
Poon Wood for Masts	5 to 100 rupees per piece	the Lingus.	Ditto	Calophyllum Inophyllum
Paddy, or Rough Rice Plantains, or Bananas	1 rupee per robin 5 rupees per 1000	To all Places in India and Coast Ditto	Ditto 2 per cent.	
Plautain Leaves	1 rupee per ditto	Ditto	Ditto	.Musa
Sapan Wood	to rupees per candy	To all Places in India	5 ditto	Used in Dying. Gui-
Teak Wood	3 ditto	Ditto ditto	25 ditto	Landina Sapan Theixa Jussieu
Turmerick -	25 ditto	Ditt <b>o</b> ditto	Not to be ascertained	
Toor, Pulse	t½ rupee per robin	Ditto ditto	5 per cent.	Very little produced in the Country. Cy-tisus Cojan
White Pepper -	120 rupees per candy	Europe, and to all Places in India	Not to be ascertained	Ditto ditto
Jams, Fruit	10 rupees ditto	To all Places in India and Coast	Ditto	S Calyptranthes Jambu-
	l			- 1214

Natural Productions of the Soil.	Locat Value.	Whither exported.	Probable Profit.	Explanatory Remarks.
Sandal Wood, 1st, 2d, 3d and 4th sorts	60 rupces per candy	{ China, Europe, and Places in } India	Not to be ascertained	Where the Sandal Wood is produced, it is bought up without being picked, or di- vided into the tst, 2d, 3d, and 4th sorts; which is always done afterwards
MANUFACTURES.	97			
Bees Wax Baskets Coro-Nut Oil Castor Oil Coir Ropes of Cocoa-Nut Ditto Cables Copra, dried Coco-Nut Kernel Chunam (Lime) Cadjans, Mats of Coco-Nut Leaves Dammer, Resin Dry Coco-Nuts Gold	8 rupees per maund 30 to 60 per a rupee 3 rupees per maund Variable 25 rupees per candy 51 ditto 2 ditto per 1000 noye 5 ditto per 1000 13 rupee per maund 17 rupees per 1000 Variable	To all Places in India To all Places in the Coast To all Places in India  To all Places in India Ditto Ditto Different Places along the Coast Ditto To all Places in India and ditto To all Places in India	5 per cent. Not to be ascertained Ditto Ditto	Very little produced in the Country  Ditto ditto  Ditto ditto
Iron -	Ditto	Different Places along the Coast	Ditto	Ditto ditto Ditto ditto
Jenjily Oil, Sesamum	5 rupees per maund	Ditto ditto	Ditto	Staspissated Juice of
Jagree of Toddy -	17 rupecs per candy	Ditto ditto	Not to be ascertained	Corge means 20, or score
Mats of Bamboos Red Bette-Nut	30 rupees per candy	To all Places in India	Ditto Ditto	
Ditto Chuqueenee ditto Rice, Boiled	45 ditto ditto 13 rupee per robin	Ditto and the Coast	Ditto	
Small Cumberbands	½ rupee per picce Variable	To all Places in Coast Ditto	5 per cent. Not to be ascertained	Parasols
Summerheads, or Chitries Toddy	3 gr. rupec per maund	Ditto Ditto	Ditto Ditto	Palm Wine .
Twine	2½ rupees per maund	Ditto	Ditto	f Grain of the Cytisus
Toor Dholl	2 rupces per robin 16 rupces per eandy	To all Places in India	6 per cent.	l Cajan Malubar Grain
Towker	22 rupees per maund	Ditto	5 ditto	
White Betle-Nut	34 rupees per candy	Ditto	Not to be ascertained	

#### 3dly, ACCOUNT of GOODS IMPORTED.

List of Articles.	From whence imported.	Quatity.	Average Price.	Remarks.
Alum	China	Dapotas	05	
Almonds -	Muscat, Mocha, and Judah	Bags	35 rupees per candy 1 to 6 rupees per maund	
Amber	Direc Mahall ditto (Arabia)	Wooden Boxes	3 to 400 rupees per pount	1
Aloes	Muscat	Bags	6 rupces per maund	
Benjamin -	Bengal and Achin	Chests	12 to 20 rupees per maune	<i>t</i> [
Black Grapes Brimstone	Muscut and Mocha	Bags Ditto	4½ rupecs per maund	
Black Cummin Seed	Ditto, Surat, and Guzerat	Ditto	60 to 90 rupees per candy 80 to 100 ditto ditto	
Black Gram, a Pulse	Bombay ditto and ditto	Ditto	18 to 35 dilto ditto	
Bole, Medicine	Muscat	Ditto	8 rupees per maund	
Batty, Rice in the Husk	Bombay	-	35 to 45 rupees per moral	,
Black Dootics, a Cloth	Surat, Guzerat, and Madras	Bale	110 to 130 rupees p	
Broad Cloth	Bombay	Ditto	\ \ corge, or 20 pieces 45 to 80 rupres per piece	
Camphire -	China and Achin	Chest	80 to 100 rupces per pecu	,1
Cotton -	\ Sombay, Surat, Guzcrat, Ra-	Bale		}
	( japore	)	80 to 130 rupees per candy	1
Cutch Cotton	Cutch Parkey and Case	Ditto and Dokras	60 to 90 ditto ditt.	
Chilly, Capsicum Castor Oil -	Bombay and Goa Surat and Guzerat	Bags Dupper	40 to 70 ditto ditto	1
	Sengal, Madras, Bombay,			
Chintz	and Guzerat	Bales	30 to 80 rupees per carge	
Cinnamon	Ceylon and China	Chests	40 to 50 rupees per cwt.	
Coffee -	Muscat and Mocha	Bags	8 to 10 rupees per maund	1
China Root Copper in Sheet, Plate,	China   Bombay, Bengal, Muscat, and ?	Dapotas	45 rupees per candy	
and Bar	Batavia	Chests	t6 to 18 rupees per maund	
Creat	Bengal	Ditto	8 rupees per maund	
Cloves	Batavia and Malacca	Ditto	3 to 4 rupees per pound	
China Cabob -	China	Ditto	15 rupees per maund	
Cummin Seed	Sombay, Sur't, Guzerut and	Bags	{ 100 to 150 rupees per candy	
Dholl, a Pulse	\ Muscat   Sengal, Bombay, Surat, and \ Guzerat	Ditto	25 to 30 rupees per cwt.	
Dry Dates -	Bussorah, Muscat, and Mocha	Ditto	25 to 30 ditto	
Dry Ginger	Bengal	Ditto	65 to 75 ditto	
Dammer, Resin	China, Achin, and Malacca	Chests Bags	50 rupees per cwt.	Pofinal Anti-
Eyes Medicine	Muscat and Juddah Ditto ditto	Ditto	10 rupees per maund 50 rupees per cwt.	Refined Antimony
Essoop Gool Seed Figs, Dry	Ditto ditto	Ditto	10 rupees per maund	
	Sengal, Bombay, Surat, and	Ditto	22 to 35 rupces per candy	
Gram, a Pulse -	{ Guzerat }			
Green Paint -	Surat and Guzerat	Ditto Dupper	20 to 35 per maund	
Ghce, Boiled Butter	Bengal, Sind, Surat, and Guzerat		6 to 8 rupecs per maund	f Made from the Croto-
Gunny Bags .	Bengal and Bombay	Bale	3 to 4 rupees per corge	laria juneca
Gunny in Pots -	Ditto	Ditto	2½ to 3 rupees per ditto	, <b>,</b>
Gum Arabic	Muscat, Surat, and Guzerat	Bags	5 to 8 rupees per maund	
Hartall, Cinnabar	China and Muscat Muscat and Sindia	Ditto Jar	110 rupees per cvt. 30 to 50 rupees per maund	1
Hing, Asafœtida Hengraw -	Muscat and Senara	Ditto	5 rugees per maund	
Iron	Bombay	_	65 to 80 rupces per cwt.	
Jenjily Oil -	Ditto Surat and Guzerat	Dubler	70 to 100 rupees per candy	Eesamum
Jagree	Bombay and Rajapore	{ EarthenPots and } Baskets		Inspissated Juice of
	Bussorah, Muscat, and Mocha	Bags		L Sugar Cane
Jestomud, Medicine Kincob, Cloth	Bombay, Surat, and Guzerat	Bales	20 to 100 runces per piece	Aquorice
Kismiss, Raisins	Mocha and Muscat	Bags	4 to 5 rupees per maund	
Long Pepper -	Bengal	Ditto	30 to 40 ditto ditto	
Lime Pickles -		Jar Code	12 to 15 ditto per 100	
Lead	Bombay, Matacca, and Batavia Ditto, Bengal, Surat, and Guzerat	Cask Rag	4 to 5 rupees per maund 18 to 35 rupees per candy	
Mug, Pulse Mustard -	Ditto Guzerat and Sindia	Ditto	30 to 40 rupees per ditto	
	Batavia, China, and Sindia		3 to 500 rupees per pound	

List of Articles.		From whence imported.	Quality.	Average Price.	Remarks.
Mugadooties, Silks		Bengal	Bales	30 to 40 rupees per corge	
Musroo	_	Bombay, Surat, and Guzerat	Bales	90 to 200 rupees per ditto	
Munzett, Madder		Mocha, Bussorah, and Sindia	Bags	160 rupees per candy	
.Wortooth, or Blue Vi	t-i-l		Ditto	15 to 25 rupees per maund	-
Maytee, Fenngreek	111101	Ditto	Ditto		
		Sengal, China, Bombay, Su-	Ditto	35 to 45 rupees per cwt.	
Medicine	-	rut, Guzerat, and Mocha	Ditto and Chests	Not to be ascertained	-
Nutniegs	-	Batavia and China	Wooden Box	10 to 12 rupees per pound	
Nuckla -	-	Muscat	Ditto	15 rupees per maund	
Opium -	-	Bengal, Bombay, and Mocha	Chests	70 to 180 rupees per maund	
Oil of Mustard Seed		Surul, Guzerat, and Sind.	Jars	70 to 90 rupees per candy	
Onions -	-	Bombay	Baskets	20 to 50 rupees per ditto	
Purpets, Cloth		Bombay	Bales	16 to 27 rupees per piece	
Piece Goods, Silk ar	r Ibn	[ Bengal, Madras, Bombay, Su-]	72.11		
Thread	}	rut, and Guzerat	Ditto		
Pistachio Nuts		Muscat	Bags	6 rupecs per maund	1
Pepul Mull		Bengat	Ditto	22 rupees per maund	Root of the Long Peppe
Pearls -		Muscat, Bombay, and Surat	Buts		land of the Long Teppe
Pomegranate	_	Ditto	Baskels	16 to 20 per a rupee	
Persia Gul		Ditto	Jars	22 rupees per candy	
Persia Salt	~	Ditto	Bags	10 rupees per cwt.	
Quick Silver	-	Bombay, China, and Bataria	Jars	45 to 50 rupees per maund	1
Rice -	-	Bengal, Mangalore, and Sindia	Bags and robin	75 to 12 rupees per bag	
Ruttans	- 1	Balavia	Bundles	2½ rupees per 100	
Red Earth	-		Bags	15 rupees per candy	
	- 1	Muscat Ditto	Ditto	4 rupees per maund	
Rose Flowers	-		Bottles		
Rose Water	-	Ditto	Jars	1 rupee per bottle	Mallows?
Rose Mallos		Ditto	Casks	121 rupees per candy	Manons:
		Eombay	Bags	4½ rupees per maund	
- 1411		Bombay; Museat, and Mocha		2 per bag	
	-	Museat	Ditto	30 rupees per pecul	-
Sweet Limes		Ditto	Baskets	15 to 20 per rupee	
Bucch		Ditto and Mocha		8 to 12 rupees each	
Salem -		Ditto ditto	Bags	2 to 4 rupees per pound	
Sunsull Karr		Ditto	Ditto	2 rupees per maund	
Sova Makee		Ditto	Ditto	3 ditto ditto	
L'aw Cummin Seed		Ditto Surat, Guzerat, and Sind	Ditto	160 rupees per candy	
affron -	-	China, Bombay, and Goa	Dupper and Tin Box	20 to 25 rupees per pound	*
S hawls -	- 1	Bombay, Surat, and Guzerat	Bale	20 to 100 rupees per piece	
Steel -	-	Bombay	_	90 rupees per candy	
Sugar in Dapotas		China	Dapotas	18 rupees per pecul	
Ditto in Bags		Bengal	Bags	16 ditto	
Ditto in Cannister	- 1	Batavia	Cannister	80 rupees per candy	
	-	China and ditto	Tub and Cannister	120 to 160 rupees per candy	
Salt Petre .	-	Bengal	Bag	60 to 70 rupees per candy	
Silk -	-	Ditto and China	Bale and Chest	4 to 600 rupces per pecul	
Tobacco		Furat, Rajapore, and Coimbetore	Bale	60 to 100 rupees per candy	
Sandal Wood	. 1	Rajapore and Mangalore	_	10 to 15 ditto	
Tuthnague -		hina and Batavia	_	8 rupees per maund	
Tortoise Shells -		Balavia	Bale	5 rupees per pound	
Tin		Ditto		10 rupees per maund	
	- 1		( Wooden Box and )		
Vermillion -	- [	hina and Surat	{ Bundle }	11 rupee per bundle	
Wheat		Bombay, Surat, Guzerat, and	Bag	20 to 35 rupees per candy	
		Muscat			
Wallnuts		Iuscat	Bag	2 to 3 rupecs per 1000	
Wet Dates	1 1	Museat and Mocha	Ditto	20 rupees per candy	
				•	

Teak wood is at present very scarce at Calicul and the sea-ports, owing to the elephants which were employed in this trade being taken away by the Aabab (Tippoo) for the use of his army. Before the Teak Timber can be brought from the forests, the process is very tedious. It is, in the first instance, necessary to cut off all the branches from the trees intended to be cut down; to cut the tree nearly two-thirds through, and to make long incisions in the bark; in which state it must remain one year to dry, during which time the bark falls off of itself; after which it is cut down, pushed into the rivers contiguous, during the rains, by elephants, and floated down them to different places. The Teak wood, when green, is very heavy; and sinks in water.

The Poon spars are got in nearly the same manner, but the Jack tree can be cut down at any time.

An ABSTRACT of the GOODS IMPORTED and EXPORTED by SEA, for the different Years, taken from the Custom-House Account of Tellichery Circle.

Malabar Year 973.	974.	975.
IMPORTS.  A  Arrack, Columbo Ditto Batavia Ditto, Cachin Ditto, Anjengo Ditto, Canara Almonds Scandics Ditto, Canara Scandics O maunds 16		75½ leaguers 25 leaguers 43½ gallons 23 ditto 128 ditto 2 candies 7 maunds
Aloes		11 ditto 15 ditto 16 lb, 2 ditto 10 ditto 6 ditto
Betle-Nuts     -     3 candies 12 maunds 16 lb       Ditto, Cut     -     13 ditto 16 ditto 16 d       Ditto, Green     27,900     27,900       Beads     -     20,000       Benjoin     -     36½ peculs = 133 lb       Barley     -     5 kegs and 3 chests       Boots     -     1 trunk		41 caudies 2 maunds 7 ditto 6 ditto 8 lb. 343,000 1 candy 18 maunds 5 ditto 10 ditto 6 kegs 35 pairs
Collage	374 candies 1 ditlo 2 maunds 1 dozen 11 boxes 59 candies 10 maunds 60730 13 candies 15 maunds 14 candies 15 maunds 12 Duppers 3 Carges 18 chests	5 boxes 6 chests 10 candies 347 ditto 590 canadies 18 maunds 16 lb. 15 ditto 50 gross 12 boxes 21 candies 4 maunds 16 lb. 88553 12 candies 4 ditto 3 ditto 4 ditto 6 maunds 2 ditto 10 ditto 17 corges, or scores 16 chests and 23 boxes 5 candies
Danmer, or Resin - 12 candies Dates - 771 bundles Doll, or Pulse - 58 candies 2 maunds	243 bundles 128 candies 11 mounds	1440 bundles 53 candics

Malaba	r Year 973.		974.	975.
·	PORTS.			-
	E			
Ditto ditto -	- 91 dozen - 42-chests - 9 boxes - 12 pipes - 7 casks - 13 hogsheads - 1 trink - 5 cases		83 dozens 41 chests 3 boxes 14 pipes 9 casks 14 hogsheads 5 trunks 18 eases	24 chests 20 pipes 8 casks
	F			
Frying Pans -	- 150 sets		312 Sets	
	G			
Ganjaw, or Hemp Leaves Gram (Pulses) Mang Ditto Ditto, Guty Ditto, Guzerat Ditto, Guzerat Ditto, Mart Ghee, or Boiled Butter Garlick Ginger Gunny Bags, Crotolaria june Goat Skins Glass Ware Ditto ditto Ditto ditto Ditto ditto Ditto ditto Ditto ditto  Hartal Cinnabar	- 102 ganous 10 pints - 35 chests - 12 trunks - 2 casks - 1 case	t do.	S candies 16 maunds 748 ditto 17 ditto 24 231 rabius 154 ditto 618 candies 11 maunds 30 6 robius 114 candies 41 candies 8 maunds 11 ditto 16 ditto 57 ditto 12500 bags 43 gallons 3 pints 41 trunks 16 casks	206 robins 321 ditto
Hemp Hams	- 12 candies 18 maunds - 1 box - 22 in number		10 boxes 15 in number	6 boxes
Ditto - Ditto - Hats -	- 24 pounds - 1810	,	140 lb. 700	18 dozen
Jagree Cane, or Inspissat Juice of Sugar Cane Iron Nails Ditto	I Second		93 candies 18 maunds 2 ditto	95 candies 4 maunds
	K			
Kismish Raisins	- 9 candies 13 maunds		18 candies 13 maunds 24	1b. 10 ditto
	L			
Liquorice Root Looking Glasses Leather	- 20 candies - 60 corges, or scores - 8 ditto		45 candies 12 maunds 8 14 corges 13 ditto	70. 3 ditto 7 ditto S0 dozen 15 corges

	1		
. Mala	bar Year 973.	974.	975.
IN	MPORTS.		y
Mace Mustard Seed Mats Ditto, Bamboo Malabar Medicines	- 7lb. 10 candies 16 lbs 10 corges, or scores - 20 ditto - 17 candies 2 maunds	8 maunds 24 candies 12 maunds 8 lb. 133 corges 112 ditto 13 candies	15 maunds 15 candics 152 corges 130 ditto 2 candics 10 maunds
Nelly, rough rice Nutmeg -	- 594,642 edangallies, 108 cub. in. - 2 candies 3 maunds	865,000 edangallies 4 candies 15 maunds	26,050 edangallies 3 candics 5 maunds
; i .	O	+ cureets 13 manus	S tunutes S mannes
Oil, Coco-Nuts Opium - Ditto - Oil, Castor -	- 923½ paddáhs - 1 box - 1 chest - 15 maunds	9,049 paddahs 13 baskets 3 chests 19 maunds	115 paddahs 9½ maunds
Ditto Gingely, Sesamum Ditto ditto	- 20½ candies - 1½ dupers, leather bag	28½ candies	5 candics
Onions - Ollibanum -	- 184 candies	215 candies 24 ditto	160 candies 26 maunds
	P		7
Paper Pickle, Europe -	- 96 reams - 5 boxes	129 reams 14 boxes	678 reams 20 boxes
Ditto ditto Ditto, Country Pork, Salt Perfumery Ditto	- 3 cases - 11 candies 10 maunds 16 lbs. - 2 chests - 1 box	13 cases	30 barrels 12 ditto 15 chests
Ditto - Pepper - Planks Padlocks -	- 1 trunk - 520 candies 16 maunds - 1934 guz. or cubits	3 trunks 711 candies 6 maunds 1,450 guz. or cubits 3 dozen	849 candies 2,000 pieces 25 dozen
Piece Goods, Guzerat Ditto ditto Bengal Ditto ditto Palgawt Ditto ditto Madras Ditto ditto Manapar Ditto ditto Colletchy	- 16,781 carges 3 pieces - 127 ditto 10 ditto - 383 dilto 11 ditto - 211 ditto 13 ditto - 1680 ditto 14 ditto - 231 ditto 4 ditto	85,800 corges   14 pieces   342 corges   10 pieces   843 ditto   15 ditto   486 ditto   2 ditto   870 ditto   13 ditto   420 ditto	75,400 corges 3 pieces 425 corges 3 pieces 725 ditto 12 ditto 480 ditto 12 ditto 550 ditto 16 ditto 325 ditto 13 ditto
Ditto ditto Palamcotah Ditto ditto Cunara Ditto ditto China	- 793 ditto 15 ditto - 27,184 ditto - 408 ditto 3 ditto	384 ditto 15 ditto 87,385 ditto 4 ditto 601 ditto 4 ditto	733 ditto 10 ditto 75,430 ditto 10 ditto 640 ditto 3 ditto
	R		
Rafties, Cotton Cloth Red Dye Red Earth Rice, Bengal	- 69 pieces - 10 candies 16 maunds 16 lbs. - 18 Kegs	25 pieces 43 candies 18 maunds 16 lb. 10 kegs 42,000 bags	230 pieces 2000 bags
Ditto, Canara - Rose Water - Rice, Malabar - VO L. III.	- 100,323 robins - 70 bottles - 9315 robins	360,440 robins 141 bottles 85,000 robins	72,500 robins <sup>1-8ccn</sup> / <sub>42</sub> cub. in. 196 bottles 7,300 robins

Malabar Year 973.		974.	975.
¥ IM	PORTS.		1
	S		
Sugar -	- 22 chests	121 chests	275 bags -
Ditto -	- 200 bags	456 bags	70 chests
Ditto -	- 126 candies 16 maunds	421 candies 15 maunds	326 candies -
Ditto -	- 138 piculs 133 lb.	146 piculs	
Ditto, Candy	- 82½ ditto	935 ditto	825 piculs
Ditto ditto -	- 180 tubs	342 tubs	416 tubs
Summerheads (parasols)	- 16 corges 16 pieces - 1 ditto 4 ditto	3½ ditto	16 corges 4 ditto 3 pieces
Ditto, Silk - Sweetmeats -	- 1 ditto 4 ditto - 1695 bundles	486 bundles	1,650 bundles
Sago -	- 1093 bundles	14 small bags	18 bags, small
Salt	- 282,000 edang allies,108 cub. in.		362,500 edangallies
Ditto	- 3752 bundles	14,000 bundles	,
Ditto	- 564 candies	83½ candies	107 candies 17 maunds
Shoes -	- 8 trunks	10 trunks	5, trunks
Ditto	- 33 corges, or scores	80 corges	90 curges
Stationery -	- 3 chests	10 chests	11 chests
Ditto -	- 4 boxes	1 box	leg minere
Spars -	- 20 pieces	61 pieces 30 bags, small	82 pieces 29 bags, small
Small Shot -	- 82,400 pieces	18,456 pieces	216,700 pieces
Soap	- 8 dozen	14 dozen	20 dozen
Stockings - Ditto -	- 1 trunk	3 trunks	2 trunks
Ditto -	- 3 corges, or scores	1 corge	
Snuff -	- 57 /b.	31 118.	
Sapan Wood -	- 19½ candies	15 candics	3 candies
Sandal Wood -	- 61 ditto 16 maunds	93 ditto	105 ditto
	T		
Tobacco, Palighat	- 2,210 ditto 8 ditto	1,531 candies 16 maunds	2,342 ditte
Ditto, Guzerat	- 36 ditto 15 ditto	86 candies	43 ditto
Ditto, Canara	- 43 ditto 10 ditto	40 ditto 5 ditto	82 ditto
Tamarinds -	- 96 ditto 17 ditto	16 ditto	19 ditto 15 maunds
Turmerick -	- 12 ditto 18 ditto	17 ditto	18 ditto 16 ditto
Tea -	- 43 boxes	81 boxes	13.boxes
Teeth, Elephant	- 4 maunds	2 maunds	60 tb.
Twine -	- 20 lb.	40 lb. 401 pieces	76 pieces
Timber -	- 17 pieces - 2 candies	12 candies	8½ candies
Tin -	- 2 canates	1	-
	V		-
	V		
Tiva Seed -	- 20 ditto 5 ditto	63 candies 10 maunds	54 candies 15 maunds 24 lb.
Vermillion	14 ditto	3 ditto	- 18 ditto 18 do.
, C. Millou			
	***		
	w		
Wheat -	- 850 ditto 1 ditto 5 lb.	904 ditto 12 ditto 316.	475 ditto 15 ditto 18 do.
Wax Candles	2 ditto 17 ditto 22 ditto	1 4 ditto 18 ditto 14 do.	6 ditto 17 ditto
TI BA CBARGO			1

. Malab	par Year 973.	974.	975.
EX	CPORTS.		
	A		
Arrack - Assafœtida -	- 20 leaguers 75 gallons - 7 maunds	18 leaguers 25 gallors - 14 maunds	28 leaguers 12 gallons 10 maunds
	В		
Betle-Nuts - Ditto, Cut - Barley -	- 327 candies 12 maunds 16 lb. - 39 ditto 9 ditto 8 do. - 2 kegs	385 candies 14 maunds 24 lb. 20 ditto 13 ditto 8 do. 3 kegs	518 candies 13 maunds 18 lb. 42 ditto 10 ditto 24 do. 5 kegs
	С		1 1
China Ware Cotton Chilly Pepper (Capsicum) Cloves Cardamums Coco-Nuts, Dry Ditto, containing Water Coprah, Coco-Nut Keruel Coir, Coco-Nut Cordage	- 10 corges - 125 candies - 6 maunds - 14 ditto - 6 candies 9 maunds 26 do 721,120 in number - 637,300 in ditto - 575 candies 4 maunds 8 lb 25 ditto 15 ditto - 17 ditto 18 do.	1,786,900 897,900 1,450 candies 6 maunds 87 ditto 9 ditto	12 boxes 73 candics 16 matinds 8 lb.  — 15 ditto 18 do. 2 ditto — 16 do. 55 ditto — 18 do. 551,000 305,400 292 candics 2 maunds 15 ditto 18 ditto 17 lb.
Copper -		2 ditto 13 ditto 16 lb.	1 ditto 6 ditto 15 do.
	D		
Dates -	- 107 bundles	88 bundles	103 bundles
	E		
Europe, Liquors Ditto, ditto -	- 85 ehests - 14 hogsheads	44 chests   11 hogsheads	36 chests 18 hogsheads
	F		
Fish Sounds -	- 8 maunds	13 maunds	2 maunds
	G	=	
Gram Moong, Pulse Ditto, Guzerat, Pulse Ganjaw, Hemp Leaves Garlick Ghee, Boiled Butter	- 16½ candics - 18¾ ditto - 13 maunds - 5 candies - 36 ditto	18 candies 46 ditto 17 maunds 2 candies 2 t ditto	12 candies 11 maunds 12 ib. 12 ditto 18 ditto — 13 ditto 19 do. 7 ditto 18 ditto 11 do. 2 ditto 18 ditto 19 do.
and, Done Butter		-	
Hams - Hats -	H - 80 /b 4 dozen		28 <i>lb</i> . 13 dozen
	1		
Iron Jagree, Inspissated Juice of Palm Trees	and and	16 candics 183 ditto	10 candies 14 maunds 14 iv. 8 ditto 12 ditto
	K	16 manda	19 maunds 21 lb
Kismish Raisins -	- 13 maunds	18 maunds b 2	च माद्यप्रताह द्वा छ

#### APPENDIX.

, Malaba	r Year 973.	974.	975.
EX	PORTS.	100	<b>*</b> '
Liquorice Root -	L - 3 candies	11 maunds	12 maunds 28 lb.
Масе -	M - 21 lb.	8 <i>lb</i> .	1 maund 18 lb.
Nutmegs - Nelly, or Rough Rice	- 6 lb. - 26,070 edangallies	18 lb. 46,300 edangallies	8 lb. 56,500 edangallies
Oil, Coco-Nut -	O - 18 paddahs	3 paddahs	12 paddahs
Pepper - Dillo, Light - Perfumery - Piece Goods -	P - 5221 candies 17 maunds 16 lb 4 chests - 210 corges	2,506 candles 7 maunds 8 lb. 85 ditto 15 ditto 2 chesis 107 carges	1,850 candies 10 maunds 23 lb. 51 ditto 9 ditto 8 do. 3 boxes 2674 carges
Rice -	R - 18,670 robins	3,786 robins	8,007 <i>rabins</i>
Sugar Ditto, Candy Sandal Wood Ditto, Sawings Sharkfins Spars Sapan Wood	- 25¾ candies - 24 tubs - 567 candies 5 maunds - 52 ditto 14 ditto - 9 ditto 1 ditto 16 lb. - 11 score 12 pieces - 4 maunds	63 candies 14 maunds 18 lb. 18 tubs 548 carges 2 maunds 27 lb. 143 ditto — 15 do. 7 ditto 14 ditto 16 do. 1 score 9 pieces 16 maunds	24 candies 10 mannds 10 lb. 17 tubs 1,056 eandies 11 mannds 27 lb. 4 dilto 11 ditto 2 ditto 16 do. 16 pieces 18 mannds
Tobacco - Tea - Timber	T - 76 candies 18 maunds - 8 chests - 632 candies 5 maunds 3 lb.	86 candies 11 maunds 13 lb. 13 boxes 200 candies 18 maunds 16 lb.	93 candies 13 maunds 10 lb. 10 chests 103 candies 16 maunds 13 lb.
Ulva Seed	- 3 candies	9 candies	11 ditto 16 ditto 8 do.
Wheat	- 73 candies 16 maunds 16 lb.	28 candies 18 maunds 18 lb.	16 ditto 13 ditto 18 do.

# TOTAL QUANTITY of different ARTICLES EXPORTED by SEA from BETTUTANADA, in the Years 974 and 975.

Articles.	Quantity in 974.	Quantity in 975.	
Betle-Nut	170 candies 4 tulam	157 candies and & tulam	
Brass	14 ditto	- 4 dillo	
Cassia -		1 candy 4 dillo	
	16½ ditto	t47 ditto	
Chappungum Wood (Sapan)	130 Ditto 16 ditto		
hinakai, a Fruit -	21 Ditto 4½ ditto	17 ditto 17 ditto	
Thilly	1 Ditto 13 ditto	- 16½ ditto	
Clay, White	None	1½ tulam	
Coolty, a Grain	370 morals, or robins	527 morahs, or robins	
Coco-Nuts, Dry -	32,34265	2731520	
Ditto, Green -	10,06590	2,20070	
oir, or Coco-Nut Cordage	25 candies 8 tulam	14 tulam	
oriander Seed -	None	50 cdungarry (edungallies)	
Cotton	75 tulam	134 Ditto	
	None	6 Ditto	
Oitto, Yarn			
Dales, Dry - 1 -	1 candy 2½ tulam	2 candies 9½ tulam	
Ditto, Wet	None	16 tulam	
ish, Salt	182½ ox loads and 292 bales	366 bales	
ingly, Sesamum -	819 morahs, or robins	1155 Ditto	
Gingly, Sesamum - Ginger, Wet	2 tulam	9 tulam	
Ditto, Dry	63 candies 191 tulam	86 candies 16 tulam	
larlie	2 Ditto 73 ditto	165 tulam	
Shee	None	1 Ditto	
	None	1 Ditto	
Gunja. Dried Leaves of Cannabis	50 bales	None	
satira (			
Kemp, Crotolaria juncea -	11 candies 14 tulam	6 candies 2 tulum	
ron -	90 Ditto 10 ditto	90 candies	
Ditto Ware	None	654 pieces	
Jagory, or Inspissated Juice of	0.17	None	
Brab Tree -	3 tulam	None	
Kastury	50 candies 18 tulam	63 candies 12 tulam	
	19 Ditto 5 ditto	29 Ditto 11 ditto	
Kopra, dried Coco-Nut Kernels	12 Ditto 16 ditto	26 Ditto 6 ditto	
Kolakai		7 Ditto 1 ditto	
Kuwn Flower	4 Ditto 8 ditto		
Ditto Root	None		
Medicine, Weppumtoly -	10 tulam	None	
Ditto, Ramacham -	None	½ tulam	
Ditto, Woralary -	164 tulam	150 edungarry (edangattics)	
Dilto, Kuwahottamura -	None	3 tulum	
Nite Volumenta	163 tulam	None	
Dillo, Katumarana -	None	1 candy 6 tulam	
oitto, Karingaly -		None.	
Oitlo, Konepuwa -	25 edungarry (edangallies)	1 tulam	
Ditto, Nerengilla -	None		
Ditto, Wengakathil -	2 tulam	None	
Oitlo, Karkolari -	None	62½ edungarry (cdaugallics)	
Ditto, Takaram -	10 tulam	None	
Ditto, Waimba -	None	2 candies 1½ tulam	
Sitta Stink Wood	1 tulam	None	
Part Part To	2 Ditto	None	
ntto, Pachotytory		224 morahs, or robins	
oitto, Stink Wood Oitto, Pachotytoly Joong, Pulse, Phaseolus Mnngo	29 morah, or robin	50	
lais, Grass -	None		
Vellikai, Phyllanthus Emblica	3625 edungarry (edangallies)	270 edungarry (cdangallies)	
oil, Coco-Nnt	None	30 pots	
oil Gingly, Sesamum -	543 Chothana, or Pots	None	
la, Writing Palm Leaves -	None	1000	
Onions	8 tulam	4 tulam	
	43,840 parahs	4600 parah	
addy, or Rough Rice -	120 candies 19 tulam	214 candies 19½ lulam	
Pepper, Black		15 tulam	
Ditto, Long	None	57 morah (robins)	
Rice	665 morah (robins)		

Λr	ticles.		Quantity in 974.	Quantity in 975.
Resin -			None	1½ tulam
Salt, Coarse	-		45,80 parah	4681 parah
Ditto, White	-	-	2 tulam	None
Ditto, Pappara			3 candies 3 tulam	1 candy 8 tulam
Sandal Wood	-	-	10 Ditto 2 ditto	3 Ditto 162 ditte
Sugar, Moist	-		1 tulam	2 tulam
Sheep Skins	-	-	None	43
Tamarinds	-	-	4 candies 10 tulam	10 tulam
Tobacco		-	100 bundles, small	190 bundles, small
Tonies, Canocs		-	None	9 new ones
Turmerick	-	-	28 candies 103 tulam	10 candies 4 tulam
Wax -	-	-	23\ tulam	å tulam

### TOTAL QUANTITY of different ARTICLES IMPORTED by SEA, in BETTUTANADA, in the Years 974 and 975.

Articles.	Quantity in 974.	Quantity in 975.
Betle-Nut Cloth, Mannapar Cedar Ditto, Kolichy Ditto, Kolarum Ditto, Kangy - Fish, Salt Balt Sublimate (of Mercury)	- 37 candies 15½ tulam - 117½ corge, or score pieces - None - 21½ Ditto - None - 2 pieces - 138 bales - 590 parali 6 tulam	None 100 corge 1½ tulam 25 corge 1½ Ditto None None 2000 parah None
Sublimate (of Mereury)	- 6 tulam (Signed)	J. W. Wye, Collector

### TOTAL QUANTITY of ARTICLES EXPORTED by SEA from PARUPA-NADA, in the Years 974 and 975.

Articles.		
tle-Nut ssia Laurus uppungom Wood (Sapan) inakai coco-Nuls, Dry itto, Green iriander Seed olty, Pulse, Dolichos biflorus sh, Sait arlick nger, Wet ingly Seed (Sesamum) emp, Crotolaria juncea		

Artieles,	Quantity in 974.	Quantity in 975.
Kastury, a kind of Turmerick	10 candics 16 tulam	17 candies 14 tulam
Kolakui -	1 Ditto 16 ditto	7 Ditto 6 ditto
Kopra, Dried Coco Nut Kernel	4 Ditto 5 ditto	21 Ditto 9 ditte
Kuwa Root -	16 tulam	None
Ditto, Flower	7 candies	1 candies 12 tulam
Moong, a Pulse, Phaseolus Mungo	None	2 morah (robins)
Medicine, Weralary -	2 Iulum	1 tutam
Ditto, Neringila -	None	1 Ditto
lilto, Waimbu, Acorus aromaticus	2 tulan	3 Ditto
oilto, Karinguly -	None	± tulam
ellikai, Philanthus Emblica	3050 edungarry (edangallies)	
il, Gingly (Sesumum) -	8 pots	900 edungarry (edangallies:
addy, Rough Rice	1400 purah	Ditto
epper, Elack	41 candies 18 tulam	21 candies 4 tulam
lice -	None	25 morahs (robins)
andal Wood	2 candies	14 candies 5 talam
alt	34,300 parahs	7350 parahs
hells for (hunam (Lime) -	None	600 narui
obaceo -	10 tulom	None
urmeriek	1 candies 11 tulam	
onies (Canoes) New -	None	11 candies 15½ tulam
wine, Hempen, i. e. of the Cro-		
tolaria juncea -	Ditto	2 candies 10 tulum

### TOTAL QUANTITY of ARTICLES IMPORTED by SEA in PARUPA-NADA, for the Years 974 and 975.

Articles.			Quantity in 974.	Quantity in 975	
Betle-Nut		_	27 candies 6 tulam	Vone	
Cloth, Mannapar		-	153 corges, or scores of pieces	1271 corges	
Ditto, Kolichy			3 Di.to	Vone	
Cotton	-	-	5 candies	Ditto	
Dates, Dry		_	5, Ditto 4 tulam	Ditto	
Resin	-	-	8 tulam	Ditto	
Rice .	-	-	None	750 morahs (robins)	
Sugar, Moist		-	10 tulam	None	
•			(Signed)	J. W. Wye, Collecto	

### TOTAL QUANTITY of ARTICLES EXPORTED by LAND from MANAR-GHAT, in the Years 974 and 975, commencing 14th September, 1798 and 1799.

Articles.	Quantity in 974-	Quantity in 975.
Belle-Nut, Areca Ditto, Leaf, Piper Betle: Cassia Laurus Cardamoms Cedar Chappungum Wood (Sapan)	None 10½ tulam ½ Ditto	1042½ tulam 5 polam 6160 small bales 26½ tulam 4 Ditto ½ Ditto 20½ Ditto

Articles.	Quantity in 974.	Quantity in 975.
hinakai -	4 tulam	None
oco-Nuts	70	7663
oir, Coco-Nut Cordage -	None	1½ tulam
ish, Salt -	None	98 bales
Subbers, New, Leather Bags	None	30
Dates, Wet	None	15 tulam
linger, Dry	347 tulam	255 Ditto
ling, Asafœtida -	½ tulam	None
lides	2	
Ioney -	None	13 pots
agory, of the Brab Tree -	13 tulam	191 tulam
agory, of Sugar Cane -	None	2 Ditto
astury, a Turmerick -	None	28 Ditto
ledicine, Weratury -	2 tulam	
itto, Nagapuwa -	1 Ditto	
il Wood	None	25½ pots
oil, Coco-Nut -	203 pots	30 Ditto
il, Gingly (Sesamum) -	None	26 Ditto
epper, Black -	2813 tulam 11 polam	279 tulam 81 polam
epper, Long, Root of -	95 tulam	5 tulum
uwatta, a Red Dye -	5½ Ditto	None
lugy, a Grain	28 parahs	None
esin	3 tulam	None _
ice	51½ parahs	405½ parah
andal Wood	933 tnlam	2½ tulam
alt -	None	1 Ditto
itto	870½ paralis	1222 parah
nells for Chinam (Linie) -	None	21½ parah
agar, Moist	None	1½ lulam
nrmerick	418½ tulam 7½ palom	540 Ditto
Vax	75% Ditto 7% ditto	2g Ditto

# TOTAL QUANTITY of ARTICLES IMPORTED by LAND to MANAR-GHAT, in the Years 974 and 975.

Articles.	Quantity in 974.	Quantity in 975.
Buffalo, Female -	27	10
Ditto, Male		106
Cardamoms	115 tulam	5 tulam
Chappungom Wood (Sapan)	33 Ditto	None
Cloth, Coimbetore -	52691 pieces	3514½ pieces
Chilly, or Capsicum -	227 parah	118½ parah
Castor Oil Seed	41½ Ditto	44 Ditto
Chinakai	3 tulam	None
Cotton Yarn	205 Ditto	364 lulam
Cummin Seed -	4½ Ditto	10½ Ditto
Cooliy, a Pulse -	29 parah	33 parahs
Coriander Seed	331 Ditto	36 Ditto
Diff : eed	446 Ditto	1571 Ditto
Dhall, Split Pease, of the Cytisus Cajan -		173 Ditto
Ditto, Whole	None	4213 Ditto
Garlick	27453 tulam	21974 lulam
Gunja, or Hemp Leaves -	8394 bales, small	3536 bales, small
Gram, Pulse	119 parahs	331 parahs
Ginger, Wet -	6 tulam	None
Ghee, or Boiled Butter -	674½ pots	17623 pots

Arth	cles.		Quantity in 974.	Quantity in 975.
Hemp, Cratolaria	,		3 palam	V
Honey -	•		None	None
Jagory -		-	21 tulam	25½ pots
Kadulcai .			23 Ditto	1053 tulam
Lac -				12 Ditto
Medicine, Waimb		-	1 Dillo	None
Ditto, Neringilla	c F	-	5 Ditto	501 tulam
Ditto, Weralary		-	None	1 Ditto
Moong, Pulse		•	4 lulam	1½ parah
Mustard Seed	-	-	5½ parahs	30 Ditto
	-	-	1873 Ditto	1401 Ditto
Onions	-	-	130 tulam	45\(\frac{1}{4}\) tulam
Oil of Weppu	•	-	None	l pot .
Dilto, Coco-Nut		•	None	4 pots
epper	-	-	703 tulam 10 poloni	
oppy Secd	-	-	15½ parāh	None
Resin	-	-	15 tulam	None
heep	-	-	111	182
Sandal Wood		-	18½ tulam	363 tulam
Tamarinds	1-	-	1283 Ditto	32½ Ditto
l'obacco .	-	-	176966 bales, small	189742 bales, small
Urced, Pnise		-	80½ purahs	279 parahs
Wax -	-	-	None	73 tulam

An ACCOUNT of the GOODS EXPORTED and IMPORTED by the TAMARACHERY GHAT, for the Malabar Year 975.

EXPORTS.	Quantity.	IMPORTS.	Quantity.
Water Coco-Nuts Dry Soopareys, or Betel-Nuts Coco-Nut Oil Silk Dungarce Cloth, coarse Cotton Cloth Maonds, or Waist Cloths Soap Chapungam Wood, Sapen Blankets, Country Salt Jagary Salt Ditto, small Cachin Arrack Country ditto Dates	19000 47 tulam 57 ditto 12 pieces 8 corges, or scores of pieces 13 ditto 600 pieces 3 maunds 30 ditto 10 343 bags 1230 bundles, 10 pieces in each 7400 59 bags 10 gallons 167 pots 10 tulam	Bags of Rice  Ditto Nelly, or Rough Country Lac Bccs Wax Ghee, or boiled Butter Tobacco Gunjar (Hemp Leaves Bullocks, Oxen Cunntry Blankets Jagary Dholt, Pulse Red Chilley, Capsicum Red Onions White ditto Eapennah (Castor Oil) Eucnah (a small grain)	 { 115 value, from 3 to 4 rupees each 2668 value from 2 to 3 rupees cach 10½ ditto 13½ ditto 22½ ditto 94 to arges 3 tulum 3 bags 56 tulum 40 ditto 12 ditto 18 ditto 19 ditto

(Signed)

R. Cowarn, Collector.

An ACCOUNT of the EXPORTS and IMPORTS of the various ARTICLES into the PYE-NADA DISTRICT, for the Malabar Year 975.

EXPORTS.	Quantity.	IMPORTS.	Quantity.
Water Coco-Nuts Dry ditto Saspareys (dry) Betel-Nut Coco-Nut Oil - Pepper Coprah, White, Coco Nut Keruels - Ditto, Black Manacil - Ditto Chuckoor Karookar Ghee, or boiled Butter Ginjaly, Oil of Sesamum Coir, Coco-Nut Cordage Mats, Bamboo Iron Chopingar, Sapan Wood	315700 463000 4433¢ candies 445½ ditte 56 ditto 66 ditto 10½ ditto 2 ditto 4 maunds 1½ candy 2 maunds 2½ ditto 59 candies 31600 1½ candy 1 ditto	Rice, Moodahs (robins) = 108000 cubical inches Pyros, a Pulse Red Sooparys, or Betel-Nut Dates Red Onions	3992 moodahs (robins) 39 ditto 136700 5½ candies 1½ tulan 10 corges, or scores of pieces 13000 dungallys (edangallies) 140 moodahs (robins)

(Signed)

R. Coward, Collector.

### ABSTRACT of GOODS IMPORTED by SEA, from 1st January to 31st December, 1799.

	Quality.		Quantity.	Quality. Quantity.
	Λ			Bamboos 13,800 Boots 4 trunks
Almonds	-		12 bundles	Beef 4 casks - 4 kegs
Arrack	-	-	485 canadas	Bellows, Smiths - 2
Ditto	-	-	964 leaguers	Demany Capin of the Hell
Ditto	-	- 1	31 casks	cus Spicatus 7 candies
Ditto	-	-	15 kegs	Ditto - 5 cappats
Ditto	-	-	174 cases	Ditto - 2 maunds
Ditto	-	-	5 jars	Ditto - 8 bags
Ditto	-	-	21 pipes	(10 corres oreco
	ed, an um	belli- \	IO& candies	Blue Cloth - \ \ of pieces
ferous I	'lant	<b>S</b>	-	Ditto - 5 picces
Ditto		•	20 maunds	Ditto - 2 bales
Ditto		-	52 bags	Ditto I bundle
Ditto		-	12 capats	Bumboo Mats - 208 corges
				Books 46
	B			Ditto - t chest
	ь			Beer - 2 chests
Bengal R	ice	-	59 bags	Ditto - 12 dozen
Betel-Nut		_	2 maunds	Blankets 10 pieces
Ditto	-	-	74,000	Ditto - 3 carges, or scores
Ditto	-	-	2 bags	Brandy 4 chests
Ditto	~	-	300 bundles	Ditto kegs

Quality.		Quantity.	Quality.	Quantity.
Brandy - Ditto - Ditto -	_	t4 dozen	Cotton	6 candies
Ditto -	-	2 casks	Ditto -	12 maunds
Ditto -	-	29 cases	Ditto -	22 bales
Bottles of Ale	-	1 ditto	Cherry Brandy	t hox
Ditto ditto	-	1 hogshead	Cherry Brandy - Ditto -	2 dozen
Barley ~	-	2 casks	Cheese -	5 boxes
Ditto -	-	t keg	Ditto	2 chests
Ditto -	-	2 chests	Cards and Pomalum	1 box
Brooms -	-	t00	Coco-Nut Oil	18 chodanas
			Ditto ditto -	8 jars
C			Ditto ditto -	660 paddoms
			Ditto ditto -	1155 pots
Columba Arrack	_	16½ leaguers	Ditto ditto -	172 candies
Ditto -	_	5 casks	Ditto ditto -	§ 81 dubers, or lea-
Ditto -	-	4 kegs		thern bags
	-	7 pipes	Ditto ditto -	11 cutys
Ditto -	-	t5000 bottles	Country Mats -	186 corge, or score
Cochin Arrack		4 leaguers	China Mats -	122 pieces
Ditto	-	4 pipes	Commou Cups -	4 chests
	-	2 casks	Combs	10 corges, or score
Ditto -	-	92 boltles	Cutlery	4 chests
	-	4 leaguers		1 bundle
Ditto -	-	110 pipes	Chintz -	5 corges, or score
	-	392 canadas	Country Beans -	15 robins
	-	2 baskets	Chandrose -	5 bundles
	-	8 chests	Combla Mas -	123 ditto
Ditto -	-	707		
Country Boots	-	5 pair 104660	D :	
Coco-Nuts -	-		7	1
Copper Pots	-	37 bags	Dholt, a kind of Pulse	19 candies
Ditto	-	90 maunds	Ditto	10 maunds
Cointer Seed -	-	6615 edangallies	Ditto	5 cdangallies
Dilto	-	9 maunds	Ditto	64 bags
Ditto	-	5 cappats	Dates	73 cappats
Ditto	-	4 bags	Ditto	2½ maunds
Ditto	-	6 ditto	Ditto	8 bags
Corks -	-	76 gross	Dorca, a kind of Muslin	14 picces
Ditto -		1000	Dungary, Cotton Cloth	67½ corge, or score
Ditto - Ditto -		1 chest	Ditto	4 bundles
Coffee -		20 bags		
Ditto -		i bundle	E	
Ditto -	-	26 maunds		
Cummin Seed	-	23 bags	Europe Cloth -	1 trunk
Ditto -	-	40 maunds	Ditto	i chest
Claret -		3 chests	Empty Bags -	3200
Ditto -		45 dozens		
Cotton Lace		24 bundles	F	
Ditto -		40 pieces	_	
Cruet Stands		2	Flannel	1 bag
Cloves -		2 maunds	Ditto	4 pieces
Ditto -		1	Frying Pans -	23 sets
Culty Gram, a kind of I	Pulse	15 maunds		
Ditto -		18 robins	G	
Chilly Pepper, Capsicu	m	233 candies		100
Ditto -		62½ maunds	Gram, a kind of Pulse	82 candies
Ditto -	-	4 bags	Ditto	132 cappats
Candles -	-	2 bales	Ditto	96 bags
Ditto -	-	35 maunds	Ditto	20 bales
Ditto - ~		850 lbs.	Ghee, or Boiled Butter	109 duppers, leather bags
Canvas		26 bolts		Dags
Coir, Coco-Nut Cordag	ge	194 candies	Ditto	31½ maunds
Ditto -		103 maunds	Gingelly, Oil of Sesamum	il duppers
Ditto -			Gun Powder -	1 bag
		c 2		

Quality.	Quantity.	Quality.	Quantity.
Gun Powder -	1 barrel	Lamps	3 chests
Glass Ware -	12 dozen	Lemon Juice -	24 bottles
Ditto ditto -	10 chests	Lutestring	I piece
Ditto ditto -	2 boxes	Ditto	3 chests
Gin	244 cases	Ditto	5 Chests
		Long Drawers -	113 corges, or score
Ditto	5 chests	Leather	16 ¾ ditto
Ditto	l leaguer	Lisbon Wine -	2 quarter casks
Garlick	18 bags	-	
Ditto	4 baskets		
Ditto	7½ candies	M	
Ditto	4 cappats		
Ginger	1 candy	Madeira Wine -	12 casks
Ditto	253 maunds	Ditto	4 boxes
Ditto	2 bundles	Ditto -	39 chests
Ganjah, or dry flowers and	)	Ditto	
Leaves of Hemp	}   75 ditto	Ditto	4½ pipes 160 dozen
	, ,		
Ditto	10 maunds	Malmsey Wine -	8 chests
		Ditto -	3 boxes
7.7		Medicine, Europe -	1 dozen
H		Ditte, ditte -	2½ boxes
TV- will anabiate	5 corges, or score	Ditto, Malabar -	5 maunds
Handkerchiefs -	2 boxes	Manapar Onions -	4 bundles
Hams	27 chests	.1Iowrah -	1 pipe
Ditto		Ditto	2 leaguers
Ditto	2 cases	Mustard	2 dozen
Hira Cassy, a Dye	5 maunds	Ditto	
Hemp, that is of Crotelaria	} 60 ditto	Ditto	8 bags 40 robins
juncea	) loo unteo	Mung, a kind of Pulse	
Ditto	37 lbs.		25 ditto
Hats -	6 chests	Ditto -	2 bags
Ditto	1 box	Ditto	2 cappats
Ditto - •	1 trenk	Ditto -	4 candies
Ditto	183	Methy Seed, Fenugreek	1 candy
	chest	Ditto ditto -	7 bags
Hooka Snakes -			3
Hock	3½ dozen		
	1	1	
		N	
1		12 11 Disain the Unck	254 000 1 11
Turn	ing i	Nelly, or Rice in the Husk	254,000 edangallies
Iron	30 bars	Ditto - •	9330 parahs
Ditto	289 pieces	Ditto	22 robins
Ditto	4 maunds	Ditto	331 bags
Ink Powder -	10 bundles	Nellika Phyllanthus Emblica	
Ditto ditto -	3 dozen	Nutmegs	1 bundle
Jagory	384 candies	Ditto	67 16.
Ditto	118½ maunds	Nackeny, the grain of the	
Ditto	187 nots	Cunasurus Coracanus	165 robins
	(4 dunners, or lea-	Needles and Pins -	24 papers
Ditto	\$4 duppers, or lea- ther bags	Nanking -	5 chests
Ditto -	6 bags	Ditto	1111 corges, or score
Ditto -		Nails	1 cask
Ditto	10 bales	Ditto	I maund
		Ditto	mauna
K		N:	1
IX.		Miles and the second se	,
Kismiss, or small Raisin	s 62 maunds	0	
Ditto -	l bag	0	1
Kascas, Poppy Seed	3 ditto	Opium	3 bundles
mascus, roppy cecu	3 unto	Ditto	113 maunds
		Ditto -	55 Seers
Ľ	-	Ditto	33 Seers
L		Ditto -	t. ·
Looking Glasses -	1 dozen		4 bags
Ditto -	14% carge, or score	Ditto -	204 candies
		Ditto	5 maunds
Ditto -	2 bundles	Ditto	30 cappats
Linseed Oil	1 4 lbs.		

Quality.	Quantity.	Quality.	Quantity.
		Salt	4 candies
P		Ditto	16 maunds
_		Ditte	34 cappats
Port Wine -	6 quarter casks	Ditto	3000 edangallies
Paper	1981 ream	Sugar -	9 candies
Ditto	9 chests	Ditto	35 maunds
Ditto	200 sheets		
Pomatum -	2 cases	Ditto Ditto	37 baskets
Peppermint -		Ditto	210 bags
Pickles	3½ dozen		177 tubs
	38 boxes	Small Cups -	4 baskets
	1 chest	Ditto Jars -	25
Ditto	4 cases	Sindy Salt -	22 cappats
Ditto	6 maunds	Saucers	2 dozen
Piece Goods -	3 chests	Shot	20 bags
Ditto	4 boxes	Saucers Shot Ditto	2 kegs
Ditto	2390 corges, or score	Sadlery -	1 trunk
Ditto	44 bundles	Ditto	3 chests
Ditto	283 ditto	Saddle	1
Ditto	11,823 pieces	Sersekar -	i piece
Ditto	8 bags		1 piece
Powder Horns -		Shawls	55 pieces
	1½ dozen	Shirts	193 corges, or scor
Purpet Cloth -	20 pieces	Ditto	211 pieces
Pepper	4½ candies	'inamon (Cinnamon) -	5½ maunds
Peu Knives -	14 dozen	Spying Glasses -	4
Paint of Sorts -	7 kegs	Scissars -	2 dozen
Ditto ditto -	maund 36 chests	Sweet Oil -	1 ditto
Perfumery -	36 chests		
Ditto	5 boxes	15	ł
Pale Ale	2 easks		}
Ditto	2 kegs	T	1
Ditto	2 chests	1)	· ·
Paint Brushes -	2 dozen	Tooth Powder -	1 dozen
raint brusiles -	2 dozen	Tea	1 ditto
		Ditto	4 chests
		Table Cloths -	21
R	•	Tobacco -	112 candie
**		Ditto	1 box
Rum	2 chests		S51 maunds
Ditto	20 cases	Ditto -	
Rice	6934 robins	Ditto	8049 bundles
Ditto	422 bags	Ditto	239 bales
	20000 edangallies	Ditto	8 bags
Ditto		Ditte	129 chipms.
Ditto	350 bundles	Teut Lace -	7 muunds
Ditto	375 padys	Thread	1000 skeins
Rose Water -	37 bottles	Ditto	10 bags
Razors	2 dozen	Ditto -	St lbs.
losin	1½ candy	Turmerick -	31 candies
Ditto	8 cuppats		53½ maunds
		Ditto - "	9 pairs
		Table Sheds -	
S		Tamarinds -	65 maunds
o		Ditto	733 candies
aan -	6 bolts	Ditto	11 cappats
oap	3442 pieces	Ditto ,	33 bundles
Ditto	1431 maunds	Ditto	30 bales
JILLO		Ditto	55 bags
Ditto	100 bags	Tape -	14 bundles
Ditto	2½ corges, or score	Twine	39 maunds
Sundry Articles -	3 chests	Ditto	2 bags
ago	1		t bundle
hoes	89 corges, or score	Ditto -	
Ditto	14 pieces	Tooth Pick Cases -	3 dozen
Ditto	2 chests	Trowsers	5 ditto
,,,,,,	1 dozen	Tin Ware -	1 chest
Ditto Ditto	1 box	Tongues -	1 cask

Quality.	Quantity.	Quality.	Quantity.
Tutanague Ditto Tea Cups and Saucers  V Vinegar Ditto  U Ured, a kind of Pulse	2 maunds 20 pieces 9 sets  1 dozen 1 case	W Wheat Ditto Ditto Wax Candles Ditto Wax Candles Ditto Unitto Way Candles Wooden Dishes Wooden Dishes Wafer Stamps	332 bags 133 condies 224 mands 500 lbs 1 box 234 corge, or score 41 pair 1 dozen

Cannanore, 31st December, 1799. (Signed) BRI. Hodgson, C. Mr.

## ABSTRACT of GOODS IMPORTED by SEA, from 1st January to 31st December, 1800.

		1	1
Quality.	Quantity.	Quality.	Quantity.
A Almonds Ditto Ditto Amanick Oil Ance Bans Ajvan, Seed of an umbelli- ferous Plant Ditto Artat Cinnabar Anjengo Arraek Ditto Arrack Arrack Arrack	7 bags 2 cappats 6 maunds 4 jars 4 pieces 39 bags 1 robin 3 maund 3 leaguers 19 casks 1 leaguer	Bamboos Barley Bengal Soft Sugar Bengal Soft Sugar Broad Cloth Ditto Brass Lamp Ditto Botty Wood, perhaps Fiti or Black Wood Brass Pots Ditto Beer Ditto Blue Boat Cloak	3900 2 kegs 98 bags 1 piece 71 yards 1 tag 32 candies 11 bags 11 lbs. 12 hogsheads 20 dozen 5 maunds 6 pieces
Bamboo Mats Boots Ditto Bengal Piece Goods Ditto	14 casks  100½ corge, or score 1 box 1 trunk 2 bundles 1148 pieces	Bepo Oil - Bambaya Brandy Ditto C Country Mats -	2 jars 2 maunds 2 chests 2 quarter casks 34 corge, or score
Beaten Rice Ditto Blankets - Betel-Nuts - Ditto Ditto Ditto Ditto Blue Doties, a Cotton Cloth Blue Cloth -	29 robins 450 cdangallies 76 pieces 1 bale 9 pullon 21 maunds 18 lbs. 13,200 21 robins 59 pieces 9 corge, or score	Catcha Cloth Ditto Ditto Ditto China Hams Ditto Copper Pots Ditto Ditto Cummin Seed Ditto Ditto	37 pieces 14 hundles 10 bales 1 chest 1 box 1 chest 8 bags 4 maunds 36 bags 1 maund 10 corge, or score
Benjamin	10 chests	Country Shoes -	io corge, or score

Quality.		Quantity.	Quality.	Quantity.
Catt Lace, a kind of	Tane	3 bundles	Corks	
Coir, or Coco-Nut co	ordage	200 ditto		1 bag
Ditto -	-	6 candies	Copper Sheets	5 maunds
Chintz -	-	9 corge, or score	Cootnys, a kind of Cloth,	52 pieces
Ditto -	-	5 pieces	Silk and Cotton	
Cutlery _	_	1 chest	1i	
Chandroose	-	t6 bales	D	
Ditto -	1-	5 bags	Dan Data	
Ditto -	-	30 cappats	Dry Dates -	38 cappats
Ditto -	-	5 chests	Ditto	15 bags
Ditto -	-	20 maunds		15 maunds
otton -	-	21 bales	Dungary, Cloth -	67 pieces
Ditto -	-	t9 bundles		10 corge, or score
Camphire	-	l box	Dooties, Cloth	82 pieces
Ditto -	-	t chest	Dry Ginger -	113 maunds
Carla -	-	34 corge, or score	Dall Split Posso of the	10 bundles
Catcheria	-	7 candies	Doll, Split Pease of the	32 pharas
Cointer Seed	-	3 bags	Cytisus Cajun Ditto	
Ditto -	-	162 edangallies	Ditto -	20 maunds
hina Summerheads,	Um-1	12	Ditto	100 measures
brellas -	ì	12		
hapa Ramal, Handke	rchief:		G	
assia Laurus	-	17 ditto	Cl- W	
hana Gram, a kind o	f Pulse	20 candies	Glass Ware	1 box
Ditto -	•	50 bags	Ditto	6 chests
hina Handkerchiefs		16 pieces	Ditto	1 case
hellas		3 ditte	Gram Moong, a kind of ]	22 cappats
omillis	_	2 bales	Pulse -	22 cappair
oehin Arrack		10 leaguers	Ditto	18 rabins
Ditto -	_	8 casks	Ditto	t1 bundles
hickney Betel-Nut		2 candies	Ganjah, Dry Flowers and	44 3544
itto -	_	5 maunds	Leaves of Hemp	44 ditto
itto •	-	9 robins	Ditto	13 maund
itto -	-	6 bales	Googal, a kind of Incense	9 maunds
ountry Twine	-	5 maunds	Ginger	2 candies
otton	_	18 bundles	Ditto	3½ maunds
ountry Combs		26 corge, or score	Ditto	15 bundles
itto Challums		900	hee, Boiled Butter	17 duppers, or skins
opra, or Dried Coco-	Vista		Ditto	8 pots
Kernels -	Mary.	10 maunds	ram, a kind of Pulse	5 candies
hina Wax	)	5 chests	Ditto	5 maunds
	-		Garlick	171 ditto
oriander Seed	-	230 edangallies 1 bundle	Diito	5 bags
hina Flowered Sattin		3 ditto	ingham, a Cotton Cloth	280 pieces
anvas	-		Ditto	2 bundles
loth -	-	1 piece 3 boxes	Gm -	37 cases
andles -	-		Ditto	2 chests
itto -	-	1 chest	2.11.0	o chests
oco-Nuts	- '	154,100		
ountry Thread	-	1 bag	Н	
illy Pepper, Capsicu	m	2 ditto	1	
itto -	-	140 pharas		1 bundle
itto -	-	3 maunds		2 candies
co-Nut Oil	-	4 skins		Lehest
itto -	- 1	6 jars	716617	3 boxes
itto	-	409 paddas		8 pieces
itto	-	65 maunds	Hair Powder -	3 dozen
tto -	-			
stor Oil		2½ maunds	_	
dty Gram, a kind of	Pulse	42 bags	I	
tlo		42 robins		2 handles
erry Brandy -		2 chests	uguig	3 bundles
		t ditto	1.00	ou ibs.
aret				
aret infectionary -		2 boxes		pota ½ candy

#### APPENDIX.

			-
Quality,	Quantity.	Qual ty,	Quantity.
Jagory	19 maunds	Pine Apple Cheeses	10
Ditto	4 bags	Pantaloons -	6 pieces
Irou Gridles -	10	Pickles -	3 cases
Iron Gridle Spoons	t bundle	Ditto	1 box
Ditto -	17½ corge, or score	Pale Beer	1½ chest
	tra torge, or acore	Ditto -	5 casks
7*		Painted Red Pearls	20 corge, or score
K		Pots of Spear	6
Kincob, Silk Cloth	t piece	Paddy, Rice in the Husk	1675 edangallies
arthrop, and Cloth	· piece	Ditto	2 bundles
		Ditto.	
, T		D	
Lanthorns -	2 sets	R	
Lutestrings -	4 pieces	Rum	t pipe
Date String 9	1 pieces	Ditto	2 leaguers
24		Rice	4909 robins
M		Ditto -	250 dozen
Manapar Cloth -	119 bundles	Ramnath Cloth -	2 boxes
Onions -	2 maunds	Raisins -	1 chest
Medicine -	1 candy	Ditto	3 cappats
Ditto	1 bundle		-77
Madeira Wine -	1 chest	s	
Ditto	3½ pipes	3	
Ditto	7 dozen	Stockings -	t chest
Mung, a Pulse, Phasealus)		Shirts	6 corge, or score
Mungo	16 cappats	Sugar	14 bags
Ditto	5 bags	Ditto	3 tubs
Mustard Oil -	1 jar	Ditto	50 maunds
Methy Seed, Fenugreek	20 bags	Ditto	14 chests
Ditto	1 maund	Sugar Candy -	9 boxes
		Ditto	15 tubs
N	-	Ditto	2 chests
**		Saddy	17 corge, or score
Nelly, Rice in the Husk -	385 robins	Soap	2 bags
Ditto	370,536 edangallies	Ditto	380 pieces
Nachany, a Grain -	60 robins	Ditto	60 maunds
Nankins -	1 chest	Shoes	3 chests
Ditto	5 carge, or score	Siniman (Cinnamon) -	5 maunds
Ditto	3 bundles	Shellas Cloths -	17 pieces
Nilacka, Fruit of the Emblica	2 ditto	Silk Piece Goods -	30 ditto
		Sadlery	1 box
. 0		Ditto	1 chest
-		Salt	2100 edangallies
Opium -	1 bundle	Shark Fins	113 maunds
Oil	7713 chodana	Ditto Sindy Salt -	1700 pieces
Ditto	59 pots	Ditto	63 candies 6000 dozen
Ditto	350 cooties	Stationery -	2 boxes
Ditto	18 duppers, or skins	Surat Tobacco -	1 bundle
Ditto	10 maunds	Surat Gram, a kind of Pulse	88 candies
Onions	4½ ditto	Saffron -	2 maunds
Ditto	3 bags	Shaving Boxes -	3
		Sauce, Fish -	2 kegs
P		Suodries -	i bag
DC		Ditto	2 boxes
Perfumery -	4 boxes	Sneakers -	550
Pomatum -	1 ditto		
Pedrum	3½ maunds		
Paulghaut, Piece Goods Ditto	4673 pieces	T	
	1 chest	T	2 abosto
Ditto	3 bales	Tea	3 chests
	42 bundles	Tea Pots -	3 pots . 5 maunds
Plates, China -	150 pieces	Tutanague	8 lbs.
Ditto	353 carge, or score	Thread	0 108.
		ig .	

Quality.	Quantity.	Quality.	Quantity.
Towrd, a Pulse Tongues Tourmerick Ditto Di	l robin 2 kegs 2½ candies 51 robins 81¼ maunds 4 bundles 1 chest 260 chippons 13,669 bundles 69 bales 4½ candies 52 maunds 23 rolls 8 maunde	U Ured Gram, a kind of Pulse W Wafers Wooden Dishes - Wheat - Ditto - Ditto - Whips, of sorts Vermillion -	14 robins  1 box 40 pieces 65 cappats 161 bngs 9½ bundles 1 chest 5 1 bundle

Errors excepted,

Cannanore, 31st December, 1800.

(Signed)

Bri. Hodgson, C. Mr.

### ABSTRACT of GOODS EXPORTED by SEA, from 1st January to 31st December, 1799.

Quality.	Quantity.	Quality.	Quantity.
		Coco-Nuts -	1 candy
A		Ditto -	23900
Arrack -	36½ leaguers	Cointer Seed -	145 edangallies
Ditto -	16 kegs	Country Mats -	400
Ditto	150 bottles	Comblams, Country Blankets	
Aniseed	1 chest	Chelly Pepper, Capsicum	7 bags
Ajuan, Seed of an umbel-		Cardamums -	6 maunds
liferous Plant	5 bags	Chilly Pepper, Capsicum	22½ ditto
Ditto -	2 maunds	China Bowls -	2400
Almonds -	1 bale	Coco-Nut Oil -	7 pots
	1 1010	Cummin Seed -	4 bags
В		Ditto -	3 maunds
. В		Coir Rope of Coco-Nul?	1 maund
Belel-Nut -	12 candies	Husks	2 maana
Ditto -	17 maunds	Cheese -	84 lbs.
Ditto -	2000	Cotton Rope -	7½ maunds
Brandy -	7 chests	Coffee -	1 box
Beer	9 dozen	Ditto	2 maunds
Barley -	1 box	Canvas -	15 pieces
Bottles, Empty -	650	China Ware -	2 chests
Budgery, a Grain -	2 bundles	Ditto	4 dozen
Somblos (Dried Fish) -	60 ditto	Chinu Sweetmeats -	2 jars
Blue Duty, Cotton Cloth	11 corge, or score	Copper Pots -	5 bags
Blue Scarlet Cloth -	6 pieces	Difto	22½ maunds
		Įl l	
С		D	
hurats, Tobacco rolled, 7			
for Smoking	4000		2 candies
	12 bags	Ditto	20 bags
	27 bales		1' 2 candies
	24 maunds	Ditto	5 maunds

Quality.	Quantity.	Quatity.	Quantity.
Dates	4 bundles	N	
Ditto	2 cappals	N	
		Nankins -	58 carge, or score
		Ditto	15 pieces
G		Aelly, Rice in the Hask	4 rabins
		Ditto	12800 edangallies
iin	53 cases	Ditto -	12000 Faungames
Gram, a kind of Pulse	t8 bags		
Ditto	34 candies	0	i
Ditto	5 maunds	i i	
Garlick	2 candies	Onions	6 cappais
Ditto	6 maunds	Ditto	27 bags
Ganja, Dried Flowers and }	7 bundles	Ditto	27 candies
Leaves of Hemp	i bunules	Ditto	13 maunds
Ghee, or boiled Butter	34 duppers	Opium	t bag
Ditto	t candy	Ditto	t bundle
Ditto	71 maunds		l .
Glass Ware -	1 chest		
Gloucester Cheese -	2 ditto	P	
•		Pepper	32 candies
Н			13 maunds
		Paper	664 reams
Hing, or Asafœtida	4 bottles	Port Wine -	9 dozen
Hams	1 candy	Pantaloons -	12 corge, or score
Ditto	1 chest	Picce Goods -	4050 pieces
Hooka-Snakes -	2	Ditto	69½ bundles
Hats and Hosiery -	2 chests	Ditto	92 corge, or score
,			, , , , , , , , , , , , , , , , , , , ,
I		R	
	3 candies	Rose Water -	1 bottle
Iron Ditto	111 maunds	Rice	2057 rabins
Jagory Ditto	10 pots 14 bundles		4 pipes 2 boxes
			2 corge, or score
	t candy	Red Camblys -	4 cappals
Ditto			3 candies
Ironmongery -	to chests		15 muunds
Ditto	t box	Ditto	15 inuunas
Jackets -	2 corge, or score		
		s	
K		Sandal Wood -	7 pieces 7 bales
Knives	1½ corge, or score	Salt	7 bales
M.111100	2 20,8-, 01 30010	Ditto	22500 edangallies
			2 bundles
L		Sindy Salt - Ditto Shoes	6 cappats
		Ditto	3 maunds
Leather	144 corge, or score	Shoes	1 chest
Limes	1 bundle	Ditto	41 carge, or scor
		Sugar	7 bundles
30		Ditto	43 bags
M		Ditto	43 candies
CD 1	oo home	Ditto	1 maund
Mung, a kind of Pulse	28 bags	Shirts	17 corge, or score
Ditto	5 candies	Summerheads, Umbrellas	2 ditto
Ditto	5 maunds		1 trunk
Madeira	3½ pipes	Sundry -	17 bundles
Ditto -	8 chests	Ditto -	t case
Ditto -	323 dozen	DICCO	450 loaves
Moodra	10 rabins	Soap -	
Mustard Seed -	1 bag	Ditto -	22 bags
Ditto	9 maunds	Stationery -	1 chest
Metty Seed, Fenugreek	2 ditto	Surat Tobacco -	7½ candies
Mothy Seed, Fenuereek	1 z ditto	II was a concess	1 7

Quality		Quantity.	Quality.		Quantity.
T Tea - Ditto - Ditto - Tortoise Shells Ditto ditto Twine - Ditto - Tutanague	-	t box 22 chests 15 lbs. t maund 4 lbs. 3 bundles 7 maunds	V Vinegar - Ured, a kind of Pul W	se	7 bottles 96 bags
Tatanague Tamarinds - Ditto - Tobacco Ditto - Ditto - Ditto -	-	4 pieces 2 candies 17 maunds 1 bundles 62 ditto 12 candies 93 maunds	Wheat - Ditto - Wax Candles Ditto - Di	:	115 bags 453 candies 5 maunds 2 chests 2 maunds 34 lbs.

Errors excepted,

Cannanore, 31st December, 1799. (Signed)

Bri. Hodgson, C. Mr.

### ABSTRACT of GOODS EXPORTED by SEA, from 1st January to 31st December, 1800.

Quality.	Quantity.	Quality.	Quantity.
Α		C	
Ajuan, Seed of an umb	el-)	Confectionary -	2 pots
liferous Plant	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Coco-Nut Oil	12 paddas
Ditto	- 4 maunds	Ditto -	50 capties
Ditto	14 bags	Cointer Seed -	31 bags
Arrack -	4 casks	Campbire -	i maund
Almonds -	25 maunds	Cotton	6 candies 93 maunds
Ditto	l jar	Ditto	40 bundles
Ditto	1 bag	Chandroise -	2 bales
Ditto	1 cappat	Curtain Cloth -	2 picces
	1	Chilly Pepper, Capsicum	81 maunds
В	1	Columbo Arrack -	15 leaguers
В		Ditto ditto -	30 gallons
Bengal Piece Goods -	155 pieces	Cadus	20 pieces
Betel-Nut -	21 maunds	Cachin Shoes -	7 carge, or score
Boots -	24 pair	Chella Cloth -	67 pieces
Barley	1 bundle	China Shoes -	Lehest
Beer	7 casks	Chints	238 pieces
Ditto	28 dozen	Copper Pots -	40 maunds
Ditto	1 leaguer	China Summerheads, Um-	
Blue Doty, Cotton Clot		brellas)	t bundle
Ditto	23 corge, or score	Camblies, Country Blankets	1½ carge, or score
Blue	5 maunds	Ditto -	1 bundle
Brass Pots -	6	Cot Lace, a kind of Tape	4 ditto
Benjamin -	1 chest	China Ware -	20 chests
Ditto	11 maund	Ditto	1 basket
Bruces (Brushes?) -	1 chest	Ditto	5 dozen
Brandy	2 ditto		15 quires

#### APPENDIX.

Country Medicine   Country Thread   Country Trine   19 lbgs   1 bundle   11 lb   10	Quality.	Quantity.	Quality.	Quantity.
Country Twine   Ditto     Ditto     Ditto     Ditto     Ditto     Ditto     Ditto   Ditto     Ditto   Ditto   Ditto     Ditto   Ditto     Ditto   Ditto     Ditto	Country Medicine -		V	
Ditto	Country Twine		K	
Ditto			Knives and Forks -	6 dozen
Coro-Nuts				
Ditto   Coffee   Co	Coco-Nuts -		L	
Ditto		60500 pieces	Loathan Clause	1 dozon
Ditto   6 maunds   Lime Pickles   Ditto   M    Dry Coco-Nuts   -   6 maunds   M    Dry Coco-Nuts   -   6 maunds   6 corge, or score   Ditto   -   37 cappats   3 candies   Ditto   -   10 bales   1 maund   2 chests   4 maunds   2 chests   3 candies   1 maunds   2 chests   3 plito   -   1 bales   1 maunds   3 plito   -   3 plito   -   3 plito   3 plito   -   1 bales   Ditto   -   2 corge, or score    Europe Cloth   -   6 pieces   Ditto   -   2 corge, or score   Europe Twine   -   2 bundles   Ditto   -   2 bundles   Ditto   -   2 bundles   Ditto   -   2 corge, or score    Gram, a kind of Pulse   10 chests   Ditto   -   2 case   Ditto   -   3 piece   Ditto				
Dry Coco-Nuts -				
Dry Coco-Nuts Dupates, a Cotton Cloth Dates Ditto Dates Ditto Dates Ditto Ditt	Ditto	6 maunds	Ditto -	
Dry Coco-Nuts Dupates, a Cotton Cloth Dates Ditto Dates Ditto Dates Ditto Ditt	D		M	6.
Dupty Bottles	_			
Dates				1 maund
Ditto 3 candies 71 bales 10 bitto 20 bundles 15 pieces 18 pieces 18 pieces 18 pieces 18 pieces 18 pieces 18 pieces 19 ditto 1 bales 18 pieces 18 pieces 18 pieces 18 pieces 18 pieces 18 pieces 19 ditto 1 bag 15 corge, or score 18 corge, or score 19 ditto 1 bag 15 corge, or score 19 ditto 2 bundles 2 bundles 2 bundles 2 bundles 3 bags 6 ditto 2 bundles 6 dbs. 00 company, Gold Thread - 6 dbs. 00 company, Gold Thread - 5 pieces 10 doing a ditto 2 bundles 2 bundles 2 bundles 3 bags 6 ditto 2 bundles 19 ditto 10 chests 10 ditto 12 fandy 2 bags 6 dis Ware - 13 chest 43 duppers, or skins 19 dupters 2 chests 2 butto 10 ditto 2 pots 15 dozen 2 bales 15 dozen				
Ditto		37 cappats		
Ditto			Ditto	
Dimity Dimity Dilto -				
Ditto				½ pipe
E	Dholl, a kind of Pulse	141 maunds		
E  Europe Cloth Ditto, Chints Europe Twine Ditto Thread  G  G  Ginghams, a Cotton Cloth Ditto Di			N	
Nutmegs   Netly, Rice in the Husk   12 lbs.   2500 edangallies	Dungary, a Cotton Cloth	15 corge, or score		
Europe Cloth				
Surper Cloth	E			
Ditto Chints	, at at	0	reay, Rice in the rask	2500 eaung atties
Empty Bottles		o ditt		1
Surope Twine				
Ditto Thread	Europe Twine		Opium	12 168.
Compositio   Composition   C	Ditto Thread -			
Comphams, a Cotton Cloth Ditto				
Comphams, a Cotton Cloth Ditto	6			
Spices   S				to auppers, or skins
Second   S			P	
Ditto			Piece Goods	8 corge, or score
Ditto   -   28 hags   10 chests   10 chests   2 cases   13 chests   13 chests   2 pots   2				37 ditto
10 chests   2 cases   13 chests   13 chests   13 chests   13 chests   13 chests   14 duppers, or skins   15 dozen   15				671 pieces
State				
Chec, Boiled Butter		2 cases		
Ditto				
H				
H	Ditto	2 pots		
H   Hooka-Snakes   1 chest   Port Wine   2 chests   2 chests   10 pair   Hams   - 15 chests   11 pair   Hams   - 15 chests   11 pair   12 pair   13 pair   14 pair   14 pair   15 pair		-	Perfumery -	2 boxes
Horse-Shoes	H		Pins	I bundle
Horse-Shoes	Harley Coulor	1 about		
Hams			Pickles	2 cases
Hats				
Handkerchiefs - 2 pieces   Rice - 300 earngaines   1542 robins   Razors - 1542 robins   30 dozen   Rum - 1 chest   Izary, Cotton Cloth - 3 pieces   S   2 candles   3 pieces   S   3 pieces   Super San   3 pieces   3 piece	Hats	3	R	
Handkerchiels - Picces Ditto - 1542 robins 30 dozen Razors, Cotton Cloth - 3 pieces S room, Brass (Bars?) - 2 ach dies Jack Wood, Artocarpus, 25 pieces Super San - 3 pieces 3 pieces			Rice	500 edangallies
Razors - 30 dozen Rum - 1  Izary, Cotton Cloth - 3 pieces Iron, Brass (Bars') - 2 candies Jack Wood, Artocarpus, 55 pieces Super San - 3, pieces 3, pieces	Handkerchiefs -	2 pieces		
I Izary, Cotton Cloth - 3 pieces Iron, Brass (Bars?) - 2 candies Jack Wood, Artocarpus, 5 pieces Super San - 3 pieces 3 pieces				30 dozen
Izary, Cotton Cloth - 3 pieces S S 2 candies 25 pieces Super San - 3 pieces Super San - 3 pieces			Rum	I chest
Iron, Brass (Bars?) - 2 candies  Jack Wood, Artocarpus, 25 pieces Super San - 3 pieces	1			
Iron, Brass (Bars?) - 2 candies  Jack Wood, Artocarpus, 25 pieces Super San - 3 pieces	Izary, Cotton Cloth -	3 pieces	S	
Jack Wood, Artocarpus, 25 pieces Super San - 3 pieces	Iron, Brass (Bars?) -	2 candies		0 = 1
	Jack Wood, Artocarpus,	25 pieces		
Issence (Incense!) - 15 mauna Suras Iobacco - Scanacco 4 mauna	Issence (Incense?) -	1½ maund	Surat Tobacco -	S canates 'I manual

Quality.	Quantity.	Quality.		Quantity.
Surat Tobacco -	9 bundles	Tobacco		32 cappais
Soap	274 bags	Furbands	•	20 pieces
Silver Epaulettes -	1 pair	Tattetas -	•	1 corge, or score
South Cloth -	5 picces	Ditto	•	15 pieces
Sandal Wood	14325 ditto	Turmerick	•	2 maunds
Saddy	388 ditto	Turnerica	*	2 maunus
Sugar	16 chests			
Dilto	5 candies 3 maunds			1
Ditto '	18 bags	1		
Spanes Glass (Spying Glasses		v		}
Sugar Candy -	10 chests	II.		
Ditto	15 tubs	Ulva Seed		1
Stationery -	3 chests		-	4 bags
Sundry Europe Articles	6 ditto	Vinegar Ditto -	-	2 chests
Scissars	3 dozen	Ditto -		3 casks
Salt	1 baie			
Ditto		-		
	7 cappats	1		
Stockings		w w		
Shot	1 cag	II.		
Silk Handkerchiefs -	2 bags	Wax Candles		t chest
nik manukerchieis -	1 piece	Ditto -	_	3½ maunds
		Wine Glasses		t chest
T		Wetery -	-	t ditto
Fobacco -	t candy 5 maunds	Wheat	-	61 candies
Ditto	93 bundles	Wine and Claret	-	
JII	700 Danaies	me and Claret	-	2 chests

Errors excepted,

Cannanore, 31st December, 1800. (Signed)

Bri. Hodgson, C. Mr.

## ABSTRACT of GOODS EXPORTED by LAND, from 1st January to 31st December, 1799.

· Quality.	Quantity.	Quality.	Quantity.
A Almonds -	28 maunds	Chilly Pepper, Capsicum Canga Cloves	30 maunds 3½ corges, or score 4 lbs.
В		D	
Betel-Nut -	1000	Dates Ditto Ditto Dholl, a kind of Pulse	8½ candies 79 maunds 24 bales 10 maunds
C		Doria, a Cotton Cloth	2 pieces
Caddy	14 pieces		
Coco-Nut -	1200 30 maunds	G	
Ditto	14 bags	Garlie	51 maunds
Coco-Nut Oil -	22 paddams	Gram, a kind of Pulse	5 ditto
Catcha Cloth Comblies, Indian Blankets	10½ pieces 5 corge, or score	Ganjah, Dried Flowers and Leaves of Hemp	14 bundles

Quality.	Quantity.	Quality.	Quantity.
Ganjah, Dried Flowers and Leaves of Hemp Glass Ware	96 lbs.	P	
Ditto	1 chest	Post Paper -	194 ream
		Ditto	1 bundle
Н		Piece Goods -	2104 pieces
		Ditto -	29 bundles
Hats	1 chest	R	
Haudkerchiefs -	17 pieces	I A	
Hing, or Asafætida -	2 maunds	Raisins -	4 bundles
		Ditto	14½ maunds
I-			3
Tamanu		S	
Jagory	1 bag	g	
		Sugar Ditto	3½ candies
, <b>K</b>		Salt -	4 maunds
Kissemis, Raisins -		Ditto	12 bags
Ditto	1½ candy 10 maunds	Shirts -	18700 edangallies
DI110	10 maunus	Soap	195 pieces
		Ditto	3 bags
M	1	Shoes	2 corge, or score
		Scissars	3 dozen
Mung, a kind of Pulse	16 maunds	Surat Gram, a kind of	3 bags
Mustard Seed -	½ ditto	Pulse	
Maniary, Beads -	3 boxes	Saddy	1 piece
Ditto	2 chests	Sindy Salt -	5 maunds
Ditto	1 bag	_	
		Т	
N		Tobacco	011 man 1."
	1	Tamarinds -	25½ maunds 1 candy
Nankins -	10 pieces	Ditto	6 maunds
Nails	1½ maunds	Tatton	3 pieces
			- 1
0		w	
Opium	4 lbs.	Wax Candles -	1 bex

#### Errors excepted,

Cannanore, 31st December, 1799. (Signed)

BRI. HODGSON,

C. Mr.

## ABSTRACT of GOODS EXPORTED by LAND, from 1st January to 31st December, 1800.

Quality.	Quantity.	Quality.	Quantity.
Α .		Doly, a Cloth Dongary, a Cotton Clot	2 pair 22 ditto
Almonds	40 maunds	M	
С		Manapar Cloth -	57 pieces
Country Medicines - Comblies, or Indian Blankets	2 bags 1 corge, or score	Ditto ditto - Ditto ditto -	8 bundles 6 corge, or score
Coco-Nut Oil -	50 costys 3 pieces	s	
Cotton Comblies, or Indian Blankets	39½ maunds 10 pieces	Summerheads (Umbrella	is) I corge, or score
	½ maund 4 bales	Salt Sugar	1,03,0080 edangallie
alona cioca	v baics	Ditto	7½ maunds
D		Ditto	9 tubs 3 dozen
	l maund 34 cappats	Soap	1 maund
Ditto	l maund	Т	
	3 candies 33 bales	Turpentine Oil -	1½ dozen

#### Errors excepted,

Cannanore,
31st December, 1800.

(Signed)

BRI. Hodeson,

C. Mr.



A'AYNGAR, or Sri Vaishnavam, a sect. See Brahman.

Abercromby, Sir Robert, his invasion of Mysore, ii. 95, 108, 121.

Abhiri or Abhira, an Indian dynasty, iii. 96,

Abracum, the mineral called Mica. See Mica. Accommodation for travellers. See Chaturam, Chaultry, Cutty, Inn, and i 2, 10, 11 15, 274. ii. 175, 182, 185, 413. iii. 465, 406.

Acsaya Muttadu Colu, or rod, a measure of length, i. 195.

Adanaad, residence of the chief Namburi, ii.

Adeva Rajas, iii. 475.

Adí Paraméswara, a god of the Jainas, iii 77. Aduca, a village servant, called also Tarugara, which see.

Adura, a m. rtgage; Aduracara, a mortgagee. See Mortgage.

Ady, or Malabar foot, a measure of length.

i. 6. ii. 208. Agave viripira L. a plant from which

cordage is made, i. 36. Agrarum, a village possessed by Brahmans, ii. 352. iii. 63.

Agriculture, See Banks, Cattle, Cordage, Corn. Dry-field, Fallow, Farms, Garden, Highland, Irrigation, Low-land, Manure, Oil, Pasture, Ploughing, Pulse, Servants, Slaves, Sugar, Terraces, Wages, Watered-land. Agriculture, state of at

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Agriculture, imperfection of, i. 15, 30, 125, 345. ii. 275. iii. 72.

Alumuddy, a gold coin. See Mohur.

Ajelar, one of the petty Rajas of Tulara, iii. 63. Alasunda, a kind of pulse. See Dolichos catsjang.

Aletris nervosa, a plant of which cordage is made, i. 192.

Aligutta, in. 338. Alitigura, a village servant, who measures the com, i. 270.

Almanac. See Panchanga. Also, ii. 528.

Aloe; a plant from which fences and cordage are made. See Agave.

Alumbady, a town, ii. 186.

Amuranthus fariniferus Roxb. a plant cultivated, 11. 427.

Amara-wati, a river, ii. 300, 301.

Amavasya, the last day of the moon, which most Hindus celebrate as a fast in honour of their deceased parents, 1. 338.

Amboor, in. 402.

Amildar, the chief officer of the district called a Talue in Mysore, i. 82.

Anacut, a dam and canal for carrying water from a river to irrigate the fields. See Canal.

Ana-giri, iii. 382.

Anagundi, part of the city of Vijaya-nagara. See Vijaya-nagara, and Yavana, in. 96. 97, 112.

Anamalu, a kind of pulse. See Dolichos Lablab.

Ananda and his kinsmen kings in India, iii. 96.

Anavun Nelluru, iii. 463."

Ancola, iii. 176.

Andhra or Andray, the poetical dialect of the Telinga nation; also the Sanscrit name for the nation itself. See Telinga, and i. 253.

Andulay conday, a place in Malabar, i. 499. Ancthum Sowa Roxb. MS. a carminative seed cultivated, ii. 164.

Angada-puram, a town of Malabar, ii. 434.

Angaraca, a kingdom, ii. 200.

Angaru, a river of Canara, iii. 108.

Angedica, iii. 78.

Ani Duelu, a copper coin with the impression of an elephant. See Dub.

Ani-malaya, town of Coimbetore, ii 331. ---, a passage in the mountains

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- Rupce, a silver coin, ii. 210. Areca Catechu Lin. or Betel-nut palm. See

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Arulu-gupay, a town, ii. 57. Arya, a region of the world. See Bharata. Asagara, a cast which contains washermen,

Asoph, chief governor of a large district under Tippoo, ii. 2.

Ass, an animal, i. 7, 206, 356. ii. 180, 383. Assur-khana, a kind of Mussulman temple, i. 347.

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Asura, a devil, iii. 78.

Attarany, a messenger, ii. 215. Avanasi, a town of Coimbetore, ii. 276.

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Bharata-khanda, a region of the world in Hindu

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Bull worshipped by Hindus. See Baswa.

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Bullar, a kind of pulse. See Dolichos Lablab. Bungar, a chief or Raja of Canara, iii. 19, 63,

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Bunts, or Buntaru, the pure Sudras of Tulava,

a cast, iii. 16, 108, 109. Buntwala, a town of Canara, iii. 62.

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Busty, a kind of temple of the Jainas, iii. 74, 82, 132, 133.

Buta, a Hindu deity, iii. 101, 107, 136.

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Bylu, a kind of land for the cultivation of rice. See Low-land, iii. 37, &c. 84.

Bynadu, a country above the western Ghats. See Wynaad.

Byra Dévi, princesses of Batuculla, &c.iii. 109.
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Cabady, a person who sells milk, i. 116.

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Cadalay, a kind of pulse. See Cicer.Cadam, a day's journey. See Measures of length.

Cadar, a rude tribe or cast of Coimbetore, ii. 334, 338.

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Cadrur, a house of the Cotay-hutty Rájús, ii. 540.

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Calura, a town of Mysore, i. 309.

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Canay, a land measure, i. 6.

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Cangony, a kind of corn. See Panicum italicum.

Cani, or more properly Kanya, diviners, sorcerers, ii. 152 See Cunian, Nuearu.

Canicapillay, a cast of Súdras among the Tamuls, from which are selected the registers or accomptants of villages and manors. ii. 213. Canicarna-hully. See Cancan-hully.

Cantery, properly Canterua or Canter'-Rúya, a Rájā of Mysore. See Rájás of Mysore. Canter'-ráya Pagoda, Hun, or Varaha, an ima-

Canter'-raya Pagoda, Hun, or Varaha, an imaginary money, i. 129, 191, 301, 363. ii. 116, 279.

Capala durga, a town and fort of Mysore, i. 53, iii. 425.

Capili-podi, the powder on the fruit of the Rotleria tinctoria, a dye, i. 168, 211. ii. 343. Capily, Yatam, or Pacota, a machine for raising

water, i. 191, 356, 373, 387, 403. ii. 281, 299, 314.

Capily tota, gardens watered by the above machine. See Gardens, Tarkari.

Caragadumma, one of the deities called Saktis, i. 315.

Caramony, a kind of pulse. See Dolichos catsjang.

Caray Hosso-hully, iji. 210.

Carculla, a town of Canara, and its princes called Byrasu wodear, iii. 19,75, 81, 86.

Cardamoms, ii. 336, 510, 538. iii. 225, 228, 270.

Cari-cullu, a black stone, ii. 61. iii. 374, 392. Carlay, a kind of pulse. See Cicer.

Carnatic, a country, being a corruption of Kurnata, i. 17. 277.

Carolu, a kind of corn. See Panicum italicum. Carriers, and carriage of goods. See Porters, i. 205, 417. ii. 180, 434. iii. 270, 331. Cart, i. 122.

Carthamus tinctorius L. a plant used as a dye, i. 214, 295, 373. iii. 443, 444.

Cartinaad, a district and principality of Malabar. See Cadutinada.

Caruru, a town of Coimbetore, ii. 299. Caryota urens L. a palm, ii. 454. iii. 64.

Cash, Cashi, or Casu, a copper coin, i. 415. ii. 116, 210, 353.

Casmi, a silver coin, i. 128.

Cassel goda, a town of Canara, iii. 15.

Cassia, the bark of a kind of Laurus, ii. 336, 502, 512, 545. iii. 59, 161, 193.

Cassuvium, vii. 178.

Cast, a division of *Hindus*. See *Hindu*, Chief, and i. 80, 254. ii. 294, 329, 491, 493. iii. 5, 76, 131.

Castor oil. See Ricinus.

Catalun, a rude tribe of Malabar, ii. 497. Cataracts of the river Caveri, ii. 166, 169.

Catechu. See Terra Japonica.

Cattle. See Ass, Buffalo, Goat, Horse, Ox, Sheep, Swine, i. 116, 164, 271, 298, 344. ii. 5, 11, 13, 63, 68, 114, 150, 151, 174, 192, 227, 278, 327, 382, 459, 488, 509, 526. iii. 148, 183, 241, 281, 299, 321, 353, 398, 456.

Caudhully, or Catada hally, a town in the Company's territory above the western Ghats, ii. 180.

Caur, a measure of length. See Chain. Carai, a Moplay town of Malabar, ii. 564.

Cavery, or Kaveri, a river. See Cataracts. i. 61. ii. 86, 115, 162, 163, 166, 176, 190, 196, 294.

Cavi cullu, a kind of paint. See Reddle.

Carila, a place in Canara, iii. 64.

Chain, a measure of length, called Chingali, Caur, Gunta, Russy, ii 208, 279, iii. 102. Chakram, a wheel for raising water, ii, 407.

Chakrantikam, a religious ceremony among the Hindus, 1. 146.

Chama, a kind of corn. See Panicum miliare. Chandra-giri, a town of Mysore, ii. 1.

-----, a town and twer of Canara, iii.

14, 15.
Chandra-gupti, or Chandra-guti, iii. 250.
Chandra-manam, the lunar year of the Hindus.
See Calendar of Musore.

Chandya, iii. 177.

Charitra, a legendary tale, ii. 270.

Charity, i. 325.

Charraka, a sect of Hindus. See Sarvaka. Chatrakal, (or Chitteldroog) a principal city of Mysore, vii. 339.

, rayana or Subayana, a division of the Mysore kingdom, formerly a principality. See Appearance of the country. Rajas of Chatrakal. i. 81.

Chaturam, a kind of inn. See Accommodation for travellers.

Chaudéswari, one of the deities called Saktis, i.

Cher, a land-measure, ii. 108.

Chenapattana or Chinapatam, a considerable town of Mysore, 1.53, 147. ii. 172.

Chensu-carir, a rude tribe or cast of Tamuls, i. 7. 167.

Chéra, a country in Hindu Geography, ii. 183, 185, 200, 237.

Cherical, a principality of Malabar. See Colutanada.

Charley lands granted for the support

Chericul lands granted for the support of the Rajás of Malabar, ii. 360, 368, 461.

Cheruman Permal, first monarch of Ma'ayala, ii. 348, 392, 424.

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Chica-bayli-caray, iii. 316.

Chicama, a female deity of the Hindus, ii. 128,

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Chinna, a village of Mysore, ii. 68.

Chinna-mali, a town of Coimbetore, ii. 283. Chin' náráyan' durga, a fortress of Mysore, ii. 15.

Chin'-raya-pattana, iii. 408.

Chitrakara, a cast who make furniture, i. 253.

Chitteldroog, iii. 339.

Chóla, a town in the south of India. See Shola.

Choni a kind of pulse. See Dolichos catsjang. Choultry, a name given by the English to various Hindu buildings. See Inn, Mandapam, Tany pundal.

Choutar, one of the petty Rájás of Tulava, iii.

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Chowa, a female deity of the Hindus, ii. 529. Chougant. See Sharacadu, a town of Malabar. Christians, ii. 391, 408, 460. iii. 2, 21, 23, 61. 263.

Chucri or Chucrum, an imaginary money. See Cantery Pagoda.

Chuncoa Muttia, iii. 202.

Churmar, a general name for slaves in Malabar. See Slaves.

-, also a cast of slaves. See Poliar, Cicer arietinum L. a kind of pulse, i. 366, 374, 407. ii. 104, 105, 159, 253, 254, 323. iii. 295, 323, 448.

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Close, Colonel, resident at the Court of Mysore, i. 60, 68, 79. ii. 91.

Cobri, the dried kernel of the Coco-nut. See Cocos.

Cochi, or Cochin, a principality of Malayala, ii. 350, 384, 393, 432, 499.

Cochincal, iii. 399.

Cocos nucifera L. or coco-nut palm, its cultivation fruit, inspissated juice, and wine, i. 155, 229, 417. ii. 33, 48, 259, 365, 399, 417, 458, 473, 487, 503, 524, 552, 554, 561. iii. 2, 50, 54, 104, 136, 151, 153, 430.

Codda panna, a palm. See Corypha. Codeal Bundar. Sec Mangalore.

Codomudi, a town of Coimbetore, ii. 292.

Codra, a kind of corn. See Panicum miliaceum. Coduga, a principality between Mysore and Malabar. Sce Coorg.

Coduganar, iii. 337.

Coduwully, a village of Malabar, ii. 483. Coffee, ii. 545.

Coicular, a cast of weavers, ii. 239, 261, 265. Coimbetore, a province. See Appearance of the country, and Chap. IX. X.

-, a town, ii. 249.

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Coir, a kind of cordage. See Cocos. Colaga, a measure of grain, i. 130, 363, 413. - land, a land measure, i. 372, 413.

Colangodu, a town of Malabar, ii. 346. Colar, a town of Mysore, i. 277.

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Coleaagla, a town of Mysore annexed to Coimbetore, ii. 164.

Colicodu, a town of Malabar. See Calicut. Colu, or Collu, a kind of pulse. See Dolichos. biflorus.

Coluta-nada, a principality of Malabar, and its chief commonly called Cherical, and Colastry Rájá, ii. 499, 515, 520, 551, 553, 556 iii. 10, 13, 14.

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Cultie, a kind of pulse. See Dolichos biflorus.
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Culy, a land measure, i. 6. ii. 208, 311.

\_\_\_\_\_, or pole, a measure of length, i. 6. ii. 252.

Cumbharu, a cast containing, potters and dyers, i. 273. ii. 26.

Cumlies, or Indian blankets. See Wool, and iii. 330.

Cumly, a town and principality of Canara, iii.

Camly, a town and principality of Canara, it

Cumri, a kind of cultivation carried on upon the hills of Canara. See Hills.

Cumti, a town of Haiga, iii. 152.

Cunabi, a Mussulman term for farmers of the Sudra cast. See Woculigas.

Cuncheny, dancers, musicians, and prostitutes. See Prostitutes, and i. 12, 307. ii. 72, 266, 285. iii. 174.

Cunian, a low cast of Malabar, containing astrologers, jugglers, and the like. See Cani, ii. 528. iii. 53.

Cunsa, a cast in Karnata, of Súdras who are cultivators, i. 349.

Cuntay, a hoe drawn by oxen. See Hoe.

Curnum, register or accomptant of a manor in Mysore. See Shanaboga.

Curry, an Indian dish, i. 95.

Curtur, title of the sovereign of Mysore. Sce Rájá of Mysore.

Curubaru, a cast containing shepherds, i. 395. ii. 25, 141, 278, 331. iii. 333.

, Cad', a rude tribe of Mysore, ii. 128. Handy (or Cumly) Curubaru, iii.

\_\_\_\_\_, Maláya, or Betta, another rude tribe, ii. 128.

Curumbahun, a tribe of Malabar. See Catalun. Curumbar, a kind of sheep. See Sheep.

Curumbara, a district of Malabar, ii. 484, 494,

Customs of the natives, such as burial, drinking, eating, marriage, worship, and the like, will be found under the different casts respectively. Custom-houses, and revenue. See Duties, and

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Cut. See Terra Japanica. Cutaki, a village on the western Ghats, iii. 206. Cutichalun, a deity of the Hindus, ii. 496. Cutigas, widows or divorced women who marry again, and their descendants, ii. 7, 212. iii. 336. See also each cast for its customs concerning them.

Cuttay Malalawadi, a town of Mysorc, ii. 92. Cuttery, a kind of weavers who pretend to be of the Kshatriya cast, i. 212.

Cuttu, a weight, ii. 157.

Cutty, a tree surrounded by a terrace for the repose of travellers, iii. 64.

Cutwal, an officer who has charge of the police in a large town, i. 415.

Cycas circinalis L. a kind of palm, ii. 469. Cycle of sixty years, iii. 408.

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Cynosurus corocanus L. a kind of corn. See Hills, cultivation on, i. 100, 101, 102, 285, 297, 369, 375, 402, 403, 408. ii. 103, 144, 161, 254, 255, 281, 290, 313. iii. 72, 239, 296, 429, 438, 440.

Cyprinus, three species of, described, iii. 344. Cytisus cajan L. a kind of pulse, i. 103, 376, 377, 382, 409. ii. 177, 223, 224, 290, 314, 323, 520. iii. 72.

Dalawai, a prime minister; also chief of one of the branches of the Mysore family. See Rájás of Mysore.

Daishmui, a name for the chief officer of revenue and police in a district, i. 267.

Dancers. See Cuncheny.

Dan' Nayakana Cotay, a town of Coimpetore, ii. 244.

Danya, a carminative seed, ii. 281.

Daraporam, or Dharma-puram, a town of Coimbetore, ii. 308.

Daray, a hard stony soil, i. 37, 83.

Dúséri, a religious profession among Hindus, i. 241, 312, 339. ii. 55.

Date, wild. See Elate sylvestris.

Dávana-giri, a town in the Chatrakal Rayada, iii. 330.

Deception, curious, i. 24.

Demon. See Muni.

Denkina-cotay, a district of the Búra-mahúl, iii. 432.

Denkina-cotay family, iii. 432.

Depopulation. See Appearance of the Country, Natives, i. 163, 344. ii. 141, 285, 332. 549, 550.

Désas, in Hindu geography, means countries: Bharata-khanda, or the world known to Hindus, contains 56 Désas, ii. 304.

Désa, in Malabar, means a collection of scattered houses composing a small district or manor, ii. 352.

Deva, or Dévata, a dæmon or spirit, good or bad, ii. 128. iii. 77.

Derangas, Canara or Karnata, a cast of weavers, i. 213, 214, 420. ii. 242, 261.

Teliga, a cast of weavers. See Jadar. i. 213; 245, 353. z. 241.

Déva-kara, iii. 190.

Deva Ráyas, dynasty of, iii. 471.

Devastanam, lands granted for the support of temples. See Religious Establishments.

Devils supposed to possess men, ii. 45. iii. 23. Dewan, chief minister in some Indian governments. See Purnca.

Dhall, a kind of pulse. See Cytisus.

Dhana, a religious ceremony performed for the remission of sin, and accompanied by gifts, i. 316. ii. 144.

Dhan-murry, a name for low land in Ma'abar. See Low land.

Dharma, gifts bestowed on religious men, ii. 121.

Rájú, a benevolent male deity of the Hindus, i. 242, 261.

Dioscorea, or yams, a root cultivated, i. 386.ii. 54, 524. iii. 47.

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Distemper among horned cattle. See Cattle, District. See Taluc.

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Doda Balapura, a town of Mysore. See Bala-

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Lablab L. a kind of pulse, i. 103, 376, 382, 410. ii. 177, 220, 224, 280, 281, 290, 314, 323, 384. iii. 72.

Donay, a cavity in a rock containing a supply of water, i. 164.

Donigar, Mussulman term for a shepherd. See Curubaru.

Doray-guda, an iron mine in Mysore, ii. 35, 38. Drávada or Drávida, a nation of Hindus, iii.

a country in the south of India, iii.

Dress of the Hindus, i. 207, 306. ii. 353. See Rings.

Drill, an implement of agriculture, i. 285, 376. Drink, See Water, and each cast, respecting its customs concerning drink.

Drought, prevalent in India, i. 277. ii. 3, 35, 249, 280, 283, 286.

Drugs, i. 168, 203. ii. 335.

Drummond, Mr. a collector in Malabar, ii.

393, 396, 401, 406.

Dry-field, or Pyr Arumba, or Punji, in the eastern side of the Peninsula, land which does not receive an artificial supply of water, analogous in some degree with the Highland of the western coast, i. 83, 99, 285, 375, 408. ii. 103, 253, 280, 289, 301, 313, 322, iii. 295, 305, 342, 347, 395, 397, 420, 438, 457.

Dry-grains, grains produced on Dry-field or High land. See these two articles.

Dub, a copper coin, called Dudu in Mysore, and Paissa by the Mus-ulmans.

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double, Dod' Dudu, or Du' Paissa, i.

Dubashies of Madias, iii. 466.

Dudu, a copper coin. Sec Dub.

Duma, iii, 259.

Dumawutty, one of the deities called Saktis, iii.

Dundia, an insurgent chief, i. 136. ii. 215.

Durgama, one of the deities called Saktis, i. 312. Duties levied on artists, keepers of cattle, rude tribes, shopkeepers. See also Benicharadi, Customs, Iron Mines, Lac, Poll tax, Stamps, Steel, i. 222, 274, 337. ii. 26, 55, 155, 264, 278, 334, 383, 435.

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Edungally, a dry measure, ii. 354, 395, 564. Eddagai, a division and cast of Hindus. See Hin-

du and Madigaru. Ejalu, a kind of palm. See Elate.

Einaru, a title given to the priests called Jangamas. See Jungama.

Einuru, a village of Canara, iii. 73.

Ejurupja, a male deity of the Hindus, ii. 129. Ekangi, a kind of religious mendicants, i. 324,

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Enam, land granted free of rent, especially for
  the support of religion. See Religious Esta-
  blishment, ii. 328. iii. 453.
Enama, a plant cultivated for oil. See Sesamum.
Era of the Kali-yugam, i. 230. ii. 202. iii.
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    --- Vicrama, iii. 112.
    - Yudishtara, iii. 112.
Eray, a kind of tank for watering the fields.
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Erim-panna, a kind of palm. See Caryota.
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Pucka seer, a dry measure. See Seer. Puckally, a machine for raising water. See

Puckally, a machine for raising water. See Capily. Pudameni, a gold coin. See Vir' Raya Fanam.

Puddial, or Pudial, in Coimbetore, a hired farm servant. See Servants, and Wages.

Puddy, a dry measure, i. 363, 413. ii. 209, 252, 279, 311, 321, 354, 481.

Puja, worship of the Hindus i. 325. ii. 271. Pujari, the priest who offers worship, i. 242. Pull, a weight. See Weights, ii. 279.

Pulla, a temple in Canara, iii. 15.

Pulses, or leguminous plants, the seed of which is fit for eating. See Arachis, Cicer, Cytisus, Dolichos, Phaseolus, Trigonella.

Pumpkin, ii. 177.

Punapuram, a village of Coimbetore, ii. 316.
Pundarum, a sect of Hindus, who officiate in temples of Siva, ii. 74, 330.

Pungal, in Coimbetore, a kind of servants. See Servants. Punji, in Coimbetore, arable lands that cannot be inundated. See Dry-field.

Puranas, books held sacred by the Hindus, and supposed to have been written by Vayasa, ii. 74. iii. 76, 91, 469.

Purnea Dewan, or minister of the Mysore Raja, i. 60. ii. 88, 91, 135, 143.

Purôhita, among the Hindus, a kind of priest who reads prayers at births, marriages, funerals, and other solemn occasions. See Panchanga, i. 235, 322. ii. 144, 243, 303, 410. iii. 94.

Putalima, one of the deities called Saktis, i. 262.

Putcary, a kind of pulse. See Dolichos Lablab.

Puttuegars, silk weavers, i. 208.

Pu or Puli Varahun, a gold coin. See Star Pagoda.

Pychi Rájá, a chief of Malabar. See Cotayhuttay. Pyr'arumba, in Mysore, arable land that cannot

be inundated. See Dry-field.
Pysachi, a kind of devils. See Paisachi.

Pyurmalay, a district of Malabar, ii. 499.
 Quarries. See Granite, Hornblend, Pot-stone, i. 132, 182. ii. 4, 60, 61, 78, 85, 118, 140,

143, 145, 146, 149, 167, 299. iii. 133. Rachewar, or Rájáwar, iii. 435.

Ragy, a kind of corn. See Cynosurus. Rájás of Chatrakal. See iii. 345.

\_\_\_\_, Ikeri, iii. 125.

...., Malayala, numerous petty chiefs. See Calutanada, Chericul lands, Cochi, Colatanada, Nileswara, Parapanada, Shekhury, Tamuri, Travancore, Vellater, ii. 349, 368, 395, 413, 424, 432, 435, 468, 470, 483, 499, 510, 548, 556.

Rájás of Mysore, or princes of that country, i. 67, 147, 361, 362. ii. 3, 65, 73, 94, 130, 137, 143, 165, 172, 193, 235, 237, 245, 250, 302. iii. 408, 417, 426, 434.

-, of Sudha-pura, iii. 213.

Rájás of Tulava, iii. 15, 18, 19, 63, 68, 74, 75, 81, 98, 109, 125, 127, 476. Raiasa, a letter writer, ii. 215.

Rajput, the pure Sudras of a country in the north of India, i. 303.

Rain. See Weather.
Rake drawn by oxen. See Harrow, iii. 144, 236.

Raksha, a devil, iii. 78.

Rali, a kind of corn. See Cynosurus.

Ram Row, Subadar of the Nagara Rayada, iii. 259.

Rama, an Avatar or incarnation of the god Vishnu, ii. 7, 164, 200. iii. 77, 83.

Rama Anuja Achárya, a personage among the Bráhmans, of great celebrity, as founder of a sect, i. 143. ii. 70, 75, 80, 101. iii. 413, 469.

Rama-giri, a town of Mysore, i. 163.

Rama Rájás, iii. 477.

Ram'tila, a plant cultivated for oil. Sec IIuts'

Rámuppa Varmica, an intelligent Bráhman, iii. 104, 108, 110.

Randaterra, a district of Malabar, ii. 551.

Rath, an immense chariot in which the images of the Hindu gods are carried in procession, i. 13. ii. 237. iii. 434.

Ratna-giri, iii. 458.

Ravana, a king celebrated in Hindu fable, ii. 200, 237.

-., king of Ceylon, iii. 138.

Ravenshaw, Mr. a collector in Canara, iii. i. 33, 75, 102.

Raya-cotay, iii. 459.

Rayalu, corrupted into Ryl, a title of the Kings of Vijayanagara, or Anagundi. See Vijayanagara, ii. 130.

Ráya paditti, or table of princes, iii. 110, 307,

Read, Colonel, collector of the Bára-mahál, &c. ii. 179, 182, 192, 208, 296. iii. 1, 11, 458, 459.

-, Mr. a collector in Canara, iii. 104, 146, 193, 194, 244.

Reaping-hook, i. 99. iii. 39.

Reddle, or red clay, ii. 46, 84.

Register of districts and manors. See Parputty, Shanaboga, Canicapillay, Survey.

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Rent, in what species paid, in kind, or money, i. 123, 124, 265, 267, 268, 299, 387, 388, 414. ii. 109, 113, 114, 187, 212, 229, 230, 296, 461, 542, 543. iii. 54, 56, 88, 140, 353, 385, 448.

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Restuli Mahastumma, a female deity of the

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-, manner of preserving and preparing it for use. See Grain, i. 90. ii. 374. iii. 39, 143.

Rice, produce of an acre at different places, i. 282, 366, 402. ii. 99, 232, 289, 313, 333, 373, 430, 477, 486, 490, 497, 519, 546. iii. 13, 38, 235, 273, 274, 293, 294, 381, 386, 445.

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Mundium, i. 138. Nala-ráyana-palyam, ii. 231, 238, 252. Nagara, iii. 293, 294. Palighat, ii. 372. Priyapatana, ii. 100. Seringapatam, i. 83. Shetuwai, ii. 396. Sira, i. 402.

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Right-hand side division of Hindus, or Ballagai. See Hindus.

Rings of glass used as bracelets, i. 150.

Rishis, suppositious persons of great celebrity among the Brahmans, i. 354. iii. 76.

Ritus, six seasons into which the Hindus divide the year. See Weather.

Rivers of Malabar have no names, ii. 433, 471. Roads, i. 17. ii. 163, 340, 389, 427, 434, 496, 500, 514, iii. 62, 64, 89, 104, 108.

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Robinia mitis L. a tree very common in India, i. 230. iii. 135.

Roman coins found in Coimbetore, ii. 318.

Rotation of crops. See Crops.

Rungaru, a kind of dyers. See Cumbharu, also, i. 222, 252.

Rapea, Rupiya, or Rupee, a silver coin. See Arcot, Bombay, Madras, Mysore, Pondichery, Sultany, Suráti.

Russy, a measure of length. See Chain. Sack-cloth of Indian hemp. See Crotolaria. Sacrifices, i. 242, 319, 423. iii. 107.

Sadru, a cast of the Sudras of Karnata, living by agriculture, i. 420.

Sagar, iii. 256.

Sago. See Caryota, Corypha, Cycas.

Sahasiva-hully, iii. 303, &c.

Saivam, a sect of Hindus, i. 144.

Saktis, a class of destructive or malevolent female deities worshipped by the Hindus, See Bhadra Káli, Birnala, Caragadumma, Chaudéswari, Culimantia, Dumawutty, Durgamá, Gungoma, Iberabuta Káli, Márima, Mutialima, Putalima, Virapakshima, Yellama, i. 242, 304, 334, 335. ii, 59. iii. 53, 78, 92.

-- Pracriti, a Hindu deity, i. 335. Salaga, a dry measure. See Canduca. Saligrama, a town of Mysore, ii. 101.

Saline earth, i. 31, 35, 142, 150. ii. 252, 316, 317. iii. 312, 319.

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Salt, culinary, commerce and manufacture, i. 31, 35, 204. ii. 252, 316, 317, 460, 479, 487, 507, 518, 543. iii. 57, 59, 109, 175.

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Sama, a kind of corn. See Panicum miliare. Samay Shalay, a kind of weavers, i. 216, 255. Sancada-gonda, iii. 130, 211.

---, holay, a river of Canara, iii. 130.

Sandal wood, i. 38, 186, 202, 391. ii. 117, 132, 165, 188, 225, 338, 436, 536. iii. 59, 151, 192, 227, 251, 288, 383, 404, 425,

Sandal and Teak trees not found in the same forests, iii. 288.

Sankara Achárya, a personage celebrated as founder of a sect of Bráhmans, i. 143, 305, 335. ii. 74. 424, 433, 475. iii. 91, 301. - Narayana, image of, iii. 169.

Sannyasis, men who have forsaken all for God. i. 22, 144, 238, 305, 333. iii. 79, 92, 99. Sanskrit language, ii. 303.

Sapan wood, a dye, ii. 487.

Saponaceous plants. See Mimosa, i. 38, 230. ii. 353.

Saraf, a money-changer, ii. 215.

Sarvakas, or Charvakas, a sect of Hindus, i. 143. ii. 74, 174.

Sashivuy. See Mustard. Sastram, the scriptures of the Hindus, read on solemn occasions, i. 235.

Satanana, a cast dedicated to Vishnu. See Vaishnavam.

Satghadam or Satghur, a town of Arcot, i. 24. Satimangala, a town of Coimbetore, ii. 237. Satnuru, iii. 425.

Satteagala, a town of Karnata annexed to Coimbetore, ii. 163. 165.

Sangata, an heretical sect of Hindus. See Buddha.

Savana-durga, a fortress of Mysore, i. 178. Savaram, a sect of Hindus, i. 143.

Saw-mill, ii. 472.

Sawmun, a kind of corn. See Panicum miliare. Seasons, hot and cold, rainy and dry. See Weather.

Seasons, healthy and unhealthy. See Climate. Sects. See Christians, Hindus, Mussulmans. Sedásica, fable respecting him, iii. 255, 256. Sedásiva-ghur, iii. 178, 188, 211. Seer (sida), a measure for grain, i. 130, 194, 301, 363, 413. iii. 26, 149. Seer (sida), a weight, i. 130, 194, 301, 363, 415. ii. 116, 209, 252, 279, 354. iii. 26, 149. Seringapatam, properly Sri Ranga Pattana, a city of Kárnata, i. 62, 76. ii. 86, 149, 173. iii. 128, 417. Serpents, ii. 123. Sersi, iii. 217. Servants. See Wages, i.124, 390. ii. 108, 217, 320, 562. iii. 35, 181, 455. Sesamum, a plant cultivated for oil, i. 95, 284, Sicnite, iii. 375. 288, 290, 366, 371, 379. ii. 107, 160, 220, 224, 234, 290, 323, 379, 398, 429, 450, 452, 562. iii. 41, 81, 447. Shalay, or Shaliar, a cast of weavers. See Padma, and Samay. 263. Shamay, a kind of corn. See Panicum miliarc. Shanabaga, in Mysore, the register or accomptant of a manor. See Village Officers, i. 82. Shanapu, or Indian hemp. See Crotolaria. Shanar, a cast of Tamuls who manage palm trees, analogous with the Tiars of Malayala, the Biluaras of Tulava, and the Idigaru of Karnata. See these, i. 9. Shanday, a kind of fair. Shavacadu, a town of Malabar, ii. 403. Shaymbliar, a kind of sheep. See Sheep. Shaynagaru, a cast of weavers, i. 213, 216,

246.

Sheep, i. 119. ii. 13, 61, 63, 276, 383. iii. 57, 333, 354.

Sheikdar, in Mysore, an officer managing a division (Hobly). See Parputty. Shekhury Rájá, a chief of Malabar, ii. 350.

Shelacary, a village of Malabar, ii. 390. Shepherds, iii. 383.

Sheristadar, accomptants and registers, i. 82, 270. ii. 216. Shetuwai, an island on the coast of Malabar, ii.

Shidy munnu, a micaceous or talcose carth used for white-washing, ii. 57.

Shin-nai, a wild beast. See Dog.

Shiraly, iii. 134.

Shirnada, a district of Malabar, ii. 434, 463, 470.

Shist, or Shista, a valuation of a territory. See Survey; and a land-tax. See Land-tax. Shira-mogay, or Simogay, iii. 289, 290. Shola or Chola, a town and principality called Tanjare by Europeans, ii. 200, 202.

Sholum, a kind of corn. See Holcus sorghum. Sholun rayas, a dynasty of princes, ii. 57, 58, 80, 348, 392, 424, 426. iii. 472.

Sicany pura, a town of Mysare, ii. 88. Siclar, or Shecliar, a low cast who deal in leather. See Madigaru, i. 19.

Sida, a weight. See Scer. Siddamána-hully, iii. 341.

Sidday, a deity of the Hindus, ii. 271. Siddha, a god of the Jainas, iii. 77, 79, 82, 84. Siducy, a gold coin. See Mohur.

Sila-cullu, or image-stone. See Pot-stone. Silagutta, a town of Mysare, i. 317. Siliga, a dry measure. See Candaca. Silk, and manufacture of silk, i. 208, 222, ii.

Singanaluru, a town of Karnata annexed to Coimbetore, ii. 174.

Sira, a considerable town of Mysore, i. 399. - subah, a Mussulman government, i. 277. Sirdar, a Mussulman officer, ii. 3. Sirjapura, a town of Mysare, i. 271.

Siru-mugá, a village of Coimbetare, ii. 248. Sitala-durga. See Chitteldroog.

Siva, or Iswara, or Mahadéva, or Mahéswara, a deity of the Hindus. See Linga, i. 13, 144, 240, 304, 334, 335. iii. 77, 92. - Acharyas, a cast of Karnata, ii. 144.

- bhaktaru, a religious sect. See Pashandi, Jangama, i. 236. ii. 144. iii. 127, 253, 264,

Sivana Samudra, an island in the Kaveri river, ii. 166, 170.

Skins. See Leather.

Slate, iii. 360.

Slaves. See Baiadaru, Batadaru, Catalun, Corar, Panian, Pariar, Poliar, i. 19. ii. 362, 366, 370, 380, 406, 442, 485, 491, 495, 526, 562. iii. 2, 35, 36, 100, 106, 140, 243, 280.

Small pox. See Marima, ii. 285. Smartal, a religious sect. See Brahmans. Smee, Mr. one of the commissioners for managing Malabar, ii. 361, 443. Smuggling, i. 49. ii. 457, 539. Soap. See Saponaceous Plants.

Soda, or fossile alkali, i. 150, 211. iii. 369. Sudras, the fourth pure cast of Hindus. See Soil, different kinds, i. 83, 98, 103. ii. 121, Asagaru, Baydaru, Biluara, Bui, Buntaru, 122, 156, 165, 219, 255, 327. iii. 63, 134, Cunsa, Gollaru, Gungricara, Ladaru, Mo-135, 136, 137, 154, 157, 176, 191, 204, 205, gayer, Morasu, Nair, Nona, Rajput, Ruddi, 230, 244, 258, 309, 318, &c. 390. Sadru, Telinga Banijigaru, Toreas, Vaishna-Solicaray, iii. 313. vam, Vaylalar, &c. i. 236, 242, 252, 257, Soligaru, a rude tribe inhabiting the mountains 258, 313, 314. ii. 243, 268. iii. 184. of Karnata, i. 168. ii. 178. Sugar-cane cultivation, i. 96, 140, 284, 341, Sonaka Guda, iii. 176. 371, 405. ii. 101, 300, 545, 562. iii. 42. Sopina angady, a place in Canara, iii. 74. 85, 145, 194, 238, 245, 275, 311, 327, Soonda, or Sudha, iii. 211, 218, 244. 328, 449. -, different kinds, i. 95, 158, 192, Sorcerers. See Cani. 284, 406. ii. 101. iii. 44. Sosila, iii. 421, 422. Soulu, impure soda. See Soda. - and Jogory, or its inspissated Soulu munnu. See Saline Earth. juice, manufacture. See Mill, Sugar, i. 97, Spencer, Mr. commissioner for the affairs of 157, 158, 340, 355. ii. 101, 373. iii. 44, Malabar, ii. 474. 145, 311, 429. Sugar-mill. Sec Mill. Spinning, i. 218. ii. 263. Spirits, distilled, i. 39. ii. 418. iii. 52. Suja cara, a kind of soda. See Soda. Squirrels, i. 154, 387. ii. 55, 112. Suja or Sujagurry, a kind of corn. Sec Holcus Sravana Belgula, iii. 410. spicatus. Sujéswara, a celebrated temple, iii. 180. Sringa-giri, a place of great celebrity in Mysore, i. 305. ii. 74. Sultany Rupee, a silver coin, i. 128, ii. 109, Sri Permaturu, or Srivaram Phutur, a town of 116, 210, 280, 310. Arcot, i. 6, 143. iii. 468. - Pagoda, Hun, or Varaha, a gold coin, Sri Vaishnavam, a religious sect. See Bráhi. 128, 364. ii. 210, 310. iii. 25. - Fanam, Hana, or Palam, a gold coin, i. 128. ii. 210. iii. 25. Stamp duties on cloth, ii. 240, 242, 265, 298. Stánika, a cast. See Moylar. Sunca, or custom-house. See Customs. Star Pagoda, called also Company's P. and Sunticopa, iii. 252. Pu Varahun, a gold coin, i. 128. ii. 210. iii. Supari, or Betel-nut. See Arcca. Suráti Rupee or Rupiya, a silver coin, iii. 25. State of the country. See Appearance. Surf on the sea coast, ii. 471. iii. 8. Steel manufacture, i. 151, 174. ii. 19. Survey of the country, i. 194, 268, 413. ii. 97, Stock. See Cattle, Tacary, i. 123, 124, 387, 99, 156, 211, 227, 279, 295, 319, 332, 389, 415. ii. 103, 108, 216, 253, 254, 281, 403, 412, 443, 446, 465, 474, 486, 502, 518. iii. 1, 102. 320, 372, 382, 442, 477, 488, 495, 526, 562. iii. 2, 3, 35, 48, 88, 102, 139, 194, Surya-manam, or solar year of the Hindus. Sce 246, 281, 299, 398, 428, 454. Calendar of Coimbetore. Strachy, Mr. a collector in Malabar, ii. 517. Suvarna, a river of Canara, iii. 101. Strata of rocks. See Quarries, i. 27, 42, 50, Swami, bountiful charity of one, 290. 59. ii. 38, 43, 56, 60, 61, 68, 78, 84, 118, Swine, i. 121. ii. 87, 383. iii. 57. 133, 138, 146, 184, 188, 201, 284, 291, --, wild. See Boar. 317, 344, 440. iii. 66, 161, 205, 211, 228, Swarna-reka river, iii. 431. 251, 300, 305, 346, 359, 366, 375, 377, Tacavy, money advanced to poor farmers, in 389, 419, 457. order to enable them to procure stock, ii. Straw. See Fodder. 188, 213. Tadaguny, a kind of pulse. See Dolichos Cats-Strings for musical instruments, i. 151. Succession of crops. See Crops. jang, - among Hindus, i. 145. ii. 351, 412. Tahsildar, in Coimbetore, and Canara, a chief iii. 16, 22, 52, 66, 76. officer of a district (Talue), ii. 163, 215, 294, 298, 329. iii. 11. Sudiky, an implement for sowing, i. 283.

Tahsildar, in Mysore, an inferior officer of a division (Hobly). See Munigar.

Taiuru, a town of Mysore, ii. 151.

Tal, a kind of palm. See Borassus.

Talacadu, a town of Mysore, ii. 162, 172.

Talawai palyam, a town of Coimbetore, ii. 283. Talliari, a servant on the establishment of each manor in Mysore, i. 3, 269. ii. 110.

Taluc, in Mysore, Coimbetore, and Canara, a subdivision of the country, like our counties or hundreds, i. 81, 270. ii. 163, 215.

Tamarachery, a town and district of Malabar, ii. 483, 484, 490, 494, 538.

Tamarinds, a fruit, ii. 337.

Tamul, a language, called by the English of Madras Malabars; and a people, called also Tigul, who inhabit the east side of the southern end of the peninsula, i. 9, 272, 339. ii. 66, 190, 202, 237, 246.

Tamuri Rájá, a prince called Zamorin by Europeans, ii. 345, 349, 387, 393, 424, 432, 435, 461, 462, 463, 470, 475, 499.

Tangul, chief priest of the Moplay Mussulmans, ii. 421.

Tanjare, a city of southern India. See Shola.

Tank. See Reservoir, Water.

Tanning. See Leather.

Tany pundal, a shed where water is distributed by charitable persons to the traveller. See Accommodation.

Tar, a kind of palm. See Borassus.

Tari-holay, iii, 152, 218.

Tarkari, properly, signifies all the productions of a garden raised for the use of the kitchen, but is extended to many articles cultivated in the same manner for different purposes. See Gardens, Kitchen.

Tarrum, a copper coin, ii. 540.

Tarugara, in Mysore, one of the servants on the establishment of a manor or village, i. 269.

Tata pyru, a kind of pulse. See Dolichos Catsjang.

Tati holay, a small river of Karnata, ii. 176. Tavina caray, a town of Mysorc, ii. 27.

Tayculum, a village of Mysore, i. 36.

Tay pallay, a scoop for watering land, iii. 50. Teak timber, i. 188. ii. 123, 246, 341, 385, 389, 436, 472, 488, 502, 560. iii. 64, 205, 230, 287.

Telinga, Teliga, or Telingana, a nation and language occupying the north-east part of the Peninsula, and part of the east side of the Subah of the Dekkun, and called Anthra in Sanscrit, i. 30, 322, 358. ii. 186.

Tellichery, an old establishment of the English

in Malabar, ii. 516, 517.

Temples. See Betta, Busty, Covil, Cuncheny, Gudy, Mosque, Pagoda, Prostitutes, Religious establishment, i. 13. ii. 57, 58, 70, 71, 82, 214, 251, 292, 308, 413. iii. 65, 100, 108, 131, 135, 138, 180, 286, 303, 314, 389, 391, 463.

Tenay, a kind of corn. See Panicum italicum. Tenures of farms, gardens, and lands. See Baliky, Candashara, Chericul, Devastanam, Enam, Gaynicara, Jaghire, Jenmear, Lease, Mortgage, Mulacara, Polygar, i. 124, 157, 271, 387, 404, 413. ii. 67, 90, 109, 143, 187, 212, 213, 295, 297, 307, 319, 366, 402, 429, 435, 453, 465. iii. 18, 31, 33, 54, 71, 99, 139, 179, 225, 242, 279, 298, 347, 398, 453, 470.

Terra japonica, Catechu, or Cut, a drug, i. 186. iii. 177, 179.

Terraces formed for the cultivation of hills, i. 84. ii. 85, 429.

Terricaray, iii. 312.

Tiar, a cast of Malyala who manage palm trees, analogous to the Shanar of the Tamuls, the Biluara of Tulava, and Idigaru of Karnata, ii. 415.

Ticory colai, a kind of pulse. See Phascolus minimoo.

Tigers, i. 163. ii. 11, 61, 96, 118, 127, 168, 247. iii. 64, 74, 189, 210, 304, 383, 425,

Tigul, the Karnata name for the people called Tamuls. See Tamul.

Timber. See Forests, Teak, i. 246.

Tippoo Sultán, late sovereign of Mysore, &c. i. 56, 64, 67, 69, 301, 330, 355, 362, 398, 399. ii. 3, 83, 91, 94, 117, 146, 175, 187, 192, 196, 214, 216, 230, 235, 236, 245, # 251, 287, 317, 328, 350, 367, 422, 426, 443, 446, 474, 494, 515, 536, 549, 558, 559. iii. 11, 19, 24, 33, 58, 61, 63, 68, 69, 75, 86, 89, 101, 129, 137, 178, 180, 259,

348, 402, 464. -- , bis sons, iii. 464.

Tirtha, a pilgrimage where the ceremonies are performed in water, ii. 307.

Tiruvana ungady, a village of Malabar, ii. 462. Tithi, an annual fast in commemoration of their

deceased parents, performed by Brahmans. See Fast, i. 246.

Titles, among the Hindus, derived from the construction of useful works, i. 15.

Tobacco, i. 52, 291. ii. 256, 281, 291, 315. iii. 386, 441.

Togari, a kind of pulse. See Cytisus.

Togotaru, a cast of weavers in Karnata, i. 217, 315.

Tola, or Tolam, a weight. See Weights, ii. 209, 279, 354, 395, 440.

Tonda, a shrub cultivated for its oil. See Ricinus.

Tonuru, a town of Mysore, ii. 80, 82.

Torearu, a class of weavers of the tribe called Besta, ii. 116, 152, 261, 270.

Tota, garden land or produce, in opposition to that which is arable. See Gardens.

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Tulam, a weight, usually called Maund by the

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