

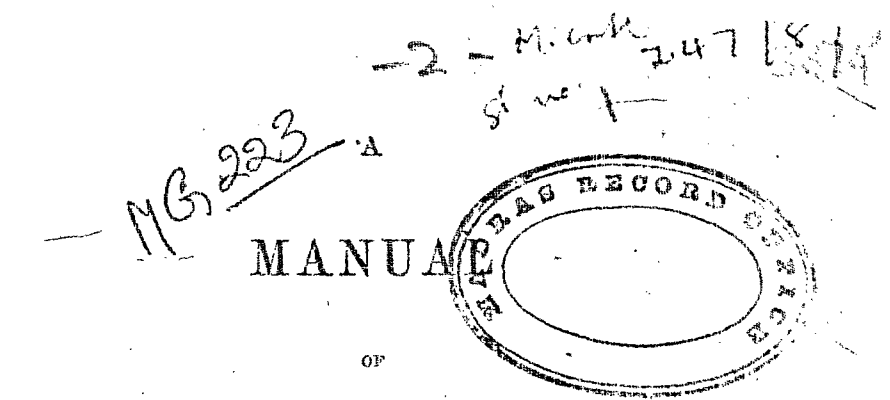
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THE SALEM DISTRICT

IN THE

PRESIDENCY OF MADRAS.

COMPILED BY

H. LE FANU,

B.A., EX. SCH. T.C.D., BARRISTER-AT-LAW, OF THE MADRAS CIVIL SERVICE,
ACTING SUB-COLLECTOR AND JOINT MAGISTRATE OF NORTH ARCOT.

VOL. I.—THE DISTRICT.

MADRAS:

PRINTED BY E. KEYS, AT THE GOVERNMENT PRESS.

1883.

PREFACE.

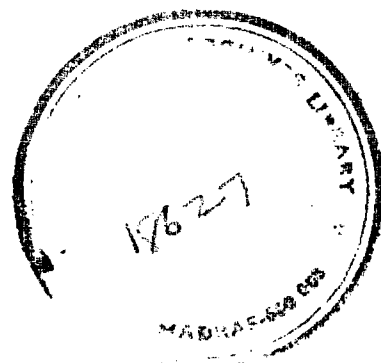
The delay in the publication of this Manual is due to the famine and the time occupied in passing such a lengthy work through the press.

I When the materials for Volume I were being collected, the Taluk offices, which form Volume II, gradually grew into shape, and, thinking that they might perhaps interest District Officers, I obtained permission from the Board of Revenue to depart from the usual scheme mentioned for District Manuals, and print them as a separate volume.

Some of the statistics in Volume II must be received with caution; notably those with regard to produce and exports and imports: they were the best available at the time, and, when the sources for compiling such information have improved, it might be worth while to correct them for an average year, when it would be possible to deduce from them a fair estimate of the condition of the ryot classes.

Having served some ten years in the Salem District, and taking a deep interest in the people, the cultivating classes especially, I gave particular attention to the Revenue History of the district, and I venture to think that Chapter V, Volume I, is unique as a history of the actual development of an Indian district. I have treated the subject at greater length than has been accorded to it in any of the other Manuals, and if this chapter assists beginners in obtaining a clear view of the genesis and growth of the Madras Revenue system, my labour will not have been thrown away. The district is a fair representative district, containing as it does both Zamindari, Mitta, and Ryotwari tenures: other tenures, such as Shrotriems, Jaghirs, Inams of various kinds, tree-planting pattas, hill assessments, Izaras and sub-leases, are also numerous. The district is fortunately free from those complications, arising from Mirasi right, as regards land tenures and village offices which are so productive of difficulty in Chingleput and elsewhere.

In writing the earlier portion of the Revenue History I have borrowed freely from Mr. Dykes' "Salem, an Indian Collectorate." It is remarkable how, writing when he did, Mr. Dykes grasped and portrayed the burning question which District Officers were then compelled to face; and the results of Mr. Brett's *Taram Kammi* reduction showed clearly how correctly Mr. Dykes had gauged the position. The arrangement of



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Mr. Dykes' book is, however, open to exceptions; passages which ought to be read together are sometimes separated by a hundred pages, and his great familiarity with the subject which he was treating prevented him occasionally from seeing that his meaning would not be as clear to his readers as it was to himself.

For the materials of fully one-third of Chapter V, Volume I, I am indebted to the ability and research of M. R. Ry. Venkata Subba Rao Garu, the Huzur Sheristadar of Salem, and I cannot sufficiently acknowledge my obligations to him.

To the Reverend Thomas Foulkes the student of Indian antiquities is indebted for two magnificent monographs: the first, Chapter I, Volume I, treats of the Ancient History of Salem; and the second, an Appendix to Volume II, is a discussion on certain Shasanams in which the district is directly or indirectly interested. In the very first rank of Indian Antiquarians, Mr. Foulkes has made the treatment of an obscure and little understood subject a labour of love, and I am much mistaken if his contributions to this Manual are amongst those writings which posterity will suffer to be forgotten. I venture to deprecate Mr. Foulkes' decision on two points. The claims of Chera to any portion of Salem have been put completely out of court by Mr. Foulkes. There is probably but one person—Dr. Caldwell—in Southern India who is capable of encountering Mr. Foulkes on this ground, and as Mr. Foulkes (page 15, Volume I) has most courteously thrown down the glove, it is to be hoped that, if a word is to be said on behalf of Chera, Dr. Caldwell will say it. In this connection it seems to me that Mr. Foulkes is perhaps inclined to allot too much weight to the "Kongu Chronicle," from its nature a partizan exhibit. I also am of opinion that Mr. Foulkes (pages 377-8, Volume II) is unduly severe on the claims of Udayendram to be identified with the Udayenda-Chaturvedi-mangala and Udayachandra Mangalam of the Shasanams. From sections of subsoil which I have seen on the present left bank of the Palār near Vaniambadi I am inclined to think that the river has changed its course and that Udayendram may once have been on the south or right bank of the river. Looking at the sudden bend which the river takes some miles above Vaniambadi it would seem probable that the river has eaten a new path for itself on the southern side. The slope of the land from the Mada Kadapa hill would favour this action, and, to any one who remembers the heavy floods of September 1874, when a large portion of the town of Vaniambadi fell into the river as the erosion of the right bank was accelerated, the change in the bed of the river, which Mr. Foulkes regards as so improbable, will appear to be very intelligible.

All the protective works constructed since 1874 have been designed specially to counteract this tendency of the river to eat away its right bank. I do not, however, venture on any of these points to put my opinion in competition with that of Mr. Foulkes. I merely call attention to them in case some person better qualified than I am to speak on the subject should have anything to say on the other side. I have to apologise to Mr. Foulkes for the spelling of Barahmahal in Chapter I, Volume I, which was altered to conform to that adopted in Chapter II (*vide* Glossary *sub voc.*).

I have to thank Surgeon-Major R. E. Pearse for his interesting contribution on the health of the district. This was written without proper books of reference at hand and was, I believe, partly revised by one of the writer's numerous successors in office. When, therefore, in topographical or statistical matters Dr. Pearse's text was at fault, I have taken the liberty of pointing this out in the notes. If the views taken by the learned writer as to the genesis of guinea-worm are correct, they will form a valuable contribution to the literature of progressive evolution. A process, somewhat analogous to that surmised in regard to guinea-worm, has been observed in the case of certain ascidians when transported to a strange habitat on the Mexican Plateau.

Mr. R. Bruce Foote has found time, in the midst of his other heavy duties, to contribute an article, full of interest, on the geology of the district. I have also in other places borrowed, not always acknowledging the source of my information, from Volume IV of the Memoirs of the Geological Survey, in which the results of Mr. King's and Mr. Bruce Foote's researches into the geological conformation of the district have been embodied.

From my friends Mr. E. Keys and Mr. Hill of the Government Press I have received the greatest kindness and courtesy. A novice to the operations of the printing office cannot fail to be struck with the wide range of subjects which seems to be familiar to those who preside over this important department: from an undecipherable technical term in geology to a doubtful chemical symbol or a quotation from George Sand, nothing seems to present any difficulty to these gentlemen and their subordinate staff.

I must disclaim responsibility for the piebald spelling of proper names which is to be found in these pages. With the one exception above noted, Mr. Foulkes has followed the system of transliteration of which he approved. In the rest of the work, as the *personnel* of the Board of Revenue changed, so the views of the Board as to spelling changed and have been followed.

It has not been found possible to supply all the details which a District Manual map ought to contain on a lithographed sheet on a scale of 8 miles to the inch. The map has therefore been prepared on a scale of 4 miles to the inch, and must be cut and mounted before use. I should mention that when it was prepared there was no satisfactory record available as to the position or revenue of irrigation works either in the District Engineer's or the Collector's Office. There are some errors, therefore, in the text; these will be found mostly in the Attār Taluk.

VELLORE,
20th December 1882. }

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SALEM DISTRICT MANUAL.

CHAPTER I.

SKETCH OF THE ANCIENT HISTORY OF SALEM.

Contributed by the Reverend T. FOWLER, Chaplain of Saint John's, Bangalore.

The principal water-partings of India have been selected as its fittest political boundaries from the earliest days of its civilized history. The development of its prosperity has followed the extension of the cultivation of its plains: and even where its mountain ranges do not rise high enough to bar the free communications of the people, the upper basins of its rivers, containing the sources of their wealth-giving water, would naturally be regarded as the reserves of the population of the plains.

The southern water-parting of the Southern Pinākini has thus, from very ancient times, separated, more or less completely, the northern from the southern districts of the Collectorate of Salem throughout the various political distributions of this part of India. It was so when the basin of the Pālār, and the districts bordering on it, formed the Tondaimaṇḍalam of the Chōlas, of which the northern districts of Salem formed a part; and it was so also, before the Chōla conquest, when these districts formed a portion of the ancient Dravīḍa country, the southernmost province of the extensive dominions of the kings of the Pallavas; while the southern districts of modern Salem, lying within the great basin of the Kāveri, formed in those ancient times the northernmost province of the kingdom of Kongu, down to the time of the absorption of that old kingdom into the dominions of the Chōlas.

THE NORTHERN DISTRICTS OF SALEM.

The materials for the history of the PALLAVA kingdom were, until quite lately, exceedingly scanty. They were, moreover, distorted in consequence of the prevalence of imperfect and erroneous conceptions of the true position and extent of this old empire, and they were dislocated from their proper chronological connections; whilst also some of them lay concealed under the covering of different names not to be recognised by any but special investigators of this portion of Indian history. Sir Walter Elliot prepared the way for a sound investigation of this history when he made his invaluable collection of South Indian inscriptions in the South Marāṭhā

country in 1826 to 1832, and in the Northern Sirkars in 1848 to 1854;¹ and his description of these inscriptions, published in 1837 in the *Journal of the Royal Asiatic Society* (vol. iv., p. 1 ff.), and subsequently in 1838 in the *Madras Journal of Literature and Science* (vol. vii., p. 193 ff.), cast the first clear rays of light into the thick darkness which had enveloped the ancient history of the Dakhan up to that time. An important new starting-point for these investigations was laid down in 1858, when he announced that the Pallava kings were the dominant race in Southern India at the time of the first conquests of the Chālukyas in the western districts of the Dakhan in the sixth century A.D. (*Madras Journal*, xx. 78.)

But who were these powerful Pallavas? What had become of them? How had their history, and almost their name, been so completely forgotten? For a while all traces of their location were confined to the deltas of the Krishna and the Godavari: and the only accessible historical memorial of them was the imperfectly deciphered copper-plate grant of Vijaya Nandi Varma, published by Sir Walter Elliot in 1840.² In 1844³ he announced that the Pallavas were the excavators of the most ancient of the monuments at the Seven Pagodas. This new discovery showed that their dominions, which the above-mentioned grant had already located in the eastern half of the Northern Dakhan, and which the account of the earliest conquests of the Chālukyas had traced far up into its western half, extended southwards to the mouth of the Palar some time before the sixth century A.D.

Dr. Babington singularly escaped making this discovery in 1828 or earlier; for the king who excavated the Ganesha temple at Mahāmāllapuram (the Seven Pagodas) is stated, in the tenth verse of the inscription upon that temple, which he has given in the fourteenth plate of his article,⁴ to have been one of the Pallava kings. Dr. Burnell⁵ has subsequently read the name as Atyantakāma Pallaveshvara. The same words occur on the eastern face of the southernmost monolith at the same place.⁶ Sir Walter Elliot⁷ read the name Atiranachanda Pallava also on the frieze above the entrance of the mantapam in the neighbouring village of Salvānkuppam.

During the last few years Mr. Fleet's decipherments of the inscriptions in Sir Walter Elliot's collection, published in the "*Indian Antiquary*," have added much to our previous knowledge of these kings: and it is now well established that they were reigning with much power and renown in Dravida from the fifth century A.D., and apparently long before that time, with the sacred Kāñchipuram (Conjeveram) for their capital. This additional information began to appear in an indirect form from the inscriptions of their neighbours and constant enemies, the Chālukya kings, of the Western Dakhan. We have now, however, several of their own grants also, two of which⁸ were brought to light amongst the materials collected for this present Manual, confirming and extending the earlier indirect testimony of the Chālukya documents. From these inscriptions it has at length become historically certain, that this part of South India formed an

¹ See *Indian Antiquary*, vi. 227.

² *Madras Journal of Literature and Science*, xi. 302 ff.

³ *Mad. Jour.*, xiii. (I) 53.

⁴ *Trans. Roy. As. Soc.*, ii. 268.

⁵ Captain M. W. Carr's *Seven Pagodas*, 222; and Dr. Burnell's *S. I. Palaeogr.*, 38.

⁶ Carr's *Seven Pagodas*, 222.

⁷ *Mad. Jour. Lit. and Sc.*, xiii. (I) 46.

⁸ *Ind. Antiq.*, viii. 167 and 273. (See Appendix to this Manual.)

important portion of the dominions of the Pallavas from an early date, which has not yet been precisely ascertained, down to the time of its conquest by the Chola kings of Tanjore about the ninth century A.D.; and that it was the only portion of their once extensive empire which remained to them, as independent kings, when that event finally extinguished the fortunes of their dynasty.

The discovery above referred to, that the Pallavas were the excavators of the monolithic "Rathas" at the Seven Pagodas, showed that these Pallava kings were patrons of a high development of the arts of architecture and sculpture; and that their architecture belonged to a style which was developed in the succeeding colossal architecture of the Chola and Vijayanagara periods of Indian history.¹ I proceed now to show that that discovery affords a clue to another important historical conclusion, namely, that the rule of the Pallavas was established in those very parts of the country in which their inscriptions have located them, at the commencement of the Christian era.

The date of the excavation of these "Rathas" has gradually been pushed backwards until at length they have been assigned, with apparent truth, to the fifth or sixth century A.D.,² "if not indeed earlier." This is the time which Mr. Fergusson has also assigned to the construction of the beautiful Buddhist rail of Amarāvati on the banks of the Krishna, and to the development of a school of architecture there, which partook of the characteristics of the schools of Central India, the Panjab, and Bactria.³

Ascending a century earlier, we come to the time of the Indian pilgrimage of the Chinese Buddhist monk Fa Hian: and in these same parts we must certainly look for his very remarkable five-storeyed Buddhist monastery,⁴ which Mr. Fergusson has shown⁵ to correspond in architectural style with the sculptured model of the Buddhist viharas of the south, the "Great Rath" at the Seven Pagodas.⁶ There are, therefore, strong reasons for connecting the builders of the Amarāvati tope with the excavators of the "Rathas" of the Seven Pagodas.

The dates assigned to both of these groups correspond with the time when both of these localities were united under the rule of the kings of the Pallavas, for the grant of Vijaya Nandi Varma⁷ was issued at Vengi, the capital of a province which contained the deltas of the Krishna and the Godavari, in which province Amarāvati was situated, and belongs to the fourth century A.D.; if not earlier; and the grant of Sri Nandi Varma⁸ was issued at Kāñchipura (Conjeveram), and belongs to the fifth century A.D., as do also the grants of Vishnu-Gopa Varma⁹ and Simha Varma,¹⁰ published by Mr. Fleet out of Sir Walter Elliot's collection.

¹ Fergusson's *Hist. Ind. Arch.*, 330, 331.

² *Mad. Jour.*, xiii. (I) 53; Fergusson's *Hist. Ind. Arch.*, 326.

³ *Hist. Ind. Arch.*, 21, 34, 102, 103; and *Tree and Serpent Worship*, 173.

⁴ Jaidlay's *Fa Hian*, p. 317; Beal's *Fa Hian*, p. 139.

⁵ *Hist. Ind. Arch.*, 135.

⁶ I have claimed Fa Hian's five-storeyed viharas for the Pallavas in an article published in the "*Indian Antiquary*" for 1878, vol. vii., pp. 1 ff.

⁷ *Mad. Jour.*, xi. 302; Burnell's *S. I. Palaeogr.*, 135; *Ind. Antiq.*, v. 476.

⁸ *Ind. Antiq.*, viii. 167. (See Appendix to this Manual.)

⁹ *Ind. Antiq.*, v. 50.

¹⁰ *Ind. Antiq.*, v. 151.

This combined testimony of the architectural monuments of the Pallavas, and their inscriptions, sufficiently establishes the fact that these kings ruled over the Dravida, Andhra, and Kalinga countries in the fourth and fifth centuries A.D. The grant of Pallava-Malla Nandi Varma,¹ belonging probably to the ninth century A.D., shows their great political and military power during the sixth, seventh, and eighth centuries A.D., notwithstanding that they had been shorn of their Andhra and Kalinga provinces by the Eastern Chalukyas in the beginning of the seventh century A.D.; and it also shows that they continued to rule in the basin of the Palar down to the ninth century, at which time the Pallava king was in conflict with a combination of his feudatories, seeking by force of arms to overthrow his throne in favour of a pretender: and to this event followed, not long afterwards, the conquest of Dravida by the Chola kings of the basin of the Kaveri.

The date of the earliest Pallava inscriptions is earlier than the first invasion of the Dakhan by the Chalukyas, who supplanted them in the Western Dakhan probably in the sixth century A.D., and in the Eastern Dakhan in the seventh century; and, before this invasion, as has been already mentioned, the Pallavas were the dominant race in Southern India, their dominions extending high up the Dakhan towards the Nerbudda river,² in which direction the first conflicts between these two powers took place.³

The architectural evidence takes us up higher than the time indicated by the inscriptions; for, as it is at present received, that evidence shows that the builders of the Amaravati tope ruled upon the banks of the Krishna as early as the commencement of the Christian era;⁴ unless it should hereafter be proved, which is not now likely, that this neighbourhood had changed its rulers in the meantime.

The evidence from the coins of Southern India may be expected to add important confirmatory testimony to the same effect:⁵ but this subject has not yet received the attention which it deserves.

The establishment of these chronological facts prepares the way for another important piece of evidence to the same effect, gathered from the historical books of Ceylon. This new evidence equally upholds the above conclusions, whether the event which it records belongs to the year 157 B.C., as stated in those books, or to the fourth or the beginning of the fifth century A.D., as

¹ Ind. Antiq., viii. 275. (See Appendix to this Manual.)

² Jour. R. A. S., iv. 3; Mad. Jour., vii. 195.

³ Jour. R. A. S., iv. 15; Mad. Jour., vii. 207. The earliest capital of the Western Chalukyas yet ascertained was Vatapi ("Watipura"), the modern Badami, in the Kaladgi District in the Bombay Presidency, made so by Pulikesi I. in the sixth century A.D. (See Ind. Antiq., v. 71, note; vi. 72, 354; Jour. R. A. S., iv. 9, 39; Mad. Jour., vii. 201, 231). But there appear to be good reasons for believing that they had an earlier capital than this, namely Indukanti, more to the north. (See Jour. R. A. S., iv. 15; Mad. Jour., vii. 207; Burgess' Report of the Belgam and Kaladgi Districts, p. 28; Ind. Antiq., vii. 247.)

⁴ Ferg., Tree and Serpent Worship, 179, 220, 237; Hist. Ind. Arch., 103. See Mr. Fergusson's earlier views of the date of the Amaravati monuments in Jour. R. A. S., iii. (new series) 133 note, 146, 148. See also General Cunningham's views on the date of the Tope in his Ancient Geography of India, i. 541, 542.

⁵ Sir Walter Elliot's "Numismatic Gleanings" in Mad. Jour., xix. 220; Ferg., Tree and Serpent Worship, 220, 237; Cunning., Anc. Geog. of Ind., i. 541.

has been suggested by Mr. Fergusson.¹ Dutthagāmini, one of the kings of the greater dynasty of Ceylon, who, "in the epics of Buddhism, enjoys a renown second only to that of king Tissa as the champion of the faith,"² upon the recovery of his ancestral kingdom from its foreign usurpers, erected a magnificent Buddhist tope in his capital in commemoration of his triumph over them; and, when it was completed, a large number of Buddhist monks from various parts of India went over to Ceylon to be present at its consecration.³ There is evidently great exaggeration in the accounts of the numbers of the monks who thus visited Ceylon, and their numbers differ very greatly in the different books. Notwithstanding these drawbacks, a fair argument for our present purpose may be drawn from these numbers; for they show, both by the very large numbers of monks who are represented to have come from the Pallava dominions,⁴ and more so still by the comparison of these numbers with those who came from the remaining kingdoms of India, the great extent of the empire of the Pallavas in the reign of Dutthagāmini, according to the current traditions of the fifth century A.D., or any other more probable date when the Mahāwanso may be supposed to have been written.

All this is in direct opposition to the ideas which have hitherto been current respecting the early history of the basin of the Palar and its neighbourhood. Those ideas are more or less founded on the misleading, though not absolutely erroneous, information communicated to Mr. Place in A.D. 1794-8,⁵ and embodied by him in his report in 1799, and reproduced by Mr. F. W. Ellis in 1816,⁶ with all the authority of his great reputation, as the current traditions of those days.

Those traditions were based upon the mistaken assumption that the Chola occupation or conquest⁷ of the Tondaimandalam—which was the new name given by the Cholas to the ancient Dravida country at the time of its annexation to their dominions⁸—took place about, or even before, the commencement of the Christian era,⁹ and that it had continued under their rule from that early time down to their extinction as a ruling power here about the fourteenth or fifteenth century. The effect of thus antedating this conquest was to extinguish the whole period of the Pallava rule over these parts, and to keep this important portion of the ancient history of India in almost hopeless oblivion until quite recently. The Tondaimandalam was believed to have been "an almost entirely uninhabited jungle,"¹⁰ peopled, previous to its occupation by the Cholas, by a wild race of wandering and half-savage hunters, shepherds or cowherds;¹¹ and it was supposed to have been, either wholly¹² or in part,¹³ the famous old Dandakāranya of the Rāmāyana.

Moreover the Chola kings¹⁴ were credited with the gift to it of the first

¹ Tree and Serpent Worship, 195, note.

² Sir J. E. Tennent's Ceylon, i. 354.

³ Turnour's Mahāwanso, 171; Upham's Mahāvansi, i. 162; Rajaratnakari, ii. 39; Rajavali, ii. 222.

⁴ Pallawabhago in Turnour; Pallawabonamratta in Upham.

⁵ Papers on Mirasi Right (1862 Edit.), p. 39.

⁶ Mir. Right, p. 229.

⁷ Mir. Right, 39, 230.

⁸ Mir. Right, 234.

⁹ Mir. Right, 239.

¹⁰ Mir. Right, 39, 229, 432.

¹¹ Mir. Right, 39, 229, 402.

¹² Mir. Right, 39.

¹³ Mir. Right, 239.

¹⁴ Mir. Right, 40, 230, 402.

elements of its civilization, by settling in it several large colonies of agricultural Hindus, whom they brought there from the Tuluva and Chola countries and other parts of India.¹

Nevertheless, there were not wanting some unnoticed indications, mixed up with these old fables themselves, of the existence of a very different state of things from this representation at the time of the Chola conquest and long before it. As early as 1824 Sir Thomas Munro expressed his dissatisfaction with these traditions;² and although he has in one particular misunderstood Mr. Ellis' statement, this does not materially affect the force of his remarks. He saw, that underneath the description contained in these traditions, there lay indications of a state of things which was "the gradual growth of a country long peopled and cultivated," and that the institutions which they were adduced to illustrate, implied the existence of a "great number of tanks and water-courses constructed at the public expense."³ Professor H. H. Wilson, four years later than this, put these doubts and inductions into the form of historical facts, when he announced⁴ that one of the Mackenzie Manuscripts contained the tradition that some Buddhists from Benares had settled about Kānchi (Conjeveram) in the third century A.D., and had continued to flourish there down to the eighth century. Moreover Mr. Place's and Mr. Ellis' own descriptions contained the statement, that these reputed half-savage shepherds were known to have had numerous strong fortresses throughout their country, and that their seacoast possessed a considerable commerce.⁵ They also represented them to have been sufficiently advanced in civilization to distribute their country into political divisions—those very divisions which the Cholas themselves adopted for their own purposes of government.⁶ And they also showed that they were sufficiently organized and powerful to beat back the earliest attempts of the mighty Cholas—"whose empire is said to have reached . . . over the greater part of the Peninsula"—to defeat them in battle, and to overthrow their invading army.⁷

The chief authority upon all historical subjects connected with Southern India at the time when the earliest of these traditions were collected⁸ was Colonel Colin Mackenzie, the father of Indian archaeology; and there is an original paper in one of the manuscripts of his magnificent collection which seems to be the probable source of Mr. Place's information. This paper was published by the Rev. William Taylor in 1838 in his second report on the Mackenzie Manuscripts,⁹ and is as follows:—

"Ancient History of Tondamandalam and its earlier inhabitants called Vedars and Curumbar."

"After the deluge the country was a vast forest, inhabited by wild beasts. A wild race of men arose, and, destroying the wild beasts, dwelt

¹ Mir. Right, 49, 177, 230, 249, 402, 432.

² Mir. Right, 432.

³ Mir. Right, 432, 493.

⁴ Descr. Catal. Mackenzie MSS., i., introd. p. lxxv, lxxvii.

⁵ Mir. Right, 39, 229, 242.

⁶ Mir. Right, 39, 42, 229, 242, 402.

⁷ Mir. Right, 40.

⁸ See Wilks' Mysore (original edition), i., pref. p. xv., &c.; Wilson's Catal. Mackenzie MSS., i., introd. p. i. ff.; Jour. R. A. S., i., 333 ff.

⁹ Jour. As. Soc. Beng., vii. 403, and republished in Mad. Jour., vii. 319.

in certain districts. There were then, according to tradition, no forts, no huts, no kings, no religion, no civilization, no books; men were naked savages; no marriage institutions. Many years after, the Curumbar arose in the Carnāta country: they had a certain kind of religion; they were murderers. They derived the name of Curumbar from their cruelty. Some of them spread into the Drāviḍa-dēsam as far as the Tondamandala country. They are now found near Uttra Mēru, but more civilized. They ruled the country some time, but falling into strife among themselves, they at length agreed to select a chief who should unite them all together. They chose a man who had some knowledge of books, who was chief of the Drāviḍa country, and was called Camanda Curumba prabhu, and PALAL rāja; he built a fort in Puralūr. He divided the Curumba land into twenty-four parts and constructed a fort in each district. Of these the names of ten are, Puralūr, the royal fort; Callattur; Amur; Puliyūr; Chembūr; Utthi Kādu; Kaliyam; Venguna; Icāttukottai; Paduvūr. While they were ruling, there was a commerce carried on by ships. As the merchants of Cāveripūm-patnam sought trading intercourse with them, the Curumbar built the following forts (stations) for trade: Patti-pulam; Sāla-cupam; Sāla-pākam; Mēyur; Cādalur; Alampari; Maracanām; whence by means of merchants from Cāveripūm-patnam and the Curumbar, a commercial intercourse by vessels was carried on. They flourished in consequence; and while without any religion, a Jaina ascetic came and turned them to the Jaina credence. The Basti, which the Pural king built after the name of that ascetic, is still remaining, together with other Basti and some Jaina images in different places; but some are dilapidated, and some destroyed by the hatred of the Brāhmans. They were similar to the Jainas of the present day; they were shepherds, weavers, lime-sellers, traders. While living thus, various kings of civilized countries made inroads upon them, as the Chola, the Pandya kings and others; and, being a wild people, who cared not for their lives, they successfully resisted their invaders, and had some of the invading chiefs imprisoned in fetters in front of the Pural fort. Besides they constrained all young people to enter the Jaina religion, in consequence of which vexation a cry arose in the neighbouring countries. At length ADONDAR of Tanjore formed the design of subduing them; and, invading them, a fierce battle was fought in front of the Pural fort, in which the Curumba king's troops fought and fell with great bravery, and two-thirds of ADONDAR's army was cut up. He retreated to a distance, overwhelmed with grief, and the place where he halted is still called Cholanpedu. While thinking of returning to Tanjore, ŚIVA that night appeared to him in a dream, and promised him victory over the Curumbas, guaranteed by a sign. The sign occurred, and the Curumba troops were the same day routed with great slaughter. The king was taken; the Pural fort was thrown down; and its brazen (or bell-metal) gate was fixed in front of the shrine at Tanjore. A temple was built where the sign occurred, and a remarkable pillar of the fort was fixed there; the place is called Tirumūliviśal. A sort of commemorative ceremony is practised there. After a little more fighting, the other forts were taken, and the Curumbas destroyed. ADONDAR placed the Vellazhar as his deputy authorities; having called them into the country to supply the deficiency of inhabitants, from the Tuluva-dēsam (modern Canara). They are called Tuluva Vellazhar to the present day. Some were brought from the

Choladāsam, still called Chola Vellazhar. He called from the north certain Brāhmans by birth, whom he fixed as accountants. The Kondai Katti Vellazhar were appointed by him. He acquired the name of Chakraverti from rescuing the people from their troubles. The name of Curumbabhumi was discontinued, the country was called Tonda-mandalam; and common consent ascribes to Adondai the regulation of the country."

Read in the light of our present knowledge of the true condition of the Dravida country before the Chola conquest, the traditions embodied in this paper, which was apparently "written from different verbal accounts" by Colonel Mackenzie or some of his assistants,¹ do not unfairly represent some of the main features of the kingdom of the Pallavas. It was probably their name of "Curumbar" which led to much of the misconception respecting the half-savage state of its inhabitants: for the Kurumbar of the present day, at least in the Tamil districts, have much in their habits to suggest the conclusion that their ancestors of two thousand years ago could hardly have entered the circle of civilization. Nevertheless, the Kurumbar claim to be the descendants of Yadu, the common father of all the shepherd castes of India; and this grand old race of Yādavas has given many a dynasty to the thrones of this country; and, more particularly, the Harihara dynasty of Vijayanagara belonged to this very Kurumba tribe. The disillusion was in reality completed when Sir Walter Elliot showed in A.D. 1844,² and more distinctly in 1858,³ that the princes of the Kurumbar were "of the Pallava race."

The inscriptions of the Western Chālukya kings afford several incidental proofs of the great power of the Pallavas throughout the long course of their bitter intercourse with them. The Chālukyas were the dominant rulers of the Northern Dakhan from the end of the sixth to the end of the eighth century, and again from the end of the tenth to the beginning of the twelfth century: and they were in frequent conflict with the Pallavas, whom they regarded as their hereditary foes; and victory, in this long-continued strife, alternately inclined to both. The repeated admissions by the Chālukyas of their own defeat by the Pallavas are very remarkable, and bear witness to the great respect in which they held these enemies.

In one instance,⁴ early in the seventh century, they state that the succession to the Chālukya throne was interrupted by the Pallavas, and that so seriously that their power was not completely recovered for more than sixty years. This interruption took place at the death of Pulakeshi II., and the memoirs of the Chinese pilgrim Hiwen Tshang, who visited the Chālukya capital during the reign of this very king, afford means for judging of the formidable power of the Chālukyas at this time, and also, by way of inference, of the contemporaneous great power of the Pallavas. At this time Harsha Vardhana, otherwise named Shilāditya, was reigning at Kanoj over an empire which extended from Kashmir to Assam, and from Nepal to the Nerbudda, which he had created for himself by a long series of conquests.⁵ "In the plenitude of his power

¹ See Jour. As. Soc. Beng., vii. (II) 393.

² Mad. Jour., xii. (I) 53.

³ Mad. Jour., xix. 245.

⁴ See Ind. Antiq., vi. 78, 87; vii. 219.

⁵ Mémoires de Hiouen Tshang, i. 243 ff.; Jour. As. Soc. Beng., xxi. 2; xxxiv. 204.

Harsha Vardhana invaded the countries to the south of the Narbada, where he was successfully opposed by Raja Pulakesi, and after many repulses was obliged to retire to his own kingdom. This account of Hiwen Tshang is most singularly corroborated in every particular by several ancient inscriptions of the Chālukya Rujas of Kalyān. According to these inscriptions, [Satyāshraya, otherwise named Pulakeshi II, the father of] Raja Vikramaditya [and] the grandson of Pulakesi Vallabha, gained the title of Parameswara "by the defeat of Sri Harsha Vardhana, famous in the north countries." (Bombay Asiatic Society's Journal, iii. 206.)¹ And yet the Pallavas were in sufficient power at the death of this monarch to alter the succession to his throne, and to keep his kingdom in a state of humiliation for more than half a century.

The grant of Kubja Vishnu-vardhana, Pulakeshi II.'s younger brother,² incidentally shows the great military strength of the Vengī (Rajahmundry) province of the Pallava empire at the beginning of the seventh century A.D., when this prince conquered it and established the Eastern Chālukya dynasty there. In making this conquest, this "surmounter of difficulties" "succeeded in penetrating inaccessible fortresses situated in the midst of plains, lakes, forests, and mountains." And, while these numerous fortresses indicate the power of the Pallavas in these northern districts of their empire, they show also that this province of Vengī was marked by that same class of military fortifications which formed the special feature of their southern districts in the basin of the Pālār, and which are at the same time so characteristic of this building dynasty.

A similar argument is supplied by the memoirs of Hiwen Tshang,³ who travelled through the districts along the Eastern Coast in A.D. 639 and 640,⁴ in the second generation after the above-mentioned conquest of Vengī by Kubja Vishnu-vardhana. One of the principal features of his description, as it bears upon our present subject, is the number of religious buildings which he found here; and amongst these, the richly sculptured Buddhist monastery at Pingkilo,⁵ several storeys high, is an excellent specimen of the Pallava style of architecture.⁶

His description of the former densely populated state of Kalinga, contrasted with its comparatively depopulated condition at the time of his visit,⁷ probably enough represents the flourishing condition of this

¹ General Cunningham's Archaeological Report in Jour. As. Soc. Beng., xxxiv. (I) 204. I have taken the liberty to supply the words which are enclosed in brackets.

² Jour. Beng. As. Soc., xxxix. (I) 153 ff.

³ Julien's translation, ii. 92 ff.

⁴ General Cunningham, in his "Approximate Chronology of Hiwen Tshang's Travels" (Anc. Crag. Ind., i. 565), brings him into Kalinga on the 30th of May A.D. 639, and places his final departure from Dravida soon after May 10th, A.D. 640.

⁵ Dr. Bunnell has identified this place with Vengī, with the addition of the locative suffix of Telugu nouns. S. I. Palaog., p. 16, note.

⁶ "A côté et à peu de distance de la ville de Ping'k'i-lo, il y a un grand convent dont les pavillons et les tours à plusieurs étages sont ornés de riches sculptures." (Julien's trans., ii. 106.)

⁷ Dans les temps anciens, le royaume de Kie-ling-kia (Kalinga) possédait une population agglomérée. (Dans les rues,) on se touchait des épaules et les moyeux des chars se heurtaient. . . . "et la population disparut. Après un grand nombre d'années, ce royaume reçut peu à peu des émigrés; mais il n'est pas encore complètement peuplé." (Julien's trans., ii. 93.)

province during the Pallava period before the Chālukya conquest; and the devastation which he found there, notwithstanding the supernatural cause to which Hiwen T'sang attributes it, would be the natural consequence of a fierce struggle within it for dominion between two such formidable powers as the Pallavas and the Chālukyas.

If we now sum up the substance of these investigations into this portion of the ancient history of India, we gather, that in the early centuries of the Christian era, and probably earlier, a powerful and civilized empire flourished over a great extent of the Dakhan, namely, the empire of the Pallavas; whose capital, Kānchipuram, the modern Conjeveram, was one of the most famous cities of ancient India, magnificently built and strongly fortified; whose advancement in the arts is illustrated by the beautiful Buddhist tope of Amarāvati, and its still more splendid enclosure walls; by the excavated monolithic seven-storied Buddhist monastery of Ea Hian; by the rock-sculptured monolithic monuments of the Seven Pagodas; by the remarkable pillar of the royal fort of Pural and its brazen gate; by its statues of the Jinas and of its early kings; by its agriculture, connected with an elaborate system of irrigation; by its cocoanut topes, betel gardens, and orchards of grafted mango trees; by the superiority and singular fineness of its woven goods; by the variety and excellent execution of its coinage; by its sea-going ships; by the armour in which its war-elephants were clad; by its fortresses; by its successful resistance of the earlier invasions of its very powerful neighbours, and the signal victories of its own armies within the territory of the most mighty of those neighbours; whose revenue administration has been substantially adopted by each successive ruling power during the subsequent political changes of the country; whose religious condition is illustrated by its numerous Buddhist monasteries, Hindu temples, and Jaina bastis; by the sacredness of the temples of its capital, Kānchipuram, which has been regarded from very early times as one of the seven most sacred places of Indian pilgrimage, and as the religious metropolis of the south; by the various decisive religious controversies held there; by its land endowments to religious persons; and by the settlement of Buddhist monks there from at least the third century of the Christian era, and of Brāhmins from at least the fourth century; whose abundant internal wealth was augmented by the commerce of its numerous sea-ports, extending along the whole Eastern Coast from modern Cuddalore to Ganjam, into which the greater part, if not the whole, of the sea-trade between the Golden Chersonese and the farther east and the western world was carried at least as early as the first centuries of the Christian era; whose riches were still further enhanced by its various mineral resources, and especially by the possession of the only diamond mines existing at that time in any known part of the world; and whose boundaries in its most palmy days extended from the Nerbudda and the borders of Orissa on the north, to the northern limits of the Kongu and Chola kingdoms in the neighbourhood of the Southern Pinākini, the Southern Pennār, on the south; and, on the west,¹ from the northern extremity of the Western Ghats, down the line of the western water-parting of the

¹ It is impossible at present to define the western boundary with complete exactness from any published data.

Krishnā, and through Nandidrūg and the neighbourhood of the Shervaroy Hills to the Bay of Bengal, on the east; an extent of territory which abundantly entitled it to be called by the Chinese pilgrim Fa Hian in the fourth century A.D., "the kingdom of the Dakshina."²

To this grand old empire the Bārahmahal and the adjacent districts of Salem, North and South Arcot, and Mysore, belonged from the earliest historical period in which traces of them have been discovered, down to about the ninth century A.D., when they were conquered and annexed to their dominions by the Chola kings of Tanjore.³

The Chālukyas do not appear to have made any permanent acquisition of territory to the south of the line of the Tungabhadra and Krishnā during the time of their earlier ascendancy in the Northern Dakhan; and these rivers, according to inferences derived from such materials as are at present available for a judgment, appear to have been the northern limits of the Pallavas down to the period of the ascendancy of the Rāthors of Malkhed towards the end of the eighth century A.D.

THE SOUTHERN DISTRICTS OF SALEM.

The districts which form the southern and principal portion of the present Collectorate of Salem, and which are more properly entitled to be called by that name, had a different early history from the Bārahmahal districts. They formed part of the ancient kingdom of Kongu.

This old kingdom was originally confined within the limits of the modern districts of Salem proper and Coimbatore. Its boundaries may be laid down with approximate exactness as follows:—It was divided from the ancient kingdom of Chera, which lay to its south, by the high mountainous eastward projections of the Western Ghats from the neighbourhood of Palghat to Pulney. Its eastern boundary, which divided it from the ancient Pāndya and Chola kingdoms, appears to have been a line running northwards from Pulney down to the bed of the Kāveri, a few miles to the east of Karūr; and, on the north bank of that river, the Kolli-malai range of mountains and the still higher Shervaroy Hills. From thence its northern boundary, dividing it from the dominions of the Pallavas, ran along the southern water-parting of the Southern Pinākini till it reached the eastern boundary of the old Karnāta kingdom. Its western boundary, dividing it from the ancient Karnāta and Keraḷa kingdoms, appears to have coincided with the present boundary between the Mysore territory and the Salem district on the north side of the Kāveri, and the Coimbatore district on the south side of that river. At an early period the Karnāta kingdom was united to Kongu, and from thenceforth the western boundary of the united kingdom appears to have coincided with the western water-parting of the basin of the Kāveri in Mysore, and its northern boundary with the northern water-parting of that basin from Mulaina-giri in the Baba-Budan hills to Nandidrūg.

That the southern districts of Salem formed part of the kingdom of Kongu has always been understood upon the authority of unquestioned

¹ See my paper on the Kingdom of Thathsen in Ind. Antiq., vi. 1 ff.

² The data for fixing the precise date of this conquest await future critical consideration.

tradition. This is distinctly stated in a grant of Krishna Raja of Mysore, dated S.S. 1638 (A.D. 1716), constituting and endowing the Brāhman settlement of Shankhagiri-durga (Sankerry, Sankly-droog, &c.), which stands about fifteen miles to the north of the Kāveri and about twenty-six miles south-west of the town of Salem. Its situation is thus described: "That province is called the KONGUMANDALA, abounding in wealth and produce. There, at the distance of two yojanas from the undivided Kāveri and nine yojanas to the north-west of the original Shri Ranga, a sacred and salubrious spot is situated. Here is the fortress called Shri Shankha-giri-durga, which formerly bore the name of Kunnattūr."¹ On the other hand this very neighbourhood² is said to be in the Chera kingdom in a deed of sale dated S.S. 1636 (A.D. 1714), conveying a piece of land in the Brāhman settlement of Yātūpura. This village is thus described in the deed. "The tax-free Brāhman settlement of Yātūpura, otherwise called Shri Kāmasamudra, belonging to the district of Beḷūr in the hill country of Magadha-maṇḍala, forming part of the district of Salem (Shālya) in Chera-maṇḍala, and at present situated in the district of Kunnattūr-yaḷagaram-nāṭu,³ within the dominions of the above-named king." From these two documents it is evident that in the beginning of the eighteenth century the southern districts of Salem were sometimes regarded as in the Kongu-maṇḍalam and sometimes as in the Chera-maṇḍalam, and the natural inference from this is that Kongu and Chera were at that time regarded either as one and the same country, or that one of them was supposed to be included in the other and larger one of these two countries. In the beginning of the nineteenth century we similarly find both these names used in descriptions of the Coimbatore districts of Kongu: thus Colonel Colin Mackenzie's assistants used the name "Kongu" throughout the descriptions which they wrote in the Coimbatore district while collecting the historical traditions of its poligars;⁴ while, in the information given to Dr. Francis Buchanan during his tour from Mysore through the Coimbatore districts, these districts are invariably spoken of as in the Chera country.⁵ It also seems very clear that in the information obtained by all European inquirers at that time, the identity of Kongu and Chera was fully assumed;⁶ and Professor H. H. Wilson, whose views are based upon

¹ Translated from the original Sanskrit and Canarese grant, which is amongst the materials collected for the present Manual; as also is the sale deed quoted below, which is in the Canarese language.

² My reason for this statement is that Kunnattūr is mentioned in both these documents.

³ This is written "Eḷu-karo-nāḍu" in the above grant of Krishna Raja.

⁴ Wilson's Cat. Mack. MSS., ii., app. p. xxii, cxlvi.

⁵ Buch. Mys., ii. 183, 185, 200, 237.

⁶ So completely was this identity taken for granted, that in the English translation of the Kongu Chronicle in the India Office Library, upon which Mr. Dowson founded his paper on the Chera Kingdom in the Journal of the Royal Asiatic Society (viii. 1 ff.), the name 'Chera' was substituted for the name 'Kongu' of the original Tamil MS. in several important places. The particular instances have been pointed out by the Rev. W. Taylor in the Mad. Jour. of Lit. and Soc. (xiv. (I) 50). The introductory note to that translation seems also to have used the name 'Chera,' and probably that name alone; and to this circumstance, perhaps, it is owing that Mr. Dowson placed that name in the heading of his article. It is unfortunate that he did not retain the title of the original Tamil document, namely, 'The Kings of the Kongu Country.'

the papers of Colonel Mackenzie, the chief of these inquirers, has stamped this supposed identity with the seal of his influential authority when describing the Chera kingdom in the introduction to his Catalogue of the Mackenzie Manuscripts.¹ On the other hand, the Kongu Chronicle, written apparently in the seventeenth century, uses the name 'Kongu' alone throughout its description of the original Kongu kings and their successors the Cholas and the Hoysala Ballālas; and the name 'Chera' does not once occur in it until, in its concluding division,² it comes to describe the universal dominion of the Vijayanagara kings over all the kingdoms of the Southern Dakhan.³ This was pointed out by the Rev. W. Taylor in the introductory remarks⁴ to his translation of the Chronicle. Mr. Lewis Rice has similarly observed⁵ with reference to the grants of the Kongu kings, "These kings have been supposed to be identical with the Chera kings mentioned in the earliest traditions of the south, but none of their grants, of which I have succeeded in discovering several, contains any reference to the Cheras."

These grants, it should be borne in mind, are ancient and contemporaneous documents; and the Kongu Chronicle also bears internal evidence of having been for the most part compiled from similar contemporaneous grants. In none of these can any traces of the identity of Kongu and Chera be discovered; while they do contain, as I will presently show, distinct evidence of their non-identity. On the contrary side, the only written documents thus far discovered upon which the proof of their identity depends, are quite recent in date, prepared apparently exclusively from verbal information, whose claim to authenticity in their statements cannot therefore be put into competition with the above-mentioned grants. I have carefully gone through the two catalogues of the Mackenzie Manuscripts in search of the documents bearing upon this question, from which Professor Wilson gathered information for the article on Chera in the introduction to his catalogue. But, while the identity of these two countries is continually assumed in the abstracts of these papers, there does not appear to be any direct statement of it in any of them; it was probably at that time not supposed to be in question. And, further, those papers in which there are any allusions to this subject, are very few in number, and appear to have been either composed by Colonel Mackenzie's assistants, or prepared by himself from verbal information collected for him by them.

There are lists in existence of both the Chera and the Kongu dynasties; but there is nothing in common between them, either in the names, or the number of the kings, or in the ancestral races to which they belonged. The lists of the Chera kings run up into the fabulous ages; but they also contain kings who reigned in the Kali age, and it is these alone who can be compared with the Kongu kings, since this latter line does not ascend

¹ Pages xcii, xliii, lxxiv, and other places. ² Mad. Jour., xiv (I) 33.

³ I am not aware that this expression has been hitherto used for Southern India to the south of the Krishna and its great tributary the Tungabhadra; but it seems to me, with the corresponding expression 'Northern Dakhan' for the country to the north of those rivers, to be a convenient one to use for the future.

⁴ Mad. Jour., xiv. (I) 3.

⁵ Mad. Jour. for 1878, p. 138; Mysore Inscriptions, introd. p. xl.

higher than about the commencement of the Christian era. There is not, however, a single name in common upon them: and both the style and the signification of the two sets of names are equally distinct.

Then, again, the boundaries of the two countries are quite different. The boundaries of Kongu, when it is not theoretically mixed up with Chera, are confined to the districts of Salem and Coimbatore; and I know of no instance in which its southern limit is carried farther south than the Anaimalai Hills, which mark the boundary between the present collectorate of Coimbatore and the Travancore and Coshin States. This is also the position of the northern boundary of Chera, as it is given in the two ancient Tamil memorial verses and the prose quotation which define its limits.¹ In all three passages the northern limit of Chera is fixed at Palani (Pyney, Pylney, Pylney, Pulney), a town in the Madura District, 59 miles north-west of Madura, near the north-eastern extremity of the high mountain range called after its name: it is also near the boundary line between the present collectorates of Madura and Coimbatore. Similarly its most western "place"² was Kolikūtu (Calicut). A line drawn from Pulney to Calicut will therefore represent the northern boundary of Chera according to these ancient verses;—not the line of crow-flight, but the line of nature, running along the Pulney Hills, 8,000 feet high, westwards through the Anaimalai Hills, of similar great height, and from thence across the Palghat gap and along the south-western declivities of the Nilagiri mountains; a natural frontier established for ever at the time of the upheaval of these mighty mountain masses.

Mr. Dowson has argued for a much more northern extension of Chera³ from the fact that the name 'Chengodu' appears in one of the above-mentioned memorial verses, which he supposed to be the town of Trichengode in the Salem District. But Mr. Taylor has shown that this identification was entirely owing to a misapprehension of his own. A glance at the map will show that Trichengode, apart from its being a hundred miles to the north of Pulney—the most northern place of Chera on its eastern frontier—is quite unfitted to be a frontier town by its position in the midst of a plain, at a considerable distance from any natural boundary. The corresponding memorial verse has the name 'Tenkāsī' in the place of 'Chengodu,' and the area of Chera is the same in both verses. Tenkāsī is a well known town near the foot of the mountains in the collectorate of Tinnevely; and Chengodu (Shencota of the maps) is a little to the west of it, on the frontier between Tinnevely and the Travancore territory.

There is a general concurrence of the authorities that Chera and Keraḷa are synonymous names, notwithstanding the difficulty caused by the supposed identity of Kongu and Chera. Dr. Rottler's Tamil Dictionary has under the word 'Keralan,' "the King Cheran, who reigned at the Malabar Coast." Dr. Gundert's Malayalam Dictionary has under 'Keram,' "Kerulam = Cheram, (1) the country between Gokarna and Cumāri; (2)

¹ These verses are given in Rev. W. Taylor's translation of *Oriental Historical Manuscripts*, ii., app. p. 26, 27, and are frequently quoted. The best date which can be at present assigned to them is about the ninth century A.D.

² Tamil 'talam' = Sanskrit 'sthala'; a place, a town, a Hindu temple.

³ Jour. R. A. S., viii. 10, 11, 12.

the middle part of it." Bishop Caldwell's statement is still more emphatic; "I have no doubt that the names Keraḷa and Chera were originally one and the same, and it is certain that they are always regarded as synonymous in Native Tamil and Malayalam lists of synonyms. In the various lists of the boundaries of Chera given by Tamil writers, the Malabar Coast from Calicut southwards, that is, the whole of southern Keraḷa, is invariably included."¹ There can be no doubt that the Tamil name 'Chera' is the 'Keraḷa' of the Sanskrit and the languages which follow it. If, therefore, 'Kongu' and 'Chera' were synonymous names, 'Kongu' and 'Keraḷa' must be synonyms also. Keraḷa, however, is named throughout the whole of the 'Kongu' Chronicle, in the India House translation as well as Mr. Taylor's, amongst the foreign countries which were invaded, and spoiled, and rendered tributary by the kings of Kongu, and subsequently by the Chola and Ballāḷa kings while ruling over Kongu, and with which they sometimes formed friendly alliances, from the second century down to the fourteenth century of the Christian era. And, as the counterpart of this, the Keraḷolpatti, a Malayalam history of Keraḷa, describes Kongu as a foreign country; "The foreign countries which lay on the borders of these provinces² are the Pāṇḍi country, the Kongu country, the Tulu country, the Vayanāḍu, and the Puṇṇāḍu, according to general tradition."³ Thus Kongu and Keraḷa are described by these unexceptionable authorities as countries foreign each to the other; and in the face of such evidence as this, the assumed identity of Chera (= Keraḷa) and Kongu falls to the ground.

Nevertheless, it will die hard. Dr. Caldwell has suggested a modified form of the identity; "The Keraḷa of the ancients seems to have divided itself into two portions; one of which, the district lying on the seacoast, has always retained the Sanskrit name of Keraḷa, whilst it also called itself by the Tamil name of Chera; the other, an inland district, including Coimbatore, Salem, and a portion of Mysore, seems to have dropped the name of Keraḷa altogether, and called itself exclusively either Chera or Kongu." This view is not put forth with any proofs in support of it, and therefore it seems permissible to regard it in the light of an explanation, framed under the impression that the modern traditional identity of Kongu and Chera had a sound foundation in historical truth. If I am wrong in this regard, I trust my old friend will forgive me for the supposition; if I am right—and I cannot see how it can possibly be otherwise—this variety of the assumed identity has been already virtually met by the arguments adduced above.

There is still another variety of this identity which requires attention. It is put forth in the following statement of Wilks' Mysore: "Cheran united Kangiam and Salem to the dominions of Keraḷa or Malabar;" and that the name 'Kangiam' is used here for 'Kongu' is apparent from his words in a previous page, "the country now called Coimbatore, and formerly Kangiam."⁴ This statement, again, is unaccompanied by

¹ Gram. Drav. Lang. (2nd Edit.), introd. p. 22.

² Namely, the provinces of Keraḷa at the time of its distribution by Cheraman Perumal.

³ Transl. from Dr. Gundert's Malayalam text.

⁴ Vol. i. (orig. edit.), p. 8.

⁵ *Ibid.*, p. 6. Kangyam or Kangiyam is, in reality, one of the older revenue districts of the collectorate of Coimbatore.

evidence, and it may, therefore, like the preceding variety, be regarded as a theory framed to comprehend the tradition. I have for a long time made notes of facts having a bearing upon this subject, and I have not met with anything in support of a conquest of Kongu by Chera. The *Keralolpatti* does not claim any such conquest, nor does the *Kongu Chronicle* contain any reference to one, though it would be likely enough to be omitted there if it had taken place. On the other hand, the *Kongu Chronicle* has repeated statements of conquests of Kerala (Chera) by Kongu. These latter conquests are fully admitted by Mr. Shungoonny Menon in his recent "*History of Travancore*"; and, while he strongly objects to the supposed identity of Kongu and Chera, he finds in the unquestioned fact of these conquests a very probable explanation of the origin of the popular tradition respecting it: "The Chera dynasty continued in power, though constantly engaged in warfare with its neighbours Pāṇḍya and Chōla, till central Chera was overrun by the Konga rājās. The original dynasty of Chera then finally retired to its southern possessions, and joined the family, residing in the south (Travancore). Many seem to suppose that Konga is identical with Chera, but in our opinion it is not, for these two dynasties, Konga and Chera, are separate families. The Kongas having invaded and ruled over a part of Chera, came to be considered as the kings of Chera itself; but several local and circumstantial facts prove the absurdity of this supposition."¹

I have entered thus fully into this question here because of the barrier which the present current opinion places in the way of investigations into the early history of these parts of Southern India. Those investigations are at present in their infancy, and the difficulty caused by this opinion has, for that reason, not yet been much observed: but at each stage of their progress it will begin to press more heavily; and it seems well, therefore, that it should be put out of the way as early as possible, to avoid the greater confusion which must result from its wider repetition. While the evidence against the identification remains in its present state—even supposing it to be insufficient as a complete argument—it would be at the least prudent to abstain from the usual way of speaking of these two countries, and to use the name 'Kongu' only when the districts of Salem and Coimbatore are intended, and to confine the name 'Chera,' as the equivalent of 'Kerala,' to those districts of the Western Coast which are included either in the wider or in the narrower limits of Kerala.

The Kongu kingdom claims to have existed from about the commencement of the Christian era, and to have continued under its own independent kings down to nearly the end of the ninth century A.D., when it was conquered by the Chōla kings of Tanjore and annexed to their dominions.

The authorities available for the study of the history of Kongu are (1) the Tamil manuscript above alluded to, the "*Kongu-desha Rājākkaḷ*," or the '*Chronicle of the Kings of the Kongu Country*,' and (2) the ancient muniments of these kings.

¹ "A History of Travancore from the Earliest Times." Madras: Higginbotham and Co., 1878, pp. 30, 31.

The *Kongu Chronicle* is one of the manuscripts of the Mackenzie collection, and is not known to exist elsewhere. A translation of it by the Rev. W. Taylor was published in 1847 in the *Madras Journal of Literature and Science*.¹ An earlier translation than this is in the India Office Library, and formed the basis of the article "On the Geographical Limits, History, and Chronology of the Chera Kingdom of Ancient India," by Mr. J. Dowson, in the *Journal of the Royal Asiatic Society* for 1846.² It gives a summary of the history of Kongu from about the commencement of the Christian era down to the extinction of the rule of the Vijayanagara kings over the province of Mysore, and the rise of the present ruling dynasty of that province, in the beginning of the seventeenth century. During the last eight years several grants of these kings have been published in the "*Indian Antiquary*"³ by Mr. Lewis Rice, the Rev. F. Kittel, and Mr. J. F. Fleet, and also by Mr. Rice in his recent work on the inscriptions of Mysore.⁴ These grants are in close agreement with the *Kongu Chronicle*, and give it new importance as an authority upon this portion of the history of South India, for which it has hitherto been almost the only source of direct information.

The earliest portion of that *Chronicle* gives a series of short notices of the reigns of twenty-eight kings who ruled the country previous to its conquest by the Chōlas. These kings belonged to two distinct dynasties: the earlier line was of the Solar race, and the later line of the Ganga race.

THE KINGS OF KONGU OF THE SOLAR RACE.

The earlier dynasty had a succession of seven kings of the Ratti tribe,⁵ a tribe very extensively distributed, which has at various periods left its mark throughout almost every part of India. This is probably the earliest reference to them as a ruling power: and it is the most southern situation in which they ever held dominion. They disappear in these parts about the end of the second century A.D.; and in the next historical references to them, we find them high up in the Northern Dakhan, amongst the kingdoms conquered by the Chālukyas about the fourth century A.D., soon after they first crossed the Nerbudda. In the *Kongu Chronicle* they are stated to be of the Solar race:⁶ and the genealogies of this tribe accordingly trace them up to Kusha, the second son of Rāma, the hero of the great Solar epic of the Hindus;⁷ but their claim to this descent is not undisputed.⁸ They are, however, sometimes said to be of the Lunar race,⁹ and of the Yādava

¹ Vol. xiv. (1st part), pp. 1 to 66.

² Vol. viii., pp. 1 to 29.

³ i. 360; ii. 155; v. 133; vi. 99; vii. 101, 112, 163; viii. 212.

⁴ "Mysore Inscriptions, translated for Government by Lewis Rice, Director of Public Instruction, Mysore and Coorg." Bangalore: printed at the Mysore Government Press, 1879, pp. 282, 284, 287, 289, 291, 293, 294.

⁵ This name is found under the following forms;—Irattu, Iretti, Radda, Raddi, Rahtor, Rahtor, Rahtore, Raṣṭra-kūta, Rathaur, Rathawr, Rathod, Rathod, Rathor, Rathor, Rathor, Rathore, Ratta, Ratta, Rayathor, Raythaur, Raythor, Rhator, Reddi, Reddi, Reddy, Retti, Retti, Ruddi: and there are probably more.

⁶ Jour. R. A. S., viii. 2; Mad. Jour., xiv. (I) 6.

⁷ Tod's Rajasthan, i. 88; Elliot's Races of the N. W. Provinces, i. 329.

⁸ Tod's Rajasthan, i. 88, 712; ii. 5.

⁹ Ind. Antiq., vi. 60.

tribe;¹ though this latter statement is sometimes confined to the later Rāthors.² The names and titles of these kings are the following:—

1. Vira Rāya Chakravarti.
2. Govinda Rāya I.
3. Kṛishṇa Rāya.
4. Kaṣavallabha Rāya.
5. Govinda Rāya II.
6. Chaturbhujā Kannara-dēva Chakravarti.
7. Trivikrama-dēva Chakravarti.

During these reigns the crown descended in regular succession from father to son; with the possible exception of the sixth king, whose relationship to his predecessor is not indicated.

Two dates occur in the short notices of these kings in the Chronicle; namely, S.S. 4, in the reign of Govinda Rāya II., and S.S. 100, in the reign of Trivikrama-dēva; and the corresponding year of the sixty-years cycle is added in each instance; namely, the years Svabhānu and Siddhārthi respectively.³ Svabhānu is also mentioned to be the seventeenth year of the cycle, and Siddhārthi the fifty-third; and this is their correct position. The year Svabhānu, however, coincides with the fifth year of the S.S., and is not the fourth as it is made here: and the hundredth year of the S.S. corresponds with the cyclic Kalayukta, while Siddhārthi is the one hundred and first year.⁴ But variations to this extent are quite common. When examined, then, by these tests, there is no improbability so far in the dates here mentioned; and, since Trivikrama-dēva's successor is placed in S.S. 111, his own date receives from that circumstance some amount of confirmation. The interval between A.D. 82 and 178 seems, at first sight, too long to represent a single whole reign and a portion of two others: on the other hand, supposing Chaturbhujā Kannara-dēva to have come to the throne in his infancy, and to have lived to an advanced age, and assuming his reign to be the longest possible to human life, the remainder of the 96 years would require but a moderate addition to be made to the reigns of his predecessor and successor. There appears to be no reason at present why these two dates should not be accepted, although they have hitherto received no direct confirmation from other documents. Against the earlier of these two dates an objection may be raised from the improbability that any inscription could use the S.S. as early as the fourth year of that era: but, on the other side, it may be replied, firstly, that it is not yet known at what date the S.S. began to be used; and, secondly, that this era was apparently introduced by the Jains: and it first appears in the Kongu Chronicle, consistently with this circumstance, in connection with a royal grant of land to the priest of a Jaina temple.

The capital of Kongu during the rule of the Rātti dynasty was Skandapura.⁵ Its locality has not hitherto been ascertained; nor does there seem to be any sufficient clue for a search for it. It must evidently be looked for

¹ Ind. Antiq., vi. 60.

² Ind. Antiq., v. 276.

³ Jour. R. A. S., xiii. 2, 3; Mad. Jour. xiv. (I) 5, 6.

⁴ McCudden's Oriental Eras, pp. 4, 8; Brown's Carnatic Chronology, p. 6.

⁵ Mad. Jour., xiv. (I) 4, 5, 6.

in the midst of a large extent of wet cultivation, and therefore not amongst the high grounds of the ghats; for Trivikrama-dēva's endowment consisted of a large extent of rice-land in the close neighbourhood of Skandapura.¹ It was also the chief town of a district, called after its own name, consisting of several villages.²

The notices of these kings in the Kongu Chronicle, short though they are, contain several particulars which illustrate the internal condition of this kingdom during the first two centuries of the Christian era. Taken by itself, indeed, the Chronicle may be regarded as merely describing a state of things which a writer of the seventeenth century was able to gather from the traditions current in his own days respecting Kongu, and from the few documents which were then accessible to him: and it may be necessary to accept his statements with some amount of reserve, until they are confirmed from other sources of information, as likely enough to be tinged with impressions belonging to the more advanced state of things in his own times. At the same time it may be observed, that the Chronicle is written in a plain and very simple style, tinged with next to nothing of the marvellous; and that it contains nothing which is improbable of itself: while large portions of its later narrative, belonging to the dynasty which succeeded these Rātti kings, and written in precisely the same style as this earlier portion, have already received substantial confirmation from recently discovered land-grants. There are also, as will presently be shown, a few other indications of a state of prosperity in this part of India about the commencement of the Christian era which are quite external to the Chronicle, and which so far uphold the credibility of its statements.

The country was divided into districts, of which we have instances in the district of Kulasta (Mad. Jour., xiv. (I) p. 5) and the district of Vijaya Skandapura (p. 11), and these districts were sub-divided into villages with their surrounding lands (pp. 5, 6). Its kings were anointed in the capital at their installation: and this implies some kind of solemn ceremonial at their consecration. They also wore a crown and sat on a throne (pp. 4, 5, 6). They ruled their kingdom in accordance with the precepts of a written code, which they themselves searched into (p. 4). They had some knowledge of architecture; as is instanced by the temples built in the capital and district towns (pp. 5, 6). They were acquainted with the arts of music and dancing. Of instruments of music they had the vīṇa or Indian guitar, and several kinds of drums (p. 5). They practised agriculture: and they used the kanduka measure in measuring their grain, and also in measuring the extent of their cultivable land (pp. 5, 6). They cultivated the art of war, and were skilled in the use of the bow (p. 5). They marched to war to the sound of their war-drums, and used enchantments against their enemies (p. 5). They invaded the foreign countries around them (pp. 5, 6). They displayed the banners which they took in battle (p. 5): and they enriched their country with the spoil and the tribute which they brought home from their wars (p. 5). They were munificent in their public charities (pp. 5, 6): and they created land-endowments for religious purposes (pp. 5, 6). These endowments were made as propitiatory offerings on going forth to war (p. 6), and as thank-offerings for victory

¹ Mad. Jour., xiv. (I) 6.

² Mad. Jour., xiv. (I) 11.

on their return from their campaigns (pp. 5, 6). Those endowments consisted of grants of land, differing greatly in extent, from seven kandakams in the instance of Govinda Rāya II.'s gift (p. 5), to five hundred kandakams in the instance of Trivikrama-dēva's (p. 6); their value, according to the valuation of the present time—taking ten rupees to be the profit of a kandakam of land—being seventy rupees and five thousand respectively. These donations were bestowed in the name of the priest (pp. 5, 6): but they were for the benefit of the temple (p. 5). Their grants were made in the form of written inscriptions (pp. 5, 6): and, as in all known early instances, they were engraved on plates of copper or on slabs of stone; and therefore the arts of writing and engraving were known here at this time. They dated their grants in the era of Śālivāhana, and added the year of the sixty-years cycle: and they used the same Tamil names of the months which are prevalent in the present time (pp. 5, 6). The time of full moon, and of the middle of an eclipse, were regarded then, as now, as fortunate moments, and specially suited for making charitable donations (pp. 5, 6): and these particulars show that they were possessed of some amount of knowledge of scientific as well as mythological astronomy and astrology: and to these indications another may be added, namely, that they divided their months into the waxing and waning halves (p. 6).

With regard to the religion of Kongu in these early times, Jainism prevailed during the first century A.D., and was in the ascendant. It was an organized hierarchy; each temple having its officiating priest, and these priests being subordinated to a superior head (guru). They built temples, which were endowed by the kings, and in which religious service was performed by priests attached to them (pājāri). Their temples were called by the names of the kings who endowed them, or by the general title of the dynasty ("Kongani Varmā Basti"). They possessed sacred books, in which some Jainas were specially learned. This literary class had a special superior (p. 5); suggesting that they had convents of literary men: and their duties included the exposition of their religious books to their kings. Those kings were well versed in the literature of their days, the Nīti-shāstra, the Bharata-shāstra, and the spiritual treatises. At the same time, the worship of the serpent was prevalent here; and it had its special ritual (Nāga-archina Mantra), which was studied even by the kings (p. 5.) The sacred Shri-kare tree, too, was planted by the side of the Jaina temple: and its shade was regarded as the appropriate residence of their pontiffs (p. 5). The Shaiva religion was also known in these parts at least as early as the middle of the second century A.D. While the first six kings of Kongu were Jainas, the seventh, Trivikrama-dēva, apostatized to the religion of Shiva (p. 6). Shiva was worshipped under the form of Shankara-dēva: and a temple to him under that name existed in the capital. The Shaivas appear to have been numerous at this time, and also of considerable importance; for they had a pontiff over their sect at the capital, whose seat was in their temple there, and who received the large endowment of five hundred kandakams of land from the king (p. 6.) This pontiff was a Brāhman of the Bhāradvāja family: and his presence here is illustrative of the fact, that Brāhmanas were settled far down in Southern India at least as early as the second century A.D. If we may judge from the Vaishnava name of this pontiff, Narasimha Bhaṭṭa, we may perhaps conclude that the

particular form of the Shaiva religion over which he presided, was some variety of the Advaita school of doctrine which subsequently attained to pre-eminence under the teaching of Shankarāchārya.

The proper names mentioned in the Kongu Chronicle may be regarded as specimens of those which were prevalent in the first two centuries A.D. in Southern India. These are principally names of Vishnu; namely, Govinda, Krishna, Chaturbhūja, Trivikrama, and Narasimha: others are common to different sects; namely, Vira, Kali-vallabha, Harishchandra (Arichanna), and Jayadeva, with a Shaiva inclination in the first two, and a Vaishnava tendency in the latter two. The appearance of the compound Nandi in the Jaina names Pancha-nandi and Nāga-nandi has also a Shaiva leaning: while the Nāga of the latter of these two names savours of the worship of the serpent.

The statements regarding the foreign relations of these Ratta kings of Kongu are confined to the reigns of Govinda Rāya II, Chaturbhūja Kannara-dēva, and Trivikrama-dēva; and in the instances of the former two, they are simply general statements. In the last instance, however, we are told that Trivikrama-dēva went forth to conquer the country of the south, "and overcame the Chōla, Pāṇḍya, Kerala, and Malayāla countries;" and that, whether by conquest or otherwise, he "also ruled over the Karnāṭaka country." It is to be noted here, that the countries of the Southern Dekkan which are named in this series are those which, from other sources, we know to have existed there at the dawn of the better known history of that portion of India: but the Kadamba and Draviḍa countries are omitted. Kadamba was, for the present, too far distant to be reached by this ambitious new power: and their intervening new conquest Karnāṭa would need to be consolidated before any new effort could be made beyond its borders. But the Draviḍa country was continuous with their original northern frontier; and their newly acquired territory in Karnāṭa carried that common frontier much further to the westwards, so far as can be gathered from the probabilities of the case in the present condition of our information: it is, therefore, remarkable that Draviḍa should be omitted in Trivikrama-dēva's invasions. He would naturally avoid attacking a power which was too mighty for him to hope to conquer: and if this was the condition of the Pallava dominions at this time, as every fresh discovery now seems to hasten to make certain, we may not improbably regard that circumstance as the reason of the omission. It is also to be observed that both Kerala and Malayālam are named amongst these conquered countries. If the Malayālam of this list refers to the modern Travancore country, the Kerala here intended will be the more limited country of that name: but the name Malayālam has also a much wider signification than this; and its reference here must, therefore, be regarded as uncertain.

A well marked illustration of the prosperous condition of Kongu during the period assigned to the reigns of the Ratti kings is afforded by the discovery of several hoards of well preserved coins of the Roman Emperors Augustus (B.C. 27 to A.D. 14), Tiberius (A.D. 14 to 37), and Caligula (A.D. 37 to 41), as well as others of Hindu type, within the limits of this kingdom; testifying to the intercourse which then subsisted between Kongu and the civilized world of the West, and to the existence of a highway of the commerce of the ancient world passing through this kingdom in those days,

and also to the production within it of some of the valuable articles of that commerce. Dr. Buchanan¹ refers to one of these finds in A.D. 1800 near Palāchy or Polāchy, 26 miles south of Coimbatore: "In this vicinity was lately dug up a pot containing a great many Roman silver coins, of which Mr. Hurdis was so kind as to give me six. They were of two kinds, but all of the same value, each weighing fifty-six grains. One of the kinds is of Augustus The other coin is of the same weight, and belongs to Tiberius." Sir Walter Elliot² mentions a similar silver denarius of Augustus being found about A.D. 1803 at Pennar in the Coimbatore collectorate, in a pot full of silver coins of other types. Other large hoards have been found at different times in the same collectorate: "A large hoard was discovered in September 1807 at the opening of one of the ancient tombs known by the name of *pandu-kulis*, near the village of Chavadi-paleiyam in Coimbatore; and about four years earlier a pot full of the same pieces was dug up at Pennar, also in the Coimbatore province, among which was found a silver denarius of Augustus, which proves that they were current at the commencement of the Christian era." Mr. M. S. Walhouse³ mentions three more gold-finds in this same district: "In 1806 five fine gold coins of the Cæsars were found at Karūr" "In 1842 an earthen pot containing five hundred and twenty-two Roman denarii was dug up near Vellalūr, a small village four miles from the town of Koimbatūr; and, remarkably enough, out of so large a number, all but a dozen, like the "great many" of the Palāchi find, were coins of Augustus and Tiberius, the exceptions being of Caligula and Claudius. In 1856 sixty-three very beautiful gold coins, bearing the heads of Augustus and other early Roman emperors, in excellent preservation, were discovered packed in an earthen pot about the size of a large mango, near the boundary of the Madura and Koimbatūr districts, about 40 miles south of Kāngyan."

The beryl, or aqua-marine, is found in the cavities of the masses of cleavelandite which occur around the village of Padiyūr, or Pattiali, 40 miles east of Coimbatore; and one only other locality in India, if it indeed is another, has been named as producing it.⁴ Mr. Walhouse⁵ has shown good reasons for concluding that the best kinds of this favourite gem, which was equally prized by the Tyrians,⁶ the Greeks, and the Romans,⁷ came from this portion of the Kongu kingdom: "In modern times the gem, besides the Indian well [of Padiyūr], has been found in America, both North and South, in Siberia, and at a few places scattered over Europe, particularly at Limoges in France. America and Siberia may be excluded from the sources of ancient supply. The localities in Europe are in regions little known to the Romans, and unmentioned by Pliny, who had the best means of information. It is unknown in Ceylon. Its ancient origin seems therefore limited, as Pliny says it was, to India, and there it is only known to occur at the locality in Koimbatūr described in this note, where, moreover, the gem is distinguished by the true clear sea-green colour specified by Pliny." Until, therefore, it can be shown that the sea-green beryl was found elsewhere,

¹ Buch. Mys., ii. 318; Hamilton's Gazetteer, under 'Palāchy.'

² Mad. Jour., xix. 227, 228.

⁴ See 'Beryl' in Encycl. Brit., 9th Edit.

⁶ Ezekiel, xxxviii. 13.

³ Ind. Antiq., v. 239; vi. 215.

⁵ Ind. Antiq., v. 237 ff.

⁷ Pliny Nat. Hist., xxxviii. ch. 5.

this gem forms a point of contact between Kongu and the western world at a very remote period, just as the diamond does for the Pallavas and the spices for Kerala, as I have elsewhere pointed out. (See Ind. Antiq. vii. 7; viii. 10.)

Another mark of the contact of Kongu with the western world in ancient times, and of its own early prosperity, is obtained from the circumstance that Salem and its surrounding neighbourhood has been the chief seat of the supply of the finest steel throughout historical times, and apparently from the earliest ages.¹ Sir J. G. Wilkinson has² adduced proofs that steel was known to the Egyptians in very early times. Mr. J. M. Heath, an excellent authority upon iron and steel, has suggested that their sculptors' tools may have been made of Salem steel: "We can hardly doubt that the tools with which the Egyptians covered their obelisks and temples of porphyry and syenite with hieroglyphics were made of Indian steel. There is no evidence to show that any of the nations of antiquity besides the Hindus were acquainted with the art of making steel. The notices which occur in the Greek and Latin writers on this subject serve only to betray their ignorance of it; they were acquainted with the qualities and familiar with the use of steel, but they appear to have been altogether ignorant of the mode in which it was prepared from iron. The arms and cutting instruments of the ancients were all formed of alloys of copper and tin, and we are certain that tools of such an alloy could not have been employed in sculpturing porphyry and syenite."³

He has also suggested that the famous present of steel which Alexander the Great received while he was in India, may have come from the Salem mines: "One certain fact has reached us regarding the antiquity of the steel manufacture of India: Quintus Curtius mentions that a present of steel was made to Alexander of Macedon by Porus, an Indian chief, whose country he had invaded. We can hardly believe that a matter of about thirty pounds weight of steel would have been considered a present worthy the acceptance of the conqueror of the world, had the manufacture of that substance been practised by any of the nations of the West in the days of Alexander. We may judge from the extent of the present, how much the cost of the article had been enhanced by transport from the place of its manufacture to the country of Porus. We know that a maritime intercourse was maintained from the remotest antiquity between the Malabar Coast, the Persian Gulf, the country about the mouths of the Indus, and the Red Sea; and it appears reasonable to conclude that the steel of the south of India found its way by these routes to the country of Porus, to the nations of Europe, and to Egypt."⁴

THE KINGS OF KONGU OF THE GANGA RACE.

Under this second dynasty of the kings of Kongu the limits of the kingdom were greatly extended to the north-westwards. The last king of the Ratti dynasty, Trivikrama-dēva, is said to have ruled over the Karnāṭaka country in addition to Kongu;⁵ by which name is probably meant, in this early stage of the extension of their boundaries, the southern portion of the

¹ Jour. R. A. S., v. 390; Buch. Mys., i. 174; ii. 19; Heyne's Tracts, 361.

² Anc. Egypt, iii. 247; Rawl. Herod., ii. 119 note.

³ Jour. R. A. S. (for 1839), v. 395.

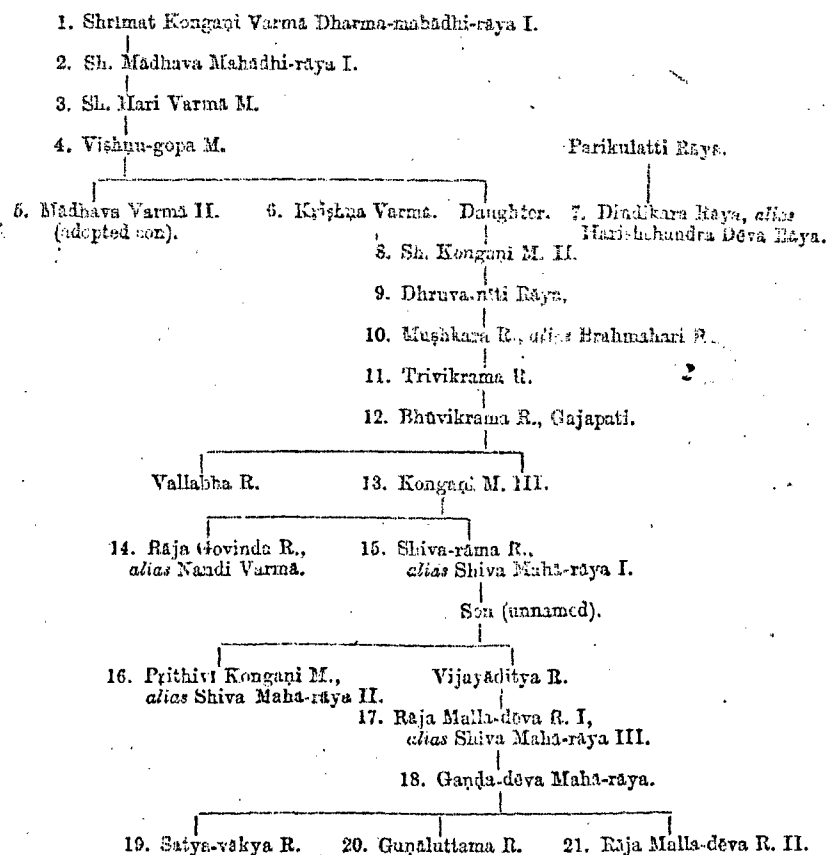
⁴ Jour. R. A. S., v. 395.

⁵ Jour. R. A. S., viii. 3; Mad. Jour., xiv. (I) 6.

present dominions of Mysore.¹ The cause of the extinction of that dynasty is not recorded; but the fact of this portion of Mysore having been governed from very early times by chieftains of the Ganga race,² suggests the conjecture that Trivikrama-dēva may have lost his life in the invasion of Gangu-vāḍi, or in a counter-invasion of Kongu by the Ganga Rāja, and that the Ganga Rāja, heretofore only a minor chief, followed up his advantage by seizing the throne of Kongu and adding the vacant kingdom to his former territory.

This new dynasty was of the Kāvāyana family, "of which the Muni Kāvya was the founder," as I have it in an unpublished grant; thus giving them a spiritual or a brāhmanical origin. In their grants they call their dynasty the Jahnvi race; Jahnvi being a synonym of Gangā, the daughter of Jahnu.

The following pedigree of the Ganga kings is constructed from the Kongu Chronicle. The figures which precede the names represent the order of their succession to the throne:—



The genealogy which is thus stated in the Kongu Chronicle, agrees, with very few variations, with the pedigree of these kings in their published land-grants. A grant of the fourth king, Viṣṇu-gopa, has been published

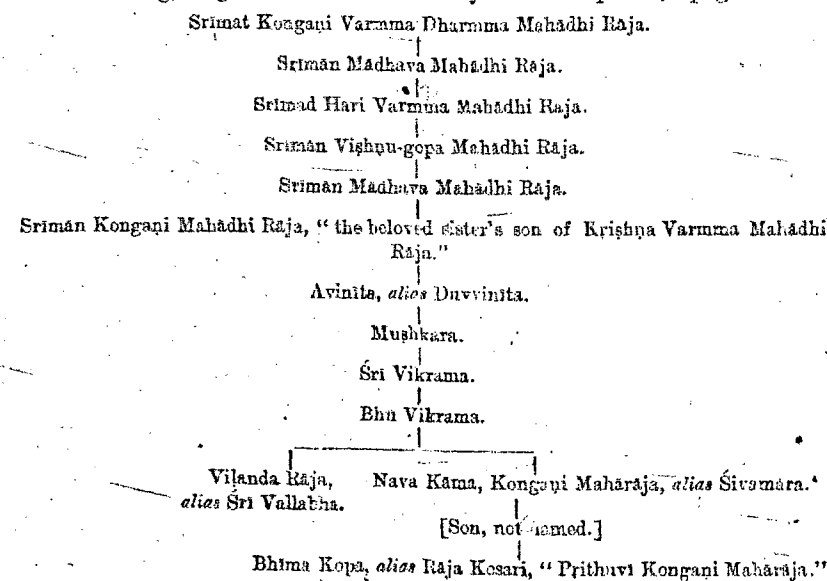
¹ The "Ganga-vāḍi" of Mad. Jour., xiv. (I) 9.

² Mad. Jour., xiv. (I) 38.

by Mr. Lewis Rice;¹ two grants of the eighth king, Kongaṇi-rāja II.;² two also of his son Avinita, the ninth king;³ and also two of the sixteenth king Prithivī Kongaṇi. The grant of Viṣṇu-gopa makes him the son of Śrīman Konguli Varma Dharma Mahādhi-rāja, but all the other grants agree with the Chronicle in stating his relationship. Another difference, and it is a large one, is in the position of the fifth, sixth, seventh, and eighth kings; the Chronicle makes Mādava Varma II. the adopted son of Viṣṇu-gopa, and sets aside his succession to the throne on the birth of Kṛṣṇa Varma, subsequent to his adoption, and assigns him a small principality as a compensation, apparently carved out of the paternal dominions. The grants, without exception, speak of him as the son of Viṣṇu-gopa without any reference to an adoption, and as the father of Kongaṇi Rāja II. by the daughter of Kṛṣṇa Varma Mahādhi-Rāja of the Kadamba dynasty: nor do they speak of the intermediate reigns of Kṛṣṇa Varma and Dindikara Rāja, the sixth and seventh kings of the Chronicle, nor of the younger sister of Mādava, whom the Chronicle makes the mother of Kongaṇi II.

Another important difference occurs in the succession after Bhūvikrama, the twelfth king of the Chronicle: but the construction of this portion of all the documents is involved and obscure; and it is possible enough that some portion, if not the whole, of the apparent discrepancy here may be owing to that circumstance.

With these few exceptions the pedigree of the grants agrees closely with the Kongu Chronicle, notwithstanding a slight variation in the spelling of a few of the names and an occasional additional title or an *alias*. To show how close that agreement is, as well as to mark the differences, the following pedigree is constructed from one of the grants of Prithivī Kongaṇi, the sixteenth king, as given in Mr. Rice's "Mysore Inscriptions," page 284:—



¹ Ind. Antiq., vii. 172; Mys. Inscr., 293.

² Ind. Antiq., i. 362; Mys. Inscr., 232; and Ind. Antiq., v. 136; Mys. Inscr., 239.

³ Ind. Antiq., v. 138; Mys. Inscr., 292; and Mys. Inscr., 294.

The substantial agreement between these grants and the Chronicle, and severally amongst themselves, will appear all the more remarkable when it is borne in mind that they belong to periods in the history ranging over more than four centuries, the earliest of them having been written in the fourth century A.D., and the latest in the eighth century; and that they have been discovered in places widely separated from each other, in Harihar, in Mercara and Kiggatnādu in Coorg, and in Mallohalli, Nāga-mangalam, Bangalore, and Hosūr.

The succession to the throne was for the most part remarkably regular during the whole continuance of this dynasty. In the case of the first six kings the crown descended from father to son, notwithstanding the expectation of a breach of the direct line when Mādhava II. was adopted by Viṣṇu-gopa, and again, after a suspension of the direct line for a short time while Dindikara "held the kingdom in his power." Each of the next six kings was succeeded by his son down to Govinda the fourteenth king. Govinda was succeeded by his younger brother Shivarāma, and he by his grandson Prithivi Kongani, and he by his younger brother's son Malladēva I. For two successions more the crown descended from father to son: and at the death of the nineteenth king Satyavākya, his two younger brothers obtained the throne in the order of their birth; though, in the case of the last, Malladēva II., his elder brother Guṇottama appears to have been deprived of the principal portion of the royal dominions to make way for him, while Guṇottama himself retained only the district of Skandapura, which surrounded the original capital of Kongu. According to the grants the succession was still more regular than it is thus represented in the Kongu Chronicle: for the only interruption of the direct succession from father to son here occurred in the case of Shivarāma or Shivamāra, who is represented to have succeeded his brother Viṇanda, and of Prithivi Kongani, who succeeded his grandfather Shivamāra. According to the Chronicle, Vallabha, the elder son of Bhūvikrama, was set aside from the succession in favour of his younger brother Kongani III.; though there seems to be some confusion in its statements regarding him: but the inscriptions give no countenance to this seeming supersession. At the death of Kṛiṣṇa Varmā without direct heirs to his throne, some interesting questions appear to have arisen connected with the Hindu law of succession. Had Mādhava II., Kṛiṣṇa Varmā's adoptive brother, been alive at that time, the crown would have gone to him as his unquestionable right: but he was evidently dead, from the circumstance of Dindikara, another member of his family, putting in his claim to the vacant throne; a claim which could only arise, with legal sanction, after the death of Mādhava, and in the absence of any heirs whatever belonging to Kṛiṣṇa Varmā's family. The only member of that family living at this time was Kṛiṣṇa Varmā's younger sister: and it is somewhat remarkable that her claim to succeed her brother does not seem to have been put forward or to have been entertained; though the right of a brotherless sister to succeed to an ordinary estate of a deceased brother, in preference to any but the heirs of the body of a superseded adoptive brother like Mādhava, is very plain. The birth of Kongani II., however—for he was apparently born after Kṛiṣṇa Varmā's death—set aside the claims of Dindikara: and the council of ministers anointed the infant as their king. It is at the same time possible that

Dindikara had not set up a personal claim to the throne; but that he "held the kingdom in his power" pending the birth of an expected heir, as regent for its female ruler. The pedigree of the inscriptions does not involve these questions; for there the infant Kongāni is the posthumous son of Mādhava II., whom he duly succeeded after a few months' interval between his father's death and his own birth.

The chronology of this period deserves close investigation; for it extends over about seven hundred years, and during this long time only twenty-one reigns are recorded, and these twenty-one kings represent only seventeen successive generations. An average of more than thirty-three years to each reign is thus obtained; and this is a longer average than is commonly assigned to a long succession of kings: and an average of more than forty-one years to each generation is here shown for a succession of seventeen generations; and this is similarly longer than we meet with in our ordinary experience.

The Kongu Chronicle has eight dates in the portion which treats of these Ganga kings: and four of these dates are taken from the inscriptions of the kings to whom they refer. These dates are all given in the S.S. era, with the addition of the year of the cycle of sixty years: and in three instances in Mr. Taylor's translation¹ numerical words for numbers are also added. The month and the solar hemisphere are given in the first of these three instances; the month, the day of the month, the lunar mansion, and the day of the week in the second instance; and the month, the day of the week, the day of the month, and the lunar mansion in the third instance. The earliest of these three instances belongs to the middle of the seventh century A.D.: and the other two to the eighth and ninth centuries respectively.

In all three instances, however, the transliteration of the numerical words is defective. The first of them is thus given: "S. Saca-vasthu-gregabannā-yuddha, 591." If the original Tamil letters here (transliterated according to their form, regardless of their sound) were, as seems most probable, 'Vachutā kiraka pāṇa'—the Tamil equivalents of the Sanskrit words 'Vasudhā graha bāṇa'—the numbers which correspond with these numerical words are 195; namely, 'Vasudhā,' the earth, = 1; 'graha,' the planets, = 9; and 'bāṇa,' Cupid's arrows, = 5; and these figures, by the necessary inversion, give the date S.S. 591, which agrees with the figures of the inscription. The cyclic year which accompanies these two forms of the date, is 'Pramodūta,' which fell on S.S. 592;² and a variation of a year, like this, is of common occurrence. In this instance, therefore, the three forms in which the date is stated, agree closely with each other. I cannot venture to correct the whole of the obscure transliteration of the other two instances.

The India House translation and Mr. Taylor's agree together in their statement of the S.S. in every instance: but in two instances they do not agree in the corresponding year of the cycle of sixty. Hari Varmā's grant is dated S.S. 210 in both translations: the India House translation adds the

¹ Mad. Jour., xiv. (I) 11, 13.

² McCudden's Oriental Eras, p. 26; Brown's Carn. Chron., p. 8.

cyclic year Saumya to it, which corresponds with S.S. 211; but Mr. Taylor's translation has the year Subhakrit instead of Saumya, which corresponds with S.S. 204.¹ Similarly, Prithivi Kongani's grant is dated S.S. 668 in both translations: but, while the India House translation adds the year Parthiva to it, which corresponds with S.S. 667, Mr. Taylor's translation has Prabhava, which corresponds with S.S. 649.² In the instance of Kongani II.'s grant of S.S. 288, the India House translation³ adds the year Parābhava to this date; Mr. Taylor, on the other hand, has no date whatever in the text of his translation, but he has "S. Saca 288, A.D. 365-6" in the margin, but still without the year of the cycle: from which it may be concluded that the text of the Tamil manuscript had no date. S.S. 288, however, does not correspond with 'Parābhava,' but with 'Kshaya;' and Parābhava of that cycle fell in S.S. 268.⁴ It is quite possible that this is owing to an error in transliterating the word from the Tamil; for Prabhava follows Kshaya in the cycle, and the Tamil form of Prabhava is 'Pirapava,' while the Tamil form of Parābhava is 'Parāpava.' It must also be noted here that Parābhava of two cycles later falls on S.S. 388; and, if this is the correct year, the figure for the century will have to be corrected from 2 to 3 in both translations, and for this correction another and stronger reason will presently be shown.

We may now proceed to compare these dates of the Kongu Chronicle with those which are found in the published inscriptions of the Kongu kings Hari Varmā, the unnamed son of Viṣṇu-gopa, Kongani II., Avinīta, Prithivi Kongani, and Satyavākya.

The earliest date in this portion of the Chronicle is S.S. 111; and it belongs to the reign of Kongani Varmā I., the founder of this Ganga dynasty. The India House translation of the Chronicle makes this date the year of this king's installation; and adds that he reigned for fifty-one years.⁵ Mr. Taylor's translation has neither of these particulars, but merely states that "his reign was in S.S. 111, in Pramodūta year." Mr. Taylor states⁶ that his "translation is close and literal;" and it therefore follows, either that these particulars were not in the original Tamil manuscript, but were added to the India House translation from some other source, or that these two translations were made from two different manuscripts. This date is eleven years after the grant of the last king of the Ratti dynasty above referred to; and, on that ground, it is a very probable date. His reign of fifty-one years, assuming S.S. 111 to be the date of his accession, places the installation of his son Mādhava I., to which no date is attached, in S.S. 162. In the next place come the two dates of the reign of Hari Varmā. The earlier of these dates, namely, S.S. 169 and the Prabhava year of the cycle, occurs in the grant of this king published by Mr. Fleet⁷ from Sir Walter Elliot's collection; and the later of the two, S.S. 210, occurs in the Kongu Chronicle:⁸ and it may here be borne in mind that the cyclic year Subhakrit, which is found in Mr. Taylor's translation as mentioned above, places this grant

in S.S. 204. The year Prabhava, which accompanies the S.S. date in Mr. Fleet's inscription, is in agreement with S.S. 169¹, as it is there given. This date was the seventh year after the installation of Mādhava I., Hari Varmā's father, according to the date of his accession as given above; and it would give Mādhava I. so short a reign that a question at once arises of the greater credibility of the above date of the accession of Mādhava I., or this date of his son's grant. If this grant were unquestionably genuine, its testimony would have a better claim to be received than the statement of the India House translation of the Chronicle, derived as it is from an uncertain source, that Kongani I. reigned for fifty-one years; and the date of Mādhava I.'s accession might then be placed farther back: but Dr. Burnell² concludes that it is a forgery of about the tenth century; and Mr. Fleet,³ who has published the grant, fully endorses that conclusion, and promises a detailed discussion of the reasons for it in a forthcoming paper upon another Kongu inscription. Under these circumstances it will be better to omit this grant from the present discussion. The date of Hari Varmā's donation, mentioned in the Chronicle, namely, S.S. 210, is forty-eight years after the accession of Mādhava I.; it is therefore within the range of probability.

Hari Varmā was succeeded by his son Viṣṇu-gopa,⁴ but the Chronicle has no date attached to his name, and no inscription belonging to his reign has hitherto been discovered. It appears from the Chronicle, and more especially from the India House translation, that his reign was a long one.⁵

Mr. Rice has published⁶ a grant of Viṣṇu-gopa's son, "the lord of Kolālapura," who is not otherwise named, bearing the date of S.S. 272 in numerical words and the cyclic year Sādhārana. The plate, of which a *fac-simile* accompanies Mr. Rice's paper, has the words "Shaga varu nayana giri naye shādhārana shaunnachchha [?] ro" for "Shaka varusha nayana giri nayane Sādhārana samvatsare;" and the figures corresponding with these numerical words are, 2 (nayana = eyes), 7 (giri = mountains), 2 (eyes again); or, by the necessary inversion, S.S. 272. The year Sādhārana fell upon S.S. 272,⁷ as it is given in the inscription. It would be out of place to discuss here the probability of a grant of this age, having its date expressed in the S.S. era in the year of the cycle of sixty and in the system of numerical words; since the introduction of each of these methods is supposed to belong to a considerably later period.⁸ We have, moreover, the additional difficulty in this grant, that it contains letters of the Nāgari character, which character is also assigned to a much later date. For these reasons it would be imprudent to make any deductions of an historical character from this inscription of the anonymous 'lord of Kolālapura.'

The succession to the throne after the death of Viṣṇu-gopa, as has already been mentioned, is surrounded with some amount of obscurity. The

¹ Jour. R. A. S., viii. 3; Mad. Jour., xiv. (1) 7.

² Jour. R. A. S., viii. 5; Mad. Jour., xiv. (1) 11.

³ Jour. R. A. S., viii. 4.

⁴ McCudden, 14; Brown, 7.

⁵ Jour. R. A. S., viii. 3.

⁶ Mad. Jour., xiv. (1) 3.

⁷ Ind. Antiq., viii. 212.

⁸ Jour. R. A. S., viii. 3; Mad. Jour., xiv. (1) 8.

¹ McCudden, p. 10; Brown, 7.

² Ind. Antiq., viii. 212.

³ Jour. R. A. S., viii. 4; Mad. Jour., xiv. (1).

⁴ See also Ind. Antiq., vii. 170.

⁵ Ind. Antiq., vii. 173; Mys. Inscr., 233.

⁶ McCudden, 14; Brown, 7.

⁷ Ind. Antiq., vii. 170, note.

Chronicle has two reigns between the death of Vishnu-gopa and the accession of his grandson Kongani II.; and there the reign of Mādhava II. is included in the long reign of his adoptive father, while all the grants make Mādhava II. the born son of Vishnu-gopa, and his successor on the throne. In the genealogy of the grants, again, Mādhava II. is succeeded by his own son Kongani II., who is represented by the Chronicle to have been the son of Vishnu-gopa's daughter, the younger sister of Krishna Varmā, who, therefore, like her brother, was born subsequent to the adoption of Mādhava. The effect of this upon the chronology of this period is plainly enough to show that a considerable length of time elapsed between the association of Mādhava II. with Vishnu-gopa on the throne, whether it was by adoption or otherwise, and the accession of Kongani II. In both the Chronicle and the grants Kongani II. is the grandson of Vishnu-gopa; and while, according to the Chronicle, his mother was born in the later years of Vishnu-gopa's long life, in the grants he is the posthumous child of Vishnu-gopa's son. The long interval which is thus involved in both these statements needs to be strongly emphasized: for, since the very doubtful genuineness of the grants of Hari Varmā and 'the lord of Kolālapura' preclude any direct use being made of them here, no date has presented itself for this period after S.S. 210 until the accession of Kongani II., which took place, as will presently be seen, in S.S. 347. The interval of a hundred and thirty-seven years between these dates is occupied, if we confine ourselves to the statements of the grants, by the two whole reigns of Vishnu-gopa and Mādhava II., and whatever portion of Hari Varmā's reign followed after S.S. 210. As the reign of Vishnu-gopa was clearly an unusually long reign, seventy years may fairly enough be assigned to it tentatively; and thirty-four years may similarly be given to the reign of Mādhava II. There will then remain thirty-three years of the reign of Hari Varmā after S.S. 210 to complete the above interval of a hundred and thirty-seven years. If we now turn to the Chronicle, this interval is occupied, first, by the reign of Vishnu-gopa, who reigned alone for some time before he adopted Mādhava, and subsequently for another long time, jointly with that prince down to the birth of Krishna Varmā; and then, after his birth, for whatever time may have elapsed to the end of his reign; secondly, by the whole reign of Krishna Varmā; and thirdly, by the reign or usurpation of Dindikara, from the death of Krishna Varmā to the installation of Kongani II. Assigning, as above, thirty-three years of the interval to the end of Hari Varmā's reign and seventy years to the reign of Vishnu-gopa, the last thirty-four years will remain to be distributed between the reigns of Krishna Varmā and Dindikara. There is no violation of chronological possibility in either of these distributions of the hundred and thirty-seven years; and there is, therefore, no necessity to reject either of the two dates at its extremities on the ground of the impossibility of the long interval which separates them.

A confirmation of this conclusion may be arrived at from another point of view. The description of the character and acts of Krishna Varmā in the Kongu Chronicle¹ imply that he died after attaining mature manhood: and yet it is quite clear that he was but a boy when he succeeded Vishnu-gopa

on the throne: for Vishnu-gopa cannot be supposed to have resolved upon the extreme step of adoption until he had arrived at the age when men usually cease to expect to have sons born to them; nor could his ministers be expected to accede to such a resolution otherwise than is permitted by the Hindu law. It has already been seen that these kings ruled their kingdom in accordance with written law; and, whatever their code may have been, it may be presumed that the adopted boy must not have exceeded the age appointed, in his class, for the ceremony of investiture with the sacred cord of his second birth. The former of these conditions implies that Vishnu-gopa was, at the time when he adopted Mādhava, either well advanced in years, or incompetent; and his incompetency is contrary to all the probabilities arising out of the descriptions of this king: and the latter condition implies that Mādhava was a youth under eleven years of age when he was adopted by Vishnu-gopa, for these kings may be presumed to have been regarded as Kshatriyas. Assuming that he was about ten years old at the time of his adoption, "some time" elapsed before the birth of Krishna Varmā; and then the whole lifetime of Krishna Varmā followed before Mādhava's name appears again in the history. When it does appear again, it is in the sentence "as this king had no son after the said Krishna Varmā Mahathi Rāya, one of the above-mentioned race (whence Mādhava was taken), named Dindikara Rāya, son of Parikulatti-rāya, held the kingdom in his power;"² and this implies that Mādhava was himself dead at the time of Krishna Rāya's death, otherwise no claim through him to the vacant throne could have arisen to any member of his family. In this way a strong presumption arises that a long time elapsed from the adoption of Mādhava in Vishnu-gopa's old age, to the accession of Kongani II. in S.S. 347: and it is important to bear this circumstance in mind; for, in the absence of dates connected with those reigns, it forms the key to the chronology of this period of the history of Kongu.

Two grants of Kongani II. have been published by Mr. Lewis Rice; one of which³ is dated in the year Jaya, the twenty-ninth year of his reign, and the other⁴ in S.S. 388. It has been mentioned above that the Kongu Chronicle has the year S.S. 288 for this king's reign in both translations; one of which adds the cyclic year Parābhava to it, and that the year Parābhava did not fall on S.S. 288. There is an error, therefore, either in the name of the year of the cycle, or in the figures which give the year of the S.S. S.S. 288 is obviously too near S.S. 210, the date of Hari Varmā's grant, to afford room between them for the very long reign of Vishnu-gopa, and for any ordinary number of years to be also given out of the interval to the reigns of Hari Varmā and Vishnu-gopa's successor or successors. On this ground, therefore, there appears to be sufficient presumption in favour of the preferential correctness of the cyclic year. Now Parābhava fell on S.S. 268, 328, and 388. The first of these dates is too early, for the reason just given. S.S. 328 is equally inadmissible on the following grounds:—In whatever calculation which may be made, it is essential to include the year Jaya as the twenty-

¹ See Grady's *Manu* (ii. 36), p. 18; Mandlik's *Yajñavalkya* (i. 14), p. 161.

² *Mad. Jour.*, xiv. (I) 2.

³ *Ind. Antiq.*, v. 156; *Mys. Inscr.*, 289.

⁴ *Ind. Antiq.*, i. 363; *Mys. Inscr.*, 282.

¹ *Jour. R. A. S.*, viii. 4; *Mad. Jour.*, xix. (I) 5, 9.

ninth year of Kongani II.'s reign. Jaya fell nearest to S.S. 328 in S.S. 319. This would place Kongani II.'s accession in S.S. 290; and this date is too early, on the grounds given above for the rejection of S.S. 288. Moreover, we shall presently see that the year Vijaya fell on the thirty-fifth year of the reign of Kongani II.'s son and successor Avinita. The nearest Vijaya to S.S. 328 fell on S.S. 315; and, if this was the thirty-fifth year of Avinita's reign, it would place his accession in S.S. 280; which is again too early, in a much increased measure, upon the same grounds. It would also place the Jaya of Kongani II.'s reign in S.S. 256, and his accession, twenty-nine years before it, in S.S. 277. We are thus driven by each of these processes to S.S. 388 for the Parabhava year of Kongani II.'s reign as its only possible date. This is the date of the Mercara grant of this king, as mentioned above; and its date is expressed in words at length, "ashta ashti uttarasya trayo satasya samvat-sarasya." This date may, therefore, be accepted without hesitation; and the S.S. 288 of the Chronicle must accordingly be corrected to S.S. 388.

The settlement of this date affords the necessary clue for ascertaining the date of Kongani II.'s earlier grant, which was made, as stated above, in Jaya the twenty-ninth year of his reign. The nearest Jaya to S.S. 388 fell in S.S. 376;² and, since the next succeeding Jaya did not occur until S.S. 436, this latter one need not enter into the discussion. Jaya = S.S. 376 was therefore the twenty-ninth year of Kongani II.'s reign; and this places his accession in S.S. 347, as has already been pointed out by Mr. Lewis Rice.³ This date is amply confirmed by the dates of the grants of his son and successor Avinita; from which, as will presently be seen, the date of Avinita's accession is discovered to be S.S. 400. Kongani II. thus reigned for fifty-three years from S.S. 347 to S.S. 400; and, though his reign was much beyond the average length, its length is natural enough; since it covered the whole term of his lifetime, for he was anointed king while still in his mother's lap.⁴

Two copper-plate grants of Avinita, the son and successor of Kongani II., have been published by Mr. Rice. The earlier of these⁵ is dated in the third year of his reign; and the later one⁶ in the year Vijaya, the thirty-fifth year of his reign. The year Jaya S.S. 376 occurred, as we have seen, during the reign of his father: the Vijaya which we now require is, therefore, the next year of this name which came after that Jaya; and it fell on S.S. 435.⁷ Having thus obtained S.S. 435 as the thirty-fifth year of Avinita's reign, the year of his accession is disclosed by it, namely, S.S. 400. It also serves to discover the date of the earlier of his two grants; for the third year of his reign thus falls on S.S. 403.

Avinita was succeeded by his son Mushkara; he by his son Trivikrama; and he by his son Bhūvikrama. For the reign of Mushkara there is as yet no date. The accession of Bhūvikrama, and consequently the termination of the reign of his father and predecessor Trivikrama, is placed by the Kongu Chronicle⁸ in the year Siddhanti, S.S. 461. This date is quite in

¹ Ind. Antiq., i. 363.

² McCudden, 18; Brown, 7.

³ Ind. Antiq., v. 134.

⁴ Ind. Antiq., v. 140; Mys. Inscr., 292.

⁵ Ind. Antiq., vii. 174; Mys. Inscr., 291.

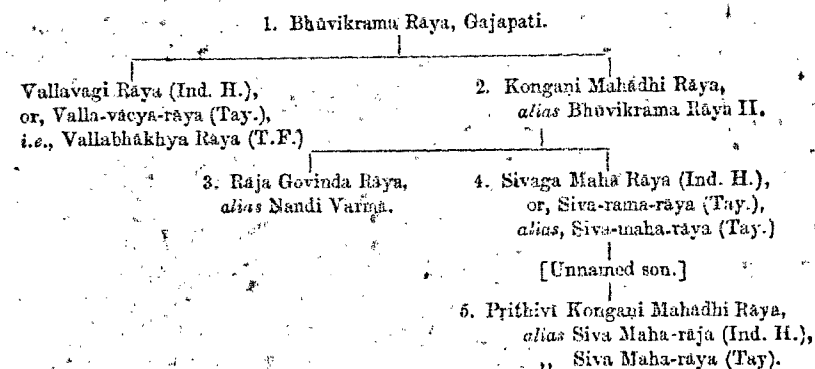
⁶ Ind. Antiq., v. 138; Mys. Inscr., 291.

⁷ McCudden, 20; Brown, 8.

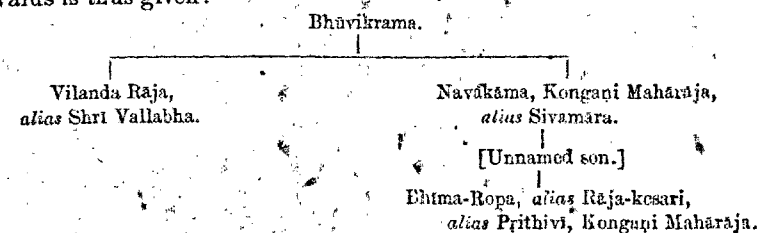
⁸ Jour. R. A. S., viii. 5; Mad. Jour., xiv. (I) 10.

accordance with the dates above given, and it gives rise to no chronological difficulty in any other respect. For, the interval from the accession of Avinita to this date of his great-grandson Bhūvikrama's coronation, which is thus shown, was sixty-one years; and this interval is filled by the three reigns of Avinita, Mushkara, and Trivikrama.

The genealogy from Bhūvikrama to Prithivi Kongani presents a difficulty which cannot at present be surmounted; for the Kongu Chronicle makes Prithivi Kongani the great-great-grandson of Bhūvikrama, whereas the grants represent him to be his great-grandson. The pedigree according to the Chronicle¹ is as follows:—



In the grants of Prithivi Kongani² the pedigree from Bhūvikrama downwards is thus given:—



Here Govinda, the fourteenth king of the Chronicle, is omitted, and Shivamāra, who may well be the same as Shivarāma, the fifteenth king of the Chronicle, is made the same as Kongani III., the thirteenth king of the Chronicle, whom the Chronicle makes Shivarāma's father. This omission occurs in both of Prithivi Kongani's grants. The effect of it is to cut off a whole generation, including two whole reigns, from the chronology of this period, and to require the interval of a hundred and thirty years, which elapsed between the accession of Bhūvikrama and the donation of Shivarāma, presently to be mentioned, to be assigned to the single whole reign of Bhūvikrama, and the short portion of the reign of Shivarāma which preceded the date of his donation. This is clearly impossible; and the omission in the grants may accordingly be regarded as an error, which may be rectified from the Chronicle.

¹ Jour. R. A. S., viii. 5; Mad. Jour., xiv. (I) 10.

² Ind. Antiq., ii. 156; Mys. Inscr., 287; and Mys. Inscr. 294.

In this period the Chronicle has the date of a grant made by Shivarāma, the grandson, according to its genealogy, of Bhūvikrama and the grandfather of Prithivī Kongani.¹ This grant is dated in the year Pramodita S.S. 591 in both of the translations, and Mr. Taylor adds to them the equivalent numerical words "vasu-graha-bāṇa," which have been referred to above. An interval of a hundred and thirty years had elapsed from the accession of Bhūvikrama to this portion of the reign of Shivarāma: and this interval embraces, in the Chronicle, the whole of the three reigns of Bhūvikrama, his son Kongani III., and Kongani III.'s elder son Govinda, together with such portion of the reign of his younger son Shivarāma as may have preceded the date of this grant. The donation appears to have been made in the early years of Shivarāma's reign; for, as will presently be seen, there are fifty-seven years between its date and the accession of Shivarāma's grandson Prithivī Kongani. Nearly the whole of this interval belongs, therefore, to the reigns of Bhūvikrama, Kongani III., and Govinda: and it gives an average of upwards of forty years to these reigns; or rather, to come nearer to the requirements of the case, since Govinda's reign must be curtailed from this average in consideration of the long reign of his younger brother and successor Shivarāma, the reigns of Bhūvikrama and Kongani III., or one of them, must be considerably extended beyond that average.

From the date of Shivarāma's grant to the accession of his grandson Prithivī Kongani in S.S. 648 there is an interval of fifty-seven years, which is filled solely by the remainder of his reign after he made that donation. That his reign was long, and that he lived beyond the ordinary span of life, is implied in the fact that he outlived the lifetime of his unnamed son, and that he was succeeded in the kingdom by that son's son. His age at his death may be approximately ascertained by adding the term of the reign of Govinda, his elder brother and predecessor on the throne, to the above fifty-seven later years of his own reign, with something besides for the previous years of his reign, if any, before the date of his grant, and something more still for his own age at his father's death. From the considerations above referred to, it seems necessary to assign at least thirty years to the reign of his brother Govinda, and in this way Shivarāma appears to have been eighty-seven years and upwards at the time of his death. It is a great age, but it is quite inside the range of our experience.

The effect of giving thirty years to the reign of Govinda is to place his accession, and also the end of the reign of his predecessor, about S.S. 558. Ascending from this date, an approximate date may be obtained for the reign of his immediate predecessor Kongani III., and also for the termination of the reign of his grandfather Trivikrama, the date of whose accession is already known: for the interval of ninety-seven years between S.S. 461, the date of Bhūvikrama's accession, and S.S. 558, the date now obtained for Govinda's accession, may not unfairly be distributed between the reigns of Bhūvikrama and his son Kongani III., by giving fifty years to the former and forty-seven to the latter. The date of Kongani III.'s accession and the end of Bhūvikrama's reign will then fall upon S.S. 511.

¹ Jour. R. A. S., viii. 6; Mad. Jour., xiv. (I) 11.

The Chronicle has in the next place the date of a grant of land made by Prithivī Kongani in S.S. 668. Both translations agree in giving this date. The India House translation makes it correspond with the year Pārthiva, which it virtually does, for Pārthiva fell on S.S. 667;¹ but Mr. Taylor's translation has Prabhava instead of Pārthiva, which fell on S.S. 649. This difference need not be discussed here, since both these dates are within the limits of this king's reign; and assuming S.S. 668 to be correct, we may proceed to compare this date with the dates of his two published copper-plate grants. The earlier of these² is dated S.S. 684; and the later of the two³ in S.S. 698, the fiftieth year of his reign. This latter inscription thus places the accession of Prithivī Kongani in S.S. 648: and it also shows that the earlier of these two inscriptions belongs to the thirty-sixth year of his reign, and that his grant of S.S. 668, mentioned in the Chronicle, was made in the twentieth year of his reign.

When Prithivī Kongani made his donation in S.S. 698, he had already reigned fifty years. It seems right to add at the least two or three years more to this; for his reign had not then come to an end. This will place the accession of his nephew and successor Malladēva I. about S.S. 701, for whose reign the Chronicle gives no date.

Malladēva I. was succeeded by his son Gaṇḍadēva, and he by his son Satyavākya, and he by his two younger brothers Guṇatattama (or Guṇottama) and Malladēva II. in succession. The only date in the Chronicle for his period is S.S. 800,⁴ in which year Guṇottama made a donation of land while he was governing the country around the earliest capital of his dynasty, as his younger brother's viceroy, after his own supersession. Of the interval of ninety-nine years which elapsed between the accession of Malladēva I. and the date of Guṇottama's grant, about thirty-five years each may very reasonably be given to the reigns of Malladēva I., and Gaṇḍadēva, father and son; and the remaining twenty-nine years may, with equal fairness, be divided between the two brothers Satyavākya and Guṇottama, of which twenty years may be given to the former and the remaining nine years to the latter, seeing that he was superseded before the natural termination of his reign.

The Reverend F. Kittel has published three grants of Satyavākya Kongani Varma,⁵ two of which bear dates. No. I, the earlier of the two, is dated in the year Ishvara, which Mr. Kittel hypothetically identifies with S.S. 780, and No. II. is dated S.S. 809, the eighteenth year of the donor's reign. The year Ishvara fell on S.S. 779,⁶ which is near enough to S.S. 780. At the same time, the figures which give the date in this inscription are almost obliterated, and so the correctness of the reading is but tentative, and depends upon its agreement with the cyclic year, and upon the right identification of that year. The nearest Ishvara to S.S. 809, the date of grant No. II, falls on S.S. 839;⁷ and since S.S. 809 was the eighteenth year of the donor of that inscription, and he therefore came to the throne in S.S.

¹ McCudden, 28; Brown, 9.

² Mys. Inscr., 284.

³ Ind. Antiq., ii. 156; Mys. Inscr., 287.

⁴ Jour. R. A. S., viii. 6; Mad. Jour., xiv. (I) 13.

⁵ Ind. Antiq., vi. 102, 103.

⁶ McCudden, 34; Brown, 9.

⁷ McCudden, 32; Brown, 9.

791, this later Īshvara would fall on the forty-eighth year of his reign, supposing both of these grants to have been made by the same king. If the donor is thus the same person in these two grants, he must have been upwards of seventy-seven years of age when he made this latter donation, on the presumption of the correctness of the above assignment of twenty-nine years to the reigns of his two elder brothers. And in that case also, these dates would tally sufficiently well with the date of Guṇottama's grant mentioned in the Chronicle, which would then fall in the middle between the dates of these inscriptions: but it makes it necessary to regard Guṇottama's superseded reign as contemporaneous with Malladēva's from the beginning. In support of this assignment of these two grants to the same king, it may be adduced that the donor of No. I. bore the name of Rācha (or Rāja) Malla in addition to the names Satyavākya Kongani Varmā; and this circumstance assists towards his identification with Rāja Malladēva, the last king of the Chronicle, who was on the throne when Guṇottama made his donation in S.S. 800, and who may be presumed to have been still reigning in S.S. 809 when grant No. II. was made. The name Satyavākya need present no difficulty here; for the word means, as an epithet, 'the true of word'; and this title is known to have been borne by several kings. Moreover the titles of the donor are almost verbally the same in these two grants: and this circumstance adds that much further confirmation to the supposition that they were made by the same king. If they were not so made, and if the year Īshvara of grant No. I. was S.S. 780, as suggested by Mr. Kittel, a series of chronological and other difficulties will arise, from which there seems to be no possible way of escape.

The general result of this discussion appears to warrant the acceptance of the chronology of this dynasty, with more or less particular certainty, as it is given in the Kōngu Chronicle; for it has shown that, notwithstanding the difficulties arising at first sight from the great length of some of the reigns of these kings, those long reigns are all within the limits of possibility; and, since they are possible, they cannot be rightly rejected on the mere ground of their length. The dated portions of the Chronicle, with one single exception, have already received ample confirmation from the published grants of these kings, widely separated from each other as they are both in their dates, and in the places of their discovery: and this circumstance affords considerable presumption that the undated intervals will in due time be found to be equally correct. It will be a great step gained in the investigation of the ancient history of the Southern Dakhaṇ, to be able to accept the Kōngu Chronicle as a document based upon even an approximation to historical truth.

The following tentative table has been constructed upon the basis of the conclusions arrived at in the foregoing discussion. It will of course be understood that the less certain portions of it are capable of some small amount of variation, and are open to emendation upon the discovery of more certain information. I have left S.S. 210 and S.S. 591, the dates of Hari Varmā and Shivarāma's grants, in the table for the present, as fixed dates, in preference to deducting an uncertain number of years from them for the earlier date of the accession of these kings and the end of the reigns of their predecessors.

Name.	Accession.	Length of Reign.	End of Reign.	Christian Era.
	S.S.	Years.	S.S.	A.D.
Kongani Varmā I.	111	51	162	189 to 240
Madhava I.	162	48	210	240 to 288
Hari Varmā	210	33	243	288 to 321
Vishnu-gopa	243	70	313	321 to 391
Madhava II.	313	24	347	391 to 425
[Krishna Varmā	313	33	346	391 to 424]
[Dindikara	346	1	347	424 to 425]
Kongani Varmā II.	347	53	400	425 to 478
Avinīta	400	35	435	478 to 513
Mushkara	435	5	440	513 to 518
Trivikrama	440	21	461	518 to 539
Bhāvīkrama	461	50	511	539 to 589
Kongani Varmā III.	511	47	558	589 to 636
Govinda	558	33	591	636 to 669
Shivarāma	591	57	648	669 to 726
Prithivi Kongani	648	53	701	726 to 779
Malladēva I.	701	35	736	779 to 814
Gaṇadēva	736	25	761	814 to 849
Satyavākya	761	26	791	849 to 869
Guṇottama	791	9	800	869 to 878
Malladēva II.	800	..	..	878

Under the Ganga dynasty the limits of the kingdom were greatly extended. The last king of the Ratti dynasty is said to have ruled over the Kārṇāṭaka country as well as over Kōngu.¹ The cause of the extinction of that earlier dynasty is not recorded: but the fact of the southern portion of Mysore having been ruled from early times by chieftains of the Ganga race, the Gangavāḍi of the Chronicle,² lends countenance to the conjecture that this last Solar king may have lost his life in the invasion of the country above the ghats; and that the Ganga king, hitherto but a minor chieftain, followed up his advantage by seizing the vacant throne of Kōngu and adding this kingdom to his ancestral territory. The Chronicle refers to several conquests made by the Ganga kings in different parts of South India at different times: their victorious armies returned home laden with the spoils of war, and they levied tribute upon the countries which they conquered; but in no single instance does it speak of any annexation of territory taken from those kingdoms. By the fifth century of the Christian era, however, they appear to have pushed northwards as far as Nandīdrūg; for there, in the present district of Devanahalli, lay the land of Kongani Varmā II.'s earlier donation.³ And in the early part of the following century they had advanced still farther northwards into the basin of the Northern Pennār, upon both banks of which river lay the lands which formed the subject of Avinīta's later grant. In the eighth century A.D. their authority, either direct or paramount, extended as far north and west as the near neighbourhood of Harihar; for there, as it seems to me, lay the lands of Prithivi Kongani's grant of S.S. 698. Towards the end of the ninth century the three grants of Satyavākya represent their donor to have been in possession of Nandīdrūg, and of the present district of Kōlār to the eastwards of it, while the lands bestowed by those grants

¹ Jour. R. A. S., viii. 3; Mad. Jour., xiv. (I) 6.

² Mad. Jour., xiv. (I) 19, 38 ("our own people").

³ Ind. Antiq., v. 133, 135.

were in one of the southern districts of Coorg. Shortly afterwards came the Chōla conquest, and, with it, the subversion of this last dynasty of the kings of Kongu.

Skandapura continued to be the capital of the enlarged kingdom during the reigns of the first three kings of the new dynasty, who were crowned there; and during this time it bore the superadded prefix of Vijaya, as if to stamp upon it a perpetual memory of its conquest. The third king, Hari Varmā, removed the capital from the plains to Talikād, at the south-eastern angle of the Mysore plateau, about A.D. 290; and at this city the fourth king, Viṣṇu-gopa, and all the remaining kings of this dynasty, were crowned. Govinda Rāya, though he was anointed and crowned at Talavanapura, made Mūgandapattanam the seat of his government¹ for some time; and in this he was followed by his successor Shivarāma for at least a part of his reign. Thrice only does the original capital appear again in the history: in the first instance, in the reign of Prithivi Kongani, who stationed the general of his forces there about A.D. 746, 'at the head of an army, and assigned to him the revenues of twelve villages in its neighbourhood.'² His successor, Malladēva I., repeated this arrangement, and added the city of Vijaya Skandapura itself to the endowment. That circumstance seems to indicate, either that this exposed portion of the Kongu dominions was being threatened at this time by the rising power of the Chōlas pressing upon their eastern frontier, or that Prithivi Kongani expected to be attacked by his more southerly neighbour the king of Pāṇḍya; unless, as Mr. Taylor's translation seems to suggest, he intended to make this place the base of his own hostile operations against these neighbouring states. A similar appointment was made by Malladēva II., the last king of this dynasty, who made his brother Gunottama governor of Skandapura after a successful resistance of an invasion of Kongu by the king of Pāṇḍya.³

The removal of the seat of government from Skandapura into the Kārṇāṭaka country virtually removed the Kongu kingdom from its position amongst independent states: and in this secondary position it continued to be connected with its more extensive sister-kingdom down to modern times. Nevertheless, the precedence was given to its name for many generations when occasions required the names of the twin-kingdoms to be mentioned: and the title of its kings, Kongani Varmā, continued to be used as the dynastic name of the rulers of the united kingdom down to the time of the last king of the Ganga line.

The political distribution of Southern India from the second to the ninth century A.D. is well marked in the Chronicle of these kings. To the south of the river Kṛishṇā were the kingdoms of Dravida, Chōla, Pāṇḍya, and Keraḷa, almost surrounding their own dominions of Kongu and Kārṇāṭa; and to the north of that river were the kingdoms of Kalinga, Āndhra, Varāṭa, and Mahārāṣṭhaka. Avinīta is said to have made conquests in all those countries except the two last, and Kongani III. in all of them excepting Keraḷa. Gaṇḍadēva obtained a victory over the king of Dravida, and impressed his fear upon the king of Chōla. With the latter king he subsequently formed friendly relations, as he did also with the king of Pāṇḍya. Malladēva II., as has already been mentioned, successfully

¹ Jour. R. A. S., viii. 5, 13; Mad. Jour., xiv. (I) 11; Ind. Antiq., iii. 265.

² Jour. R. A. S., viii. 5; Mad. Jour., xiv. (I) 11.

³ Jour. R. A. S., viii. 6; Mad. Jour., xiv. (I) 13.

resisted a Pāṇḍyan invasion; but it was he apparently who finally succumbed to the rising power of the Chōlas.

THE CHŌLA PERIOD.

The second period of the ancient history of Salem extends from the conquest of Kongu by the Chōlas, down to the rise of the Ballāla kings of Kārṇāṭa.

The Kongu Chronicle, which is at present our only authority for this period, has not given the dates of the reigns of its Chōla kings: one single date occurs in the whole of this part of the work, namely, at its close, where some of the charities of Rājarāja Chōla are placed in S.S. 926 or A.D. 1004. The dates of the Chōla kings have long been a source of great perplexity, and the best which can be done here for the chronology of this period is to take this date in connection with the last date of the Kongu period, namely, S.S. 800 or A.D. 878; from which it appears that the Chōla rule over Kongu extended over a hundred and twenty-six years. During this time six kings reigned, and the average of twenty-one years, which falls to each reign, presents no chronological difficulty.

The following pedigree of the Chōla kings is constructed from the Kongu Chronicle down to Harivari-dēva, *alias* Rājarāja Chōla. I have added the succeeding names from Sir Walter Elliot's papers in the Madras Journal, in order to connect the Kongu series with those Chōla kings who are better known in connection with their conquest of Kalinga. This identification, however, can only be regarded as provisional, until both the genealogy and the chronology of the Chōlas have received a critical investigation.

Vijayadi Rāya.

Āditya Varmā Rāya, or Vijaya Rāya Āditya Varmā; about S.S. 800.

Vira Chōla Rāya, *alias* Vira Chōla Nārāyaṇa Rāya; builder of the Kanaka-sabha at Chitambarā.

Harinjaya Rāya, or Arun-jaya Rāya. Desoditya Rāya, or Dasoditya Rāya; died sonless. "Many sons"; "a great many other children."

Parantaka Rāya, *alias* Hari Mali, or Ari-malli; married Chittiri, daughter of Setu Rāya, or Chatī Rāya.

Divi Rāya, or Divya Rāya, *alias* Hari-tittu Rāya, or Arittu Rāya; died sonless. Harivari-dēva, or Arivari Dēva, *alias* Rājarāja, Maharāja Chōla Bāya, *alias* Rājarāja Narendra Chōla, married an E. Chalukya princess (Mad. Jour., xiii. (II) 40). Many other children ("sons").

"Elder sons" (Mad. Jour., xiii. (II) 39): Rājendra Chōla, or Rājendra Dēva, *alias* Ko Virāja, Kesari Varmā, *alias* Koppara Kesari Varmā (*ibid.*, 39), *alias* Vira Rājendra Chōla, reigning in S.S. 1001 (*ibid.*, 40).

"Elder son" (Mad. Jour., xiii. (II) 43): Vira Chōla Dēva, *alias* Tribhuvana Malla, *alias* Viṣṇu Vardhana VII., Viceroy of Vengi in S.S. 1001 (*ibid.*, 43), reigning in S.S. 1044 (Mad. Jour., xiv. (I) 57, 59).

¹ Jour. R. A. S., viii. 4, 5, 6; Mad. Jour., xiv. (I) 9, 10, 12, 13.

The Kongu Chronicle incidentally affords two clues tending towards an identification of some of these kings with other names mentioned in other records of this dynasty; and these clues afford some assistance towards a settlement of the approximate dates of their reigns.

The kingdom of Draviḍa, thenceforward known as the *Tondaimandalam*, was conquered from the Pallavas by Adondai, the son of one of the Kulottunga Cholas, to whose birth some kind of inferiority is attributed owing to an irregularity of some sort in his father's marriage.¹ The Chronicle does not mention this conquest of Draviḍa; nevertheless it is clearly implied in the narrative: for, upon the death of Vira Chola, it assigns the Draviḍa country, which it had mentioned before in connexion with the Cholas, to this king's elder son Harinjaya, whilst his younger son Desotya succeeded to the throne of the ancestral dominions of Tanjore.² This reversal of the order of succession needs some explanation; and it is satisfactorily accounted for on the supposition that Vira Chola's marriage with Harinjaya's mother was in some way opposed to the customs or traditions of Tanjore, such as is implied in the accounts of the birth of Adondai. This circumstance lends some probability to the identification of Harinjaya with Adondai, and this identification will show Vira Chola, the father of Harinjaya, to be the same as Kulottunga Tondaman Rāja, the father of Adondai. If these identifications are sound, they lead to an approximate date for the Chola conquest of the *Tondamandala*; for, since the conquest of Kongu by Vira Chola's father took place about A.D. 878 and the conquest of *Tondamandalam* was made in Vira Chola's (Kulottunga Tondaman's) own reign, this latter event belongs to the generation which followed the fall of Kongu. It has been placed³ about the eighth or ninth century on general grounds. From the above collocation it follows, and this general conclusion will suffice for our present purpose, that the two principal divisions of the modern collectorate of Salem, the *Bārahmahal* districts of the ancient Pallava kings, and the Salem districts of the ancient Kongu kings, fell before the conquering Cholas, and were added to their dominions, within a short interval of each other.

The second clue is obtained from the connexion of Vira Chola and his great-grandson⁴ Harivāri (Rājarāja) Chola with the temple of Chitambaram. The Kongu Chronicle informs us⁵ that Vira Chola "expended great sums of money in building the Kanaka or golden Sabhā" of that temple: and of Harivāri it says, "he enlarged the temples at Chidambaram. His grandfather [rightly, great-grandfather] had built the Kanaka-sabhā only; but he now, with the aforesaid riches, erected all kinds of towers, walls, mantapas, flights of steps, &c., and other matters. He also had all kinds of valuable ornaments made for Sabhāpati, and thus performed munificent charity."⁶ Sir W. Elliot⁷ has identified Rājarāja⁸ Chola with the Rāja-

¹ Wilson Mackenzie MSS., introd. p. lxxxiv; Mad. Jour., xiv. (I) 60, &c.

² Jour. R. A. S., viii. 7; Mad. Jour., xiv. (I) 15.

³ Mad. Jour., xiv. 244.

⁴ Both translations of the Kongu Chronicle make Vira Chola the "grandfather" of Rājarāja; the pedigree shows that he was his great-grandfather.

⁵ Jour. R. A. S., viii. 7; Mad. Jour., xiv. (I) 14.

⁶ Mad. Jour., xiv. (I) 17; Jour. R. A. S., viii. 8.

⁷ Mad. Jour., xiii. (II) 40.

⁸ It must be borne in mind, at the same time, that 'Rājarāja' is a title rather than a name, meaning 'king of kings.'

rāja Narendra Chola, who married a princess of the Eastern Chōlukya line, and so came subsequently into possession of the dominions of that line in Kalinga. He has placed the termination of Rājarāja's reign in S.S. 986 or A.D. 1064:¹ and a reign of forty years is assigned to him, which places his accession in S.S. 946 or A.D. 1024. This is twenty years later than the date which the Kongu Chronicle connects with Harivāri's (Rājarāja's) reign; but though it so far interferes with the completeness of the identification, this approximation of dates is perhaps more hopeful than might have been expected. The interval of a hundred and thirty years between the supposed date of the Chola conquest of Kongu in A.D. 894 and the accession of Rājarāja in A.D. 1024 is sufficiently filled by the four reigns of Aditya Varmā's successors, Vira Chola, Desotya, Parāntaka, and Divi Rāja, together with the remainder of his own reign between that conquest and his death, on the presumption that these reigns were tolerably long: and, in favour of the presumption that at least two or three of these kings were long-lived, it may be mentioned that Vira Chola lived long enough to have "a great many children;" that Desotya outlived his elder brother Harinjaya; and that, when Parāntaka's wife "burnt herself with his dead body," it was "not before many children were born by her."

The Chronicle gives no information regarding the internal condition of Kongu at this time, beyond the fact that its army consisted of men of the Vedar caste. It also states that Kongu continued united to the ancestral kingdom of Tanjore when Draviḍa was temporarily separated from it during the reign of Desotya Rāja.

The conquest of Kongu by Aditya Varmā was followed up by an invasion of Karnāṭa, and the capture of its capital Talikād;² and the hold of the conquerors upon the country was rivetted by the settlement of Brāhman colonies there, whose interests would require them to maintain the rule of the donors of their endowments. This policy was continued by each of his successors: and in the reign of Rājarāja a similar course was adopted to attach the merchant class of the capital of Karnāṭa to the throne of its foreign rulers.

The Chola occupation of Kongu-Karnāṭa continued for about two centuries: for it is not until about S.S. 991 or A.D. 1069 that the Ballala kings appear in sufficient power to be regarded as the rulers of the country. How far the Chola power extended northwards into Karnāṭaka cannot at present be ascertained. But the temples of Arulagupay, Turivaykare, in the districts to the south of Sīra, and one dedicated to Narasimha at Jamagulla, ten miles to the north of Halabīd, are said to have been built by the Chola Rāja:³ from which it may be inferred that their erection belongs to this period, seeing that the Cholas had not at any other time any hold upon this part of Karnāṭa; and that their rule extended, in this north-western extremity of their empire, at the least as far north as the northern districts of the present kingdom of Mysore.

¹ Mad. Jour., xiii. (II) 40. Dr. Burnell adds additional strength to this identification (S. I. Palaeogr., 2nd Edit., 40, note), by showing that this king is called Rājarāja Chola, Rājarāja Narendra, and Narendra, respectively, in three different inscriptions.

² Jour. R. A. S., viii. 6, 7; Mad. Jour., xiv. (I) 14.

³ Buch. Mysore, ii. 57, 58; iii. 389.

During this time the enterprising energies of the Cholas were devoted to the conquest of the countries lying on their northern and southern borders: and there is no reason to suppose that the tranquillity of Kongu was disturbed under their rule. Salem, at this time, formed a compact little territory in the very midst of a gradually enlarging empire, which, at its culmination not long after this time, extended from the southern limits of Orissa to Cape Comorin, and from the Western Coast, at the northern boundary of Kerala, across the peninsula along the southern frontier of the Western Chālukyas and of the Rāthors of Malkhed, up to their own western boundary on the banks of the lower Kṛishṇā.

THE BALLĀLA PERIOD.

How long after S.S. 926, A.D. 1604 (the date of Rājārāja Chola's grant), Kongu continued under the rule of the Cholas there is at present nothing on record to show. It is probable enough that, when the Telugu kingdom of the Chālukyas became a portion of the Chola dominions, Rājārāja's whole power and attention were needed by this important accession; and so these earlier western conquests of his house became comparatively neglected. An opportunity would thus be afforded, when the ripe time came, for Kongu and Karnāṭa to throw off their yoke. Whatever the cause may have been, by the middle of the eleventh century A.D., and apparently about five years after Rājārāja Chola's death, these provinces had ceased to pay their former tribute to the Cholas, and were broken up into a number of petty principalities.¹ At that time Vinayāditya, the second prince of the Hoysala dynasty of Yādavas, who ruled over a small territory surrounding the capital of the Kongu-Karnāṭaka kings, Talikād, formed friendly alliances with the chiefs of the neighbouring principalities, and so laid the foundation of the new kingdom of Karnāṭa, and of the new dynasty of Vallāla or Ballāla kings.² Vinayāditya's own conquests were confined to the Karnāṭa country and to some parts of Tuluva. His son Vallāla Rāya descended into the plains and conquered the chieftains of the Kongu country:³ and thus Salem became reunited to Karnāṭa about A.D. 1080. He also conquered Nonambavāḍi, Gangavāḍi, Banavāsi, and Anaikal,⁴ forming the western and northern districts of the modern Mysore, and the southern portion at least of the modern collectorate of Dharwar. Salem continued to form part of the kingdom of the Ballālas until their rule was subverted by the rising power of Vijayanagara soon after the sack of their capital Dvārasanudra by the troops of Delhi in A.D. 1310. An invasion of the new kingdom by the Chola king occurred about A.D. 1095, in the reign of the fourth king, Peddata Viṣṇuvardhana Rāya, which was repelled.⁵ This king is also said to have been "as a forest on fire to the Kongu Rāya,"⁶ from which it may be inferred that this old kingdom had at this time successfully asserted its independence. But it could only have lasted for a short time; for in the succeeding reign Kongu was a portion of the Ballāla kingdom.⁷ About A.D. 1283, in the reign of the

¹ Mad. Jour., xiv. (I) 19.

² *Ibid.*, 19.

³ *Ibid.*, 19.

⁴ *Ibid.*, 20.

⁵ *Ibid.*, 19.

⁶ *Ibid.*, 23.

⁷ *Ibid.*, 19.

eighth king Narasimha II., the chieftains of Kongu again caused trouble in the kingdom: but Narasimha marched into the country at the head of a great army, and reduced the rebels to subjection. He then advanced into Kerala; as if that country had been concerned in the rebellion, either actively, or as its instigator or supporter. Here also he was equally victorious: and, after much severe fighting, he "totally destroyed the king of Kerala and his army."¹ With these exceptions, nothing is recorded during the two hundred and fifty years of the Ballāla rule over Kongu which had any tendency to diminish the tranquillity and prosperity of Salem.

The Hoysala kings were of the Yādava race, to which the whole of the widely spread castes of the shepherds of India claim to belong. They traced their descent down from a divine origin:—Viṣṇu, Brahma, the ṛishi Atri, Chandra, Budha, Purūṣa, Ayu, Nahusha, Yayāti, YADU. From Yādū, through the royal line of Dvāraka, came Sala, or Saḷa, of Simhāchala, who afterwards received the name of Hoysala, and became the founder of this dynasty.² They were called Ballāla Rāyas after the name of the third king, Ballāla or Vallāla Rāya, the son of Vinayāditya.

Eight kings of this line ruled over Karnāṭa. The duration of the dynasty, according to the dates given in the Kongu Chronicle, was from about A.D. 1060 to about A.D. 1313.³ Extant inscriptions of these kings extend from A.D. 1117 to 1287.⁴

The following pedigree is constructed from the Kongu Chronicle. The figures preceding the names show the order of the reigns.

1. Sala, or Oysala, or Hoysala, Vijaya.
2. Vinayāditya (grant in S.S. 921).
3. Vallāla Rāya I. (grant in S.S. 1015). Pedda Deva. Udayāditya Deva.
- Chikraja Deva. 4. Peddata Rāya, or Pedda Rāya, *alias* Viṣṇuvardhana Rāya (grants in S.S. 1021, 1033, 1039, 1044, 1050, 1052, 1054).
5. Narasingha Rāya I., or Narasingha Nāyaka, or Vira Narasingha Rājadhīrāya (grants in S.S. 1071, 1072, 1080, 1081, 1082, 1084, 1085, 1093, 1094).
6. Vallāla Rāya II. (grants in S.S. 1095, 1104, 1131, 1154).
7. Someshvara (reigning in S.S. 1159).
8. Narasingha Rāya II., or Vira Narasingha Rāya, or Oysala N. R. (installed S.S. 1205; grants in S.S. 1206, 1207, 1210, 1235).

THE VIJAYANAGARA PERIOD.

The Harihara Dynasty.

All the best accounts agree in ascribing the establishment of the Vijayanagara empire to two brothers, who are variously named, Hukka and

¹ *Ibid.*, 23.

² *Ibid.*, 18. The name of this dynasty is met with under the following forms:—Hayasala, Hayasala, Haysala, Hayāla, Hothesala, Hoisela, Hoyasala, Hoyisala, Hoysala, Hoysala, Hoyasana, Hoysana, Oisala, Osala, Oysala, Oysala, and probably more. The form which is found in most of the inscriptions of the kings of this line, is 'Hoysala.'

³ Mad. Jour., xiv. (I) 18 to 31.

⁴ Mys. Inscr., pp. xi, xii.

Bukka, Bukka and Harihara, Aka Huriyur, Harihara Bukka Raya, &c. They were the sons of Sangama, "a powerful king," the son of Kampa, Kampana, or Kampila Raya, of the race of Yadu, and of the Kurumba tribe. It is also to be gathered from these accounts—though the facts are stated in various forms—that these brothers received countenance, in laying the foundation of their power, from the Mahomedans, who had then recently established themselves in the Northern Dakhan; and apparently still greater material and moral help from the pontiff of Shringeri, the representative, then as now, of the spiritual power of Shankaracharya throughout India. The erection of their capital Vijayanagara is placed between A.D. 1327 and A.D. 1336. The sack of Dvārasamudra, the capital of the Ballālas, by the Mahomedans, in which these two brothers were engaged on the side of the king of Delhi,¹ is placed by Ferishta in A.D. 1310;² and the last recorded grant of the Ballāla kings is dated S.S. 1235, A.D. 1313;³ and thus the dates obtained from these opposite sources agree closely together.

One of these accounts ascribes the destruction of the Ballāla power to the unprecedented tyranny of the last king of the line; to punish whom the king of Delhi permitted the brothers Harihara and Bukka to make war upon him. After some early reverses, they succeeded eventually in subverting the Ballāla rule: and then they created the kingdom of Vijayanagara on its ruins.⁴

In what position relative to the throne of Delhi the withdrawal of the army of Alla-ud-din from the Southern Dakhan left the rising house of Vijayanagara has not yet distinctly appeared. The earliest territory of this new power formed part of the dominions of the Ballālas down to the date of the sack of Dvārasamudra. It is not likely that Delhi would entirely relinquish its hold upon this new rich conquest: and, therefore, it seems all but certain that the first kings of Vijayanagara built up their power as feudatories of Delhi; and that they proceeded to make their succeeding conquests in Karnāta nominally in that capacity. Feudatories of Delhi they probably remained until the opportunity arrived for them, in common with the Mahomedan rulers of the Northern Dakhan, to assert their independence, when Delhi was unable to hold them in awe any longer.

Down to A.D. 1348 no extension appears to have been made of the Vijayanagara territory to the southwards. In that year, at the commencement of the reign of Vira Pratāpa Deva Raya, a grand series of conquests began to be made, which ultimately gave to Vijayanagara the empire of the whole of the Southern Dakhan. This king invaded Karnāta, Chera,⁵ Chola, Pāndya, and Kerala, and made the rulers of these countries, which included the whole of Southern India to the south of his own territory, tributaries of Vijayanagara.⁶ At this time, therefore, Salem began to feel the influence of this new power: and there is nothing at present to show

¹ Mad. Jour., x. 413.

² Mad. Jour., xiv. (I) 31.

³ This is the only occasion of the mention of "Chera" in the Kongu Chronicle. From the circumstance that Kongu is omitted from this list of conquests, and that Kerala appears with Chera, it seems that "Chera" is substituted for Kongu here, either intentionally or inadvertently.

⁴ Mad. Jour., xiv. (I) 33.

⁵ Briggs' Fer., i. 373.

⁶ Mad. Jour., x. 413.

that their relationship was disturbed during the whole period of the rule of the Harihara Rayas.

Seven, or, according to other accounts, eleven, or thirteen kings of this first line—the Harihara dynasty—occupied the throne of Vijayanagara for about a hundred and fifty years after A.D. 1313.

The Narasimha Dynasty.

A new line of kings, still belonging to the same old Yādava stock, but of Telugu origin, then succeeded to the empire: and they continued to rule over it, sometimes with great magnificence, down to the time of its overthrow by the confederacy of the Mahomedan kings of the Northern Dakhan in A.D. 1565.¹ Seven, or, by other accounts, eight, or thirteen kings of this second line—the Narasimha dynasty²—reigned at Vijayanagara for about a hundred years down to the period of the above-mentioned catastrophe.

The southern provinces of the empire did not readily accept the rule of this new dynasty. Karnāta, in particular, withheld its tribute: but the disaffection was quickly overcome. When, however, the second king of this line, Vira Narasimha Raya, came to the throne, the chieftains of the Karnāta and Kongu countries refused to pay their tribute. The Rāja of Umraṭṭūr, a descendant of the ancient Ganga kings,³ placed himself at the head of the rebellion: and he succeeded in maintaining his independence during the whole of Vira Narasimha's reign, from A.D. 1479 to 1503, although the whole power of the kingdom was set on foot to coerce him. Vira Narasimha died before he was able to put forth the renewed effort to reduce this rebellion for which he was making preparations. His younger brother Kṛṣṇa Raya, the most illustrious of the kings of the south in all time, succeeded him in A.D. 1504;⁴ and as soon as he had settled the province of Dravida, he set out to reconquer the revolted province of Karnāta. Some of the leading chieftains returned to their allegiance at this time, and joined the army of Kṛṣṇa Raya; especially the Chikka Raya, one of the ancestors of the present dynasty of Mysore.⁵ The Ganga Raya was still powerful enough to bear the strain of the invasion for more than a year: but the capture of the strong fort of Shivasamudra, on the island at the falls of the Kāveri, within which he had retired, and the reduction of Seringapatam immediately afterwards, decided the event of the war. Kṛṣṇa Raya rewarded these chiefs of Karnāta who had joined his standard with grants of additional territory; in which were included the present Kolār district of Mysore, and the neighbouring portion of the present collectorate of Salem.

The Kongu country followed the general fortune of Karnāta throughout this period: and Salem continued to form part of the empire of Vijayanagara at the time of its overthrow in A.D. 1565.

¹ Briggs' Ferishta, iii. 126.

² It is variously called the Narasingha, Narsing, Nursing, Narasana, Narasayya, Narasa and Narasimha dynasty, and there are other forms.

³ "Ganga Raya" of Mad. Jour., xiv. (I) 40, "our own people," as distinguished from the still earlier "Konguna Varna kings" of p. 38.

⁴ Mad. Jour., xiv. (I) 39. The dates of the Kongu Chronicle are here given as a matter of consistency.

⁵ *Ibid.*, p. 40.

THE PENUKONDA AND CHANDRAGIRI PERIOD.

When the adverse event of the battle of Talikota drove this dynasty from their ruined capital, and deprived them of the territory around it, the whole of their southern provinces were still left under their rule,—the Karnāṭaka, Dravida, Chola, and Pāṇḍya provinces, and probably Keraṭa also; forming still a very extensive empire, and capable of doing great things in judicious hands. These provinces were governed, as in the earlier days of the empire, by viceroys, who remitted a fixed annual tribute to the Rāya at Penukonda; the Telugu districts around Penukonda being retained under the home government of the Rāya. The amount of this tribute which the provinces of Madura, Tanjore and Gingee paid in A.D. 1611 is stated by the contemporary Jesuit Missionaries¹ to have been from six to ten million francs each. If a similar amount was paid by the remaining provinces of Andhra, Karnāṭa, and Chandragiri, the whole amount of the revenue of the Rāya at this time may be computed at about forty-eight million francs; or about two crores of rupees, or two million pounds sterling per annum from tribute, besides his revenue from his home-domain of Penukonda and other sources.

Rāma Rāya was succeeded by his son Shri Ranga Rāya in A.D. 1574.² He appointed his younger brother Rāma Rāya to the government of the province of Karnāṭa; who continued in that office down to his death about A.D. 1583. During his viceroyalty the chiefs of Karnāṭa and Kongu duly paid their appointed tribute to the Rāya; but upon his death, Chikka Rāya, the tributary chief of Mysore, captured the fort of Seringapatam, and took possession of the district attached to it.³ His rebellion was of short duration; and Tirumala Rāya, the son of the deceased viceroy, was appointed by the Rāya in his father's place in A.D. 1584.⁴

In A.D. 1577 the Mahomedans advanced to the south with the intention of capturing Penukonda and annexing its territory to the dominions of Vijayapūr (Beejapore).⁵ The defence of Penukonda was entrusted to the Rāya's son-in-law, Jagadeva Rāya, who then held the Bārahmahal districts of Salem as a feudatory of his father-in-law. He conducted his operations with such skill and brilliant bravery, that the invaders were compelled to abandon the siege. For this important service, which prolonged the existence of the waning empire for half a century, Jagadeva Rāya was rewarded with a large addition to his territory, extending from his original patrimony in North Salem to the neighbourhood of the western hills of Mysore.⁶

Upon the death of Shri Ranga Rāya in A.D. 1590, his son Venkatapati Rāya succeeded him on the throne of Penukonda.⁷ Soon afterwards Penukonda passes away from the records: and the remnants of the power of the famous Rāya empire, precarious now, but still of great extent, came into the hands of the Chandragiri branch of the Narasimha family.⁸

¹ La Mission du Maduré, ii. 124.

² Mad. Jour., xiv. (I) 43.

³ Mad. Jour., xiv. (I) 43.

⁴ Ibid., 44.

⁵ Briggs' Ferishta, iii. 170.

⁶ Buch. Mys., ii. 66; iii. 459; Wilks' Mys., i. 81.

⁷ Mad. Jour., xiv. (I) 44; Campbell's Tel. Gram. (3rd Edit.), introd. p. xii.

⁸ The Jesuit Missionaries use the name "Bisnagar," a corruption of Vijayanagara, for the ruler of Chandragiri from A.D. 1608 downwards. La "La Mission du Maduré," ii. 19, 73, 90, 120. But one of the Mackenzie MSS. quoted in Camp. Tel. Gram. (3rd Edit.),

About this time the viceroy of Madura, Virappa Nāyakkan,¹ invaded the province of Karnāṭa: and, though his army was beaten back, this invasion led in the sequel to an exchange of rulers for Salem. The victorious army of the viceroy of Karnāṭa advanced and threatened the capital of the invader. Owing to the treachery of the Karnāṭaka general, who sold his master to Virappa Nāyakkan, the Mysore army abandoned its advantages and returned home: and, on arriving at Seringapatam, the general completed his treason by setting up his own power there.² Salem, with the rest of Kongu, was now abandoned to the viceroy of Madura; probably as a part of the treacherous understanding between Virappa Nāyakkan and the usurper. As an outcome of the struggle between this usurper and his master, which followed upon these events, Rāja Uḍaiyār of Mysore took the fort of Seringapatam in A.D. 1609, when its garrison had been temporarily withdrawn for the war, and so laid the foundation of the present kingdom of Mysore.³ Salem thus became a dependency of the province of Madura about the same time as the new kingdom of Mysore sprang into existence: and, with the adjoining districts of Coimbatore, it brought an important accession of new strength to Virappa Nāyak for the struggle which he, like his father before him, was then waiting for a fitting opportunity to precipitate, in which he hoped to be able to throw off the yoke of Chandragiri, and to establish an independent kingdom of the South.

Soon after these events the southern districts of Salem are found under the government of tributary chiefs subordinate to the viceroy of Madura. Thus in the reign of the great Tirumalai Nāyakkan, the younger brother and successor of Muttu Virappa, the celebrated Jesuit Missionary Robert de Nobilibus resired from Trichinopoly in A.D. 1623 on account of the preparations for war then going on there, and took temporary refuge in Shendamangalam, in the extreme south-east of Salem, "the capital of Rāmachandra Nāyakkan, one of the tributaries of the Nāyak of Madura."⁴ In the following year he proceeded from thence to Salem, "the capital of Salapatti Nāyaker, another of the tributaries of the king of Madura, but more powerful than Rāmachandra;"⁵ and when he had remained there a short time, he went northwards to visit "the king of Moramangalam, about eight leagues from Salem."⁶ In the reign of the same Tirumalai Nāyakkan, A.D. 1622 to 1662, two of these chieftains of the districts of Salem are named amongst the seventy-two trusty supporters of this prince, to whom he committed the charge of the seventy-two bastions of the fortifications of Madura; namely, Rāmachandra Nāyakkan⁷ of Talaimalai and Ketṭi or Geṭṭi Mutaliyār of Taramangalam.⁸

introd. p. xii., brings the reign of Venkatapati Rāya of Penukonda down to A.D. 1614. The king of Chandragiri was visited by two Jesuit Missionaries in A.D. 1599, as stated in Orme's Hist. Frag., 61, 224, 228. Compare also Wilks' Mys., i. 12, 43.

¹ Muttu Virappa Nāyakkan reigned from A.D. 1590 to 1622. (Tay. Or. Hist. MSS., ii. 31).

² Mad. Jour., xiv. (I) 44.

³ Mad. Jour., xiv. (I) 45; Wilks' Mys., i. 40.

⁴ La Mission du Maduré, ii. 226.

⁵ Shalyapati, 'lord of Salem.'

⁶ Ibid., ii. 228.

⁷ Ibid., ii. 242.

⁸ A horoscope of one of the Rāmachandra Nāyakkas came into the hands of Colonel Mackenzie, from which it appears that he was born in October A.D. 1652 and died in 1718. (See Tay. Cat. Mad. MSS., i. 79.)

⁹ Tay. Hist. Or. MSS., ii. 163, 167.

To strengthen this new and advanced portion of their extensive province, the Nāyaks of Madura about this time built numerous forts in their territories beneath the ghats: and amongst these, they built in the districts of Salem the forts of Nāmakkal, Shentaimangalam, Periya Salem, Shemalūr, Shankagiri, Āttūr, Anantagiri, and Paramatti.¹

The territory of Keṭṭi Mutaliyār,² mentioned above, covered a large portion of the south-west of Salem and of the districts of Coimbatore on the opposite bank of the Kāveri, from Omalūr, about eleven miles from the town of Salem, to the boundary of the Mysore territory up the pass at Naṭukāval, where he erected a small fort as his frontier post.³ The town and fort of Kāveripuram, on the bank of the river to the eastwards of that pass, also belonged to him, together with the intermediate country.⁴ To the southwards of this town, on the right bank of the Kāveri at the junction of the Kolattūr river, he held the fort of Shamly;⁵ and still farther south, the fort of Bhavanikūṭal, at the confluence of the Bhavāni and the Kāveri.⁶ On the left side of the Kāveri, in the Salem districts, he held the town of Tāramangalam,⁷ about twenty-five miles west of Salem, and Omalūr, about eleven miles north-west of Salem, where he resided.⁸ He is called "the Polligar of Uttara [the northern] Pallapat in the Koimbatūr country" in one of the Mackenzie Manuscripts,⁹ with probable reference to his territory on the right bank of the Kāveri. His ancestors for ten generations are said to have held this estate before him:¹⁰ and he himself continued to hold it, as a feudatory of Madura, down to the time of its absorption into the rising kingdom of modern Mysore. In A.D. 1641 Kantirōva Narasa Rāja of Mysore,¹¹ descended the Kāveripuram pass, and took from him the country as far as Jamballi:¹² and in A.D. 1667 Dodda Dēva Rāja captured Omalūr, and annexed the remaining portion of Keṭṭi Mutaliyār's estate to the dominions of Mysore.¹³

At this point of the history this sketch may fitly end; for here we are already in contact with the period, which the following chapter begins to describe, when the history of Salem enters into that course which, in due time, runs into the modern history of India.

¹ *Ibid.*, p. 163, 167.

² Wilks calls him Geottee Moodelareo in Mys. i. 53, and Gaute Moodelair in i. 59; Buchanan (loc. cit. *infra*) calls him Gattimodaly; and Wilson Cat. Mack. MSS., ii. p. xl, has Ghatti Mudalari. The Tamil initial letter of his name represents K, Kē, G, Gb, and H of the other vernaculars and the Sanskrit.

³ Buch. Mys., ii. 185.

⁴ *Ibid.*, ii. 183, 185, 186, 190.

⁵ *Ibid.*, ii. 193.

⁶ *Ibid.*, ii. 200.

⁷ Tayl. Or. Hist. MSS., ii. 163, 167.

⁸ Buch. Mys., ii. 193.

⁹ Wilks. Cat. Mack. MSS., ii. p. xl.

¹⁰ Buch. Mys., ii. 236.

¹¹ Wilks' Mys., i. 53.

¹² The Shamly of Buchanan above, and the Shamapalli of the above list of Madura, frontier forts.

¹³ Wilks' Mys., i. 59.

CHAPTER II.

HISTORY—PART II.

THE present district of Salem has never, either wholly or in part, formed a political entity, and therefore claims no separate history of its own, depending for whatever of historical interest it possesses on the vicissitudes of the larger territorial divisions of which it has from time to time been a constituent part. It is not proposed, therefore, in the following sketch of the political history of the district in later years, to notice, further than can be avoided, transactions which did not directly concern the tract under consideration, saving when reference to the same may be necessary to the understanding of other incidents which may be material.

The confusion which Indian history presents during the five hundred years which preceded the present century is almost indescribable.

"The rude valour which had achieved a conquest was seldom combined with the sagacity requisite for interior rule, and the fabric of the conquered state, shaken by the rupture of its ancient bonds and the substitution of instruments clumsy, unapt, and misapplied, either fell to sudden ruin, or gradually dissolved. If the energies of a new dynasty sometimes preserved for a few generations the semblance of wisdom and vigour, still the imperceptible consequences of wealth, by relaxing its force, subverting the allegiance of its subjects and dependant chiefs, or inciting the cupidity of its neighbours, had already undermined the tottering state when it appeared to have attained its highest prosperity. Whether these revolutions were produced by a sudden or a gradual dissolution of the former government, the consequences were nearly the same. Almost every village became a separate state, in constant warfare with its neighbours; the braver and more fortunate chiefs enlarging their boundaries and augmenting their force, and thus proceeding by rapid strides to the erection of new dynasties.

"From causes resembling those which have been thus slightly sketched, there is perhaps not one ruling family in the south of India that has the least pretension to any considerable antiquity; but the difficulty of tracing their origin is not diminished in proportion to its distance from those remote periods which bury all the tribes of the earth in a common darkness. The insignificance of the rulers contributes in this case, equally with the lapse of time, to that obscurity which hangs over the early history of every people."

1323. After the capture in 1323 of Warangal, the capital of Telingana, a new seat of Hindu Government was established further south at Vijayanagar, founded 1336-1343.
1336-1343.
W. i. 14. -1344.

¹ Wilks' "Historical Sketches of the South of India, in an attempt to trace the History of Mysore." London: 1810, vol. i. pp. 2, 3.

The Vijayanagar kingdom gradually extended its conquests south and west while the power of the Bellal dynasty waned, and in 1387. 1387 grants by Vijayanagar are found south of the W. i. 15. Kāvēri. Subsequent to 1490 Narasinga Raja extended 1490. his conquests into Dravida, and in 1509-1515 Krishna 1509-1515. Rāya reduced the whole of Dravida to real or nominal W. i. 15. subjection.

The extension of the power of Vijayanagar was favoured by the dissensions amongst the Mahometans of the Deccan, the incursions of the Moguls occupying the attention of the Delhi Pathans, who were unable to watch over their rebellious subjects further south; when W. i. 16. however the sovereigns of Vijayanagar attempted to extend their power over the territory lying north, the Masalman kings of that tract confederated and defeated the army of Vijayanagar at Tellikota in 1564.

Previous to the battle of Tellikota the whole south of India was subject nominally to Vijayanagar; but after that event the W. i. 20. viceroy of that state at Seringapatam had but little control over the Wadaiyars and Paligars, who set up isolated quasi-independencies, occasionally venturing to assume the title of Raja. In fact the Empire of Vijayanagar was gradually tottering and, taking advantage of its weakness, the provinces and petty chiefs meditated independence.

At some time, most probably in the fifteenth century, two adventuring W. i. 32. Yadavas, named Vijaya and Krishna, who were about the court of the Vijayanagar Government, started for the south. The Hindu Turanian population appears to have been at this time split up into innumerable petty communities, each under a chief, or baron, called in some places Paligars and in others Wadaiyars. The town of Maisūr was not then built; but there was in the same spot the village of Poorughurry, and near it the fort and residence of the W. i. 34. Wadaiyar of Madana. Here the Yadavas stayed; and Vijaya, having wedded the Wadaiyar's daughter, from a Vaishnava became of the Linga; at sett and eventually himself Wadaiyar of the place, and ancestor of the Rajas of Maisūr.

Even before the battle of Tellikota the Hindu house of Maisūr had been rising into some amount of local prominence. With its early history this narrative is not concerned, as nothing of note for the W. i. 35. present purpose occurred until 1571, when Heere Cham 1571. Raj succeeded to the Government of Maisūr, and, as the power of Vijayanagar had no steady vigour in this part of its dominions since the battle of Tellikota, ventured to throw off the W. i. 35. yoke of the Seringapatam viceroy.

In 1576 Heere Cham Raj died and was succeeded by his cousin Betad W. i. 36. Wadaiyar, shortly after supplanted by his younger brother Raj Wadaiyar, who made some petty conquests, being alternately at peace and war with the Vijayanagar W. i. 37. Viceroy at Seringapatam. In 1610 this same Raj 1610. Wadaiyar obtained possession of Seringapatam from the last viceroy, Tirumal Raj, who retired to Talkad, and thenceforth Seringapatam became the seat of the W. i. 40. Government of Maisūr. 1642.

It was at some date¹ between 1564 and the reign of Raj Wadaiyar that the seat of the Vijayanagar Raj, then removed from Pennakonda to Chandragiri, was assailed by the Masalman king of Vijayapūr, on which occasion, for his brilliant defence of Pennakonda, a former seat of the Vijayanagar dynasty, Jagadēva (Jug Deo) Rāyar was rewarded at the hands of the sovereign Timma Raj—to whom

16. i. 62. he was related—by the gift of an extensive territory of which the Bārahmahal formed part, and it was during 16. 64. this period that the Durgams of the Bārahmahal were fortified.² This domain, with some fluctuations, remained in the family of Jagadēva Rāyar until finally absorbed in the growing 16. 62. fortunes of the Wadaiyars of Maisūr.

Raj Wadaiyar, dying in 1617, was succeeded by Cham Raj his grandson, 1617. who, like Raj Wadaiyar, made several conquests from the territories of the Jagadēva Rāyar family, and died in 16. 45. 1637; being followed by his uncle Immadeo Raj, a 16. 46. posthumous son of Raj Wadaiyar, who, after reigning—probably as a puppet king—for a year and a half, was 1637. poisoned by his Dalavoy Vikrama Raj. 16. 47.

To him succeeded in 1638 Kanti Rēva Narasa Raj, a son of Betad Cham 1638. Raj the ex-Raja, one of whose first acts was putting to death the usurping Dalavoy. It was fortunate for the 16. 48. house of Maisūr that this prince was a man of courage and ability; as his, and the subsequent reign, marked an important crisis in the life of the Maisūr kingdom. The year 1626 had 16. 49. witnessed the birth of Sevāji, the great Mahratta Chief, who, at the age of 17, entered on his career of robbery and conquest, foiling the arms of Vijayapūr and even 16. 71. defying the Mogul. Shahji, his father, was a general under the Masalman Government of Vijayapūr and second in command under the famous Bend 16. 74. Dhoola Khan during his invasion of the Karnatic in 1636. The ascendancy of the Vijayanagar Raj over the south 16. 60-72. was confined to the eastern part of the peninsula when Bend Dhoola Khan made an incursion into the Karnatic and Dravida. In an attempt against Seringapatam in 1638 he was foiled 16. 66. by the valour of Kanti Rēva Narasa Raj; but about 1640 he must have established the authority of Vijayapūr over the greater 16. 66. part of the Salem District, as is evidenced by the re-conquest of the same by Maisūr twelve years after in 1652. 16. 54. The services of Bend Dhoola Khan being required elsewhere, Shahji made Bangalore his head-quarters as provincial governor of all the conquests of Vijayapūr in the Karnatic and 1641. Dravida: his tenure however could not have been very secure, as Kanti Rēva Narasa Raj, who had already, in 16. 53. 1641, made some conquests from Getti³ Mudaliar of

¹ In 1575. Cf. Wilks, i. 61. margin.

² So Wilks puts it. Some at least date from this period, but to the greater number a later date must be assigned. Cf. note on the Bārahmahal, Chap. III.

³ Wilks writes "Gootee." The natives now call it Getti. If Gootee is correct, can this person have been the Paliger from whom the Gutrayan (Guti + rāyan) hill is named?

1652. Kāvēripuram, extended his aims to the Balāghāt¹ where, *Ib. 64.* in 1647 and 1652, he added Ratnagiri and Denkanikōta, both captured from Itibal Rao, to Maisūr territory. Encouraged by his success in this quarter the Bārahmahal next became the scene of his enterprise, and, becoming in his turn the attacker, he *Ib. 64.* annexed Virabadrudurgam, Pennāgaram and Dharmapuri, dependencies of Vijayapūr, to Maisūr. In 1654 he *Ib. 55.* took Hosūr (Ooscor) from Chandra Sankar.

Dud Deo Raj, his successor in 1659 on the throne of Maisūr, ruled for 13 years. It was during his reign that the house of Vijayanagar became extinct in the person of the last sovereign *Ib. 66-68.* Stri Ranga Rāyal. The latter, in 1646, had fled from the last seat of the dynasty at Chandragiri on the East Coast to take refuge with the Raja of Bednore, who, in the first year of Dud Deo Raj's reign, under pretence of asserting the right of this last representative of the Vijayanagar sovereigns, but in reality for purposes of self-aggrandisement, sent an army against Maisūr which was repulsed. The only portion of Salem which can certainly be named as having been annexed during the reign of Dud Deo Raj

1667. was Omalūr, captured in 1667 from Getti² Mudaliar of *Ib. 59.* Kāvēripuram mentioned above.

He was succeeded in 1672 by Chick Deo Raj who, taking advantage of the complicated strife in which the Mogul, Sevāji and the states of Vijayapūr and Golconda were involved, gradually *Ib. 87.* extended the conquests of Maisūr. *Ib. 92-211.*

Shahji, though nominally the humble servant of Vijayapūr, had meanwhile not been idle, the object steadily kept before him being that of supplanting the Masalman Government of Vijayapūr by an independent Mahratta Dynasty of which his Jaghīr at Poona should form the nucleus. His designs did not escape notice, especially when coupled with the rebellious conduct of Sevāji. As responsible for the latter, but more probably in consequence of the suspicions

Ib. 74. entertained regarding his own loyalty, Shahji was recalled and his execution actually ordered, a fate from which he *Ib. 76.* was only saved by the intercession of his old friend Rind

Dhoola Khan, to whose influence probably he was indebted for his subsequent reinstatement in his former Government at Bangalore. The latter, during his absence, had been administered by his sons

Ib. 78. Sambaji and Eccoji, assisted by the minister Ishwant *1674. Ib. 93.* Rao. This was about the year 1674; and, in the preceding year, the lieutenants of Vijayapūr cannot have been idle, for, on the

1675. *Ib. 78.* death of Shahji, late in 1674, Eccoji is found established at Tanjore and much of the Balāghāt and Bārahmahal must have been re-conquered by them, seeing that, in *Ib. 78.*

¹ This word is never now-a-days correctly written or pronounced. The vowels are all long. The derivation is from the Persian preposition *ʾAlā* (bālā), above, and *ghāt*, a line of hills or pass between them. Hosūr being above the second line of ghāts, is therefore named the Balāghāt taluk.

² Gautajin Wilks, i. 59, and Gootee, *ib.* p. 53. Vide supra sub voc. and also in writing of Attūr fort, q. v.

Ib. 54, 59, 93, 211. 1688 and 1689, Maisūr had to recover the conquests which she had made in Salem and the Bārahmahal in 1652 and 1667. The death of Shahji was the signal to Sevāji for still greater efforts, to which he was stimulated by Raganath Narrain, a deserter from Eccoji. Himself nominally a subject of

Ib. 79. Vijayapūr, Sevāji, who contemplated the ultimate reduction of Dravida, plotted in 1677 with the king of Golconda for the subversion of the dynasty of Vijayapūr, and, aided by his troops, levied a contribution from Karnūl, took Gingee and Vellore and attacked Eccoji, with whom the Raja of Maisūr and the Naik of Madura were now allied; but was called off by other events, and, in 1678, peace ensued between the brothers. In 1687 Eccoji, who found Tanjore more convenient as a seat of Government than Bangalore, agreed to sell the latter place to Chick Deo Raj for three lakhs of rupees; the purchase however was approved neither by the Mogul, who in 1686-88 finally reduced the Masalman states of Vijayapūr and Golconda, nor by Sevāji's Mahratta representative at Gingee; consequently detachments in the interests of both powers were sent to Bangalore to anticipate the occupation of the same by the troops of Maisūr. Kasim Khan, the general of Aurangzebe, was the first; but his tenure lasted four days only, as, for political reasons, it appeared to him more desirable to accept the price which Chick Deo Raj was still ready to pay. He accordingly represented the transaction to Aurangzebe in a light which showed the Maisūr state as a valuable counterpoise to the other principalities with which the Mogul was then at war.

Ib. 91. This was no doubt a mere temporary union of interests on both sides, for the Emperor still meditated the conquest of Maisūr, while Chick Deo Raj, though careful to propitiate Aurangzebe, with whom he figures later on as an ally, allowed no opportunity to pass by which he could increase his territorial possessions, taking care at the same time not to attract the attention of the greater powers.

Ib. 92. So we find that in 1688-89 he conquered the greater part of the Bārahmahal, including Dharmapuri and Kāvēripatnam, pushing his conquests also into the Talāghāt, as, at the same time, he annexed Omalūr, Paramathī, and Attūr-Anantagiri. The uncertainty and chaos of the time is well instanced here, as Omalūr and Dharmapuri had already been annexed by Dud Deo Raj and Kanti Rōva Narasī Raj respectively, in 1652 and 1667. These districts must have been overrun in the interim either by the lieutenants of Vijayapūr or by the Naik of Madura in that conflict with the Naik of Tanjore which led to the invasion and annexation of the latter state by Eccoji. Possibly local Puligars and Wadaiyars had taken advantage of the prevailing confusion—Dharmapuri, Omalūr, Paramathī, and Attūr-Anantagiri being entered as captured from the "people of Aura," whoever they may be—and it is probable that the Getti Mudaliar of Kāvēripuram, from whom Omalūr was taken by Dud Deo Raj, was identical with the Getti Mudali mentioned elsewhere as¹ having built the fort of

Ib. 93. *Ib. 93.* *Ib. 92.* *1688-89.*

Ib. 93, 212.

¹ Vide sub Attūr.

1704. *Ib.* 211. **Attūr.** The reign of Chick Deo Raj lasted to up 1704, when, with the exception of a small mountainous strip to the east, the whole of what is now known as Salem belonged to Maisūr.

To him succeeded, in 1704, his son Kanti Rēva Raj, whose reign contains nothing of importance, and who, in 1714, was succeeded by Dud Kishen Raj. The conquests of Chick Deo Raj had not been very stable, as, at the succession of Dud Kishen Raj, all Karnatic Haidarābad Bālāghāt, enlarged by other conquests to the south, was directly or indirectly in the power of the Pathan Chief of Kurpa and of Siddoji Gorepora, the Mahratta Chief of Gooty.¹

The next Raja, Cham Raj, in whose reign there is nothing particular to note, gave way in 1734 to Chick Kishen Raj. It was not long before this that the Dalavoy had succeeded in reducing the Raja to the rank of a mere pageant. Similarly, in the second line of descent from Sevāji, the Mahratta Government had been usurped by the Peshwa, a step followed not long afterwards by the substitution of a cabal for the Peshwa, to which, though not quite in chronological order, may be added the usurpation in the next generation by Scindia of the power of the Mogul, who was made, by a singular contrivance of circuitous mockery, to appoint the Mahratta Peshwa his absolute vicegerent, the Peshwa in his turn appointing Scindia his deputy. The usurping minister of an imprisoned sovereign appointed as absolute vicegerent by an imprisoned emperor, while the conqueror of the latter is named the deputy of the former, whose authority he was at the moment scheming to absorb!

To resume, the soubedāri of the Deccan, on the death of Nizam-ul-Mulk in 1748, became in turn a bone of contention between his six² sons and one of his grandsons; while the nawābship of the Karnatic was held in rapid succession by numerous pretenders supported by the French and English, or by the Soubedar *pro tem.*, M. Duplex himself holding the post at one time. The Pathan Nawābs of Karnūl and Kurpa

¹ In Colonel Miles' History of Hyder Naik it is stated (p. 271) that "in the reigns of the Kotah Shahi dynasty, the Barh Mahl district was included in the Souba of Arkat, which Souba was depending on Hyderabad; but when Bahādur Shah, the son of Alimgoor, gave Kirpa [Cuddapah] in Jageer to Abdunubhee Khan, the nephew of Azum Khan, the Barh Mahl was added to that district." Bahādur Shah reigned from A.D. 1707 to 1713 (Prinsep's Tables, 316); but at what date the Bārahmahal was taken by Cuddapah from Maisūr does not appear: it was probably in 1724. (See Wilks, i. 228.) It was held by the Nawāb of Cuddapah down to 1753, when he was obliged to cede it, with other parts of his Territory, to the Mahrattas (cf. Wilks, i. 412), from whom it was taken by Haidar and reannexed to Maisūr in the following year.

² Orme, i. 122, says he "left five sons," and p. 123, "the 2nd son Nazir-jing," and "the three other sons" (*ib.*), but does not name them; p. 165 he says "there were in the camp three brothers of Nazir-jing." "the eldest of the brothers, by name Salabat-jing," and again, vol. ii. 263, "Nizamally and Bassalat Jung were the two brothers of Salabat-jing who, as well as himself, were prisoners." Orme does not appear to have known of a sixth. Wilks names six legitimate sons (i. 258), whose names were Ghazi-u-din, Nazir Jung, Salabat Jung, Nizam Ali Khan, Basalat Jung and Mogul Ali Khan; the grandson, by a daughter, was Mohy-u-din Khan, afterwards Mozuffar Jung.

Orme, i. 166. aimed at independence; Morari Rao from Gooty was ubiquitous with his Mahratta marauders in his train; Orme, i. 129. the Raja of Tanjore had but a precarious tenure of his kingdom; the Naiks and Paligars in Madura and elsewhere to the south were in revolt; the power of the Mogul was indefinitely frittered away in half a dozen independent soubas; Adoni, Nundial or Ghāzipur, Savanūr, Bankipūr and other places were centres of rebellion. In such a scene of confusion and bloodshed—when even the Company's servants were hampered and degraded by the treacherous policy of their *protégé*, Mahomad Ali, a deputy's deputy, whose father had gained the masnud by a murder—it was not strange that the Dalavoy himself should succumb; that a mind bold, brave, far-seeing, ambitious and unscrupulous, should conceive the idea of converting this chaos into order and becoming the ruling spirit of the south. Such a man was found in Haidar, who in 1749 distinguished himself for the first time at the siege of Deonhalli. Gradually rising in influence and wealth, he became, from servant, the superseder in authority of the usurping Dalavoy and Serv. Adikar, Deo Raj and Nanjiraj. It would be foreign to the present purpose to consider the general operations of this reign as connected with the rivalry of the French and English and their respective Nawābs. The forces of Maisūr found ample employment in Coimbatūr, Madura, Trichinopoly, Arcot, and Maisūr proper; but those transactions only which concerned Salem will be referred to.

In May 1760 we find M. Lally forming an alliance with Haidar. It has already been recorded how the Bārahmahal had been wrested from Maisūr by the Pathan Nawāb of Kurpa. The latter chief had been much despoiled by the Mahrattas, and Haidar now profited by the opportunity afforded by Kurpa's weakness to reannex the Bārahmahal by means of a force under his brother Mukdum Ali, after which a formal offensive treaty was made with the French, the fort of Tiāgardurgam being ceded to Maisūr as an intermediate base of operations. The Bārahmahal then formed the rallying point for the detachments from Maisūr *en route* for the war in Arcot. About this time occurred the episode² of Kande Rao's treachery and punishment, a most important crisis in the career of Haidar. Mukdum Ali, marching hastily through the Bārahmahal to the assistance of the latter, was opposed by the Mahratta auxiliaries of the Maisūr Raja and Kande Rao, who beset him in his advance both in front from the Maisūr side, and also in flank by the Kadapanattam pass, which leads between the hill fort of Mullikarjunadurgam and Vaniambādi to Vellore. Mukdum Ali took post at Anchittydurgam not far from Kalamangalam in the

¹ Miles' Histories of Hyder and Tipu were published in 1842 and 1864 respectively, and belong to the "Oriental Translation Fund" series.

² Colonel Miles, p. 71, places this event in Hij. 1170 or A.D. 1756.

Balāghāt, where the brave Fazl-ulla Khan attempted in vain to relieve him.

Miles, 87. Negotiations between Haidar and Visaji Pandit ensued, involving another vicissitude in the varying fortunes of the Barāhmahal, which Haidar agreed to cede to the Mahrattas, together with a money payment, as the price of their defection from the cause of the Maisūr Raja, which they had so recently espoused. To promise with Haidar was one thing, but to fulfil was quite another; so it is no subject for wonder that this compact, as regards the cession of territory, became a nullity.

Miles, 88. No sooner was Visaji Pandit's back turned than Haidar began to procrastinate, and, on hearing of the battle of Panipat, flatly refused to carry out this part of the agreement. Haidar on the one hand thus got rid of one enemy, while Kande Rao temporarily neutralized the English, holding for the Raja the whole of the country from the Barāhmahal to Dindigul, the latter fortress alone excepted. When however Haidar effected a junction with Mukdum Ali, his forces were so superior that he ventured to make a considerable detachment into Salem and Coimbatūr; and, being reinforced by a strong party of European French troops,¹ gave battle in Maisūr territory to Kande Rao, but was defeated.² What he failed to accomplish by force of arms in the field he determined to effect by intrigue, and, calling to his aid the retired Serv. Adikar Nanjiraj,³ Haidar got the better of Kande Rao and the Raja, who surrendered every thing into his hands, when Nanjiraj, being no longer useful, was relegated to obscurity.⁴ The events of the years 1761-66 are irrelevant to the present purpose, such incidents of importance to the Maisūr state as occurred during that period concerning chiefly its western and northern portions. A temporary lull in the strife between the two great European nations had been brought about by the treaty of Paris in 1763. Nizam Ali had usurped the soubedāri of the Deccan, and the recognition of his claims by the French had rendered Mahomad Ali's nawābship more secure. 1766 saw the death of the Raja Chick Kishen Raj, to whose nominal honours his son Nanjiraj Wadaiyar succeeded; and Haidar, having reduced Malabar to subjection,⁵ was free to grapple with the triple alliance between the English, Nizam Ali, and the Mahrattas, which led to the war

¹ According to Miles (p. 85), these French troops were already with Mukdum Sahib before he was attacked at Anchiti Durga.

² Miles, pp. 92, 93, gives the victory to Haidar.

³ According to Miles, p. 83, Haidar's reconciliation with Nandiraj took place before the arrival of Mukdum Sahib at Anchiti-durga. This fort belonged to Nandiraj, and Mukdum Sahib was permitted to take shelter under the protection of its guns by the Kibdar, who held it for Nandiraj in consequence of written instructions to that effect sent to him by the latter.

⁴ According to Miles, pp. 97, 102, the friendship between Haidar and Nandiraj continued unbroken.

⁵ Miles, p. 143, places this event in H. 1175 or A.D. 1761.

1767-69. of 1767-69, a war on which the English entered, against Haidar, not only without any colour of provocation, but in blindness as to their own interests, which at the time were directly involved in the maintenance of Haidar's independence; war in which they bore all the blows and derived little or no advantage, while their dignity was lowered by being in turn the tool of Mahomad Ali and Nizam Ali, the latter of whom shamelessly deserted them. This war was no part of the policy of Lord Clive, to which in fact it was directly opposed, and arose out of the treaty negotiated in November 1766 at Haidarabad by General Calliaud with Nizam Ali. The coalition was too powerful for Haidar to cope with it in the field, had he even been able to attack/his assailants in detail, and his address in intrigue alone saved him. The Mahrattas under Madoo Rao, taking the initiative,¹ were bought off in the midst of their usual career of plunder;² nor was Nizam Ali proof against the arguments of Haidar, with whom, at the very time when the English were in his camp as allies, he formed a treaty against the English, which resulted in both armies being employed in a campaign against the latter. During the coquetry between Haidar and Nizam Ali which formed the prelude to open hostilities, the troops of Colonel Smith, which were with Nizam Ali, were kept idle; but meanwhile another English corps was operating from Madras in reducing the Barāhmahal, with intent to extend their frontier to the second range of hills. Vaniambādi, Tirupatūr, Kāvēripattanam, and other mere village bulwarks surrendered without opposition; but the places of real strength, erected on the summits of naked, lofty and insulated mountains, were protected by garrisons. An attempt was made to carry Krishnagiri, one of these, the reputed capital of the district, by surprise on the night of the 3rd of June. The walled town at the foot of the rock having for some time been occupied without any serious opposition, a petard was prepared for forcing the gate of the upper fort; but the men who carried it, as well as the forlorn hope which preceded them, being all killed by showers of detached rocks precipitated from the summit, the party retired with the loss of nearly the whole grenadier company which led the enterprise; and on its failure, the siege was converted into a blockade, which neutralized what little of plan had been preconcerted, by locking up the great body of the troops in this ineffectual operation. On the return of Colonel Smith from Bangalore, he was directed to assume the general command of the British troops on the frontier. Nizam Ali was already on the crest of the hills which overlook the Barāhmahal, and Haidar in full equipment followed at the interval of two days march. "Although," says Colonel Smith, "it was as plain as noon-day to every person (except the Council) that they were preparing to enter the Karnatic jointly, no measures

¹ Miles places this invasion in H. 1176 or A.D. 1762; p. 148.

² During this invasion a detachment of the Mahratta cavalry ravaged the Barāhmahal, where they were met and defeated by Haidar's troops. (Miles, 158.) A second invasion occurred two years later, which Haidar again terminated by a money payment. (Miles, 167, 176.)

were taken to establish magazines of provisions in proper places, nor any steps to supply our army in time of need," and even three days before the

ib. ii. 23. invasion this officer was positively directed to pass to the enemy a supply of provisions, of which his own troops were in the greatest want.

There being no longer any doubt as to the intentions of Haidar and Nizam Ali, Colonel Smith, who, unlike his Government, had not been a dupe to the wiles of the latter, awaited their united forces, expecting an attack on his front, where he was prepared to defend the pass, which he believed to be

ib. ii. 24. the only mode of access from the Balāghāt; but found that while the enemy amused him by demonstrations in the quarter expected, they had outflanked him by another route, and the war was now fairly commenced in the Bārahmahal.¹ "The first act of hostility, on

the 25th August 1767, was an actual surprise. The cattle

1767. of the army, grazing with their accustomed confidence of security, were driven off; the cavalry hastily moved out for their recovery, and found themselves unexpectedly assailed by very superior numbers under Mukdum Ali, the brother-in-law of Haidar, who charged them into the very lines of the encampment after destroying about one-third of their number, and carried off the greater part of the cattle, a misfortune which still further crippled the already inefficient equipments of the English army and

¹ The native account of this campaign differs in many respects from Wilks' narrative. According to Miles, p. 249, the united army passed through the Bārahmahal district and encamped on the western side of the pass of Changama. On the eastern side of the pass a detachment of British troop was posted to defend the pass. The allies sent a force through the pass to attack this British force, which retired before their superior numbers towards Trinomali. When they had proceeded seven miles on their route they were attacked by the Māisūr troops, whom they succeeded in beating off, and they arrived in safety at Trinomali. This authority places these events three years later than Wilks.

Upon this event followed the British victory at Changama (Wilks, ii. 25 sq.; Miles, 253); after which Haidar retreated to Singārapetta (p. 254) and the Nizam to Kāvēripatnam (p. 255), where Haidar shortly afterwards joined him (p. 256), having in the meanwhile been joined by Tipu with the Māisūr cavalry on their return from their raid through Arcot and the neighbourhood of Madras (p. 254; Wilks, ii. 41).

The Nizam now marched with a portion of his army to Moskota (p. 256), and Haidar, with the Māisūr army and the cavalry of the Nizam's force, crossed the pass of "Tubul Pulli" and besieged Ambūr (p. 257; Wilks, ii. 43), and, when a British force approached to relieve this fort, Haidar retreated to "Vudcheri and Bapun Pilli" (p. 257). Here the allies made a stand to await the attack of the British troops pursuing them from Ambūr (p. 257). The Nizam's force was easily defeated, and retired in haste to Vāniambadi (p. 259); but Tipu, who commanded the right wing of the Māisūr army, repelled the British left, and captured their baggage (p. 260); while Haidar, who commanded the centre, pursued the British right, which had followed the retreating troops of the Nizam, and defeated it (p. 260). The whole of the Māisūr army then fell back on Vāniambadi, leaving the field of battle in possession of the English (p. 260).

After resting four days the British force advanced to Vāniambadi (p. 261), and Haidar retreated to Tirupatur, and the next day to Kāvēripatnam, where he fortified his camp (p. 261). The Nizam's force encamped in his rear, and, on the approach of the English, the general commanding for the Nizam entered into separate negotiations with them, and, after allowing the English to pass by his positions to make a right attack upon the Māisūr encampment (p. 263), he proceeded to Moskota and persuaded the Nizam to make peace with the English (p. 264).

The British force now returned by the Ambūr route, to Haidar's great astonishment (p. 264), and he soon afterwards learnt that the Nizam had made a separate peace with the English (p. 265) and had returned to Haidarabad (p. 266).

prevented it from moving until the 28th, during which interval Haidar had besieged Kāvēripatnam; and the imprudence of occupying

ib. ii. 24, 25. such places was evinced by its falling on the second day.

A corps of British troops from Trichinopoly under Colonel Wood had been ordered to join Colonel Smith; and the fortified pagoda of Trinomalai, to the eastward of the first range of hills, had been indicated as the point at which he would receive his further orders. Although Haidar was aware of the approach of this corps, and that it was still at the distance of ten days march at the least, he committed the apparent error of not placing himself between Colonel Smith and the pass of Singārapetta, by which the junction must necessarily be formed. From assuming a strong position near Kāvēripatnam, he seems to have expected that his adversary would be guilty of the rashness of attacking him before he had received his reinforcements; and the necessity of Colonel Smith's situation, from the causes which have been stated, prevented him from reaching Singārapetta before the 30th. In the preliminary communications of the allies, Haidar had been lavish of his eastern assurances of cutting the English army to pieces wherever he should come up with it: a shyness so little corresponding to these boasts, might in part be ascribed to the distinction between promise and performance so well understood among uncivilized nations, and also in some degree to the actual contact which had just been experienced at Kāvēripatnam, where, previously to capitulation, three companies of English sepoys, under Captain McKain, had twice repelled the assault of the flower of his army, and a position which should place his rear on an impenetrable wood, with only one narrow road through it, was suited to troops not only confident but determined not to be forced. Nizam Ali, indignant at the timid policy which seemed to have purposely allowed the enemy to secure his retreat, indirectly upbraided Haidar with the too delicate use of his powers of command, and intimated that if he chose to persevere in the plan, which in explanation he proposed to recommend, of acting on the enemy's supplies, he (Nizam Ali) had in his own power a more summary mode of adjusting his differences with the English. Whether the omission of Haidar in suffering the unmolested movement of Colonel Smith had been of error or design, he now found himself under the necessity of yielding to the impatience of his ally or risking the benefit of his co-operation. From that moment, therefore, he began to press upon the rear of the English army in its movement to form a junction with Colonel Wood. The first march from Singārapetta was through a road of ordinary breadth, formed by felling the trees of a forest considered as impenetrable in most places to ordinary travellers, and consequently favourable to a small body retiring in a single column. The surprise of the English troops was, however, excited by the sudden appearance of bodies of predatory horse on the flanks, scrambling for booty among rocks and thickets accessible with difficulty by regular infantry. On the two following tardy anarchies, nearly due east to Changama, as the country became more open and practicable, the English column of march was every-

ib. ii. 25, 26, 27. where surrounded and impeded by horse, and during the whole night the encampment was harassed by flights of rockets."

¹ Colonel Smith arrived at Trinomalai on the 4th September 1767, 27 hours after the action at Changama. (Mill, iii. 473.)

The upshot of the campaign in South Arcot and elsewhere in the so-called Karnatic, with which this narrative is not concerned, was the flight of Nizam Ali after the battle of Trinomalai¹ through the Singurapetta pass on the 26th September 1767. He left his commander-in-chief, Rucan-ud-Doula, to direct the immediate retreat of the remainder of his forces, and Haidar shifted for himself by following the example of his ally, after sustaining a crushing defeat from Colonel Smith. Tipu Sultan, hearing of this adverse crisis, withdrew his forces from the vicinity of Madras to come to the assistance of his father, and Colonel Smith went into winter quarters. The confederates meanwhile halted for a month in mutual dudgeon at Kalaimattur² in the Barahmahal, and at length Haidar, taking courage at the departure of Colonel Smith, mustered his forces to the attack of the remaining posts occupied by the English in his vicinity. Tirupatūr was recaptured on the 5th and Vaniambadi on the 7th November 1767, Captain Robinson capitulating at the latter place under parole not to serve again during the war, a promise which (apparently by the orders of Government) was subsequently broken and entailed a not unmerited punishment. Haidar next marched on Ambūr, the key of the Vellore Valley, the brilliant defence of which place by Captain Calvert is outside the present narrative. The activity of Haidar at a season when it was usual for armies to go into cantonment for the monsoon, rendered it necessary for the English to take steps to counteract him, and accordingly "the division of Colonel Wood, which had been cantoned at Trichinopoly, was ordered to move to Trinomalai, and from thence, as might be concerted, to enter the Barahmahal by the pass of Singurapetta. The remainder of the army, under Colonel Smith, assembled at Vellore, and being under some uneasiness for the fate of Ambūr, he hastened to its relief, and had the satisfaction of perceiving the British colours still flying on the morning of the 7th of December. After making the requisite arrangements in the course of that day, Colonel Smith moved in pursuit of Haidar, whom he found on the morning of the 8th, after a short march, at Vaniambadi, with his right covered by the fort, and his front and left by some bad redoubts lately constructed, and by a fordable river. Nizam Ali had moved farther south into the Barahmahal, and Haidar's position, although by no means judiciously chosen, seemed to Colonel Smith to indicate a determination to risk a battle; but his real intention was no other than to gain time by this demonstration for the retreat of Nizam Ali, and for the uninterrupted move-

¹ This name is neither fish, flesh, nor good red herring; it is however better than *Trinomalee*, which extinguishes the last item of etymology. The natives commonly say Tirumamalai, but purists say Tiruvanamalai. As however the place is not in Salem, the spelling in the text is a reasonable compromise.

² This place has not been identified. There is a Mattur in the Barahmahal 14 miles south-west of Tirupatūr on the trunk road, and another known as Irumattur one march farther south: possibly the latter is the place intended. It is known that Haidar in one of his marches crossed the river at Kammenellur, which is only 4 miles from Irumattur; but Mattur would be more easily reached from Singurapetta, and as a position to block an advance to Krishnagiri or Kaveripatnam would be preferable to Irumattur.

ment of his own heavy artillery, which had been sent off on the first appearance of the English army. The degree of resistance was proportioned to this intention; Vaniambadi was abandoned; but he had the mortification, during this affair, to see his European troop of horse under M. Aumont move off in a body and join the English army, in consequence of a concerted arrangement of which he had no previous suspicion; in other respects the loss on either side was unimportant.¹ To overtake the superior equipments of Haidar, although attempted, was a visionary pursuit; and on the succeeding day the miserable commissariat of the British army compelled it to halt to receive provisions from Ambūr. Colonel Tod with the advance followed the enemy as far as Tirupatūr, which he also found abandoned; but contrary to Haidar's usual precaution, containing a supply of grain and some cattle. The confederated armies retired towards Kaveripatnam, and Colonel Smith was again reinforced by Colonel Wood without an attempt on the part of the enemy to interrupt the junction. On Haidar's capture of Kaveripatnam in 1767, he had thrown up some field works to strengthen the position under its cover, which Colonel Smith had then declined to attack; and on finding that he should be obliged to raise the siege of Ambūr, he had sent one of his French officers to extend and improve the same camp, as a safe position for the confederate armies. Immediately after the junction of Colonel Wood, Colonel Smith approached to examine it. A river, the Ponar, "passed the northern face of the town and petta of Kaveripatnam; this face had been strengthened by a good covered way and by two large detached redoubts, which enfiladed the north, the east, and the west faces; five similar redoubts, completing the circuit to the south, covered the whole position; and two more distant rocky mounds to the south and south-east were crowned with redoubts, which commanded the most accessible approach: good lines of retreat in the event of discomfiture were provided by crossing the river towards Krishnagiri, or moving along its right bank to Ruyakōta. On the first glance of this much-improved position, Colonel Smith determined to decline the risk of an attack; and the measures of the enemy relieved him soon afterwards from the necessity

¹ The native account of these events differs from Wilks' narrative. (See Milrs, 266 sq.) About two months after the defection of the Nizam, General Smith advanced with a larger force from Ambūr (p. 266) to Vaniambadi and took it. He also took the forts of Tripatūr, Gangangarh (Gaganagarh), Natkul (Thatakāl?), Jagdeo (Jagadevagarh), Dharmapuri and Krishnagiri (p. 270). Haidar meanwhile had sent off his baggage and heavy artillery towards Anaikal and Makridrug; but he retained with him his light troops in order to harass the English army, which he did not dare to meet in the field (p. 266). At this time he intercepted a convoy of stores which had been sent to the English army through the Chengamma pass, captured the stores, and destroyed the escort. (1b.) The English were at this time encamped at Tirupatūr (p. 267), where they had, in consequence of this loss, to await the arrival of another supply of stores from Madras. (1b.) These events occupied about six weeks (p. 270), during which period Tipu was sent to retake Mangalore, which had been captured by the Bombay British Army (p. 267; see Wilks, ii. 57). By this time the whole of the Barahmahal was in the hands of the English; and a Dewan was appointed to manage it for the Nawab Mahomed Ali Khan (p. 270), but he was recalled soon afterwards (p. 272). After this settlement of the Barahmahal, which this authority places in A.D. 1771, "General Smith marched through the 'Kunuk Goondah' pass, and took the forts of Hassūr (Osoor), Masli (Masli), Muwakal (Malubagal), Kolar and Huskōta."

Wilks, ii. 41, 49, 50. of so desperate an attempt. Sources of separate but serious alarm," viz., disturbances on the West Coast, and demonstrations by the Bombay Government of an attack on Maisūr from that quarter and by Bengal troops from the Northern Circars against

Ib. ii. 50. Haidarābād, "distracted the attention of both the confederates. Haidar sent off his heavy guns and baggage to the westward on the 14th, accompanied by his son Tipu and Ghazi Khan with a light corps; and on the 18th, Nizam Ali, with the main body of his army, reascended the ghāts and moved to the northward: a light field train, with nearly the whole efficient force of his army, remained with Haidar; and political considerations still detained with him a corps of some thousand horse, in the service of Nizam Ali, as an escort to the brother of his prime minister."

"While the heavy equipments of Haidar were moving to a far distant object, it was necessary that his intentions should be veiled to the last moment by the appearance of increased activity. From the strong position near Kāvēripatnam, detachments of his light troops were actively employed on the line of Colonel Smith's supplies, and imposed on that officer the necessity of moving strong detachments of his army for the protection of the most unimportant convoys. Against one of these, expected by the pass of Singārappettā under Captain¹ Fitzgerald, Haidar thought proper to move in person with a force of 4,000 select horse, 2,000 infantry, and five guns, in the confidence of an easy conquest over a single battalion, without guns, embarrassed by a cumbersome convoy; but Colonel Smith, who had penetrated his intentions, detached a reinforcement of two companies of grenadiers, a battalion of sepoys, and two field pieces. Haidar not being aware of this junction, attacked the convoy with great vivacity and imprudence; charging in person at the head of his cavalry, he had his horse shot under him and received a bullet through his turban; the loss of several of his best officers evinced an effort of more than usual determination, and their repulse reflected corresponding credit on Major Fitzgerald, who commanded the united detachments. The hope which Haidar had cherished of terminating the campaign with a creditable exploit was thus converted into the mortification of returning in disappointment to his head-quarters. The heavy equipments which had preceded him having now made sufficient progress, he left a strong and efficient division, chiefly cavalry, under Mukdum Sahib, to watch the operations of the English army and disturb its supplies; and ascended the ghāts with his remaining force, about the close of the year, at the exact time that the English army, after having been two days

Ib. 51, 52. without rations, was obliged once more to move in an opposite direction in quest of food." Nizam Ali now made overtures for peace with the British, whom he had so wantonly attacked, and a treaty was made in February 1768, by which he abandoned Haidar and his territories to the English and Mahomed Ali, if they could get them, the Mahrattas being propitiated in anticipation by the stipulation that *chaut* should be paid them from the contemplated conquest.

¹ Sic in original. Wilks in the same paragraph gives this officer the rank of Major.

On the 20th January 1768¹ Haidar marched to the West Coast, where he reduced Mangalore in May, and, returning to Maisūr, despatched his army to Bangalore, while he departed in person to Bednere, and, after regulating his affairs both there and elsewhere, was at leisure to operate again in August, from Bangalore, against the English, who had omitted to take advantage of the open field for their arms afforded by the absence of Haidar during the preceding seven months. The cause of this culpable mistake was the divided councils of the Commander-in-Chief and of the Government of Madras. Colonel Smith was unwilling to advance into the Maisūr plateau owing to the difficulty of obtaining supplies, his proposed line of action being to occupy the whole of the country contiguous to the frontier, from Vaniambadi through the Barahmahal and Talaghat down to Dindigul and Palghat, in view to establishing depôts as a base for subsequent operations. The Government at Madras, on the other hand, not realizing the obstacles entailed by an advance in the enemy's country, were for marching directly on Bangalore and Seringapatam. The upshot was a plan of operations devised to carry out both projects with a force inadequate to the full execution of either.

¹ The conquest of Koorg, or Coorg, is placed by Miles (178) in H. 1181 (A.D. 1757), and it was immediately followed by the invasion of the Western Coast.

During the next year, A.D. 1768, this authority places Trimuk Rao's (Trimbur Row of Wilks) invasion of Maisūr, culminating in the battle of Charkoli (Charkooli or Cherkool), which event Wilks (ii. 141 sq.) places in A.D. 1771.

The Mahrattas returned home after their victory, on that battle-field through the south-eastern passes of Maisūr, and, after ravaging the country around Coimbatūr, Palghat and Dindigul, they marched homewards with their plunder through the pass of Thorur and by the towns of Vaniambadi and Tirupatūr. Haidar had despatched Tipu with a small force of cavalry and Mahomed Ali with a detachment of infantry into the Barahmahal in anticipation of this movement; and he had advanced through the pass of Rayakōta and was encamped with his cavalry in the plain of Kāvēripatnam and his infantry at Krishnagiri when he heard of the advance of the Mahrattas. Mahomed Ali followed them by the "Gangindī Pālā" (Kangundi?) round through the pass of "Tubul Pulli"; and, having outmarched them, encamped near the foot of the pass to await their arrival. The next day the advance of the Mahrattas arrived at the pass, and were attacked in front and rear by the Maisūr ambush parties, and a panic having seized them, they fled into the hills to hide themselves, leaving the rich baggage which they were escorting and large droves of cattle and horses in the hands of Haidar's people, which Mahomed Ali at once despatched to Krishnagiri, he himself following after beating off the Mahratta cavalry in a subsequent skirmish. "When Trimuk (Miles, 214) heard of the plunder and dispersion of his detachment, he discovered that the ghāt of Kurunpatt was a dependency of the Nāzim of Arkat, and was therefore surprised how it was possible the troops of the enemy should penetrate there; he consequently inferred that some collusion had subsisted between the two chiefs, that is, Muhammad Ali Khan and the Nawab, and further inferred that in the event (which he hoped God would forbid) those chiefs should unite together to attack the Mahrattas, and shut the passes of the mountains on their route, the honour of the Paishwa might be thereby endangered, and many lives uselessly lost. Trimuk, therefore, made forced marches from that quarter, and having crossed the ghāt of Tuppoor (Thorur), encamped near the town of Ootangiri (Uttankarai). The commandant, Muhammad Ali, immediately apprised Tipu of the arrival of the Mahrattas, and advised him to march to Puttūr (Kāvēripatnam?). As soon, however, as that fortunate

The English, however, were not wholly idle from January to August 1768. "The army was formed into two divisions, one of which, under Colonel Smith, after appearing once more before Kāvēripattanam, which was evacuated in the night, moved northward as far as Palikonda in the vale of Vellore for the purpose of approaching the army of Nizam Ali, then at Punganūr, and quickening the negotiation of his minister at Madras. This object being effected, he returned to waste, in the blockade of Krishnagiri, which surrendered on the 2nd of May, the precious time which ought to have been employed in higher achievements. A second division of the army was in the meanwhile employed under Colonel Wood, who, after the capture of the remaining fortified places in the southern extremity of the Bārahmahal, proceeded with rapid success to reduce those which are situated in the districts of Salem, Erode, Coimbatūr, and Dindigul. Haidar had the mortification to hear of the successive fall of every fortified place in those provinces, Sankagiridurgam alone excepted, the only place of strength which, by a strange omission, is never once mentioned in Colonel Wood's correspondence. Tenkaraikōttai, the first place attacked, made a respectable defence, being garrisoned by regular sopoys, but capitulated when it was perceived that an assault was prepared. Dharmapuri, a place of no strength, was commanded by a brave officer with troops unworthy to serve under him; the place was carried by assault, and the necessary consequences of such an operation bore a terror before the arms of Colonel Wood, which was more effectual than his cannon. Erode alone, a place of fiscal importance but no military strength, afterwards stood the assault, being encouraged by the presence of a body of horse, who promised to charge the flank and rear of the assailants in the act of storming, and did make a feeble effort for that purpose. All the other places, and among them Nāmakkal and Dindigul, erected on

hills of granite, surrendered without the semblance of a defence which could be reported to their master with even negative approbation."

and brave young man knew of the rapid march of the Mahrattas, he sent the whole of his baggage and followers, that is, his tents, stores, colours, &c., to Puttun; and he himself, with a body of three or four thousand horse, marched towards Trimuk's force. It happened on that day that the Mahratta light troops had foraged towards Dharmapuri (Dharmapuri), and thrown that neighbourhood into great disorder, and had plundered several towns, and were then busy in collecting wood and forage. Tipu soon joined them, and affected to collect wood and grass as they did; but he was looking out for an opportunity, which at last he found. Having made up their loads, the Mahrattas put them on their horses, camels and elephants, and, without any precaution as to friend or foe, marched towards their own encampment. Tipu, the moment he was able, threw upon the ground the loads from his horses, and, without delay, stretching forth the hands of manhood, with little trouble put the Mahrattas into such confusion, that from the shouts of "kill and take!" fear fell on their hearts, and they saw no remedy but to fly, and save their lives. Tipu, in consequence, with three or four thousand horses and bullocks, fifty or sixty camels belonging to Trimuk's Tōsha Khāna, or wardrobe, and fifteen or twenty elephants, with other equipments of the Mahratta army, returned victorious to Puttun. Trimuk, struck with alarm at this attack, marched with his army to Kauveri Puttun and encamped there. The commandant, however, having on the same night obtained information of the encampment of the Mahrattas, and having force in readiness, determined to surprise them by an attack under cover of the darkness, and he marched for that purpose. It happened that by the time he had arrived

Owing to the scanty forces at his command, Colonel Wood¹ was reduced to the necessity of frittering away his troops in detachments to hold these conquests, and was finally called off to the northward to reinforce Colonel Smith, to join whom he marched *via* Thopūr pass and the Bārahmahal. With the ultimate object of taking Bangalore Colonel Smith had meanwhile been marching towards that place *via* Kolar, which surrendered on the 28th June to Colonel Campbell, the

Durgam of Malwagal having been taken by stratagem on the 23rd. When at Arlier, on the road to Kolār, the Commander-in-Chief recalled Colonel Campbell, and, hearing that Mukdum Sahib had "taken post under the walls of Bāgalūr about 18 miles south-west of his present encampment, Captain Cosby, with a light and well-equipped detachment, was sent in the evening of the 28th to beat up his quarters during the night. Owing, however, to the unexpected length and impediments of the route, the day had dawned before he came in presence of the enemy, and, after a vigorous effort in which Mukdum Sahib sustained a trifling loss, Captain Cosby, perceiving the attempt to be fruitless, desisted from the pursuit. Bāgalūr was the seat of a Paligar to whom Haidar had continued a restricted permission to govern the district and occupy the fort as his dependant, and this person very prudently abstained from hostility to the English detachment, professing to Captain Cosby, whom he accompanied to head-quarters, his best wishes for their success; but at the same time representing to Haidar his inability to resist, and the necessity of temporizing until he had a better opportunity of evincing his allegiance. On the 3rd of July the army joined by Colonel Campbell moved by Bāgalūr for the siege of Hosūr, which fell on the 11th, and a detachment, skilfully conducted

near their encampment, the night was spent, and the cock sounded his loud call to attention, and to arouse the lovers of sloth; he, the commandant, therefore quickly countermarched, and sought refuge in the low ground near the foot of the mountain of Gagangurh. Trimuk also halted during the day where he was, but was still ignorant of the arrival of that lion of the field of valour, who, from the morning to the evening of the same day, passed his time under the cover of the jungle. But at night, when the veil of sleep and forgetfulness was thrown over the world, he, having all intrepidity, attacked the left wing of the Mahrattas, and most gallantly captured the whole of their stores and artillery, and released several prisoners, who had been taken in the confusion of the defeat of Churkoli, and were still confined in the Mahratta camp. Having completely dispersed the followers and baggage of the enemy, and set fire to their tents and standards, the commandant, before the rising of the sun, returned with five hundred horses, six elephants, and eleven camels; and skirting or keeping close to the hills, entered Rai Kōtē (Rayakōtē). He, however, still marched on, and, at night, proceeded to Anikol (Anaikal), where he had scarcely arrived when Trimuk, having been informed of the presumption of the Nawab's troops, despatched his light horse in pursuit of them, he himself following."

¹ During this time, according to Miles' Hist. of Haidar, while Colonel Wood was contemplating an incursion into the neighbourhood of Mistr and Seringapatam, Haidar made a rapid advance by forced marches to Dharmapuri; and, when he had taken it, he proceeded by night marches through the Tipur (Thopur) pass by Nāmakkal to lay siege to Kartur (p. 273), which had recently been occupied by an army in the pay of the Raja of Travancore (p. 267). Haidar returned from this expedition by the Gajulhatti pass, and, when he had reached Anaikal, he sent a detachment to attack the fort of Hussar (Oosoor), while he himself went in pursuit of a convoy which had marched during the previous night from that fort towards Hoskōtā (p. 278). Haidar was himself but partially successful; but the detachment succeeded in taking Hussar, and left a garrison in charge of it (p. 279).

by Captain Cosby, afterwards succeeded in obtaining possession of Ānāikal and Denkanikōta to the west and south of Hosūr. The Paligar of the former place accompanied him to head-quarters, and reported to Mahomad Ali the existence of a series of other positions, commanding some revenue, to the southward as far as the Kāvēri, in the continuation of a narrow strip from Hosūr, which was actually encompassed to the east, west, and south by impenetrable woods and mountains, but which positions, according to Mahomad Ali's ideas of military and fiscal policy, were to form a chain of defence for the lower countries in connection with the conquests of Colonel Wood to the southward of the Kāvēri; and a division of the troops under

Is. ii. 71, 72, 73. Colonel Lang¹ was sent to realize this strange project, which detained the body of the army for some days longer at Hosūr.²

It was at this place that Colonel Smith, whose cavalry arm was weak, was reinforced by Yoonas Khan with the advanced guard of Morari Rao, whose co-operation had been purchased, and who joined in person at Hoskōta,

Is. 73. where, owing to various causes, the army was detained for a month. Haidar, resuming operations on the 9th, was foiled in a night attack which he made on the 22nd on Morari Rao's camp. Having then arranged for his affairs in that

Is. ii. 74, 76, 77. quarter, he made a circuitous march in a southern direction on the 3rd September in the hope of cutting off the division of Colonel Wood

Is. 78. now ascending from the Barahmahal. At the same time Colonel Smith marched by Mālūr to meet Colonel Wood, who was expected to move towards Mālūr on the 6th, and with whom he

Is. 73, 79. effected a junction on that day. Haidar, so far from surprising Colonel Wood, narrowly escaping from being crushed between the two forces, a fate from which the folly of Colonel Wood alone availed to save him.

Not long after this Haidar again made overtures for peace, (he had previously done so to Colonel Smith at Krishnagiri), for the attainment of

Is. 82. which he was willing to make moderate sacrifice. "In an early part of the negotiation he professed his readiness to cede the province of Barahmahal and pay ten lakhs of rupees to the English (not to Mahomad Ali, whom he refused to admit as a party to the treaty); and to this proposal he continued steadily to adhere to the last moment of the discussions. But his adversaries, who were the substantial aggressors, demanded reimbursement of the expenses of the war to an enormous

¹ The native history of Haidar has the following sequence of events after the retirement of Colonel Smith from Hoskōta to Kolar (Miles, p. 252) :— Haidar took possession of the abandoned baggage and marched towards the Tubal Pally pass to intercept a convoy (p. 252); and when he had effected this, he descended into the Barahmahal by the Rayakōta pass, and took the fort of Krishnagiri. He also garrisoned the forts of Tirupatur and Vāntarabudi, and then marched through Ambār, Vellore, and Arni to Trinomalai (p. 253). Colonel Smith at the same time returned to the low country and halted at Vellore (p. 254). Mahomad Ali Khan now made overtures for peace to Haidar, after a consultation with Colonel Smith (pp. 254, 255), which were gladly accepted (*ib.*); and Haidar returned to the Balāghat, having received a payment of four lakhs of rupees and the cession of the taluks dependent in Karar (pp. 256, 257). This authority places all these events in H. 1185 or A.D. 1771, while the actual date of this treaty was the 3rd of April 1769. (Wilks, i. 124.)

amount, and a line of territory which should at least include Krishnagiri, Sankagiridurgam, and Dindigul, numerous concessions on the coast of Malabar, the payment by Haidar of that tribute to Nizam Ali which the

Is. 82. English had engaged to pay in the event of their conquest of Maisūr, together with some important cessions to Morari Rao. The negotiation consequently failed.²

The Government of Madras had before long reason to regret that they had not closed with his offer. The month of October was

Wilks, ii. 82. marked chiefly by the defeat of Colonel Wood at Malwagall¹ and November by a raid on Kolār, in which Haidar

Is. 83 to 87. inflicted much damage, though beaten off by Colonel

Mill, iii. 477. Campbell. On the 14th November Colonel Smith went to

Wilks, ii. 89. Madras with the Nawāb Mahomad Ali and the deputies who had accompanied the force, ostensibly for consultation with his Govern-

Mill, iii. 477. ment, but really in order that he might be disembarassed of the Nawāb, whose presence was a drag on all his movements. Colonel

Wilks, ii. 91. Wood was left in a command for which his unfitness had already been fully demonstrated, (and) disaster naturally followed. "The

departure of Mahomad Ali and the deputies had caused the movement of Colonel Smith's division to the eastward of Kolār. In the first march intelli-

gence had been received that Haidar was besieging Hosūr, and Colonel Wood's division was in consequence reinforced by the 2nd Regiment of

Europeans and Captain Cosby's battalion of sepoys, in order that he might move for its relief. The remainder of Colonel Smith's division, under Major

Fitzgerald, the senior officer, continued at Venkatagiri to cover the retreat of the Nawāb and the deputies, and furnish escorts to

Is. 92. place them in a situation of security.

Colonel Wood marched for the relief of Hosūr on the 16th November with two regiments of Europeans, five battalions of sepoys, and their usual

field-pieces, to which were added two brass 18-pounders. He reached Bāgalūr on the 17th, and, in order that he might be divested of all

incumbrances in the night attack which he meditated on Haidar's camp, he ordered the whole of his baggage, camp equipage, and surplus stores,

into the walled town or petta of Bāgalūr, the two 18-pounders being now classed and deposited among the incumbrances. Having given these

orders, he proceeded at ten on the same night towards Hosūr, which he did not reach till seven² in the morning of the 18th, and was of course foiled

in the design which he had planned of a night attack on an army embarrassed in the operations of a siege. Haidar had on the preceding evening withdrawn his preparations for the siege, and remained on his

ground of encampment, north-west of the fort, until Colonel Wood's advance was entering Hosūr. The march had been so hurried, that a small portion

only of the provisions and stores intended for the relief of the garrison

¹ So Wilks. Buchanan spells it Malavagall, probably under the impression that the last syllable means a rock, cf. Dindigul. A more heinous transliteration is Mulwaggle. The correct spelling is "Mollu Bagalu" or the "eastern door" of Kolār on the frontier of Arcot. So Bāgalūr is the village forming the door to the Balāghat on the north. Cf. Hosur Taluk notice sub. voc.

² A march of seven and a half miles in nine hours on a fair road!

was brought up; and, while these were entering the place and the requisite arrangements were in preparation for giving repose and refreshment to the troops, the whole of Haidar's cavalry were making demonstrations in various directions, while his infantry, by a circuitous movement, turned the flank of the English, and got between them and Bāgalūr. Clouds of dust indicating the movement of troops in that direction had been observed and reported by the outposts, but disregarded by Colonel Wood. About two o'clock, however, repeated and heavy discharges of cannon and musketry

Ib. 93, 94. explained the circumvention, and obliged him to retrace his steps with fresh precipitation.

Bāgalūr, like most of the fortresses in that country above the rank of a walled village, had a little fort or citadel, the habitation of the chief, his officers, and garrison, and a walled town connected with it on one side, the residence of the agricultural, commercial, and mixed classes of the community; and the place was garrisoned by one of the best corps in the service of Mahomad Ali, under the command of Captain Alexander. It had been found on trial that the gate of the petta was too narrow to admit the 18-pounders, and they were accordingly left with a guard at the outside. Some of the most portable of the stores were removed within the fort: the mass of stores and baggage was deposited without much order in the streets, and the draught and carriage cattle had chiefly taken shelter under the walls; but when the enemy's columns appeared, returning from Hosūr, the cattle were driven with precipitation within the town. These apparent ramparts are generally no more than mere single walls of mud from fifteen to twenty feet high, and not exceeding a cubit in breadth at the summit. The gateway is converted above into a turret for musketry; and if, at the exterior angles, there be other similar turrets, these, with the distant fire of the fort, hardly ever furnishing a true flanking defence, are considered a respectable protection against cavalry, which they are chiefly intended to resist. But it is evident, unless time be given for erecting platforms for musketry along the interior of the curtains, that the infantry without and within such a line of defence are not far removed from a state of equality. Haidar approached in several distinct columns, preceded by cannon and attended by pioneers and ladders to clear the breaches or surmount the walls. Captain Alexander personally directed his chief attention to the preservation of the 18-pounders, but on finding that the enemy had penetrated in the rear of both his flanks, he retreated with haste towards the fort. The officer left in charge had fortunately ordered the gate to be shut on the first moment of his perceiving an enemy within the petta wall; without this precaution everything must have been lost. The few sepoys that had been left within the fort now manned the ramparts with confidence, and kept up a brisk fire, which assisted in preventing the enemy from cutting off Captain Alexander's retreat. The camp-followers and many of the inhabitants, on perceiving the entrance of the enemy, pressed into the petta towards the gateway of the fort—men, women, and children, driving camels, horses, and oxen, with the hope of obtaining admission. This was prevented by the precaution which has been stated, and a scene ensued too horrible for description: the heavier and more active animals pressed forward on the

weaker until they were piled on each other in a mass of dead and dying, of which the human beings formed too large a proportion; and the perils which the retreating garrison encountered in clearing this dreadful scene, to be drawn up by ropes into the fort, were not inferior to those which they sustained from the pursuing enemy. Haidar made no attempt on the fort, but the 18-pounders were quickly put in motion, the mass of baggage in the petta was placed upon his spare carts and tumbrils, but chiefly on the gun carriages, which were loaded to the utmost that each could carry, and successively despatched on the road to Bangalore. The arrangements were completed, and the whole of his army nearly out of sight, before Colonel Wood's return to lament the loss of above two thousand human beings, an equal number of draught and carriage bullocks, two 18-pounders, and nearly the whole of the stores, baggage, and camp

Mill, iii. 477. equipage of his army. On the 20th he returned to repair one of the errors of his precipitation by throwing some ammunition and stores into Hosūr. On the 21st he measured back his steps to Bāgalūr, now destitute of provisions for the use of his troops, and *Wilks*, ii. 94 to 97. on the same evening prosecuted his march to Arlier,¹ an intermediate post on the road to Kolār, where there was a small supply."

Here on the 22nd and 23rd November he sustained a series of crushing reverses, which must have ended in complete annihilation had not Major

Ib. 97 to 99. Fitzgerald, by a forced march, come to his relief from Venkatagiri. Colonel Wood was in consequence sent under arrest to Madras, Colonel Lang assuming the command.

Haidar being now temporarily disembarassed of Colonel Smith, the only opponent whom he really feared, prepared to carry the war into the enemy's country. Early in November

Ib. 101. Fazl-ulla Khan moved by Gajalhatti and the Kāvēripuram pass on Coimbatūr, where almost every post fell into his hands.

Ib. 103 to 105. Having learnt by a despatch from Fazl-ulla Khan that his descent into Coimbatūr would be completed by the 4th December, Haidar descended on the 6th December eastwards into the Bārahmahal "by the excellent pass of Pālakōd, and thence southwards through that of Thopūr through a chain of hills running east and west, which at this place connects the first and second ranges of great mountains whose direction is north and south; and Colonel Lang, who now commanded in Maisūr, on receiving intelligence of this event, which had long been foreseen, detached in the same direction a light but efficient division, composed of 5,000 men of

Ib. 106. the best troops of the army, under Major Fitzgerald, which marched on the 10th.

Haidar in descending through the pass of Pālakōd was preceded by emissaries in every direction, who announced the intelligence of his having defeated and destroyed the English army, and of his approaching to re-occupy his own posts in the lower country preparatory to the conquest of Madras. The garrisons, with the exception of Erode and Kāvēripuram, were composed,

¹ So Wilks spells it. The name is probably identical with Araleri, an outlying village of the Bāgalūr Pālahm.

in various gradations of inefficiency, of the same materials as those which have been already described, excepting that in those of the provinces of Barahmahal and Salem the garrisons were of Nawab's troops without any intermixture of regular English sepoya. They followed the same disgraceful fate as those in the province of Coimbatūr, and fell as if a magic wand had accompanied the summons. Major Fitzgerald, who followed with rapid strides, had the mortification to hear, at each successive march,

ib. 108.

of the surrender of the place which he next hoped to relieve. Their surrender is reported by him on the following dates. On the 6th Dharmapuri, 7th Tenkaraikottai, 12th Omahūr, 15th Salem, 17th Namakal, 19th Karūr, 25th Erode, 31st Dindigul. Kāvēripuram and Palghāt are not mentioned in his dispatches. As he approached the Kāvēri, he had intelligence that Haider had crossed or was about to cross the river a little to the eastward of Karūr, and had determined to leave Fazl-ulla to invest that place and Erode, and to proceed himself with the main army to attempt Trichinopoly, or levy contributions on Tanjore and the southern provinces. Deeming Erode to be safe for the present, from his knowledge that at least 200 Europeans, 1,200 regular sepoye, eight pieces of good battering cannon, and two mortars had been allotted for its defence, and knowing Trichinopoly to be in a defenceless state, from having been drained of its troops for the service of Coimbatūr, he inclined to the eastward for the protection of that more important object. This movement determined Haider to the opposite direction. Karūr fell

ib. 108, 109.

without much resistance, and he moved up the right bank of the Kāvēri for the siege of Erode."

The year 1768 closed with the capture of Erode and Kāvēripuram, the former place being disgracefully surrendered by the same Captain Robinson

ib. 111 to 113.

whose breach of parole has been referred to above. In six weeks from the commencement of Fazl-ulla Khan's operations, Haider had regained all the territories which had been wrested from him in two campaigns, with the exception of Kolār and Venkatagiri, two untenable posts, and Krishnagiri where the garrison might remain safely perched on the summit of the rock without any probable influence on the future character of the war. While Fazl-ulla Khan operated from Dindigul

Mill, iii. 477.

January 1769.

Mill, iii. 477.

Wilks, ii. 114.

ib. 107.

ib. 119.

on Madura and Tinnevely, Haider bent his course along the northern bank of the Kāvēri eastward ravaging Trichinopoly, exacted a contribution from the Raja of Tanjore as a ransom for his territory, and then marched northwards towards Cuddalore, the English retreating before him along the coast, while Colonel Lang fell back from Kolār and the Barahmahal on Vellore for the greater security of the metropolis. Abortive negotiations for peace were then opened by the Government of Madras, in which, judging by the light of after events, it is pitiable to contrast the manly and statesmanlike

ib. 119, 120.

demeanour of Haider with the blindness of the dupes of the Nawab. Hostilities were resumed on the 6th March, and, after a series of rapid movements, in which the masterly dispositions of Colonel Smith often embarrassed him, Haider, when 140 miles south of Madras, despatched his whole army, guns, and baggage, 6,000 cavalry and

200 chosen infantry alone excepted, through the Barahmahal; then eluding Colonel Smith, he marched 130 miles in three days and a half, appearing on the 29th March before Madras, when he again made overtures for peace, which, after some manœuvring, was concluded on the 3rd of April.¹

Wilks, ii. 121 to 123.

The treaty² stipulated for the mutual restitution of prisoners and places, and that "in case either of the contracting parties shall be attacked, they shall, from their respective countries, mutually assist each other to drive the enemy out." This clause is important, as the

Mill, iii. 479; iv. 76.

British in after years undeniably broke faith, and the next war with Haider was the fruit of their refusal to fulfil their obligations. It is, however, but just to add that though Mr. Du Pre acquiesced in the spirit of this article, he had objected to the letter of it as fundamentally inadmissible. It was well known that the

ib. 129.

Mahrattas had for some time been meditating one of their periodical raids on Maisūr, and, towards the close of 1769 Madoo Rao was in motion from Poona, on which Haider, retreating as Madoo Rao advanced along the woody tract which skirts Bednore,

1770.

ib. 132.

sought protection in his capital in January 1770. Though he repeatedly called on the English to assist him, as by treaty bound, to repel the invasion, his demands were as persistently evaded, to the discredit of the Madras Government. The war lasted up to June 1772,

ib. ii. 144 sq.

ib. 151.

Mill, iv. 83.

when Haider, who had been severely handled at Chercolee, purchased peace by a large money payment and by the cession of a great portion of his dominions, which entailed on the English, as the fruit of their infraction of the treaty of 1769, the portentous contact of a Mahratta frontier to the province of Arcot, along the whole extent of the ghats from the pass of Dunalcheri to that of Poddanai-

Wilks, ii. 152.

kandurgam. The year 1771 saw the murder of the pageant raja Nanjiraj Wadaiyar, whom Haider detected in an intrigue with the Mahrattas, and to whose barren honours his brother Cham Raj succeeded. He in his turn died in 1775, when, failing a representative in the direct male line, an infant of the same name, claiming through a collateral branch, was raised to the masnad.

1775.

ib. 162, 163.

Up to the year 1780, when Haider again made war on the English, there is nothing of note for the present purpose. Meanwhile he was again at war with the Mahrattas, with more success than in the preceding campaign. Between 1769 and 1779 he made

1780.

ib. 214.

ib. 219.

repeated efforts, even going so far as to offer the provinces of Barahmahal, Salem and Attūr, and twenty lakhs of rupees, as the price of their co-operation, to effect a proper understanding with the British, by whose persis-

¹ On the 4th April. (Mill, iii. 478.)

² The Board of Directors denounced this treaty as pusillanimous. The Madras Council replied that they were compelled to make peace for want of money to carry on the war, (Mill, iii. 479), and Haider had made this clause an essential element of his concurrence in the peace. (Mill, iv. 76.) Mill sees "nothing of humiliation or inconsistency with the train of the Company's policy" in this clause, though he admits its imprudence. In taking this view, however, Mill must be regarded as holding a brief for the Company.

tent refusal he was driven into the arms of the Mahradta. The latter state, during this period, was rent by dissensions between Ragonath Rao, the Peshwa *de jure*, and the ministerial party at Poona, who espoused the cause of a reputed posthumous child of the late Peshwa Narraun Rao, for that reason named *Sevai Madoo Rao*. Haidar had for some time been a supporter of Ragonath Rao, the *protégé* of the Bombay Government, in whose name he conquered—for himself—a large tract of Mahratta territory, which conquest the upholders of *Sevai Madoo Rao* recognized in his name in return for Haidar's adherence to a general confederacy against the English. The latter meanwhile were again involved in hostilities with the

French, whose capital Pondicherry fell on the 18th October 1779. An understanding, of which the English had

been frankly forewarned as the inevitable result of their rejection of his offer, already existed between the French and Haidar, to whom the fall of Pondicherry alone afforded sufficient grounds at which to take umbrage. But his affairs at the time did not admit of immediate action. When, however, the English informed him of their designs on Mahé, a port in Malabar, where Haidar's authority was generally established, and where the foreign settlements were regarded by him as dependencies of his own, he gave the English to understand, in no doubtful language, the consequences of such action, and the war of 1780, though long premeditated on his part, and in any case inevitable, was precipitated by the capture of Mahé.

Haidar's march was through the Bārahmahal and the Singarapotta pass, the scene of his former defeats by Colonel Smith and by Major Fitzgerald. The theatre of the war was outside the first line of ghats and did not concern Salem. The death of Haidar on the 7th December 1782 brought no conclusion to military undertakings, which were however diversified by the operations on the West Coast, whereby the attention of Tipu was called off from the Coromandel, where Saïd Sahib was left to co-operate with the French, while the Sultan in person attended to his interests in

the opposite direction. Tidings of peace in Europe resulted in a convention for the cessation of hostilities between M. Bussy and General Stuart on the 2nd July 1783; but the strife with Tipu continued up to the 11th March 1784, when a nominal peace ensued which lasted up to the war of 1790, which was brought about chiefly through

¹ Hossain Khan Sahib, the aged Kazi of Rayachikla, who heard it from a contemporary, if not an eye-witness of the act, narrates an incident in connection with Haidar's last illness which surpasses in barbarity all the barbarous acts with which that inhuman monster is justly credited. "Pregnant women," the Kazi says, "were cut open and the babes extracted from the womb, their livers being applied as a poultice to the leg or carbuncle of which he eventually died." Wilks does not mention this; but he says (vol. iii. p. 36, 2nd edit.) that Haidar was attended by Hindu, Mahomedan and French physicians in his last illness, and the treatment above mentioned is quite in keeping with the ignorance and superstition of the country, though it would be hardly fair to place it to the account of a European practitioner of the last century.—H. L. F.

Wilks, ii. 518.
1790.
Mill, v. 331, 335.

Wilks, iii. 73.
Miles' Tipu, 164.

Mill, v. 346.
Wilks, iii. 72.
Mill, v. 347, 349.

Wilks, iii. 95.
ib. iii. 96.
Mill, v. 352.

Wilks, iii. 98.
Miles' Tipu, 164.
Mill, v. 352.

Tipu's attack on Travancore, which the British held themselves bound to defend. The war commenced on the part of the English by a double attack, the one under Colonel Kelly from the centre of the Coromandel through the Bārahmahal, and the other under General Medows from Trichinopoly, operating in the first instance against Dindigul and Coimbatūr. The latter met with much opposition, Tipu in person assuming the command and some severe actions being fought. Later on in the year the Sultan, receiving tidings of the invasion of the Bārahmahal, crossed the Kāvēri to the northward, leaving a fourth of his army under Kamr-u-din to watch General Medows, who crossed Erode to succour Colonel Maxwell, who, by Colonel Kelly's death on the 24th September, had succeeded to the command of the other division. "In conformity to orders from General Medows, that officer entered the Bārahmahal on the 24th of October in pursuance of the original plan of the campaign. On the 1st of November he approached Krishnagiri, the capital and strongest post of the district. The natural strength and improved defences of this tremendous rock rendered it of some importance to determine whether a regular siege should be attempted, and several days were expended in a close and minute examination of its whole circumference. Colonel Maxwell then established his head-quarters near the central position of Kāvēripattanam, intending, as was supposed, by making demonstrations towards the pass and the fort in its vicinity, to return and attempt Krishnagiri by surprise. On the 9th the presence of considerable bodies of light cavalry indicated the Sultan's approach, and on the 11th the only regiment of cavalry, allowing themselves to be inveigled in pursuit through a defile, were attacked by about six times their number and driven back with considerable loss. On the 12th the Sultan showed his army in full force, and attempted by a variety of evolutions to find the means of attacking Colonel Maxwell with advantage; but the strong position assumed by that officer, his admirable dispositions, and his promptitude in anticipating every design, frustrated these intentions, and the Sultan drew off at night without any serious attempt. Similar means on the 13th, varied so as to compel an entire change of position, terminated in the same manner. On the 14th, numbers further augmented made similar demonstrations, but these were actually intended to conceal his meditated departure on the ensuing day.

General Medows had commenced his march from the Kāvēri on the 10th. On the 14th he encamped at the southern extremity of the pass of Thopūr, and on the 15th was enabled, by the improvement of the road effected by the Sultan a few days before, to clear the pass and the range of hills, and encamp on their northern face on an elevated ground overlooking Bārahmahal, and distant about twenty-nine miles from Colonel Maxwell's position at Kāvēripattanam. On the arrival of the advanced guard at the intended ground, a camp was observed gradually to arise, flags to be erected, and troops to take up their ground on the plain, distant about

six miles. Nearly three weeks having elapsed since any direct intelligence had been received from Colonel Maxwell, no doubt was entertained that the English army beheld their comrades, and three signal guns were fired to announce the event. In five minutes every tent was struck, and heavy columns were seen in full march to the west in the vale of the great pass of Palakōd. It was soon understood to be the Sultan's army. He had drawn off some miles south from Colonel Maxwell's position on the preceding evening, and, calculating on General Medows requiring another day to clear the pass, had marked an encampment which he found it prudent to abandon. General Medows moved on the 16th fifteen miles farther in the

direction of Kāvēripattanam, and, on the ensuing day, the important junction was formed by Colonel Maxwell.

The united army was now twenty miles from the head of the pass of Thopūr and twenty-six from its southern extremity. Kishen Rao, the treasurer, was alone admitted to the Sultan's councils on this occasion. He had no fixed opinion regarding the plan of future operations intended by the English after the disruption of their chain of depôts; but he inferred that wherever the Sultan should go they would follow, and that he ought accordingly to carry the war into their own country, keeping also in view such a line of operation as might enable him to avail himself of any favourable opportunity to recover the places he had lost. If he should be followed up the vale of Palakōd, the nature of the ground left him no alternative but to ascend the ghāt; and he determined to double back through the pass of Thopūr. His cattle had been much overworked on the 15th, and it was deemed necessary to give them two complete days rest. His intelligence stated the intention of the English general to halt on the day ensuing the junction; but if such an intention existed, it had been changed. The two armies were accordingly in motion¹ on the 18th, both

pointing to the pass of Thopūr and both intending to clear it in two easy marches.

As the Quartermaster-General's department was preparing, under the protection of the advanced guard, to mark out the new encampment, they perceived a few tents pitched three or four miles in front of their right. It was Tipu's Pesh Khana, or tents always sent on for his personal accommodation with the advanced guard. The circumstances were reciprocally reported, and the Sultan, confident in the powers of his equipments, rashly decided on continuing his march through the pass. By the time that the head of the main column of the English army had reached the intended encampment, thick clouds of dust in front indicated the entrance into the

pass of a long and heavy column, while a considerable body of horse made a demonstration on the right, and was supposed to mask a movement of infantry, indicated by columns of dust in the rear of their left, which seemed, however, to accurate observers to be returning to the westward. The general, with a brigade of infantry and the cavalry, moved out to examine this body, while the head of the column of march was ordered to regulate its advance by that of the corps

¹ Miles' Hist. of Tipu says (p. 166) that their route was through the plain of "Sattimangal" (Sattiyamangalam) towards Trichinopoly, whither Tipu's cavalry followed them (p. 168).

which the general directed. Colonel Stuart, who commanded the right wing of the army and led the column, perceiving soon afterwards from a commanding ground the probability of being able by a rapid advance to cut off a considerable body of the Sultan's infantry and attack the remainder to advantage while entangled in the pass, reported his observations, and asked permission to attempt it with his own wing of the southern army, as an advanced corps, to be supported as occasion might require. This proposition was not approved, and the corps on the right under General Medows, impeded by ravines, was making slow progress. The demonstrations were continued, and the effect of a more rapid advance was sufficiently evinced by the fact of three battalions of infantry of the rear of the main column being intercepted under all these disadvantages of delay, and forced to make a straggling retreat through the ravines and woods in the opposite direction. The remainder of the Sultan's army, astonished at their good fortune, completely cleared the pass, with the loss of only one tumbril, which had broken down, and some unimportant articles of military store. The cavalry disappeared about sunset, a small body taking the route of the pass, and

the remainder in a circuitous direction by Pennāgaram; and the English army, after a tedious march of twenty miles in about fifteen hours, and firing a few shot, encamped at night near the summit of the pass of Thopūr."

To one acquainted with the lie of the ground over which this retreat was conducted, the omission by General Medows to harass and destroy the enemy while entangled in the pass appears to be open to censure. All the advantages would have been with the pursuer, as for nearly six miles the fugitives would have been exposed to an almost vertical fire to which they could have made no effective return. The diagnosis of General Stuart appears to have been correct, and even had General Medows apprehended danger on his right and rear from the body which afterwards escaped towards Pennāgaram, it would have been in his power to make ample disposition to meet this difficulty without detaching from his main body to such an extent as to impair its efficiency for the pursuit through the pass. There is the less excuse for this omission as General Medows had himself marched through the pass not long before and must have been aware of the advantage which it offered to a pursuing enemy. On the Sultan's part, the discovery of the English advanced guard was made in sufficient time for the baggage, camp equipage, and rear-guard to return, separated from the army by the intervention of the whole of the British forces, and the dust of their retrograde movement contributed to the hesitation of the English general. The Sultan was personally present with the cavalry which made the demonstration on the right, and went off with a slight escort through the pass shortly before it disappeared. The Pesh Khana was the only cover in the whole army, and they were equally destitute of provisions until joined by Kāmru-din and his small bazaar two days afterwards. Tipu however made no delay, his army supplying themselves by the plunder of his own villages; and first pointing to Karūr, and giving out that he would cross the Kāvēri below that place, he descended by the northern bank of the river, and made no halt until opposite Trichinopoly. Against that place he made various demonstrations, but they had no material result beyond the plunder and devastation of the island of Seringam."

Mill, v. 354.

Wilks, iii. 102.

General Medows was now called off to Madras¹ to meet Lord Cornwallis, the Governor-General, who arrived there on the 12th December; and Tipu, foiled at Trichinopoly, marched, devastating as he advanced, through the Coromandel *via* Tiagardurgam and Trinomalai, and thence by Permacoil² towards Pondicherry. The Governor-General had arrived on the 11th February 1791 at Vellore, and was threatening the Bārahmahal through the Ambūr pass, when the Sultan, learning this, marched hastily *via* Changama³ and Palakōd to meet him, and, had the attack been made by the route anticipated, would have been in time to forestall it; but the feint on Ambūr had served to cover the real design, which was to ascend *via* the Mugli pass, whence the English troops advanced by way of Kolār and Hoskōta on Bangalore, which was stormed on the 21st March. An attempt to penetrate in the direction of Seringapatam had to be abandoned, when in sight of the capital, owing to the utter failure of the carriage and stores necessary to maintain the army in efficiency. To recruit and provide for a continuous supply in future, Lord Cornwallis retraced his steps to Bangalore, accompanied by the Mahrattas, who had meanwhile effected a junction, more important than that of Nizam Ali's cavalry, which had arrived previously and was found to cost more than it was worth. "Lord Cornwallis, after the requisite arrangements at Bangalore, where the talents and military skill of Captain Road had succeeded in bringing forward the most important supplies without any loss, although greatly interrupted by the enemy's detachments, moved in a south-eastern direction to Hosūr, which was evacuated and imperfectly blown up on his approach; fortunately a train laid for the magazine, and intended to explode after the entry of the English troops, did not succeed. Thence he moved³ in the direction of the passes of Palakōd and Rāyakōta for the purpose of reducing the congeries of droogs which command the access to these passes from above as well as from below. The possession of these posts would accomplish the double purpose of opening a free communication for his own supplies from Coromandel and protecting the Company's possessions from the inroads of small divisions of cavalry, by occupying all the direct roads from Seringapatam to Bārahmahal. An advanced brigade under Major Gowdie had some sharp service at Rāyakōta, the chief of these droogs, garrisoned by 800 men. He forced the

¹ Miles' Tipu says that he took the troops with him, pp. 168, 169.

² According to Miles' Tipu (p. 177), it was a detachment under Mahommed Khan Bakshi which made this march. On its way it took the fort of Tirupator, which was held by a force consisting partly of English troops, and inflicted a defeat upon its fugitive garrison.

³ According to Miles' Hist. of Tipu (p. 211) General Medows, after the capture of Nandidrug, marched into the Bārahmahal at the head of a strong force, to take Krishnagiri, but was repulsed by its garrison and obliged to fall back upon the main army (p. 212) "Colonel" Gowdie's capture of Rāyakōta is related substantially as in Wilks' narrative.

lower works shortly before daylight by blowing open a gate, and hoped to carry the rock by entering with the fugitives; he succeeded in carrying several successive gates, but found it imprudent to attempt the summit. He had been instructed to withdraw in the event of not completely succeeding in his first enterprise, but perceiving a probability of ultimate success, he ventured so far to deviate from his orders as to hold his ground in an intermediate line of works about half-way up the hill, and the place capitulated on the appearance of the army.

The minor posts, all capable of protracted defence, offered various but unsuccessful degrees of resistance; some of them, favoured by local circumstances, stood the assault, and the garrisons escaped by the opposite descent into the woods. His lordship had it also in contemplation to adopt some arrangement for blockading Krishnagiri, the capital of Bārahmahal, a place deemed impregnable according to regular means, which, although not commanding any road, was capable with a large garrison of interrupting the transit of convoys; but he was called from this vicinity by causes which had not been entirely unforeseen.

Still, with the exception of Krishnagiri, everything essential to the communication with the Coromandel and Bārahmahal to the south-east and east was already secured, and Lord Cornwallis considered himself at liberty¹ to turn his attention to the north-east, where Nandidrug was captured on the 19th October. The absence of the Governor-General in that direction suggested to the Sultan the advantage of making a diversion elsewhere, and Lord Cornwallis was again called to the south-east by an alarm for his communications. "A force under Bakir

Sahib, an active young officer and son of the venerable killadar of Darwar, had been detached by the route of Coimbatūr and Thopūr into Bārahmahal, with a respectable reinforcement for Krishnagiri, with orders to act on the communications of the English army, and particularly to sweep off in a southern direction the population and cattle of the whole district. Colonel Maxwell, with a suitable division of the army, was detached for the purpose of endeavouring to disperse these intruders, and in descending the ghat, he received intelligence that a portion of the enemy had proceeded in the execution of their barbarous purpose of carrying off the population to Pennāgaram, a post in the angle formed with the main range of mountains by the cross chain of Thopūr, whence only a mountain pass communicates farther south. He moved with rapidity in that direction, and demanded the surrender of the place by a regular summons; but the enemy, not satisfied with a simple refusal, fired upon the flag. As the appearance of the works justified prompt measures, it was instantly assaulted and carried by escalade with little loss to the assailants; but of the garrison, two hundred men were killed before the indignation of the troops could be

restrained, and the cavalry escaped by the mountain paths. The activity of Colonel Maxwell's movements, from the accurate local information he had acquired in the previous campaign, soon induced Bakir Sahib to withdraw from a country too

¹ The native authority places all these minor events after the fall of Nandidrug.

much bounded for the safe operations of cavalry. He descended by the pass of Changama into Coromandel, but finding, from the presence of the English cavalry under Colonel Floyd, that any enterprise towards Madras would be hazardous, he turned southward and re-entered the Maisūr dominions by the pass of Attūr.

Colonel Maxwell had been ordered, if he found the enterprise advisable, to attempt the destruction of the town within the lower fort of Krishnagiri, for the purpose of depriving the enemy as much as possible of cover for their predatory arrangements; and, after effecting his objects in other parts of the province, he encamped on the 7th of November within a few miles of the place, without any other demonstration than that of reascending the pass. He moved at ten at night in three divisions, and carried the lower fort by escalade. The officers commanding the divisions were instructed, if appearances were favourable, to follow up the blow and ascend the rock with the fugitives, who had barely time to shut and barricade the gate; and so close was the pursuit, that a standard of the regular troops was taken on the very steps of the gateway. The bearers of the ladders were not so expeditious in their ascent, and the garrison, more numerous than their assailants, began to hurl the dreadful missiles of granite. Projections of rock afforded cover to the assailants, and repeated attempts were made during two hours to apply ladders, which were as often crushed with those who bore them; and Colonel Maxwell at length found it necessary to desist from the assault with considerable loss. The garrison sallied on their retreat, but it was conducted with so much regularity that they quickly returned. The English troops, after setting fire to the town, withdrew before daylight, and the detachment soon afterwards returned to head-quarters, having moved along the back of the range between the passes of Palakōd and Peddannikandurgam, for the purpose of restoring a number of minor posts to the families of their former Hindu possessors.

The remaining operations do not concern this narrative, and terminated in the siege of Seringapatam and treaty of 1792, by which, amongst other cessions of territory, the whole of the present district of Salem, the Hosūr Taluk excepted, fell to the English, the Coromandel thereby obtaining the second line of ghāts as an iron boundary on the west, with its frontier fortress of Rāyakōta on the tableland of Maisūr.¹

¹ The cessions of territory in the Salem District under the treaty of 1792 are given in Aitchison's "Treaties, Engagements and Sanads," vol. v, p. 149, as follows:—

Salem, Namul (or Nauakal), Sunkagurry (or Sunkagiridurgam), Barrah Mohul (Barahmahal), nine taluks, viz. :—

- (1) Barrah Mohul (Barahmahal),
- (2) Caveriputtam (Kāveripattanam),
- (3) Verbudurdroog (Virabadrādurgam),
- (4) Raycottah (Rāyakōta),
- (5) Belongs to North Arcot,
- (6) Durampoory (Dharmapuri),
- (7) Pinnagur (Pennagaram),
- (8) Tingrycottah (Tenkaraikōttai),
- (9) Caveripoor (Kāveripuram),

Between this period and the war of 1799 there is nothing calling for notice except the extinction *pro tem.* of the line of lawful kings of Maisūr on the death by small-pox of Cham Raj aforementioned. Tipu did not even go through the usual farce of raising a successor to the masnad, and the whole family were pillaged to the last

Ib. 300.

of their possessions.

The undisguised hostility of Tipu and his intrigues for a French alliance

Miles' Tipu, 252.

1799.

Mill, vi. 104, 109.

Ib. 107, 109, 112.

Wilks, iii. 372, 373.

These were either altogether disregarded or noticed with contempt, and when at last, waking from his infatuation, he sent an escort to Hosūr to receive Major Doveton, the expected envoy, the step, if sincere, was too late, as the army of retribution was already on the march.

Miles' Tipu, 259.

Mill, vi. 111, 114.

The attack was two-fold; from the west through Cōorg, under Lieutenant-General Stuart, and from the east under General Harris. Colonel Brown in

Coinbatūr and Colonel Read, the first Collector of Salem and the Barah-

mahal, had each an adequate corps at their disposal to secure the due supply of the advancing troops. The

earlier progress of General Harris was unopposed by the

Sultan, who had proceeded in force in the opposite

direction, where he was defeated² at Sedaseer by General

Stuart, and thence proceeded on the 11th March to

Seringapatam *en route* to oppose the more formidable

array of the Commander-in-Chief. The winding route of the army under General Harris, from the vicinity of Arcot, was continued through the vale of Ambūr and the province of Barahmahal, whence it ascended the ghāts, and encamped within the English frontier, near Rāyakōta, on the 4th of March.

After entering the enemy's country on the 5th with one of the divisions, some days were necessarily occupied in reducing that portion of the congeries of hill-forts in the vicinity of Rāyakōta which the treaty of 1792 had left in possession of the Sultan; and on the 7th the head-quarters were established at Kelamangalam, about sixteen miles within the territory of Maisūr. On the 9th the whole army was collected on that ground and made its first united movement on the enemy's country on the 10th, the day which General Harris had indicated to General Stuart as the latest

Ib. 405.

to which, if possible, his arrival before the enemy's capital ought to be protracted.

of which latter only that part on the left bank of the Kaveri was annexed to Salem, Attoor-Anantagurry (Attūr-Anantagiri), Purnathy (Paramathi), Shadnangal (Shendamangalam), and Vaimloor (Onalūr).

¹ According to the native authority (Miles), Generals Harris, Floyd, and Burgess opened this campaign by advancing into the Barahmahal by Ambūr and Tirupatūr as far as Rāyakōta (p. 254), where Pirunaiya made an ineffectual attack on the flanks of the British army (p. 255), after which they moved on to Anakal and encamped there. (*Ib.*)

² The History of Tipu asserts that this army, being defeated and dispersed, returned to Calicut (Miles, p. 260); but it admits afterwards (p. 262) that this army arrived at Seringapatam.

The route of the Commander-in-Chief lay on the 11th, 12th and 13th through the Balāghāt Taluk of Hosūr, and thence on the 14th to within nine miles of Bangalore, whence he marched, *via* Kankanhalli, towards Seringapatam, which fell on the 4th May, exactly one month after the investing force first encamped against it. In the division of territory which followed on the capture of the capital and the death of the Sultan, the Balāghāt Taluk of Hosūr was added to the English possessions, thereby completing the catalogue of vicissitudes whereby the present district of Salem came to form an Indian collectorate.

¹ *Vide* Atchison's "Treaties, Engagements and Sanads," vol. v. p. 62.

CHAPTER III.

DESCRIPTION OF THE DISTRICT AND DETAILS OF GENERAL INTEREST RELATING TO IT.

The district of Salem lies between North Latitude $11^{\circ} 1'$ to $12^{\circ} 57' 0''$ and East Longitude $77^{\circ} 32' 0''$ to $79^{\circ} 5' 0''$. It is bounded on the north by Maisūr and North Arcot, on the south by portions of the Coimbatūr and Trichinopoly Districts, on the east by Trichinopoly and South and North Arcot, and on the west by Coimbatūr and Maisūr. Its extreme length from north to south is about 116 and the breadth 90 miles, the averages being about 90 and 70 miles respectively.

The area, according to the census of 1871 is 7,604 square miles, the same being the figures taken in Government Order, 22nd March 1876, No. 404. In a letter, No. 411, dated 7th February 1877, from the Assistant Superintendent, Revenue Survey, the area is stated to be 7,483 square miles. This is stated to be the "approximate areas of the taluks of the district, scaled from the Sheet Atlas of India." Even this however is not final, having been superseded by Board's Proceedings, No. 3,389, dated 23rd December 1879, in which, on the authority of the Superintendent, Revenue Survey, the area is stated to be acres 7,882.

The district contains nine taluks as follows:—

Collector's charge.			
	Area. SQ. MILES.	Population. NO.	Land Revenue. RS.
Salem	993 or 1,033	393,805	4,56,871
Attūr	798 or 816	164,006	2,21,393
Total ..	1,791 or 1,849	557,811	6,78,264

Deputy Collector's charge.			
Trichengode ..	682 or 628	249,678	3,67,202
Nāmalai ..	743 or 702	261,009	3,62,558
Total ..	1,375 or 1,330	510,687	7,29,760

Sub-Collector's charge.			
Hosūr	1,169 or 1,290	193,037	1,93,902
Krishnagiri ..	658 or 620	170,233	1,73,923
Dharmapuri ..	998 or 785	190,626	1,92,215
Total ..	2,825 or 2,695	553,896	5,60,040

Head Assistant Collector's charge.

Tirupatūr ..	805 or 699	190,800	1,65,528
Uttankarai ..	808 or 910	153,801	1,29,081
Total ..	1,613 or 1,609	344,601	2,94,609
Grand Total ..	7,504 ¹ or 7,483	1,966,995	22,62,673

The figures given in the Board's Proceedings of 23rd December 1879 harmonise closely with the calculations of area made by Mr. H. E. Stokes, the Acting Collector, for the purpose of the census of 1881. As the most accurate figures available they are given in full as follows:—

Taluks.	Government.	Isani.	Mitta.	Total.	Square Miles.
	ACRES.	ACRES.	ACRES.	ACRES.	
Salem	595,970	59,570	57,722	654,262	1,069.16
Attūr	459,900	55,344	25,014	570,758	891.51
Nāmakal	292,175	19,402	202,234	513,811	802.83
Trichongode	257,736	39,595	117,786	406,078	634.59
Dharmapuri	440,132	25,420	119,339	581,901	913.91
Krishnagiri	246,180	42,392	146,496	435,077	679.81
Hosūr	518,831	105,523	164,281	778,935	1,216.62
Tirupatūr	363,427	21,021	94,784	479,232	748.80
Uttankarai	477,221	8,018	101,562	587,991	917.33
	3,651,581	368,796	1,019,468	5,039,815	7,874.77
Add area of Javadi villages transferred to South Arcot					8.00
					7,882.77
Deduct Kodayanji transferred from North Arcot					.74
Area given in Board's Proceedings					7,882.03

The Attūr Taluk is generally in charge of a passed Assistant Collector, and sometimes, when there is no such officer available, of a Special Deputy Collector. Descriptive notices of all the taluks are given further on.²

The district came into the hands of the English by the treaty of peace with Tipu Sultan in 1792, by which all the Pāyīnghāt now belonging to the district was ceded, and by the Partition Treaty of Maisūr in 1799, by which the Bālāghāt, or what is known now as the Hosūr Taluk, was added to the previous cession. It is commonly supposed that the district is

composed of the Talāghāt, or taluks of Salem, Attūr, Nāmakal, and Trichongode; the Bārahmahal, or the taluks of Krishnagiri, Dharmapuri, Tirupatūr and Uttankarai; and the Bālāghāt or Hosūr Taluk. This however is to some extent misleading, as Krishnagiri is to a great extent Bālāghāt, and half or more of the

¹ The area as first given is that taken from census returns and from Government Order, No. 404, of 22nd March 1876, from which the figures for population and land revenue have also been taken. The alternative area stated is that mentioned in the Assistant Superintendent's letter above quoted.

² See Vol. II.

Hosūr Taluk is below the ghāts. The Bārahmahal¹ again is a misnomer as, in addition to the four taluks named, the Kangundi Zemindari was part and parcel of the original Bārahmahal. Nor can the four southern taluks be properly named Talāghāt, as both Salem and Attūr are distinctly above the first line of ghāts and Nāmakal is partially so; if also the line is taken

¹ The question, What is the Bārahmahal? is one more easily asked than answered. At present it is supposed to be coterminous with the four taluks above mentioned. At the commencement of the century it included Kangundi, and if the treaty of 1792 is to be believed, it contained at that time a considerable portion of the Talāghāt. The natives commonly say that the name signifies the 12 palaces or mahals, the name given to 12 rock forts or drugs mostly in the Krishnagiri Taluk. The first separate ruler of the tract is supposed to be Jagadēva Rāyar (See History, Chapter II, p. 51), who obtained the tract in jaghīr, for his defence of Pennakonda, from Timma Rāj. The tradition further states that Jagadēva Rāyar had 12 sons, to whom he assigned their several charges, and by whom the 12 mahals were built; but the 12 sons of Jagadēva Rao are as mythical as the 50 sons and 50 daughters of King Priam. What the names of these 12 mahals were is even a matter of doubt. Buchanan enumerates them as follows:—(1) Krishnagiri, (2) Jagadēvagār, (3) Varanagār, (4) Kavalgār, (5) Maharājagār, (6) Bujangagār, (7) Katōrgār, (8) Tripatura, whereas a fact there is no drug, (9) Vaniambadi, ditto, (10) Gaganagār, (11) Sudārsanagār, and (12) Thattakallu. The suffix "gār" is written by Buchanan "gheda," the Tamilians commonly writing it "gala" (கலா), an attempt on their part to pronounce a letter in the Hindustani alphabet (ग) which does not exist in their own. With reference to the earlier history of the Bārahmahal Buchanan says that "on the fall of the Rāyaru of Anagundi the Bārahmahal, with Rayakōta and many other districts, became subject to Jagadēva, the Paligar of Chennapattanam. On the overthrow of this powerful family its territories were divided between the Nawāb of Kurpa (Cuddapah) and the Rājah of Maisūr: the former took the Bārahmahal and the latter the dominions of the Chennapattana family that were situated in Karnāta. Haider annexed the Bārahmahal to the dominions of Maisūr." In writing of Rayakōta he says that it is only "commonly" reckoned in the

* 2nd Edit., vol. ii, p. 523. Bārahmahal because it was added to that province by the peace which Lord Cornwallis granted to Tipu: he also states that one of its limits is at Ambār in the North Arcot District. The statement also which makes the Bārahmahal coterminous with the taluks of Tirupatūr, Uttankarai, Krishnagiri, and Dharmapuri needs qualification, as Buchanan states that "Mallapadi, though placed in the heart of the Bārahmahal, never belonged to that province and has long been annexed to Arcot. The Nawāb has given it in jaghīr to the husband of one of his sisters." There is even some reason to doubt if the name, Bārahmahal, can correctly be referred to the time of Jagadēva Rao, as native tradition assigns the building of the 12 mahals to Abdul Nabbi, Nawāb of Cuddapah; nor again is there any certainty as to the list given by Buchanan being correct. His whole stay in the Bārahmahal did not exceed seven days, during which he marched from Rayakōta to Ambār. The Kāzi of Rayakōta, one of the oldest and best informed inhabitants, gives the 12 forts as follows:—(1) Jagadēvagār, 7 miles east of Krishnagiri, the capital of the Bārahmahal. (2) Arungār, $\frac{1}{2}$ a mile from the Krishnagiri hill. (3) Shinnagār, 17 miles west of Krishnagiri. (4) Sudārsanagār, 10 miles south of Krishnagiri near the village of Thattakallu. This is probably identical with the Thattakallu of Buchanan, who however gives Sudārsanagār also. (5) Krishnagiri. (6) Kavalgār, 2 miles north of Jagadēvagār. This is otherwise written Kavalgār. As "Kaval" means "a guard," the Kāzi's spelling is probably correct. (7) Mantharājagār, 7 miles north of Krishnagiri. As Maharājagār, an undoubted Bārahmahal fort, finds no place in the Kāzi's list, this is probably a synonym for it. (8) Bujangār, 16 miles east of Krishnagiri. (9) Gaganagār, 8 miles south of Krishnagiri. (10) Katōrgār, near the village of Nanthibandi in Tirupatūr Taluk. (11) Mallikarjunagār, 12 miles east of Krishnagiri, near Mallapadi. (12) Varanagār, also called Virabadrādurgam, 20 miles west of Krishnagiri. The points of the compass and distances from Krishnagiri as given

from the Thalaimalai on to Sankagiri and the Pakkanād and thence to the Pālamalai in Coimbatūr, it will be seen that the greater part of Trichengode is also relatively Bālāghāt. The whole four are however Talaghat as compared with the Bārahmahal, and in this sense the name may be accepted. Salem, as applied to the district, is a misnomer. (When the English

by the Kāzi are not altogether trustworthy, as may be seen on a reference to the map on which most of these places have been identified.

The following sloka, in Mahratta language, but written in Tamil letters, contains the names of the forts very much as the Kāzi has given them:—

முகிய ஜகதேவ் அரங்கட சிம்ம சுதர்சன
கிருஷ்ணகிரி சாகேவலதேர் மஹராஜ புஜங்கட
உன்னததேதி சதோககநாசாபார் கடோர்
பார்மலிசர் ஜனவாரண நாம அசேகடபாரர்.

The following is a transliteration of the same:—

Mukhiya jagt Jagadēv, Arangada, Simma, Sudarsana,
Krishnagiri sē, Kēvala tē, Mahārāj, Bujangada,
Unnatō tīatō Gaganāsi pār, Kadōr,
Pār Malikārjuna, Vāraṇa, nama asekadapārā.

It will be observed that Tirupatūr, Vaniambādi, and Tattakal of Buchanan's list are not in the slokam; while Arangarh, Simmagarh and Mallikarjunagarh of the slokam are not in Buchanan. It has already been conjectured that Tattakal and Sudarsana are identical. There is a Mallikarjunadurgam about four miles north-west of Vaniambadi, but no application of the rack would bring this near Mallapadi as the Kāzi puts it, and the identification of Simmagarh with Tirupatūr is plainly impossible. The natives, however, say that the hill near Mallapadi is called Mallikarjunadurgam. This, however, is but a trifling complication compared with that involved by the "treaty of peace with Tippu Sultan, 1792" (cf. Aitchison's Treaties, vol. v, p. 149), where, amongst other cessions, appears the following: Barrahmohul, 9 talooks, viz.: (1) Barrah Mohul; Canterai Pagodas 64,000; (2) Caveriputtan (= Kaveripattinam), 10,000 C.P.; (3) Verbudurdroog (Virabadradurgam), C.P. 8,000; (4) Roycottah (Rayakōta), C.P. 8,000; (5) Kangoodie (Kangundi), C.P. 6,000; (6) Durampoory (Dharmapuri), C.P. 8,000; (7) Pinnagur (Pennagaram), C.P. 10,000; (8) Tingrycotta (Tenkaraikōttai), C.P. 12,000; and (9) Caveripoor (Kaveripuram), C.P. 8,000. Now Kaveripuram is quite outside the Barahmahal plateau and never belonged to it; in fact the tract subject to the Paligar of Kaveripuram lay on both sides of the Kaveri, being partly in the Coimbatūr District. Rayakōta also, there is reason to believe, was excluded from the true Barahmahal, though there is no doubt that Jagadeva Rao or one of his successors lived there; but the chief difficulty arises from the first named taluk or the Barrah Mohul Proper, whose revenue, 64,000 pagodas, only falls short by 6,000 pagodas of the total revenue of the other so-called taluks. What was this true Barahmahal tract? By a process of elimination it would appear to be the taluks of Tirupatūr, the north and north-east of Uttankarai, and the north, centre and east portions of the Krishnagiri Taluk. So far as the geography of the treaty is concerned it is entitled to scant respect. The tract concerned was comparatively a recent acquisition to Maisur, and Tipu and his people knew little about it beyond that, through extortionate middlemen, they had wrung considerable sums from it. The untrustworthy nature of the treaty may be gauged from the fact that the following cessions are mentioned:—Salem, Koork, Namuel, Sunkagurry, and then the Barrah Mohul, after which follow Attōor-Anantagurry, Purmutty, Shadmaungal, and Vainloor. Salem and Vainloor (or Omalur) make up the present Salem Taluk; Anantagiri is the old name of Attūr; Purmutty (or Paramathi), Shadmaungal (or Shendamangalam) and Namuel (or Namakal) account for the present taluk of Namakal; and Sunkagurry (or Sankagiri) accounts for Trichengode, the whole four accounting for the Talaghat, as the so-called Barrahmohul accounts for the four taluks (Hosūr, which was ceded in 1799, excluded) above the ghats; but what is Koork?

first began to administer the country the district was known as "Salem and the Barahmahal," in which latter the Zemindari of Kangundi was included up to 1808. When the Hosūr Taluk was subsequently acquired the district was properly "Salem, the Barahmahal, and the Bālāghāt;" but by degrees the name of the chief town came to be given to the whole

How came this fly in amber between Salem and Namakal? This is a question which has caused much heart-burning. Coorg was certainly ceded by Tipu at this time, and, having a private account of his own to settle with the Rājā, he was so incensed at the inclusion of this province in the list of cessions demanded, that he very nearly broke off the treaty. Coorg is certainly not mentioned in the treaty unless Koork be another transliteration of the name; but, if so, how came Koork to be entered between Namakal and Salem? Search has been made in every direction to try and discover any "Koork taluk" in the present Talaghat, where, if anywhere, it ought to find a place. There is a village called Kurukupuram in the Trichengode Division and two called Kurukupatti in Sankagiri and Omalur; but all insignificant, though, as might be expected, some one was ready to come forward with a tradition that Kurukupuram was once a taluk. There is something to be said on both sides of the question. The original treaty, in Persian, appears to be in Calcutta, and not available for reference; but one conjecture is that Koork found no place in the original treaty. The latter was made on the 17th March 1792, and on the 26th March Lord Cornwallis ordered Captain Alexander Read to proceed to, and take charge of, all the ceded districts, of which a list was furnished with the order, according to a copy of which, purporting to be a translation of the original and signed G. F. Cherry, Persian Translator, the extent of the district corresponds with the cessions in the treaty, excepting only that Koork is omitted, and the total of the beriz of the ceded districts is less than that shown in Aitchison's Treaties by C.P. 8,000, which is exactly the amount entered against Koork, and which also, according to the "engagement with the Rājā of Coorg in 1793," was the tribute paid by Coorg to Tipu Sultan, the sum there mentioned being 8,000 Hoons of Rupees 3 each.—*vide* Aitchison, vol. v, pp. 173, 174. Another fact quoted in favour of this view is that the name Koork does not occur in the list of the 36 taluks into which the ceded provinces were divided by Captain Read in June following. Now if Koork was in the present Salem limits, and was a taluk under Tipu, Captain Read would surely have assigned it a place in the 36 taluks. In a letter subsequently written by Captain Read to the Board of Revenue, dated 11th June 1793, the total revenue of the ceded provinces was entered as Pagodas 2,82,000 and not 2,90,000, which would be the case if Koork was one of the taluks.

On the other hand the beriz of all the treaty taluks, including Koork, is, according to the schedule, 2,90,000 C. Pagodas. This amount exactly corresponds with that given in paragraph 102 of the Board's General Report, dated 23rd July 1792, *vide* Board's Selections, vol. i, which runs as follows:—

"102. The Baramaul and Salem Districts ceded to the Honorable Company by Tippu Sultan in the late Treaty of Peace have been put for the present under the management of Captain Alexander Read, as notified to us in the letter from your Honorable Board, under date 4th April last, the estimated value of which, together with the province of Dindigul, continued in charge of Mr. A. Macleod, as per schedule received from Tippu Sultan, is as follows, viz.:

	Canterai Pagodas.
For Baramaul Taluks	1,34,000
For Salem Taluks	1,66,000
For Dindigul	90,000."

From this it may be inferred either that the Board in July had not realised that the insertion, in the treaty, of Koork between Salem and Namakal was a mistake, and that the Koork referred to was the Coorg Province on the West Coast, or that some taluk called Koork must have existed in Salem. In Captain Read's report on the settlement and survey, dated 4th April 1800, paragraph 23, it is said that when the country was ceded it

district. The Talaghat, as its name implies, is situated below the ghâts, on the level of the Karnatic generally, and in soil and climate differs but little from the neighbouring districts of Trichinopoly, South Arcot and Coimbatûr. The Barahmahal tract, as now defined, lies between the first and second line of ghâts. The greater part of the Hosûr Taluk,

consisted of the taluks noted in the margin (i.e., prior to the British Government). These

- North of Toppoor.*
1. Adamankottai.
 2. Pennakam.
 3. Daranipuri.
 4. Tenkarakottai.
 5. Haroor.
 6. Morapoor.
 7. Kaveripattam.
 8. Veerabuddroog.
 9. Raycottah.
 10. Krishnagiri.
 11. Kallavi.
 12. Mattur.
 13. Singarapett.
 14. Tirupatur (conquered).
 15. Parandapalli.
 16. Vanimbadi (conquered).
 17. Kavundi.
 18. Javadi.

South of Toppoor.

1. Salem.
2. Ahtore.
3. Shendamangalam.
4. Namkul.
5. Cautputtoor.
6. Parunatti.
7. Sankerydroog.
8. Omaloor.
9. Nangavalli.

taluks are not those formed after the assumption of the country by the British: for in Captain Read's Report to the Board, dated 10th June 1792, the number of taluks as constituted by him was entered as 36, and again, later on in 1796, the number was reduced to 26. Comparing the list in Aitchison's volume with Captain Read's statement, it is argued that first, with regard to the Talaghat Taluks, Cautputtoor is not men-

tioned as having been ceded in Aitchison, vol. v, p. 149. Captain Read writes to the Board of Revenue on the 16th December 1792 that, as in Article 4 of the treaty, it was stipulated that all districts lying to the west and south of the Cauvery should belong to Tipu, and those to the east and north to the British. Caveripattam was, subsequent to the treaty, exchanged for Cautputtoor. Deducting therefore Cautputtoor, there are 8 Talaghat taluks, which is the number given by Aitchison. The names of the 8 taluks as mentioned in the two are exactly the same except in one particular, viz., that in the one Koork is mentioned and in the other Nangavalli. The latter is situate in the Omalur Division and has a population of 3,178. Tradition has it that this was the kasba of a taluk under the Moorish Government, and Captain Read also made it a taluk in June 1792. It is argued therefore that these two taluks were identical; but then there occurs a doubt as to how names so different could have been confounded. This must be left to the imagination. If Kurukupatti (8 miles from Nangavalli) had once been a taluk, and continued to appear so in Tipu's accounts notwithstanding the change of the kasba to Nangavalli, which must have subsequently risen to importance, it is natural that the name of the former should have been retained in the treaty. It was a common thing till lately that the kasba was not the place from which the name of the taluk of which it was the head-quarters was derived.

As to the 18 taluks of the Barahmahal (i.e., north of Thopur) mentioned in Col. Read's Report, it is difficult to reconcile them with the nine mentioned in the definitive treaty. It may be that those mentioned in the latter were handed down in Tipu's accounts from time immemorial without reference to the actual number which existed at the time of the treaty; indeed this is very possible, as Article 4 of the treaty indicates that Tipu himself was rather hazy as to what taluks then actually existed or where they were.

Of the nine Barrah Mohul taluks of the treaty schedule, seven find a place in Captain Read's list, Kaveripattam and "Barrah Mohul" proper being omitted. Kaveripattam, as we have seen, was exchanged for Cautputtoor, and it would therefore seem as if "Barrah Mohul proper" coincided with the remaining taluks mentioned by Captain Read, viz., Adamankottai, Harar, Morapur, Krishnagiri, Kallavi, Mattur, Singarapett, Tirupatur, Parandapalli, Vanimbadi and Javadi; and from these Adamankottai, Harar and Morapur may fairly be deducted, as the first-named would probably have merged in Bharunapuri and the last two in Tenkarakottai of the treaty list. The difficulty however still remains that if Coorg, undoubtedly ceded to the English in 1792, is not the Koork of the treaty schedule, then this important province is not mentioned in the treaty at all: and this is further complicated by the fact that, in Appendix VI, vol. i, p. 519, 2nd Edit. of Wilks' History, a list is given of the Purgunnahs that appear to have been in the possession of Chick Deo Raj of Maisur at the time of his death in 1704, in which list

or the true Balaghat, is above the second line of ghâts, and the so-called Talaghat taluks are below or between outlying ranges of the first ghât system. As might be inferred, the district is composed of a series of plains and valleys, of varying height, the slope throughout being towards the east and south. Thus the greater part of Hosûr is 3,000 feet above the

the "Barrahmahal" is entered as containing the following taluks:—(1) Barrahmahal, (2) Caveriputtan, (3) Verabuddroog, (4) Raycottah, (5) Kangoondy, (6) Daranipoor, (7) Pennagra, (8) Tingrycottah, (9) Caveripoor, (10) Ahtour-Anantgeery, (11) Parunatti, (12) Shendamungul, (13) Womloor, (14) Sankergueery, (15) Namcall, (16) Koosh, (17) Salem. Now here again, between Namakal and Salem is a mysterious "Koosh" where Koork of the treaty schedule stands, the revenue being the same in both cases. Now Coorg was not subject to Maisur until 1773, when Hyder conquered it: so if a Koosh or Koork was really amongst the provinces subject to Chick Deo Raj in 1704, then it might fairly be inferred that Koork of the treaty schedule was a taluk in Salem and not the province of Coorg. In arguing that Koork is Coorg Mr. Foulkes, after assuming that Koosh of Wilks' Appendix may be taken to be a misprint for Koork, writes as follows:—"If so, the matter is narrowed down to the simpler question, whether the Koork of the treaty schedule is Coorg.

"There is not after all much of an imputation upon the 'veracious Wilks' in correcting the error of his appendix; for, if, as I believe to be the case from internal evidence, this Appendix is not his own work, but was compiled for him by some one else, all his own responsibility regarding it was to see it correctly printed. I will give two reasons why I believe it not to be Wilks' own work.

"1. In this Appendix the 'Purgunnahs' supposed to have belonged to Chick Dev Raja are distributed under three heads, viz., (1) *Mysour* with 70 'Purgunnahs,' (2) *Barrahmahal* with 17 'Purgunnahs,' (3) *Coimbatour* with 14 'Purgunnahs.' Under 'Barrahmahal' it includes Salem, Koosh, Namcall, Sankergueery, &c., all numbered in consecutive order. I do not think it possible that Wilks could have written this; he knew perfectly well that these places were not in the Barahmahal. Here then is a huge error and an error that Wilks could not possibly have made, and he could not have compiled the document which contains it."

"2. In the next place, I turn to Wilks' Index to see whether he wrote the name 'Barrahmahal' as it is written twice over in this Appendix; and I find there 'Bârahmahâl,' and on turning to half-a-dozen places in his text, I find this same spelling always, with or without the accents. And similarly I find the names of nearly all the 'Purgunnahs' included in 'Barrahmahal' in this Appendix spell differently from Wilks' spelling.

Appendix.	Wilks' Index.
Caveriputtan	Caveripattam.
Verabuddroog	Veerabuddra Droeg.
Raycottah	Rayacota.
Kangoondy	
Pennagra	Pecagra.
Tingrycottah	Tingrecota.
Caveripoor	Caveripoor.
Anantgeery	Does not occur: but Wilks never writes -geery, but almost always -gherry, and sometimes gerry.
Parunatti	Perunetti.
Womloor	Oomaloor.
Sankergueery	Sankerydroog or Shankerydroeg.
Namcall	Namcul.
Koosh (for Koork)	Coorg.

"All these differences of spelling, and they can be carried much further, show ve

sea; Krishnagiri slopes from 2,000 to 1,300, which is the general level of Tirupatūr, Dharmapuri, and Uttankurai, Dharmapuri being perhaps on the average nearer to 1,400 feet; Salem slopes downwards from a maximum, in the plains, of about 1,200 feet, and Attūr is somewhat lower; Trichengode generally is lower than Attūr, and near Erode comes as low as 550

plainly that the compiler of Appendix No. VI had a different system of spelling from that of Wilks, and therefore * it was not drawn up by Wilks himself.

* That Wilks' mode of transliteration was not uniform. Mr. Fonkes himself has supplied every strong proof, cf. p. 48 *supra*, note on Ketti Mutaligar.

"The question, why 'Koork' is placed by the side of Salem in the schedule attached to Article 3 of the Treaty of 1792, and in Tippee's own confirmatory 'Jumamahandy,' is one to which only a conjectural answer can be given. Possibly it may have been a bit of diplomacy. But it does not much matter; for this much is very certain from Wilks himself, (1) that Coorg was ceded by this treaty; and (2) that Tippee was very angry about it, which emphasizes that certainty; and yet, if Koork of the treaty schedules is not Coorg of Wilks' text, this important emphasized cession does not appear at all in these lists of the ceded provinces. I do not see any difficulty in the way of this identification beyond the circumstance of the place which it occupies in the list of cessions, and this difficulty seems to me to be quite set aside by the circumstance that everything else points to Coorg."

If, to sum up, Koork and Koeth are not Coorg, then Coorg finds no place in the treaty by which it was ceded, which is improbable though possible. The matter may have been so much a subject of humiliation to Tipu that the cession may have been understood but not mentioned. This is improbable. If, and this appears the better opinion, Koork is Coorg, then its position may be explained on the supposition that the natives who copied the treaty were so much afraid of Tipu's anger that they purposely placed Koork amongst the so-called Barahmahal taluks in the hope that it would escape special notice, and so save them from an explosion of the tyrant's anger. Reference on the subject was made to Mr. Aitchison, then Chief Commissioner of British Burma, who was under the impression that a map showing the treaty cessions was to be found in the Foreign Office at Calcutta. Application was accordingly made to the Foreign Secretary, eliciting the following very obliging reply, which is the latest information available on the subject:—

FOREIGN OFFICE,
Simla, 1st May 1880.

"DEAR SIR,

"I am directed to acknowledge your letter of the 10th instant, asking for the identification of Koork in page 149, vol. v, of Aitchison's Treaties.

"I am afraid the Foreign Department cannot help you on the point.

Yours faithfully,
(Signed) H. M. DURAND."

To

H. LEFANT, Esq.

To return however to the Barahmahal. The etymology of the name is بارہ (barah=12)

+ محل (mahal = a palace), and it consequently signifies "the twelve palaces."

The following durgams are said to have been dependent on the Barahmahal:—Boditimmaraya Durgam, Chenraya Durgam, Kodagiri Durgam, Melagiri Durgam, Udagiri or Odagiri Durgam, Ratnagiri Durgam, and Anchitti Durgam. Jagadeva Rao appears to have been originally an inhabitant of Nannal Circar in Haidarabad, from which he was obliged to fly owing to a passion which the beauty of his daughter had inspired in the nawab. He took with him in his flight 64 families, of whose names a list is at hand, but too lengthy for insertion here: their descendants, of whom Ramier, late Karnam of Krishnagiri, is one, still live at Krishnagiri, Maharajagarh, Parandupalli, Tirupatūr and Kaveripatnam. In their flight they came southwards to the Tungabhadra, which stopped their progress, being in flood. Considering however that death was preferable to dishonour they risked the passage, which was accomplished in safety. Coming thence to

feet, while the Namakal Taluk, which borders on Trichinopoly, is on the lowest level of all. An almost unbroken line of hills crosses the district a little south of its centre, in a line roughly speaking from E.S.E. to W.N.W. Another range separates the Balaghat from the Barahmahal, and another, almost unbroken, fringes the Barahmahal on the east. The south-east corner

Pennakonda, Jagadeva Rayar performed such feats of valour in its defence against the army of Vijayapur, that the representative of the Vijayanagar dynasty at Chandragiri, to whom Jagadeva Rao was related, granted him the tract now known as the Barahmahal. This was about the year 1578. The tract was then almost uninhabited and clothed with forests. He took up his residence first at Jagadevagarh, and was very liberal in the terms on which he granted lands to his followers and the small indigenous population, who needed some such stimulus to wrestle with the jungle. Several grants known as Deshmuki and Deskulkarani were given by him in perpetuity, as also Inams for village services, and Battavarthi Inams to the Brahmans who officiated in the temples. It is said however that his generosity was quickened by a prophecy that his raj would be of brief duration. When he left Haidarabad two sons, Kumara Jagadeva and Rama Jagadeva, accompanied him, one of whom, as Jagadeva Rayalu II, who is said to have transferred the seat of government to Rayakota, succeeded him, his name being preserved in a stone inscription about the grant of the village of Karimangalam in the Pennaguram Division. He was succeeded by Jagadeva Rayalu III, and after him Ramajagadeva Rayalu, in whom the dynasty came to an end in 1659. He was overthrown by Mustafa Khan, said to have been a servant of Vijayapur, who ruled the country for five years, after which it passed into the hands of the Mahrattas Eecoji and Sevaji, to whose time the forts of Maharajagarh and Bujangagarh are assigned. The Mahratti rule (this account is according to a memoir, based chiefly on office records, prepared in the Huzar in 1859, vide District Gazette, January 14, 1860) is said to have lasted forty years. Zulfikar Khan, on the part of the Mogul, then reduced the country and is said to have ruled eight years, after which Alamgir gave it in jaghir to Abdul Nabee Nawab of Cuddapah, who is said to have reigned thirty years up to 1751. To him are assigned the twelve forts from which the name Barahmahal is derived. In his government the whole of Krishnagiri is said to have been given away to Mahometans in jaghirs, some of which still survive. The rule of the next nawab, Abdul Mahomed Khan, which lasted ten years, is said to have been noted for the leniency of the rates imposed on the jaghirs. Abdul Musum Khan, the next nawab, ruled eleven years, after which he gave place for eight years to Abdul Muzzad Khan Nawab, who, after governing for eight years, was succeeded by the same Abdul Musum Khan, who ruled for five years more, after which Haidar conquered the country and held it for one year, and then ceded it to Sena Viesaji Puot, a servant of the Peshwa, in lieu of peahkash. After two years Haidar resumed the country, and a short time afterwards it was administered by General Smith, but fell into the hands of Tipu in 1782 until 1792, when it was ceded to the Company. Tipu's reign is chiefly embalmed in native memory by his having resumed all favorable tenures except Devulayam and Brahmadayam. He seems however to have made partial restitution. Haridas Tyer was then Amildar of the Barahmahal, and the Zemindars, finding their estates sequestered by him under the Sultan's orders, proceeded to Raja Ram, the Dewan at Bangalore, with whom they had no better luck. They then had the courage to approach the Sultan himself, who, through Mir Mahomed Saadat, granted their request in consideration of a sum of Rupees 75,000 to be paid, money down; to this they at first consented, and Raja Ram was ordered to carry out the matter; but when they came to him they pleaded for a reduction of Rupees 40,000 in the amount on the ground that the Sultan had received the revenues for four years. Raja Ram referred them back to the Sultan, who was then with his army at Deohalli, and from him at last they obtained the terms which they required. Krishna Das, a Sowcar, paid Rupees 11,000 for them, and they paid the balance themselves to Imam Beg, Amildar, who was put in charge of Krishnagiri, which was afterwards formed into a separate division, and the Zemindars resumed their estates. The same summary, prepared in the Huzar as stated above, mentions that sanads then existing showed that the Talaghat taluks were partially held during the period of nominal Muisur rule, by Abdul Russul Khan, Nawab of Cuddapah, and by the Nawab of

has also its mountain guard. The river systems are strictly speaking four in number. The chief is the Kāvēri system, to which belong the southern portions of Hosūr and Dharmapuri, which contribute the Sanathkumārānadi and the Thopūr river or Vēpādiār, and the taluks of Trichengode, Nāmakkal and Salem, through which the Sirabangānadi, Thirumanimuthār, Karuvāttār and Aiyār flow, in the order mentioned, to the Kāvēri. The second system may be called the Vellār system, and concerns mainly the Attār Taluk, between which and Salem there is a water-shed, plainly noticeable, near the Gōdumalai. To this system belong the Vāsishthanadi and the Swēthanadi, which drain two parallel valleys running east and west, the former carrying off the drainage of the Kalrāyans and the latter that of part of the Kollimalais and Pachaimalais. Both these rivers unite outside the district and form the Vellār, from which the system has been named. The third system is that of the Pēndūr, which drains the northern portion of the Balāghāt and the Barāhmahāl, the north-west corner of Tirupatūr and the southern corner of Dharmapuri excepted. The chief tributaries to this are the Chinnār in Hosūr, the Mallapādiār in Krishnagiri, the Pambār in Tirupatūr, and the Vaniār in Uttankatai. The last and smallest system is that of the Pālār, which traverses the north-western corner of Tirupatūr. The district appears to have undergone a double crushing, the forces in the one case working from east to west, and, in the other, from north to south approximately. The result of the double forces is specially noticeable in the series of ranges which cross the centre of the district, their general line being from E.S.E. to W.N.W. and the spurs from north-east to south-west nearly. The system resulting from the east to west pressure may be traced in several distinct lines of hills. Thus on the extreme east there is the Javādimalai, the Kalrāyans (Mrlvāni and Valasaimalai ranges), and the Chittārimalai. A second line may be traced in the Yēlagiris, the Kunna-thūr outcrop, the Mallāpuram hill, the Kaurmalai and the Shevarōys. The third line is traceable through the Krishnagiri hills down to the Vattalamalai and the Thopūr hills. A fourth line is represented only in Krishnagiri and by the Pikkilimalai in Dharmapuri, and a fifth runs from Sūlagiri, with breaks, to the Panchapalli hills and the Mēlagiris, and on to the belt which fringes the Kāvēri. The sixth line, which is the true Maisūr plateau upheaval, is less noticeable, mainly because the Maisūr tract to the west is level with it, but it may be seen partially south of Denkanikōta and Jaulikōri. Any one who, from the plains, studies the hill system in Krishna-

Arcoot. Sanads are also forthcoming under the seals of Narro Janardan and Balāji and Baji Rao. A portion of the Balāghāt was under the Paligar of Alambadi. These details have been given for what they are worth. Nothing is more remarkable than the readiness with which people give away what does not belong to them. Rulers whose tenure is new or shaky are glad, for a present payment, to assign tracts in jaghir when the grantees are likely to be their supporters. Even the veriest pretenders are forward enough with sanads for what they have never conquered, and the recipients have no objection to take what costs them nothing, and play a double game with both contending parties. Even in the present day relics of this survive, and it is not uncommon to find that, under cover of right to a village, rival claimants grant pattas to ryots, who take advantage of this to plead uncertainty as to who their landlord is, and thereby embarrass the lawful owner. The details relating to the Barāhmahāl and the vicissitudes which it underwent as narrated by Wilks, will be found in Chapter II, History.

giri, will fail altogether to get an approximate idea of the way in which the hills run. True there are vales like those through which the roads from Krishnagiri to Kāstūpatnam and that from Rāyakōta to Palakōd run, which might suggest that the hills trend nearly from north to south, but the mass of hills is so tangled and complicated and the valleys between are so small, that a general view is impossible. If however the Yēlagiri is ascended to the plateau which fronts Jolarpett, a clear view of the whole is obtained. From thence, looking west, a series of long hill ranges running from north-east to south-west may be seen distinctly, commencing in Kangundi and Chittoor to the right and running on to the confines of Dharmapuri on the left. These lie one behind the other as far away as the Balāghāt, where the further extension is lost to view. Seven separate ranges may be counted, and they cannot better be described than by likening them to surf waves of gigantic size, the seven huge rollers seeming as if they were surging down from Maisūr and would dash themselves against the Yēlagiri. The best time to see them is in the evening just before sunset, when the western rays throw the eastern sides of the hills into dark shadow, while each topmost ridge glitters brightly against the dark setting of the range beyond. In the glare and haze of the burning sunset the dark rollers look as if flecked with golden foam. The last example of the north-south ranges is on a small scale, viz., the Allavamalai, south of Salem and west of Ghāzipūr. Of the results of the crushing from south to north the lines of upheaval south of Denkanikōta and Kundukōta in the Balāghāt are the northern representatives. The great range which crosses the centre of the district as above mentioned may be classed in the same category; the next is south of Salem, where, from the Shevarōys, may be seen three large and distinct ranges running east and west, of which the Jerugumalai, the Bōdamalai and Kheddāmalai are the chief representatives. The Gōdumalai to the east follows the same direction, as does the ridge which bisects Attār near Mallikarai. The Pachaimalais and Kollimalais cannot be referred distinctly to either system, partaking as they do partly of both. It is not impossible that the great horse-shoe curve in the south of the district, to which Mr. Bruce Foote refers in his memorandum given below, may be in some way the resultant of the double forces. A comparison of the parallel trap-dyke systems of the Barāhmahāl with those of the southern taluks, which are twisted and run in all directions, will show that while the forces in the Barāhmahāl have generally acted in a uniform direction, there has been a struggle of opposing forces in the Talāghāt.

For the purposes of the Revenue Settlement acres 1,508,642 were classified, 66 per cent. of the said area being "sandy red" soil, 16 per cent., "loamy red," 16 per cent. "regur" (chiefly loamy), and 2 per cent. "permanently improved." The red soils therefore largely predominate, the taluk percentage of this ranging from 68 in Krishnagiri to 91 in Uttankarai. Geologically regarded the soils are highly interesting, and are discussed at length in the Memoirs of the Geological Survey, Volume IV, Part 2, pages 34-46 and 120 to 139. They are primarily discussed under the heads of laterite (generally a highly ferruginous conglomeratic deposit of indurated clay), cotton soil, and kunkur, and again as red soils (Lāl), alluvial soils, black soils

(or regur), and mixed soils, besides which special mention is due to the white or salt soil (Chandu-man or Kalar-bhumi), which is generally a mixture of clay and sand containing large quantities of soda and potash and some common salt, these salts being derived from the decomposition of the highly felspathic rocks in the neighbourhood. The laterite is either pseudo-lateritic, as for instance the decomposed gneiss on the Shevaroya, or laterite proper, often highly conglomeratic, which "consists essentially of an agglomeration of little rounded particles cemented together by a ferruginous sandy clay, the little nodules or concretions being more distinct in their form towards the upper surface, where they become darker in colour, gradually changing from a yellowish red to dark brown or black, eventually becoming quite polished and assuming a semi-metallic lustre. Generally these consist of ferruginous sandy clay, concretionary in structure, but in many cases they are composed of iron ore, showing a grey metallic surface when broken; grains of sand also are frequently included in the mass, which sometimes assumes a true conglomeratic character. The matrix or cementing material increases in quantity from the interior of the bed to the surface, the latter being harder and less friable than the interior, which is clayey. In its least compact form this formation occurs as a gravel-like accumulation of small rounded pellets of impure, clayey, brown hæmatite, for which the very suitable name of 'pisiform lateritic gravel' has been proposed by Dr. Oldham." This semi-metallic lustre and polished exterior are very deceptive, and at first sight it is difficult to believe that the nodules are mere concretions or conglomerates, as they look as if they had been fused by intense heat. As for the red soils the greater part of them is formed by the decomposition of more or less ferruginous rocks, especially the hornblende varieties. The Lal of the plains is not to be distinguished from the red soils on the hills, which are however evidently formed by the weathering of the underlying rocks. Of alluvium the only sample worth mentioning is that of the Kāvēri in the south-west corner of the district, into which both humus and sand enter. Of cotton soil there are numerous spreads in the district, as, for instance, north of the Thalaimalai and west of Nāmakal. "South-east and east of Adamankōttai, at the south end of the Bārahmahal terrace, at an elevation of between fourteen and fifteen hundred feet above sea level, and around Dharmapuri are several good-sized spreads of typical cotton soil, especially to the north of the road from Dharmapuri to Pennāgaram.

"Eastward of the Mukanūr peak cotton soil is again found at a very high level, and spreads, without any important break, as far south as the bend of the Thopūr river. A long strip occupies the northern part of the Manjavādi valley, and extends northwards along the foot of the Tenāndōmalai for three or four miles.

"Several small but typical spreads of regur occur in the eastern part of the Salem-Attūr valley, and also in the great Kōttaiappatti valley which divides the Kalrayanmalai from the Tenāndōmalai.

"The very black soil lies, as far as we have seen, on the higher undulations of the comparatively flat country. It is generally of a very dark brownish-black colour, with occasionally greyish or bluish shades. The

mineral composition of cotton soil varies considerably, some varieties being so sandy as to constitute a clayey loam, while others are marly, or still more rarely form a very stiff clay, all agreeing, as a rule, in the absence of coarse mineral particles.

"In dry weather the surface is seamed with gaping cracks, which break it up into irregular polygonal figures, and the soil is then very friable, but in wet weather it becomes a highly tenacious mud.

"Many of the larger cracks extend three or four feet in depth, and where numerous render the ground unsafe for rapid riding.

"According to existing chemical analysis there is very little organic matter in this soil, the mean result of observations being about 4 per cent." M. D'Archiac quotes the following analysis in his *Histoire des Progrès de la Géologie* (vol. ii, p. 329), but without stating from what part of India the sample in question was derived:—

Silica	48.2
Alumina	20.3
Carbonate of lime	16.0
Do. of magnesia	10.2
Oxide of iron	1.0
Water and organic matter	4.3
	100.0

"In appearance the cotton soil bears a strong resemblance to the black soil of the Nilgiris, of the Anamalai forests, and of the 'bottoms' and parts of the surface of peat bogs in Ireland. It is also very like in appearance, and probably of similar origin, to the black mud soils at present forming on the beds of most tanks and jheels and of some of the backwaters of India.

"Looking at the cotton soil, then, as compared with these soils, we are inclined to regard it as a sedimentary deposit mixed with organic matter, chiefly vegetable in its origin, and we further believe the deposits to have been formed more generally in fresh than in brackish waters.

"The black soil, or 'maiden earth,' which is formed on the surfaces of peat bogs in Ireland contains very little organic matter, and is derived from the peat through the exposure of that deposit to atmospheric influences, when the organic matter is decomposed by the liberation of the carbonic acid.

"The fine black soil just on the surfaces of the peat bogs and drying-up swamps at the bases of many 'sholahs' (woods) on the Nilgiris, is undoubtedly formed in the same manner. In the dense damp forests of the Anamalais, south of Coimbatūr, the black soil is still a highly vegetable one, owing to so little exposure to weathering influences.

"In tank beds and jheels of India generally there is possibly more of animal life going on, but there is at the same time quite sufficient vegetable life to yield the amount of vegetable organic matter necessary for the

Mr. Henry F. Blanford has already put forward the idea of this soil being mainly of lagoon origin.

production of this soil, and, above all, these localities are exposed to atmospheric influences far more powerful than is the case with the peat of Ireland or of the Nilgiris. It is the intensification of the weathering influences of the Indian climate which appears to us to be the great agent in the production of this soil, and which accounts in great measure for the almost total destruction and consequent absence of all organic remains in recent deposits where we know that life has been so largely developed.

"Another argument in favour of the fresh-water character of the regur-depositing waters may be drawn, and apparently with good reason, from a consideration of the various levels at which the cotton soil occurs. It has already been observed that spreads of regur occur at comparatively great elevations above the level of the Indian Ocean, as, for example, at Adamankōttai, Dharmapuri, and other places in the Bārahmahal, and to the west of Nāmakal in the low country.

"In the first cases, if the plains around Dharmapuri and Adamankōttai had become covered with regur through the existence of brackish-water lagoons connected with the sea, as those of Mercanum or the Chilka and Pulicat lakes, it is evident that the whole of the low country of our area must have been under the waters of the sea in question, out of which the Shevaroy and other mountain ranges would alone have risen as islands. No indications remain of such a state of things, and there is good reason for believing that no such great depression of the metamorphic country has taken place since it acquired its present general contour. If such a sea ever did surround the mountains and highlands, it must have been at a period subsequent to the formation of the Cuddalore sandstone series, unless we presume the regur to belong to more than one geological period, a presumption not warranted by our present knowledge of the facts connected with the several formations of cotton soil before enumerated. Supposing such a sea to have existed, the question at once presents itself, what has become of the sedimentary deposits, both littoral and pelagic, formed by it? We can hardly suppose that they would all be so utterly swept away by denudation as not to have left any traces whatever among the numerous and often very tortuous valleys of the mountain country. We cannot, then, attribute the formation of the Dharmapuri cotton soil to the action of brackish-water lagoons connected with a sea washing over great part of what now forms the Bārahmahal, but must suppose the regur to have been deposited in shallow fresh-water lakes, or, if the water was not fresh, the saline properties must have been derived from the decomposition of the metamorphic rocks of the neighbourhood in which the deposit took place. The same argument will apply to the other high-level regur deposits of the Bārahmahal, and also to those in the neighbourhood of Salem, but not so forcibly to those occupying lower levels nearer the coast."

The natural lie of the country, as favouring the opinions set forth above, may be studied to great advantage in the south-west corner of the Uttankarai Taluk, over the greater part of the Kadathūr mitta and towards the bases of the Shevaroy. Before the Thopūr river had worked an outlet to the Kāvēri, the whole of this tract must have been one spread of shallow water. Kunkur is very common in the sub-soil, and near the banks of the Vānūr large deposits are found. The same may be observed in ravines near the Mallāpuram railway station.

Mr. Bruce Foote, of the Geological Survey of India, contributes the following memorandum of the geology of the Salem District:—

The geological structure of Salem District is (so far as it is known) very simple. By far the larger part is made up of rocks belonging to the great metamorphic or gneissic series of Southern India, with a few irruptive rocks in the form of trap dykes and granite veins. The remaining part is occupied by a few unimportant subaerial deposits and the alluvia of the different rivers, which also are very little noteworthy. Simple though the geological features of the district are, they are of much greater interest than is generally the case in mainly metamorphic regions.

But little is known geologically of the district outside of the tract examined by the Geological Survey, which tract includes very little but what lies within the limits of sheet 79 of the Indian Atlas. The parts known outside of those limits are the Kanjumalai and its magnetic iron beds, Sankagiri-drug and a small tract to the east of it, and finally a strip of country averaging three miles in width from Tirupatūr northwards to the boundary of the district.

A description of the area surveyed will be found in Volume IV of the Memoirs of the Geological Survey of India under the title "On the Geological Structure of portions of the Districts of Trichinopoly, Salem, Tanjore, and South Arcot, included in Sheet 79 of the Indian Atlas, by William King Junior and Robert Bruce Foote, Esquires, Geological Survey of India." The chief geological features are shown in the geologically coloured edition of sheet 79, also published by the Geological Survey Department.

The Nāmakal and a small part of the Attūr Taluk were surveyed in 1860 by my colleague Mr. W. King (now Deputy Superintendent, Geological Survey of India for Madras) and myself jointly; the remainder, which forms by far the greater part of the area included in sheet 79, was surveyed by myself in the seasons of 1861 and 1862.

But very little had been previously written about the geological or mineralogical features of the country. The earliest writer mentioning Salem District was Dr. Benjamin Heyne, of the Indian Medical Service, who referred to the so-called "chalk hills" near Salem town.¹

He was followed by Dr. Benza, also of the Madras Medical Service, who touched upon various points in connection with the geology of the district, remarking upon the well-marked bedding of the hornblende schists lying between Adamankōttai and Salem, and giving a fair description of the "chalk hills," a tract of country cut up by a remarkable plexus of veins of magnesite or carbonate of magnesia. He quotes an analysis of the magnesite by James Prinsep, Esquire.

Dr. Benza, whose "Notes on the Geology of the Country between Madras and the Neilgherry Hills *via* Bangalore and *via* Salem" will be found in the Madras Journal of Literature and Science, vol. iv, 1836, seems to have overlooked the presence of balmorite (fibrous serpentine) and chalcedony, both of which occur commonly with the magnesite, and also to have been unaware

¹ See his Tracts on India (London, 1814), No. 22. Journal of a Tour from Bangalore to Trichinopoly in 1802.

of the existence there of chromate of iron, a remarkable vein of which was discovered there by Mr. Heath, the founder of the Porto-Novo Iron Company. He also failed to observe the great magnetic iron beds of the Kanjimalai. No mention of the mode of occurrence of the magnetic iron beds or of the chromate of iron vein is given in the very numerous letters by Mr. Heath and others concerning the various leases granted by the East India Company to the Porto-Novo Iron Company, which had obtained the monopoly of those important minerals. These letters were all published in a bulky Parliamentary Blue-book.

References to the geology of Salem District were made by the Reverend C. F. Muzzy, of the American Mission at Madura, in his remarks on Greenough's Geological Map of India, which had been submitted to him for comment by the Government of Madras. These references, as well as some made by Mr. H. J. Carter in his "Summary of the Geology of India," given in his geological papers on Western India, are of no importance.

A notice of the magnesite at the chalk hills by the late Captain Newbold, F.R.S., which is referred to by Mr. Carter, I have not been able to come across.

The Metamorphic or Gneissic Rocks.

The members of the great gneissic series may be considered in the first place with much advantage, forming as they do by far the greater part of the district, and being the base on which rest all the other rocks met with. The South Indian gneiss series is unquestionably of vast geological antiquity, very probably quite as old as the gneissic rocks which in America and Europe are reckoned to the Laurentian system, the oldest as yet determined in any part of the world. Despite their age and the great amount of metamorphism they have undergone, their truly sedimentary origin may in general be clearly seen. The bedding of all the varieties of gneiss is as a rule perfectly clear, and over considerable tracts it is possible to work out the succession of beds with considerable detail and precision. In other parts, however, there has been so much contortion and dislocation of the strata that it is impossible entirely to unravel the confusion they show.

The true direction of the outcrop of the bedding, or "strike" as it is technically called, is in the northern part of the surveyed portion of the district (the north-western corner of sheet 79) generally more or less north-easterly; further south, along the Salem-Attir valley, the strike is more generally north-east by east or even more easterly still. In the extreme south of the district the rocks form a vast horse-shoe curve, a feature of great geological interest and worthy of every attention from future explorers, affording as it does the best and most extensive section of the metamorphic rocks as yet known in Southern India. This great curve will be referred to again at some length.

As these lines of strike represent a numerous succession of synclinal and anticlinal foldings, it is evident that they are due to the action of some great force or succession of forces compressing the originally horizontal or but very slightly inclined strata in a direction at right angles to the axes of the foldings.

The principal varieties of rock belonging to the gneiss which occur in the eastern part of the Salem District are, in the order of their importance and extent of development:—1, hornblendic schists and rocks; 2, quartzo-feldspathic gneiss (massive or schistose); 3, talcose and chloritic rocks (generally schistose, rarely massive); 4, magnetic iron beds; 5, crystalline limestones.

There are many intermediate varieties formed locally by graduation of the leading varieties into one another, but as a rule these are of no great importance. In the two first groups the varieties range from highly granitoid and porphyritic rocks to finely laminated schists, an intermediate rather massive but distinctly bedded (laminated) form being in each group the most common variety met with.

This intermediate massive variety of the hornblendic gneiss may be well studied on the Shevaroy hills, of which it constitutes the main mass; also in the group of hills known as the Dharmapuri hills lying to the north-west of the former. It is in fact the most widely distributed variety of the gneissic rocks in the eastern part of Salem District.

The quartzo-feldspathic group is well represented in the northern part of the district. On the western side of the Yēlagiri mountain near Tirupattūr some beds exposed on the slopes of the mountain show very marked porphyritic structure; the quartzo-feldspathic mass of the rock being crowded with distinct crystals of a lighter coloured felspar, and the rock constitutes a true granite gneiss.

Whether the great band of granitoid rock occurring at Sankagiridrug be a true granite, i.e., a truly eruptive rock, or simply a band of gneissic rocks converted into granite-gneiss by extra metamorphic action along an axis of folding, has yet to be determined; but there can be no doubt that the very numerous veins traversing the main mass of the rock in the drug hill are veins of true granite. These veins, which intersect each other at many different angles, form a very striking feature in the scenery of the place. Much of the granite would yield building stone of very great beauty and susceptible of very high polish.

The talcose and chloritic schists are also widely distributed. Their largest development is seen along the eastern flank of the Tenāndēmalai and further north on the banks of the Ponār, across which the beds extend towards the Javadi hills. The schists are often indurated into a very hard rock, generally of pale bluish-green colour.

In a few places are associated small beds of potstone, an impure variety of talc, used for the manufacture of various culinary utensils which will be referred to again further on.

The magnetic iron beds are the most remarkable and interesting of all the gneissic rocks in Salem District on account of their economic value, and forming, as they do, in many places very striking natural features of the country, and affording the geologist who is endeavouring to unravel the structure of the metamorphic region greater assistance than do the members of any of the other groups. None of these latter can be followed with much certainty over distances through which the course of the ferruginous beds can be traced with perfect ease and confidence.

The majority of the magnetic iron beds known to the Geological Survey

may be referred to five principal groups, but several important ones must be referred to singly. The five groups are—

1. The Kanjumalai group.
2. „ Gōdumalai group.
3. „ Singipatti group.
4. „ Thalaimalai-Kollimalai group.
5. „ Tirtamalai group.

1. The most accessible and one of the most interesting and important groups is that which heads the list, the Kanjumalai group, so called after the fine bold hill¹ around which the magnetic iron beds are disposed in a concentric ellipse forming part of a great synclinal fold. The hill is in itself a very striking and noteworthy example of a hill formed by circum-denudation, the sides of the synclinal fold having been cut away in such a manner that the highest part of the ridge coincides very nearly with the major axis of the ellipse into which the beds were folded. Three principal iron beds occur here, and may be traced with ease in most parts all round the ellipse, which is very elongated and not quite regular in form. The ellipse formed by the lowest iron bed measures $4\frac{1}{2}$ by $1\frac{1}{2}$ miles in length and greatest width, and all the beds are tilted up at high angles.

The following list shows the series of beds making up the mass of the hill, enumerated in descending order:—

1. Quartzo-hornblendic beds full of large garnets and of great thickness, forming the summit ridge.
2. Magnetic iron bed.
3. Quartzo-hornblendic and hornblendic beds alternating.
4. Magnetic iron bed.
5. Quartzo-felspathic gneiss.
6. Quartzo-hornblendic and hornblendic beds alternating.
7. Talcose schist, highly indurated.
8. Hornblendic gneiss.
9. Magnetic iron bed.
10. Talcose schist, a thin bed much indurated.
11. Garnetiferous gneiss.

The average thickness of the two lower and principal iron beds may be set down as about 50 feet, or possibly rather more. A great talus of iron-stone fragments extends all round the hill, but is specially noticeable on the south side, where the fields are thickly strewn with it for a distance of more than a mile from the foot of the hill.

In richness the beds are not constant throughout, but vary gradually from a rock which to the eye would appear to consist of ore to the extent of seven parts in eight (the eighth part being quartz, the only mineral associated with the magnetic iron,) to one containing about half its bulk of

¹ Lying six miles south-west by west of Salem town and close to the railway which passes round the eastern end of the ridge.

ore; the great mass of the beds consisting of an intermediate quality, in which the cubical and octahedral forms of the magnetic iron can occasionally be traced. The ore generally occurs in grains of various sizes lying in the planes of foliation, and sometimes uniting into strings or into small laminar patches. The grains have when freshly broken a considerable metallic lustre; weathering however gives them a black or very dull purplish-grey colour.

The iron beds show very conspicuously on the flanks of the hills in quasi-terraces.

These iron beds furnish much of the ore smelted by the natives in the surrounding villages, and were also worked (certainly as late as 1861) to supply the Porto-Novo Iron Company's furnaces at Pulāmpatti on the Kāvēri river some twenty to twenty-five miles to the westward. From information kindly furnished by Mr. Maylor, at that time the Manager of the Porto-Novo Iron Company's works, it appears that the yield from this ore was about 55 per cent. of pig iron; the quantity of charcoal required was $3\frac{1}{4}$ tons to every ton of iron produced.

Two kinds of workings were in vogue (in 1861) for collecting the ore. The first and most generally adopted was to turn up the talus or highly weathered outcrops of the beds by shallow trenches or holes (rarely more than three or four feet deep), and thence to collect the smallest and most friable pieces, which, if not already sufficiently comminuted, were further reduced by pounding (often with only a round stone) to the consistency of a coarse sand. The second kind of workings was by means of rude attempts at shafts, inclining according to the dip of the bed and joined together by still more irregular galleries, all running in a line in the richest part of the bed. The deepest shaft seen was about 15 feet in depth with a diameter of less than 6 feet. No attempt at timbering of any kind had been made.

The cost of collecting and picking for the Pulāmpatti furnaces was about $1\frac{1}{4}$ rupees per ton, and the carriage thither by bandies about $3\frac{1}{4}$ rupees; heavy charges, which, with the great increase in the price of charcoal, eventually led to the closing of the Porto-Novo Company's works at that place.

2. The Gōdumalai group of iron beds takes its name from the Gōdumalai, a fine lofty hill rising in the middle of the great valley stretching eastward from Salem along the southern flanks of the Shevaroy, Tenūdōmalai and Kalriyan mountains. The Gōdumalai divides this valley, which, for convenience, I will call the Salem-Attūr valley, into two parts, for it forms the watershed between the Vellār river and the Thirumanimuthār (or Salem river), a tributary of the Kāvēri. The summit ridge of the Gōdumalai consists of a great bed of magnetic iron ore rising into cliffs and pinnacles of great height and beauty. These cliffs are beautiful from their vivid colours as well as from their bold and striking forms. The main mass of the rock is of a deep purple, but where blocks have fallen away and the half-weathered joint surfaces are exposed, the colour of the surface is often so intensely red as almost to rival vermilion when lit up by the sun. This red colour, toned by streaks of brown, is well displayed on the face of the great precipice occurring on the north side of the ridge just below the summit, and forms a fine contrast with the bright green jungle at foot of the precipice.

The iron beds forming the Gōdumalai group may be traced from a point seven miles east by north of Salem along the Gōdumalai ridge, then past Bēlūr, north-eastward up the Naiyamalai, and thence along the eastern slopes of the Tenāndēmalai for many miles. The main bed, which is very rich along the ridge of the Gōdumalai, is in places fully 100 feet thick and dips north at a high angle. Where seen on the Bēlūr hill and on the Naiyamalai plateau, the bed is again very rich in its content of iron, but intermediately it is poorer. At the western end of the Gōdumalai two principal beds appear, but in the Naiyamalai four are seen. The main bed at the west end of the Gōdumalai ridge furnished (in 1861) the ore smelted in a considerable number of native furnaces in neighbouring villages.

3. *The Singipatti group.*—Lying four miles south of the Gōdumalai is another group of iron beds forming part of a synclinal fold extending some ten miles in a generally east-north-east to west-south-west direction. In this group there are three principal beds, which are most largely developed in the northern side of the synclinal axis, the corresponding beds to the south being cut off by faults to the west of Singipatti and obscured by thick superficial deposits east of the villages.

This group is not specially remarkable for its richness. Of the three principal iron beds, which are separated from each other by intervening thick beds of hornblende and quartzo-felspathic gneiss, the west or northernmost is richest. Where seen to the south-south-east of the travellers' bungalow at Valapādi it is about 50 feet thick, which is also about the average thickness of the other two beds north of the synclinal axis.

This Singipuram group appears to be connected with the iron beds occurring in the south-western part of the Kalāyan mountain group.

4. *The Thalaimalai-Kollimalai group.*—The magnetic iron beds reckoned to this group spread over a much wider space than those in the foregoing groups. They figure very conspicuously in the vast horse-shoe curve formed by the gneissic beds in the southern part of the district. This huge curve, which includes the whole mass of the Kollimalais and the Thalaimalai (the most southerly mountain in the Salem District), has its apex to the west outside of the limits of the area surveyed by the Geological Surveyors; but the curve of many of the inner (upper) beds was traced with perfect ease, demonstrating the reality of the flexure. To the east of the Kollimalai and Thalaimalai mountains the beds belonging to the great curve are lost sight of under the great spreads of cotton soil which cover the north-western side of the Trichinopoly District, but could they be followed up, there is but little doubt that a distinct connection could be traced between the iron beds of this group and several that occur in the Pachimalai mountains in the last-named district.

The principal iron beds of this group are four in number, three of them occurring about half way up in the total thickness of beds reckoned as belonging to the great curve, the fourth occurring at a much higher level, but in obscure relation to the others. It occurs at Mahadēvi near the south-eastern corner of the Kollimalais and will be described further on. In the southern arm of the curve two of these have been traced from a little north of Thāthaiyāngārpēttai westward to and along the most northerly ridge

outlying from the Thalaimalai. Thence they extend westward, forming two well-marked wall-like ridges nearly to the Karuvāttār river, reappearing from under the alluvium and continuing a west-north-westerly course for a distance of about 12 miles, beyond which they were not surveyed. The third bed is an overlying one, not much developed in the southern arm of the curve, but best seen on the Kumārapatti hill a few miles to the south-south-west of Nāmakal.

The representative of the two first beds in the north arm of the curve is a great bed forming a ridge which commences at Vellalapatti, seven miles north-west by north of Nāmakal, and runs north-east by east for several miles.

Four miles eastward of the Trichinopoly-Salem road this great bed runs up and along a very conspicuous ridge, the Bēlukurichi ridge, forming its crest for several miles till cut off by a great trap dyke and apparently faulted with a great dislocation to the north. The shift appears to amount to nearly two miles, but can hardly be considered as proven owing to the intervening grounds being covered by a large tank and the paddy flat below it. What appears to be the continuation of this iron bed runs up the most north-westerly spur of the Kollimalais, and is finally lost sight of in the jungle on the northern flanks of the mountains. The upper or Kumārapatti hill bed is represented in the northern arm of the curve by two fine rich beds forming the backbone of the Ullālapuram ridge, five miles north-west of Nāmakal. These beds cross the Naināmalai hill and come within the influence of the great fault just mentioned, by which they are not much shifted, but have their dip changed from a southerly to a northerly one, being in fact inverted. They then run up the western flank of the Kollimalais, where they are probably again seen in the magnetic iron beds on the high ridge north of Pylum.¹ It is very likely also that the beds of this group are associated with the rich and important beds of the Tammampatti valley, though the connection was not traced across the very jungly region intervening. The iron ore obtained from the lower beds on the great Bēlukurichi ridge west of the great fault is of excellent quality, and the iron obtained from it was the most highly esteemed of all manufactured in the district. The very numerous furnaces at Nāmagiripett and other villages in the Rāsiapuram Taluk² used to be fed with ore from this bed. The Mahadēvi bed above mentioned is noticeable more because of the remarkably distinct and well-defined double curve it has been bent into than for its richness, which is but very moderate. Unfortunately it is surrounded on all sides by great spreads of thick soil, which completely prevent its relations to the great curve being worked out; but it must be regarded only as a minor crumpling within the great horse-shoe. As in the great curve, the apices of the double curves both lie to the west, and the

arms extend away to the east embracing two hills thus:

The

decomposition of the iron-bearing rock has here given rise to the formation subaerially of a marked lateritic crust covering the magnetic iron in part.

¹ A village on the Kollimalais, so spelt in the Ordnance map.

² Prior to the revision of the taluks in 1860 there was a taluk of this name called after Rāsiapur or Ghazipur; it is now amalgamated with the Salem Taluk.

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5. *The Tirtamalai group.*—The most northerly group of iron beds in the surveyed area is that called after the Tirtamalai, a fine bold mountain forming the extreme northern extremity of the Tenāndēmalai mass. The group consists of two great and in parts very rich beds, forming the backbone and summit of the Tirtamalai ridge, and a third bed three miles to the east on the banks of the Ponār river. On the east side of the mountain the iron beds, which have a dip of 82 degrees west, form a very grand precipice many hundred feet high, and exhibiting in great perfection the beautiful colouring described as belonging to the Gōdumalai iron cliffs. The iron made from the ore quarried close to the Tirtamalai pagoda is highly esteemed, and the beds being between 50 and 100 feet (or possibly much more) thick each, the quantity of ore is practically inexhaustible. To the north the Tirtamalai beds extend beyond the limits of the area surveyed, and may very probably extend into the Javādi hill group. To the south of the pagoda the beds can only be traced for one and a half miles, and are then lost sight of under thick soil in a heavy jungle.

It is probable that the Tirtamalai beds occupy a very much higher horizon in the gneissic series than do the Gōdumalai beds, but the evidence obtained was insufficient to establish the inference suggested by the relative positions of the two groups of beds indicated on the map.

The third member of the Tirtamalai series is a fine rich bed occurring at Mondacooly² on the Ponār river, which it crosses. Its course is a short one, both ends being covered up by thick soil at no great distance from the river.

The single beds of magnetic iron not referable to any of the above groups but yet deserving mention are—

1. A small but rich bed on the south side of the remarkable elliptical basin forming the Mallikarai hill (in the Āttūr Taluk) already referred to when speaking of the Kanjumalai synclinal ellipse.
- 2 and 3. Two good beds on the south flank of Paithūr hill.
4. A bed on the south side of the Āttūr hill which supplies the furnaces at Āttūr village.
5. A small bed of rich ore close to the southern base of Kheddamalai in Salem Taluk.

Crystalline Limestones.

Crystalline limestones were found in only two places within the surveyed area, the one being Shattambūr, seven miles south-west of Nāmakal, the other a little to the east of Mahoonpolliam³ (?) on the Madras Railway, east of Sankagiridrug. In the former case the beds extend for a couple of miles to the eastward of the village, the easterly extremity disappearing under cotton soil. The beds, which are chiefly greyish white in colour, include also

¹ Erroneously called Teepleemullay in the Atlas sheet N^o. 79.

² This is the spelling of the Atlas sheet.

³ Mr. Bruce Foote probably refers to the village spelt Moonatampolliam on the Atlas sheet, which would probably transliterate into Mūnatampalaiaim or "the Palaiyam of the three Nātangars."

some greenish and pink beds. The whole mass is several hundred feet thick, and calculated to yield a vast quantity of splendid stone admirably fitted for all building purposes, ornamental as well as ordinary. Lime could also be burnt to very great advantage for purposes requiring purity and good colour. A solitary bed lies about three-quarters of a mile south of the principal group of beds.

The Mahoonpolliam beds are much less important, being but of small extent. Their position, however, is favourable, as they cross the railway line, and could be made available with great ease if any demand for the limestone existed. They are greyish white and pink mottled in colour.

Potstone.

Several small beds of this variety of impure hard talc occur among the gneissic beds in different parts of the district, and deserve notice because furnishing a material used to some extent for the manufacture of various cooking utensils, as pots, bowls, plates and dishes, which are (or were) in considerable request. These utensils, which are but of rude shape, are made by chiselling out lumps of the stone, which are placed on pads of rag or straw on the workmen's laps. The presence of crystals of iron pyrites, which are very common in the grey or whitish drab stone, causes much loss to the workmen, as they find the stone very brittle in parts.

The fire-resisting qualities of the vessels appears to be one of their great recommendations. They are said to be specially employed by Brahmans.

The three principal localities where these beds of potstone occur and are worked are Tandagoundanpalaiaim, 17 miles east-south-east of Salem; Karupūr, 6 miles north-west of Salem; and Yerumaipatti, 9 miles south-east of Nāmakal.

Corundum.

Certain beds, probably belonging to the gneissic series, have been worked for emery or corundum, which was formerly, if not now, exported from Salem. The localities where these occur were not visited by Mr. King or myself, and nothing appears ever to have been published about them from which to judge of their nature. Rubies are said to have been found occasionally at the same places, but I have not been able to learn on whose authority the statement was based.

Intimately connected with the metamorphic rocks of the district are two groups of rocks which must themselves be looked upon as of metamorphic origin; these are, firstly, the *quartz veins*, and, secondly, the *magnesite veins*, occurring so numerously at chalk hills near Salem.

The former group, the *quartz veins*, are with one exception of little interest in the Salem District as far as they are known. They are few in number and small in size as a rule. Only three need be here referred to; these are—

1. A vein of large size on the north face of the Melakupūr hill three miles west-south-west of Āttūr, and
2. A large vein three miles south-east of Morapūr railway station, both which veins are full of cavities left by the removal of some mineral forming rhombic crystals. What that mineral was cannot now be determined.

3. A great mass of pure white quartz issuing out of the jungle on the east flank of the Gundūr or southernmost spur of the Shevaroy mountains.

This fine mass, locally known as the "White Elephant Rock," rises about 120 feet from an irregular base, the diameter of which I estimated at 200 feet as seen from the top of the mountain rising behind it. It presents the appearance of being a rudely cylindrical intrusive mass rather than part of an ordinary quartz vein. The mass is much cut up by great vertical joints, by one of which the hillmen get up to rob the wild bees' nests on the summit. The quartz is of very pure colour, and not a speck of any other mineral could be found in it.

The *magnesite veins* occur chiefly at the "chalk hills" near Salem, but are also met with at a few other places in the district, but are there much fewer in number and less well developed. A description of their mode of occurrence at the "chalk hills" will also give a clear idea of their appearance at the other localities.

The name "chalk hills" was long since given to a rather barren tract of slightly hilly ground north and north-west of Salem town. Over great part of this tract the surface is whitened by numerous small veins of *magnesite*, the white colour of which doubtless suggested the name given to the locality. The tract of altered rocks over which the *magnesite veins* extend covers some twelve square miles in two areas stretching from a little west of the railway a couple of miles north-west of the Salem station, north-eastward to the western foot of the Shevaroy mountains. The southern area, which is very much the smaller, forms a low ridge about three miles long, and lies about three-quarters of a mile south of the northern area. The shape of the northern area is irregular; in plan it is leg-of-mutton shaped, with the broad end abutting on the spurs of the Shevaroy and much obscured by low jungle. The surface of both areas is cut up by innumerable *magnesite veins* running in every possible direction; but the more important veins are seen to follow certain definite lines, coinciding with the joint fissures observed in the unaltered gneiss rocks in the immediate vicinity. The principal veins range from north-north-east to east in their bearing, but if the minor ones be also considered, nearly every point of the compass would have its representative. The following is the description of the aspect of the chalk hills given by Mr. King and myself in our memoir on the geology of Salem, &c., already quoted:—

"The southern or smaller of these altered areas has the form of a low broad ridge, seamed in every possible direction by the veins of *magnesite*, which, being harder than the main mass of the altered rocks, stand out from three or even four feet down to an inch or two over the general surface, and seam the ridge all over as with a rude network. The veins generally underlie at a high angle, or are vertical. The course of the veins is generally straight for several yards; they then turn and follow some other directions, but often divide and twist about in a most puzzling manner. In colour the veins, where freshly broken or exposed by recent denuding action of heavy rains, are of a pure white, very dazzling and painful to the eyes when the sun is shining brightly. When the veins have been long exposed to the weather, they have become much blackened, and wherever the rock shows any asperities, or when seen from a distance,

present, as might be expected, various shades of grey. Occasionally, however, the grey or brownish stain extends through the *magnesite* itself, indicating in all probability the admixture of some foreign mineral substance. In width these veins rarely exceed two or three feet, and are generally very much smaller. Those occurring in the northern area are generally larger than the southern ones, but not so well defined and more kink-like in appearance. Though the *magnesite veins* are white in colour, these so-called "chalk hills" present but a very faint resemblance to hillocks of true white chalk, which are generally quite smooth and covered with turf, whereas this *magnesite-bearing* region is far from being generally white, and is eminently dry, rugged and barren, hardly anything but a few stunted shrubs, chiefly of the genus *Dodonaea* (?) and a thorn-bearing acacia (*Acacia latronum*) growing where the white veins are most abundant.

"Associated with the *magnesite* are minute veins of *baltimorite* or fibrous *serpentine*, generally of pale green colour, but here and there the largest of these veins (never exceeding 6 inches in thickness) show pieces of a rich bluish green." Weathered and waterworn pieces often show rich tints of yellow, brown, red and purple, but on the outside only. Of compact *serpentine* only very small fragments were found in one or two nullahs as pebbles.

"Thin coatings of *chalcedony* not unfrequently cover the surface of the *magnesite* or penetrate the mass of it; the *chalcedony* itself is frequently covered with a layer of very minute crystals of quartz. The *chalcedony* appears also in the earthy mass which the *magnesite veins* traverse, especially in the northern area and at the south-east extremity of the south ridge; and in this reddish or brownish earthy rock it occurs so frequently as to cause portions to pass into impure *jasper*, numerous fragments of which may be seen strewn the ground, more especially where the *magnesite veins* are least numerous, e.g., at the east end of the south area, where the matrix rock presents to a very remarkable degree the appearance of having been baked and burnt into a cindery consistence. Here the *chalcedonic* and *jaspery* coating and network of innumerable small threads and veins penetrate the rock in every direction. The *magnesite* also not unfrequently forms such a network in the immediately surrounding rock."

Fragments of *chromate of iron* are found occasionally lying about the northern area; they are probably derived from a vein of that valuable mineral exposed in an old and (in 1861) abandoned mine near the centre of the area. The vein, judged from the direction of several shafts sunk there, seems to have a north-north-east south-south-west course, but the mine was inaccessible when visited by me. The ore, judging from specimens picked up at the pit's mouth, seems to occur in a true lode, giving off minute strings into the surrounding mass.

The reddish, reddish-brown earthy rock which occurs so largely throughout both areas, and which somewhat resembles an impure *serpentine*, is probably a much altered *hornblende* or *talcose schist*, beds of which occur immediately outside the area. In the southern part of the northern area the red rock is represented by a coarse black *porphyritic hornblende* rock of very *trappean* appearance, but which passes beyond the area of alteration into unaltered coarse *hornblende* *schist*.

The other localities at which magnesite veins are found are—

1. Near Mutunaikanpatti, three-quarters of a mile south-west of the village and six miles south-east of Namakal.
2. Powtram (written Pavitram), ten miles east-south-east of the former locality.
3. A little north of Moorputty and six miles north-eastward of Powtram, just on the borders of Trichinopoly District.
4. A small valley opening out eastward from the Isharmalai (Iswara Malai), nineteen miles east-south of Salem.

At all these places the magnesite veins appear under circumstances strongly resembling, though on a very small scale, those found at the "chalk hills."

No trace of any organism was found in either the magnesite or the associated siliceous sinters, and there is no evidence by which to fix the geological age of these remarkable examples of the re-metamorphism of metamorphic rocks. The cause of this re-metamorphism appears from careful consideration of the several examples cited, and still more from the study of another and very remarkable case at Tripunguly (eight miles north by west of Trichinopoly) to be the action of thermal waters charged with carbonic acid and other corrosive gases.

Igneous Rocks.

The igneous rocks found in Salem District are all younger than the great metamorphic series into and through which they have been intruded from below. The representatives of this family of rocks we have to deal with belong to two groups, the granite veins and the trap dykes:—

(1.) *Granite veins.*—Beside the very remarkable flexus of granite veins occurring in and around the Sankagiri drug already mentioned above, but very few of any importance occur in the surveyed area. The following may be named:—

1. A vein occurring at Calingapatti in the Namakal Taluk, remarkable for containing felspar crystals of huge size. These are associated with large plates of coarse blackish-green talc.
2. A large granite vein east of the Travellers' Bungalow at Valiapatti (on the Salem-Trichinopoly road), in which the central part of the mass shows that peculiar arrangement of the quartz and felspar that has been called "graphic granite" from the ends of the quartz crystals on cross-fracture surface presenting some resemblance in shape to Hebrew characters. The sides of the vein consist of common quartzo-felspathic granite of coarse texture.
3. A very large vein running nearly parallel with the Salem-Bangalore road from close to Dharmapuri to the foot of the high hills east of the Thopar glut, a distance of nearly ten miles. The vein is everywhere much obscured by debris and *

* Hiatus in manuscript due to white-ants.

(2.) *Trap dykes.*—These are not very numerous in Salem District, but some few occur which are of sufficient size and importance to be noteworthy. These are—

1. A group consisting of five very large dykes, traversing the country north of the Shevaroy mountains in a south-east by east to north-west by west direction. These rise in parts into high ridges forming conspicuous objects in the landscape. They are traceable for long distances, though lost sight of here and there under thick soil or jungle. The most southerly of the group, which crosses the Kaumalai, a great hill north of the Shevaroy mountains, and the Dharmapuri mountains, as a very large black mound, can be followed for 28 miles including breaks. The second dyke, which lies five miles to the northward, is 23 miles long; while the fourth and fifth have a closely parallel course of some 28 miles from their eastern extremity to where they leave the surveyed area. How much further they may extend to the westward remains to be seen. The two northernmost dykes form the backbone as it were of hill ridges many hundred feet high, where they cross the northern part of the Tenandemalai.

A group of large dykes radiating from the Paithūrmalai, a group of high hills lying between the Kalāyannalai and Pachaimalai. The group consists of two principal dykes and a number of branches. The former are remarkable for their great * and form striking objects, rising into high black-crested ridges 500 to 1,000 feet and upward over the plain. The more important, because the longer of the two, has a course of 17 miles from a point 3 miles east-south-east of Attār, and runs generally south-west by south. The second dyke branches off from the first about 6½ miles from its southern extremity, and runs for 14 miles nearly north-north-west. Though of great size, these dykes, like the great majority of others in this region, have caused no apparent disturbance of the gneissic rocks into which they have been injected, nor can any fusing or other metamorphic action be traced where the two sets of rocks are seen in contact. From this it may be inferred that they occupy lines of joint fissures which were already in existence when the volcanic action set up which caused the intrusion of the basaltic trap, and were not formed by violent rupture of the overlying rocks, which process could hardly have taken place without great disturbance of the strata broken through. These dykes are all of the same age. There are no intersections at the points of junction; on the contrary, a homogeneous rock branches off on all sides, the only difference traceable being a difference in the texture if the dykes be very dissimilar in size, in which case the rock in the smaller dykes is more compact and fine-grained than in the larger ones.

3. But one more dyke need be referred to; it is a large dyke running in a remarkably straight line for 12 miles north-east by northward from the northern slope of the Naināmalai (8 miles north-north-

* Hiatus in manuscript due to white-ants.

east of Nāmakal). This dyke is remarkable because connected with the great fault and dislocation of the magnetic iron beds at the east end of the Bēlakurichi ridge and on the eastern side of the Naināmalai, which were mentioned when describing the iron beds of the Thalaimalai-Kollimalai group (see *ante* p. 100). The injection of the trap in all probability took place along an old line of weakness caused by the faulting of the rocks and was not the cause of the fault.

The trap rock forming these dykes is in most cases a coarse black basalt.

Subaërial Rocks.

Two leading kinds of subaërial rocks are very commonly, though not extensively, developed in this district. The first is the well-known calcareous tufa known popularly as kunkur, formed by the decomposition of lime-holding rocks by rain-water, which deposits the lime when evaporating at or very near the surface. The second is a ferruginous clay incrustation formed on the surface of ferruginous rocks weathering in a damp atmosphere, *e.g.*, the so-called laterite on the summits of the Shērarāyan and other mountains. The name of laterite having been restricted to ferruginous clayey beds of sedimentary origin, should be avoided in reference to such strictly subaërial rocks as the capping of the Shērarāyan. In the same category with the iron-clay encrusting the highest mountain peaks should be placed the local aggregations, loose or compacted, of clayey hæmatite pellets often found in or underlying highly ferruginous red soils.

The Alluvial Deposits.

The alluvium of the Kāvēri has not been studied as yet in this district, and the alluvia of the smaller streams are too unimportant to require special notice. The valley of the slightly auriferous Pouār * *incognita*.

There are no thermometrical means available for the whole district. The

METEOROLOGY. readings, owing to the varying elevation of the different taluks, of one station would be no guide to the general temperature of another. The readings for a year have been given in the Taluk Notices of Hosūr and Salem. The average district rainfall is 38·3·23 inches. The subjoined statement shows the monthly rainfall for a series of seven years:—

* Hiatus in manuscript due to white-ants. The words omitted are probably "is a terra."

Year.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
1872	..	..	..	1 3·16	8 6·63	2 9·52	3 7·97	6 8·81	6 7·91	6 0·32	6 6·15	4 6·4	47 8·89
1873	..	..	..	1 9·16	1 6·52	1 4·5	2 4·78	5 4·27	6 19	10 7·82	0 5·80	0 6·8	32 9·12
1874	..	..	..	0 4·3	11 8·15	1 9·58	3 9·2	5 1·16	10 7·91	9 2·08	2 8·61	0 4·3	46 6·73
1875	..	..	..	2 5·3	4 9·03	3 3·24	1 5·46	4 4·63	3 9·75	7 3·83	1 8·52	0 1·27	31 0·61
1876	..	..	..	0 5·8	4 6·47	2 38	2 6·47	4 5	4 4·75	1 2·75	0 8·91	0 1	21 3·33
1877	..	..	..	0 6·1	3 8·49	3 5·75	0 9·13	1 2·13	12 6·31	13 9·79	4 4·56	2 2·61	45 1·61
1878	..	..	..	2 7·38	4 3·5	4 1·2	6 1·68	8 5·52	5 9·28	5 8·1	5 0·4	0 6·24	43 2·84
Average for the 7 years.	0 0·03	0 3·01	0 5·31	1 4·55	5 6·97	2 7·74	3 6·7	6 2·28	7 2·30	7 7·85	3 1·79	1 2·68	38 3·23

The following extracts from the Jammabandi reports show the state of the season from Fasli 1241 (1831-32) to Fasli 1289 (1879-80). From Fasli 1241 to 1244 the extracts are from the Huzur records; after that up to Fasli 1261 the extract is taken from the Appendix to Board's Proceedings, No. 5,270, dated 20th July 1868. The remaining extracts are from the Jammabandi reports.

Fasli 1241 (1831-1832).—The rains set in early; many mild but copious showers fell throughout the district in the months of March, April, and May and promised a favourable season, in consequence of which the ryots readily engaged in the tillage of their lands, and by the end of May much seed was in the ground, especially in the Barahmahal and upper taluks. The subsequent want of rain, however, entirely blighted some and did much mischief to all the growing crops and nearly stopt all agricultural operations until September, when plentiful rains again replenished the tanks, and of this, though then somewhat late, the ryots eagerly took advantage. For the last crops the rains completely failed, and much of the produce was in consequence destroyed. On the whole the rains were insufficient for even an average produce from either the dry or wet crops, and considering the injurious check the cultivation of the district experienced from want of rain between June and September, especially in the three Payinghat taluks of Omalur, Attur, and Trichengode and in Tenkarukottai and Tirupatūr of the Barahmahal, the season cannot be regarded otherwise than unfavourable, and, except for the timely fall of rain in September, would have proved a distressing one.

Average Current Price of Grain during Fasli 1241.

	Per Garce.
	RS. A. P.
Rice, first sort	159 15 0
Do. second sort	144 7 4
Paddy, first sort	73 13 5
Do. second sort	66 4 6
Ragi	61 7 5
Kambu	61 3 0
Cholam	70 12 6
Varagu	45 6 4
Wheat	251 2 11
Dholl	112 10 5
Horse-gram	62 13 2
Bengal-gram	163 2 2
Black-gram	130 9 6
Green-gram	163 7 8
Mochai	68 12 10
Sea salt	209 12 2

Fasli 1242 (1832-1833).—The commencement of the season promised favourably and induced the cultivators to engage actively in their field operations, but subsequently failed entirely and ruined their prospects; the distress has been in consequence very great. It would not have pressed so peculiarly hard on the ryot if the season had proved unfavourable from the commencement, as he would not then have sown his lands, which, if left uncultivated, would, according to the system observed in this district, have been exempted from any payment, but from its having been otherwise, and the lands having been extensively ploughed and sown, the failure of the rains caused not only the loss of crop to the cultivator, but also left him burthened with the assessment of the land, when, besides his seed and labour, he had lost the produce, the only source from whence he had to pay that demand. The distress was further enhanced by the unusual rise of price which was 71 per cent. above that of the previous year. By extensive farmers this would not perhaps be felt, as the high prices would probably more than counterbalance the diminished produce, but to the petty farmers (and they form nine-tenths of the cultivating community in this district) the case is very different. In the most favourable season the surplus produce they can bring to market, after supplying the wants of their families, is barely

sufficient to defray the land assessment, but in a year of drought like the past, when the produce extensively fails, they are left without the means of subsistence, much less the means of paying the Government demand. The poor ryots had not even the resource of selling their cattle left, as these, from want of water and pasture, died in great numbers, and the few which survived were in so miserable a condition as to be totally unsaleable. Many of the ryots indeed, as well as the other inhabitants, were reduced to the necessity of supporting life by gathering roots and herbs in the jungles, from the pernicious quality of which many are reported to have died. In addition to this cholera was not slow in its ravages on the population; it appeared at intervals in different parts of the district and the mortality during the year has been very great: 14,214 individuals are reported to have died from this disease, of whom 6,923 were cultivators and the remainder 7,291 other inhabitants.

I have said that nine-tenths of the cultivators in this district exist in great indigence; the following classification of them, according to the amount of land tax they each pay, will best exemplify this:—

Number of ryots paying below 10 rupees	68,602
From 10 to 15 rupees	12,774
From 15 to 20 do.	7,314
From 20 to 25 do.	4,529
	88,219
From 25 to 50 rupees	8,017
50 rupees and upwards	2,635
Total	98,874

Of the whole cultivators in the district amounting to 98,874, you will observe that no less than 88,219 pay below 25 rupees, and three-fourths of these even less than 10 rupees. From land of this small assessment, even in the most favourable year, it must be allowed there can be very little surplus after defraying the expenses of cultivation and of subsistence to augment the capital and means of the ryot, but in an adverse season, after deducting the maintenance of the family, it is clear there can be no surplus produce even to pay the land tax. The following statement exhibits the sale prices during the fasli of three descriptions of grain commonly used in this district; these are ragi, cholam, and kambu:—

The first varied from 44½ to 14 measures per rupee, average ..	26½ measures.
The second do. 41 to 12 do. do. ..	23½ do.
The third do. 42½ to 13½ do. do. ..	26½ do.

Allowing, then, that a man consumed daily on the lowest scale one measure of any of the above his annual expenditure would be, if he used ragi, Rupees 15-12-5, cholam 17-14-8, and kambu 16-13-7: including a family of a wife and two children and allowing 3 measures daily; his annual charge will be Rupees 47-5-3, Rupees 53-12-0, and Rupees 47-8-2, respectively; if to this is added the expense of salt, spices and the requisite condiments, also a cloth and a cumby to each member of the family, the charge will be considerably enhanced; and from the circumstances in which I have shown the mass of the cultivating community of this district to be placed, a season of privation and distress like the past could not fail to be most severely felt. Remission, which is not allowed in ordinary seasons, became indispensably necessary, and your Board having sanctioned it and furnished instructions for my guidance, it only remained for me to carry your orders into effect.

Average Current Price of Grain for Fasli 1242.

	Per Garce.
	RS. A. P.
Rice, first sort	218 4 5
Do. second sort	228 5 0
Paddy, first sort	113 13 8
Do. second sort	104 7 4
Ragi	123 3 0

	Per Garce.	
	rs.	A. P.
Kamba	122	1 10
Cholam	141	11 1
Varagu	82	9 7
Wheat	371	13 10
Dhol	248	4 9
Horse-gram	153	6 7
Bengal-gram	294	5 9
Black-gram	217	10 10
Green-gram	220	14 11
Beans	169	8 1
Sea salt	213	9 6

Fasli 1243 (1833-1834).—The past season proved below an average one; the rains fell partially and unequally and were on the whole scanty: this added to the diminution of the cultivated population from death and emigration and the extensive mortality amongst their cattle from want of water and forage during the previous year has occasioned a considerable decrease in the extent of punja cultivation. There was a considerable increase, however, as might be expected, in the nanja cultivation of the Barahmahal and upper taluks from the season being more favourable than the preceding, but in all the lower taluks there was a decrease in the nanja as well as the punja, especially in the taluk of Sankagiridurgum where little or no rain fell either in this or the previous year and where distress is consequently much more severely felt than in any other part of this district.

Statement showing the Average Current Price of Grain in the Zillah of Salem for Fasli 1243.

	Per Garce.	
	rs.	A. P.
Rice, first sort	313	15 9
Do. second sort	281	0 0
Paddy, first sort	144	9 3
Do. second sort	129	12 1
Ragi	162	9 7
Kamba	139	12 0
Cholam	176	13 3
Varagu	100	2 1
Wheat	604	11 9
Dhol	349	12 10
Horse-gram	226	13 3
Bengal-gram	474	10 11
Black-gram	332	1 2
Green-gram	352	9 11
Beans	258	5 5
Sea salt	230	4 4

Fasli 1244 (1834-1835).—The past season may be considered much more favourable than that of the year preceding. In the cultivation of dry land there has been in every taluk a considerable increase, and with some exceptions a small increase also in the wet. Notwithstanding this satisfactory outturn, the season was in some respects unfavourable from the rains being either insufficient or unseasonable for particular descriptions of grain. Amongst the dry grains, for gingelly oil seed, cholam, kamba, and a few other kinds of pulse, which require a good supply in the months of May and June, the rains were inadequate, especially for the first-mentioned grain; for ragi and cotton (the cultivation of which I am glad to say is extending especially in the southern taluks) which are sown in June and July the rains were both plentiful and timely; but for horse-gram, black-gram, Bengal-gram, and wheat, which is but partially sown, as well as for a few other kinds of pulse which are cultivated from August to October, the rains were very inadequate. For wet and garden lands the tanks and wells throughout the district received a poor supply, more so however in the Balaghat and Payinghat than in the Barahmahal taluks.

Comparative Statement of Cultivation.

	Punja.	Nanja.
	ACRES.	ACRES.
<i>Fasli 1243</i>	454,327	44,955
<i>Do. 1244</i>	534,252	45,227

Fasli 1245 (1835-36).—Season somewhat more favourable than the preceding one. Prices fell 34 per cent., but this was scarcely felt owing to the "abundant produce."

		Per Garce.
Average price of dry grains		82
Do. do. white paddy		82

Fasli 1246 (1836-37).—The season opened well, but the later rains failed. "The crops, especially in the lower taluks, suffered severely, and not only the quantity, but the quality of all was deteriorated, and the cultivation of the second nanja crop in general prevented from the inadequate supply of water which the tanks received. . . . The total produce of the district is estimated to have been about one-fourth below that of the preceding year. Prices began to rise in May, and continued pretty steady till September; but owing to the failure of rain, they rose very considerably afterwards, especially in the southern part of the district, where the unfavourableness of the season was more severely felt."

		Per Garce.
Dry grains		106
White paddy		106

Fasli 1247 (1837-38).—The season opened unfavourably, but subsequently improved greatly. "The produce of the dry lands was everywhere much below an average crop; in the two upper taluks not much above one-half. The wet lands yielded fairly. In consequence of a great demand for grain to export to Coimbatour and the Southern Districts, prices rose 17 per cent. above those of the former fasli, and enabled the ryots with facility to meet the Government demand."

Fasli 1248 (1838-39).—The season was more favourable, and the yield "over all may be estimated at three-quarters of a full crop."

Fasli 1249 (1839-40).—"The season may be considered somewhat more favourable than the last. . . . The outturn of the crops was very similar to that of *Fasli 1246*, and estimated at a three-quarter crop; and although the prices were somewhat lower in this than in the former year, in consequence of the more favourable state of the season in the Maisur and northward preventing the same demand which existed in *Fasli 1248*, yet the people have been able to pay up the revenue without much difficulty either to themselves or the Government servants."

Fasli 1250 (1840-41).—Season favourable. Prices fell considerably, and "some of the people found difficulty in meeting the Government demand."

Fasli 1251 (1841-42).—More favourable for nanja and less favourable for punja than the preceding year. Prices continued to fall, and "the difficulty of disposing of their grain, except at an unremunerating price, and of procuring silver, has been considerably felt" by the ryots.

Fasli 1252 (1842-43).—Season somewhat less favourable than the preceding. Prices rather lower.

Fasli 1253 (1843-44).—Season still less favourable and prices falling. "With a scanty produce and the present prevailing prices, the punja cultivation must have been seriously inconvenienced."

Fasli 1254 (1844-45).—"The season was altogether unfavourable." Prices rose in consequence.

Fasli 1255 (1845-46).—"The season under review was very unfavourable, and worse than that of the previous fasli. . . . The failure of rain which continued throughout the year. . . . put a stop to the progress of cultivation, both punja and nanja; and the crops on the ground suffered so much from drought as to compel the Collector to solicit the Board's sanction to grant remission on shavi and wasta. The produce of the lands cultivated was in punja from one-sixteenth to six-sixteenths, and in nanja under tanks

from one-eighth to one-half. The nanja lands irrigated by river channels alone yielded from three-fourths to a full crop. The loss of cattle from sickness and from want of pasture and water was very great. The increase in the prices of grain of every description is great and caused by a failure of the crops. This in itself has been the cause of great depression and distress throughout the district."

Fasli 1258 (1846-47).—Season unfavourable, but "not so severe as that of the past." The produce of nanja averaged thirteen-sixteenths; that of punja one-half. "The increase in the prices of grain of every description is great and caused by a failure of crop."

Fasli 1257 (1847-48).—"The season was decidedly more favourable than either of the preceding." The fall of rain was not very regular, and in some tracts there was still a deficiency. But on the whole the punja crops must have returned a fair crop, and this was indicated by a decided fall in prices as the season advanced. Had the season followed a course of average years, it would. . . . have been considered a fair one, but one more decidedly favourable is required after a series of years so unfavourable as those we have experienced, before the country can fully recover from their effects. To show the effects of these seasons more distinctly, I continue to separate the average prices of the years 1255-56 and that under review (*Fasli 1257*) from the average of the previous ten years, and it will be seen that although the average was lower than that of last year, it only fell back to that of 1255, a year of great scarcity, and was still far above that of the previous ten years.

	Average of 10 years.	Fasli.		
		1255.	1256.	1257.
Kambu, per garce ..	RS. 84	RS. 122	RS. 163	RS. 125
Cholam, do. ..	96	149	187	141

"On the other hand the monthly returns prove that the chief pressure was felt during the earlier months, and was the result of the scanty crops of former years and the apprehension of a further rise in prices, and that as soon as the harvest was commenced, a rapid fall took place."

Fasli 1258 (1848-49).—"The season was more favourable than in the preceding year. The decrease in the prices of grain of every description is great, which is principally attributed to the favourableness of the season."

Fasli 1259 (1849-50).—"The season was very unfavourable," the average yield of the district being half in punja and three-eighths in nanja. "The results of the season may, to a considerable extent, have been expected to create an enhancement in the price of produce."

Fasli 1260 (1850-51).—"On the whole, the fasli was far more favourable than the preceding one and left but little to desire. The general market rate of most of the grains grown in the district fell below the selling price of the previous year."

Fasli 1261 (1851-52).—"The dry crops "supplied a satisfactory yield." Generally the wet cultivation did not afford so favourable a return as could have been wished. "On the whole the outturn of the season may. . . . be taken as a moderately good one. . . . The average sale prices of the grains which constitute the standard produce of the district fell without exception below the rates which prevailed in the preceding fasli, and doubtless much inconvenience would, under such circumstances, have been experienced by the cultivating classes, had not the dry crop and, in several localities, the wet crop also yielded a more than usually abundant harvest."

Fasli 1262 (1852-53).—"The rain at commencement of cultivation season was scanty, but there was sufficient rain in July, which filled most of the tanks. In February the pulse crops, such as black gram, green gram, dholl, beans, &c., suffered from blight, but this loss was more than counterbalanced by full returns from other descriptions of grain."

A storm and hurricane of great severity occurred on the 27th and 28th March, and this

afforded full supply to some of the tanks of the taluk. The high and unusual rise in the rivers destroyed in some places the crops. In some places nanja, punja and garden products suffered loss by floods.

Fasli 1263 (1853-54).—"The season was not favourable. There were some falls of rain in May, but very little fell in greater portion of the district during the months of June and July. The falls in the succeeding months to the middle of November brought good supplies to most of the tanks and assisted the nanja crops. In some places wet crops failed in coming to maturity. The outturn of the dry was below the average quantity on account of the partial want of rain in earlier months and the entire failure towards the last part of the season."

Fasli 1264 (1854-55).—"There was no rain at the commencement of the cultivation season in May and June. In the months of July, August, September, and October there was a fair average supply of water in the tanks. In the month of November, though the rain was deficient, all descriptions of crops were in a fair state, but in December a few of the tanks were exhausted, and the wet crops dependent upon those tanks were dried up. The outturn of both descriptions of crops was below the average yield."

Fasli 1265 (1855-56).—"There was a general fall of rain at the commencement of the cultivation season in May and June in all the taluks, excepting Hosur and Tenkaraikottai. In July and August slight rain fell throughout the district, and from September to October there was again a general and seasonable fall; but in July and August and from November to the end of the year the Talaghat taluks suffered from drought, and on that account some of the earlier and the later punja crops entirely failed in those taluks. There was also a deficient supply of water in some of the tanks, and some of the nanja crops were partially lost in consequence."

Fasli 1266 (1856-57).—"The season for the year under report was a favourable one. In May, at the beginning of the cultivation season, there was a general fall of rain throughout the district. In the months of June and July there was seasonable rain in nine out of the fourteen taluks. In the taluks of Namakal, Paramathi, Trichengode, Tirupatūr, and Tenkaraikottai the rain failed, but this was in some degree counterbalanced by the heavy rains that fell throughout the district in the succeeding months down to October. In the months of November and December there was again a general fall in all the taluks excepting Denkanikota and Rāzipur. The tanks received a sufficient supply of water for the wet crops. The outturn from the dry crops was a fair one, excepting in a very few places where the pulse crops, such as horse-gram, Bengal-gram, oil-seeds, &c., partially failed owing to heavy land-winds. On the whole the entire outturn of the crops, both wet and dry, was much more than enough for local consumption; but, owing to the demand for grain in other districts, there was no material fall in the high prices which commenced in July of Fasli 1266."

Fasli 1267 (1857-58).—"The year under report was remarkable for an unusually bad season, the crops, both wet and dry, having failed to an extent that has not been equalled during the last twenty-four years. Owing to this failure of the crops there was a great scarcity through the year. The outturn of both the wet and the dry crops was not more than a fourth the average yield, and was therefore not enough for local consumption. It is a very unusual thing for grain to be imported from other districts into the Salem District; but in the year that has just closed other districts supplied large quantities of grain, both wet and dry. This supply was found of very great service to all classes, though it did not effect any material fall in prices."

Fasli 1268 (1858-59).—"The year under report may be pronounced somewhat better than the last, and yet the outturn of both the wet and dry crops was but one-half the average yield, for the district suffered from drought during June, July, and August. In the latter part of September and October heavy rains fell generally throughout the district and afforded to all tanks an abundant supply of water. From October to the close of the fasli there were but few showers, and in some places dry crops suffered from want of rain."

Fasli 1269 (1859-60).—"The season on the whole proved less favourable than that of the past year. Heavy rains fell during the months of July and August. In September and October the falls were partial only. From November to the close of the fasli there was little or no rain. The tanks received a fair supply in the months of July and August, but not an adequate supply to meet the wants of the year. The outturn of the wet crops was

somewhat below one-half the average yield, owing to the insufficiency of the later rains. The outturn of the dry crops was above one-half the average yield.

Fasli 1270 (1860-61).—The season during the year was of a very unfavourable character. The usual early rains in April and May, on which the dry cultivation so much depends, failed altogether. There was some rain in the next four months, but from October the rains almost entirely failed. The dry crops were in consequence very scanty, and the wet in many places perished for want of water. The outturn of the wet crops was only about one-third, and of the dry crops about one-half the average yield. The cultivation under the Kaveri channels was as steady as usual.

Fasli 1271 (1861-62).—The season though unfavourable was tolerably good compared with the preceding year; it however varied in the district, the Talaghat taluks having been more fortunate than the Barabmahal and Balaghat taluks. In the latter taluks there was a considerable extent of nanja waste and a partial failure of crops. More remissions were therefore called for both for shavi and for waste in these taluks than in the others. Though the average fall of rain during the year was 9 inches less than that

	In. Ten.	of last year, as shown in the margin, yet it was more timely in
<i>Fasli 1270</i>	31 9	this year than in the last. The early rains in March, April, and
<i>" 1271</i>	23 0	May, on which the dry crops depend so much, were pretty good,

and the rains in the months of September and November saved to a considerable extent the wet crops. The outturn of the crops was about one-half the average yield. The cultivation under the Kaveri channels was as steady as usual.

Fasli 1272 (1862-63).—The season opened pretty well and has been decidedly more favourable than the preceding year. Rain fell more or less every month from April to December. Had the rain which fell in November and December been a little more general, there would have been no failure at all in the crops. The amount of waste and shavi is considerably below that of the past year.

Fasli 1273 (1863-64).—The season, though less favourable than the previous one, was on the whole good. It was more favourable for dry cultivation than wet. Rain fell more or less in every month and exceeded in quantity that of the preceding fasli, but it was not so general in this as in the former. The taluks of Dharmapuri, Uttankarai, Krishnagiri, and Hosur were peculiarly unfortunate in regard to wet cultivation.

Fasli 1274 (1864-65).—The season was very unfavourable for cultivation, especially for punja. Though the fall of rain was almost the same as last year, it was neither general nor timely, and remissions were therefore called for to a considerable extent both for shavi and waste. Some taluks have, however, been more fortunate than others. Trichengode Taluk was the worst in regard to wet crops, which suffered to such an extent that almost one-half of the remissions granted for shavi in the whole district, viz., Rupees 10,637, appertained to this taluk alone. The crops could scarcely be said to have yielded half the average outturn.

Fasli 1275 (1865-66).—The season was unfavourable for cultivation, especially for dry crops. The rains have not been general, and crops in consequence suffered considerably in parts of the district. Remissions for the failure of punja crops were called for in the Tirupatur Taluk, and they were granted to the amount of Rupees 2,245 under the sanction of the Board, dated 27th March 1866, No. 2,155.

Fasli 1276 (1866-67).—The year opened when the district was on the verge of famine. Never did Salem witness for years past a more disastrous kind of season than the one under report. From the middle of July to nearly the end of October the district was overwhelmed with distress. The early rains entirely failed, and it was not till October that cultivation to any extent commenced. Up to that time nearly all the occupied land was lying waste, and not a blade of grass was to be found anywhere. Tanks and wells were almost dry, and the want felt for food and water was not a little. People were driven to live on herbs and roots, while more than a lakh and half heads of cattle perished from sheer starvation. The October rains enabled the ryots to bring under plough all lands that could be cultivated, and the prevailing distress gradually disappeared. The crops (chiefly wet) thrived well, and, though late, there was after all a good harvest.

Fasli 1277 (1867-68).—The season was very unfavourable for crops. The rains at the beginning of the punja season (April and May) were such as to encourage cultivation extensively; but the subsequent failure affected the crops seriously. The outturn of the

punja products, cholam and ragi, was scarcely one-half the average yield. The taluks which suffered the most were Uttankarai, Tirupatur, Krishnagiri, and the Sankaridrug sub-division of the Trichengode Taluk. In these the average outturn has not exceeded two-fifths, and as for pulse crops, such as dholl, &c., the failure has been considerable. The nanja season usually begins in July and August, but as the tanks received no supply till about September, the cultivation actually commenced only in October. The supply did not last over three months, and the consequence was that in January most of the crops were either perishing or had perished. Fortunately, however, there came a very heavy fall of rain on the 24th and 25th January and the following two days, which averted the impending danger, and saved much of the crop which would otherwise have entirely gone.

Fasli 1278 (1868-69).—The season during the year has on the whole been good, though it varied so that some taluks have been more fortunate than others. The season for punja cultivation is generally March and April, but this year it was later and did not begin till about May, as but little rain fell up to that time. It was afterwards carried on vigorously, and a fair average outturn, especially in the Sub-Collector's division, has been the result.

The rains in July and August having filled almost every tank, the nanja cultivation was begun in earnest, but the subsequent failure from December affected the crops. The remissions for shavi have not, however, been considerable.

Fasli 1279 (1869-70).—The season was on the whole very favourable throughout the year. The falls of rain have been generally copious and opportune for wet crops. The only taluks in which there was some lack in this respect were Hosur and Uttankarai, especially the former. Though the rains for dry crops came two months later than they should, they were sufficient to produce a fair outturn. Remissions for waste were called for only to a small extent, and were granted chiefly in the Hosur and Uttankarai Taluks, more than half the total amount remitted appertaining to the former.

Fasli 1280 (1870-71).—The season was very favourable both for dry and wet cultivation. Copious rains fell more or less every month, and all the tanks capable of containing water were filled twice or thrice over in the year. The result has been a good harvest and a fair outturn of crop. Very few remissions for waste were called for.

Fasli 1281 (1871-72).—The season, though not as good as the preceding one, was on the whole favourable for cultivation. The early rains were copious and timely for dry crops, and the result was a good harvest in most parts of the district. It was not, however, so with the later rains, on which mainly the wet crops depend. The rains were not only late, but partial. The tanks did not receive a full supply, and the outturn has been below the average. The parts of the district which suffered the most are the Pennagaram Division in the Dharmapuri Taluk and the Denkanikota Division in the Hosur Taluk. In the former the ayakat of some of the tanks was entirely left waste, and the dry crops yielded an extremely small outturn.

Fasli 1282 (1872-73).—The season was very favourable both for dry and wet cultivation. Rain fell more or less in every month, excepting January, and the tanks and anakats received a fair supply of water. The result has been a good harvest and an average outturn of crop.

Sub-Collector's report.—The season appears to have been a very good one. The small amount of remission granted compared with that of past years, and the more than ordinary extension of cultivation which has taken place, support this conclusion. The rainfall seems to have been abundant both for the dry and wet crops, though some of the former, such as mochaikottai (beans), dholl, Bengal-gram, &c., are reported to have suffered from excess of rain in the taluks below the ghats. The outturn of the wet crops is stated to have been very good.

Fasli 1283 (1873-74).—The season was a very indifferent one. The early rains in May, upon which the dry crops in the upland taluks depend principally, failed. The fall from April to July was very slight. In August and September it was moderate and in October heavy. There was little or no rain afterwards till May.

It will thus be seen the season was not favourable for cultivation, especially for dry crops. The heavy rains of October favoured the wet cultivation in most parts of the district, but in Hosur Taluk, however, the supply that the tanks received was insufficient.

Fasli 1284 (1874-75).—The season was favourable both for dry and wet crops. The rainfall was seasonable and copious, and a fair average outturn has been the result.

Fasli 1285 (1875-76).—The season was unfavourable for both dry and wet cultivation. The rains were scanty and partial, and failed when most needed. The outturn was below the average, and altogether it has been a bad year for man and beast.

Fasli 1286 (1876-77).—The season could not have been more unfavourable for both dry and wet cultivation. The outturn was below one-fourth. The rains of the south-west monsoon were very scanty and unseasonable, while the north-east monsoon completely failed. Scarcity of fodder was much felt. Water failed everywhere, and it was a disastrous year for man and beast.

Fasli 1287 (1877-78).—The season was favourable for wet cultivation, but not so for dry cultivation. The rains of April, May, and June, though partial and scanty, encouraged cultivation of the early dry crops, but the crops perished to a large extent by the failure of the rains of July and August. A small portion, however, revived by the copious rains which fell from September to December, but these being excessive, the pulse crops materially failed, and the later sown dry cereals returned but a poor outturn. The ravages of insects also contributed to decrease the yield of the dry crops. The wet crops, though they fared better, suffered from blight. The average dry yield was a little less than a quarter and the wet seven-sixteenths, the average all round for both dry and wet being five-sixteenths.

Fasli 1288 (1878-79).—The season was very favourable for the dry and wet crops, rain having fallen in all the months from April 1878 to March 1879. Wet crops returned an average harvest, the yield of paddy being estimated at 12 annas. Of the dry crops, the early kumbu, cholam and gingelly-oil in parts of Trichengode, Salem, Dharmapuri, Krishnagiri, Utankarai, and Hosur were partially destroyed by locusts. With this exception, the yield of all dry crops was good.

Fasli 1289 (1879-80).—The average rainfall during the fasli was 32.92 against 24.26 in the previous year. Though the difference in total rainfall in the two faslis was small, the influence on crops was very different, as the first crops of each fasli depend to a great extent on the rainfall of April, May and June of the previous fasli, and the rainfall in these months was deficient. Thus the rain from April to June of the fasli under report, included in the total given above, affects the crops of Fasli 1290, and the rains in the corresponding period of Fasli 1288 the crops of Fasli 1289. When thus calculated the rainfall affecting the cultivation of Fasli 1289 was only 23.18 inches.

The annexed statement, in which the rainfall in each month of the agricultural, as distinguished from the fasli year, is shown, illustrates the influence on the cultivation and crops of the rainfall affecting the two faslis.

Months.		Average Rainfall of 1878-79.	Average Rainfall of 1879-80.
First Crop	April ..	2.23	.91
	May ..	3.81	2.01
	June ..	3.29	1.45
	July ..	5.00	7.90
	August ..	5.85	3.01
	September ..	5.07	5.42
		25.30	20.71
Second Crop.	October ..	4.64	4.48
	November ..	3.94	1.65
	December ..	0.60	0.13
	January ..	1.23	0.75
	February ..	1.36	0.46
	March ..	2.19	..
		13.96	7.47
		39.26	28.18

Thus it will be seen that the rains affecting the fasli under report were scanty from April to June and almost entirely ceased from November.

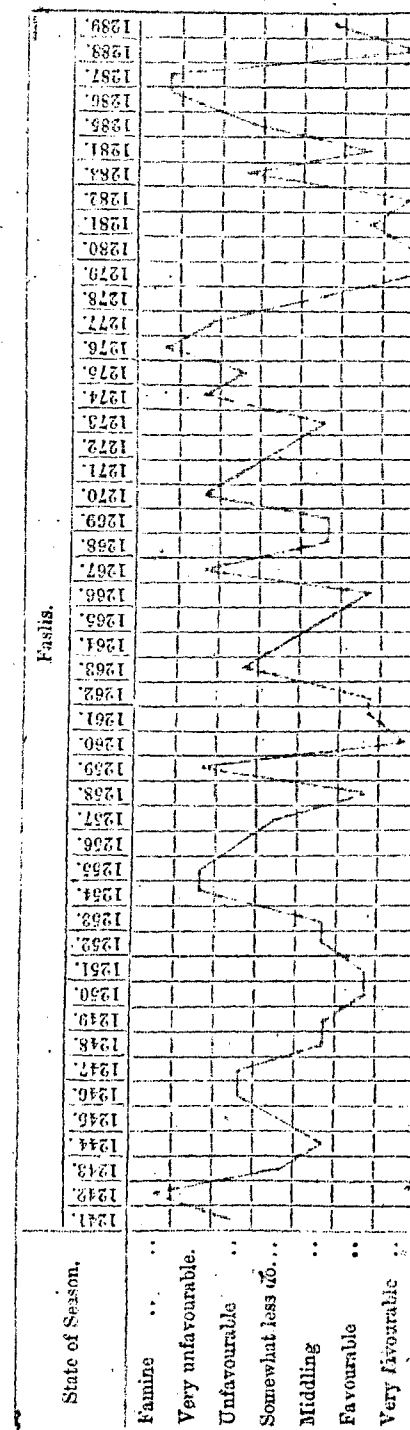
Crops—Dry.—The rainfall from April to June (except in Tirupatūr and Attur) not being encouraging, the cultivation of early dry crops such as gingelly-oil, kumbu, &c. was greatly retarded, while the almost entire failure from November affected pulses, &c. sown from September. For these reasons the dry grains yielded but a poor outturn, the produce of ragi, kumbu, varegu and other staple crops being $\frac{1}{2}$ to $\frac{3}{4}$, and that of horse-gram, black-gram, &c. being $\frac{1}{2}$ to $\frac{3}{4}$ of an average crop. In Attur however the outturn of all dry crops was about the average, and in the taluks of Namakal, Trichengode and Salem was better than elsewhere.

Wet.—The crops dependant on tanks fed by rivers and channels returned a 10 to 12 anna crop; but there was not more than from a 6 to an 8 anna crop under rainfed tanks. The crops under the Kaveri channels were excellent as usual.

The diagram in the margin exhibits the vicissitudes of season during the 49 years concerned.

Those who favour the eleven years cycle theory will find ample confirmation in the above reports. 1877 was the crisis of the severest famine of this century; 1833 was the year of the second in severity; 1866 was a famine year; 1857 was exceptionally bad, and so was 1845. But bad seasons are unfortunately not limited to cycles of eleven years, and the above extracts give ground for doubts as to whether the reduction of 20 per cent. for bad seasons on the revision of the assessment was sufficient.

The following notes on the health and vital statistics of the district were received from Surgeon North, who states that they are almost *verbatim* from the memorandum drawn up by Surgeon-Major R. E. Pearse, his predecessor as Zillah Surgeon.



Births and Deaths.—There are certain birth and death statistics kept both in the town and district, but I consider them very far from reliable.

In the town of Salem these statistics are prepared by the Municipality, there being two registration offices, one in each of the divisions of the town. The statistics for the past five years stand as follows:—

Year.	Deaths.	Percentage to Population.	Births.	Percentage to Population.	Population according to last Census.
1875-76	46,276	2.3	47,874	2.4	1,966,995
1876-77	65,305	3.3	46,842	2.3	
1877-78	161,778	8.2	20,177	1.02	
1878-79	45,110	2.2	13,603	0.8	
1879-80	25,930	1.3	28,665	1.4	

In the district generally returns of births and deaths are collected by the Village Munsifs and sent by them to the Tahsildars, who summarize them and forward them on to the head-quarter catcherry, where both these returns and those received from the Municipality are tabulated and transmitted to the Sanitary Commissioner.

Endemic Diseases of the District.

The endemic diseases of the district are two, viz., fever and guinea-worm, to which in former years might have been added cholera (so far as relates to the town of Salem itself), but this can no longer be considered endemic, as for the last ten or twelve years it has never been seen in Salem, except when a cholera wave was passing over Southern India as in 1875-77 and 1877-1878, whilst in the last epidemic the mortality was exceptionally low, the deaths in 1878-79 being only 113. The explanation of this is very simple. In years gone by Salem was an extremely dirty town, and the river which flows through it was at once the main sewer and principal source of drinking water. Now the town is clean, the purity of the said water greatly improved and its consumption much diminished, and when the works at present being carried out are completed, its use for drinking purposes will be entirely prevented.

Fever.—Of the other two endemic diseases the most important is, doubtless, fever, which prevails to a large extent throughout the whole district. This fever is for the most part ordinary quotidian, intermittent fever, or ague of a bilious type, but at the same time the tertian and quartan forms are not uncommon, and the variations in the character of the disease are endless, changing according to the climate, elevation, period of the year, &c., and assuming a different character even in the same locality in different years. Premising that the prevailing type is a mild bilious fever, seldom

fatal unless neglected, the following, so far as my observation goes, are roughly the geographical and climatic variations:—In the Salem, Attūr and Nāmakal Taluks it is generally accompanied by congestion of the liver and a tendency to jaundice and subsequent dropsical effusion. On the Kalrayans and Kollimalais the spleen becomes rapidly and in many cases enormously enlarged, the fever being more commonly tertian in type, remarks which in a lesser degree apply to a considerable portion of the highlands in the district, the Shevaroy excepted, where it frequently occurs in conjunction with a sharp attack of congestion of the liver, soon followed, in neglected cases, by cerebral complications. Lastly, at Thopūr and one or two other places, where it is known to be caused by the drinking-water of the place, some gastric disturbance accompanies the attack, which, if not averted, leads on to prostration, serous apoplexy and death. This I regard as by far the most dangerous variety; but viewing it as a whole, the fever of the district must be said to be decidedly of a mild type and very amenable to treatment. I give below the admissions and deaths from fever for the last five years in the Civil Dispensary, Salem.

Years.	Admissions.	Deaths.	Years.	Admissions.	Deaths.
1873-74	980	..	1876-77	1,737	1
1874-75	1,368	..	1877-78	1,064	..
1875-76	1,090	..	1878-79	2,168	1

Guinea-worm.—Premising that guinea-worm may be considered as one of the endemic diseases of the district, and exists more or less in every taluk, I shall pass on at once to the several heads under which the information required is desired to be classed.

- (a.) Soil and water-supply of exempted localities.
- (b.) Soil and water-supply in localities where the disease is endemic.

These two headings may most conveniently be considered together. Speaking generally, then, the district may be described for purposes of this report, as consisting of a more or less elevated basin, extending from the north of the Uttankarai Taluk through the Uttankarai, Salem, Trichengode and Nāmakal Taluks to the borders of the district. The direction of this valley is first south through Uttankarai, but extending slightly west into Dharmapuri Taluk, then south-west through Salem (leaving the Shevaroy range on its east) to the borders of the Trichengode and Nāmakal Taluks, over which it spreads in a southerly and south-east direction. Beyond this so-called basin the land rises considerably, viz., on the north into the highlands of Krishnagiri, Hosūr and Tirupatūr, on the (central) east into the Shevaroy range, and in the south-east into the hilly country around Attūr.

Now it is in the high valley thus roughly sketched out that guinea-worm abounds, whilst in the highlands which environ it the disease is almost unknown, as will be seen from the following table extracted from the jail returns, the period referred to extending from 1st January 1878 to date.

Salem	..	..	..	55	} 170 in the low lying taluks. ²
Namakal	..	..	..	43	
Üttankarai ¹	..	..	..	32	
Trichengode	..	..	..	30	
Dharmapuri ¹	..	..	..	10	} 13 in the high- lands. ²
Krishnagiri	..	..	..	3	
Tirupatūr	..	..	..	4	
Hosūr	..	..	..	3	
Attūr ¹	..	..	..	3	
Non-district prisoners	..	..	..	8	
Total .. 191					

On referring to the records of the Civil Dispensary I find that 143 out-patients and 12 in-patients have been treated for this disease since the 1st March 1878 (twenty months), but as 140 of the former and 11 of the latter belonged to Salem and its environs, the table affords little information beyond showing the great prevalence of the disease in the town and taluk.

Now as regards the difference in soil and water in the two areas described above, I am sorry to say I have neither the geological nor local district knowledge to enter into any minute or detailed description; but speaking generally, I think it may be said that the soil of the lower lying tract is for the most part red earth of shallow depth, overlying gneiss rock (which is constantly cropping up to the surface), whilst where the stratum of earth is thin, the red character is frequently lost and the soil becomes poor and sandy. In the higher regions the outcrop of the rock is more bold and defined, and the depth of the soil in the intermediate valley greater and more rich.

Water-supply.—In part of Dharmapuri and throughout the Üttankarai Taluk water is scant and brackish, containing an undue proportion of saline matter, whilst in the Omalūr and Razipūr sub-divisions of the taluk it is also proverbially bad. In Namakal and Trichengode the same remark applies, but with two exceptions, viz., the town of Namakal itself and Sankagiri-drug in Trichengode, in both of which beautiful natural springs exist, welling out of the solid rock. Of the water on the higher lands I have little experience, but it is certainly less saline and brackish than at the lower level, and natives who from long experience and tradition are generally good judges in these matters, speak of it as "good water" as compared with that of the infected or endemic area, which is universally designated as "bad."

(c.) As regards the period of inoculation or incubation it is difficult to speak with any certainty; indeed there can be no doubt that it varies greatly,

¹ Attūr is not in the high lands; Üttankarai by comparison is; so is Dharmapuri.

² The low lying taluks, being near Salem, send proportionally more prisoners there, owing to the rule that prisoners whose sentence exceeds a certain term are sent to the Central Jail. The Magistracy above the ghats generally take this into consideration in passing sentence, both in order to save cost of travelling and guards, and also because the time spent on the journey is so much cut out of the prisoners sentence. It should further be remembered that the population of the four Talaghat Taluks exceeds that of the Bala-ghat Taluks by 150,000, and consequently contributes in larger proportions to the jail population.—H. LeF.

for it is no uncommon thing to see a patient arrive from some place where guinea-worm is common, and suffer from a succession of worms developing at periods ranging between a few days and two or three months, whilst there can be no doubt that the inoculation of all occurred at one and the same time or very nearly so.

I had hoped that the jail statistics might have thrown some light on the point, but as will be seen from the annexed table the indications are very slight.

Table showing the interval between date of incarceration and appearance of the Worm.

Under 1 month	..	..	..	..	36	} A.
Above 1 month and under 2	..	..	..	..	9	
Do. 2 months and under 3	..	..	..	..	11	
Do. 3 do.	4	..	..	..	24	
Do. 4 do.	5	..	..	..	9	} B.
Do. 5 do.	6	..	..	..	9	
Do. 6 do.	7	..	..	..	10	
Do. 7 do.	8	..	..	..	16	
Do. 8 do.	9	..	..	..	10	
Do. 9 do.	10	..	..	..	8	
Do. 10 do.	11	..	..	..	4	
Do. 11 do.	12	..	..	..	6	
Do. 1 year	..	..	..	..	39	

Now viewing this table broadly I should feel disposed to draw two probable inferences.

First.—That the ordinary period of incubation is short,¹ probably about a month; but that it is by no means uncommon for it to be retarded, especially where, as in this case, the person is removed from the locality in which he has contracted the disease, and is moreover furnished with a purer water.

Second.—That endemic sources of guinea-worm exist within the jail here. Group A is probably imported disease, Group B endemic. Beyond this point I do not think that the table permits me to theorise. It may perhaps be expected that I should offer some opinion of the probable causes of the disease after spending years in a district where it is so common, but I confess I am somewhat reluctant to do so, never yet having been able to work out any theory entirely to my own satisfaction; and I will, therefore, only throw out one suggestion which, though not complete in itself or thoroughly investigated, still contains, I believe, some elements of truth, or at least of probability, viz., that the ova from which the disease is germinated are either carried down or subsequently developed in the disintegrated rock which is washed down from the higher regions into the area of disease.

¹ This would appear to be by no means certain. In the article on the subject in Chambers' Encyclopædia (1874 edition) it is stated that "having gained an entrance into the body, the guinea-worm takes a considerable time to be developed. This period varies from two months to a year or even two years." If this is correct, the inferences as to the disease being endemic in the jail precincts are discredited, and, considering the purity of the jail water-supply, it is improbable that such is the case.—H. LeF.

It is well known that during the dry season the surface of gneiss rock is gradually cracked and disintegrated by the sun's action. Into the chinks thus formed small mosses and lichens soon find their way, which carry the process a step further, until, when the rain comes, this decomposed rock, with its mass of vegetable life adhered to it, is washed down into the lower country. And it is here that I feel disposed to look for the germs of guinea-worm. The patent objection that in this case the disease ought to be equally if not more abundant in the higher valleys, which receive a large supply of this detritus, I do not look upon as valid, as it is highly improbable that ova hatched at the temperature of the human body, should survive long in water at any great elevation. The town of Salem is close on a thousand feet above sea level, and this I am inclined to regard as well nigh the limit of such quasi-spontaneous generation. The above I admit is purely a theory, but (1) as we know the ova of guinea-worm are water-carried or water-begotten, (2) as the water must come from the higher lands, and as (3) that water must bring down a large quantity of disintegrated rock mixed with the low forms of vegetable life—which is the natural nidus for such ova—and as, lastly, the disease is common from March to August (inclusive)—when the conditions exist—and sometimes is almost or quite absent during the rest of the year, the theory has, I think, a certain probability; and in this light I propound it.¹

Sanitation.

Many sanitary improvements have been carried out and are being undertaken in the town of Salem. Streets have been opened out, 47 latrines constructed, cess-pools filled in, and wells dug. The river running through the town at one time supplied nearly the whole of the town with drinking-water, but this being considered very liable to contamination, wells were sunk, and the river, which is being embanked, will be abandoned as a source of drinking water.

The sanitary establishment consists of—2 sanitary inspectors, 11 divisional maistries, 4 river watchmen, 81 scavengers, 79 latrine toties, 11 cistern men, and 27 drain cleaners.

The sanitary arrangements of the minor towns have been noticed in the chapters on the taluks (*vide* Vol. II) and need not be referred to here.

From the Jammabandi reports it will have been seen that the monsoons are very uncertain, and failure of crops, consequent droughts, &c. thereon, by no means rare. This is apparently nothing new, as Munro alludes to the same causes and effects as not uncommon. The present century has, however, seen three periods, 1833, 1866, and 1877-78, in which scarcity deepened into famine with all its terrible concomitants. Mr. Dykes, writing in 1853, says that some portions of the district had not even then recovered from the disasters of 1833, when, as he

¹ In fact the outcome of Dr. Pearse's theory is that the worm is generated at a level of 1,000 feet or less, and that it is produced from germs washed down from elevations at which, in accordance with this theory, the worm cannot exist. A consideration of the distribution of the watersheds shows that it is impossible that germs could be water-borne from the five higher taluks to the Talaghat, and there too both Salem and Attar are isolated.

described it, owing to drought "the price of grain rose 71 per cent., for there was a famine in the neighbouring districts also, and the people robbed that they might live. They eagerly sought for the wild fruits of the jungle and of the trees that lined the wayside; they turned up the earth for such roots as possessed nourishment; there was nowhere to fly to, and the country was covered¹ with the bodies of those who died of starvation. Fourteen thousand deaths were reported from cholera alone, which probably was not a tithe² of the number that so fell; and the sickness extended to the brute creation, for the cattle also were exterminated by herds. Somewhat more than 525,000 acres had been cultivated, but even official inquiries showed that the crop had entirely failed on no less than 54,000 acres, and such investigations could not extend to half the losses. On the ryotwari lands alone, from all these different causes, there was a total falling off in the revenue in one year of not less than £30,000, and from this alone it might have been inferred that there was then a great famine in the country. The amount of assessment is in proportion to the extent of cultivation,² and consequently to the produce raised. All changes in the one must be proportionately marked in the other; and in this instance it may be considered that, for such scanty crops as the earth did yield, the extent fell short of the preceding year by at least 100,000 acres. The crops on these lands were all the people had to look to; and the effect of such a decrease in the amount of produce may be easily imagined, even if horrible sickness had not added to the general distress. It was not till the new grains came into the market in the following year that prices fell at all, and by that time had become cent. per cent.; but it was long before they fell to any amount."

The actual loss of population in this famine is not known, but may be gauged from Dr. Cornish's figures, according to which the population in 1833-34 ought to have been 1,253,303, whereas in 1838, or five years later, it was only 898,233. The intermediate famine of 1866 was, by comparison, a mere flash in the pan, but while it lasted, it was sharp enough. Prices were then as follows:—

Number of Seers of 2 lb. per Rupee.

Months.	Rice.		Ragi.	Kumbu.	Cholam.	Horse-grain.
	1st sort.	2nd sort.				
September	6½	6½	9½	10½	9½	9
October	6½	7½	9½	15½	12	8½
November	6½	7½	12½	16½	12	9
December	6½	7½	13½	16½	13½	9½

Works and relief-houses were provided by Government, but the crisis soon passed. Not so however the last visitation. There had been signs and warnings by which this might have been foreseen. The tail end of the

¹ Mr. Dykes can hardly expect these statements to be accepted literally.

² In those days remission was given for "dry waste."

north-east monsoon failed both in 1873 and 1874. In 1875 the north-east monsoon was almost a total failure, especially the latter part of it, and in 1876 the south-west and north-east monsoons, on both of which the district depends for its water-supply, failed almost completely. The pinch began to be felt in October 1876, but people still hoped. In November the failure of the monsoon became an established fact, grain-dealers took alarm, and prices rose at a bound. Dr. Cornish is of opinion that prices begin to tell on mortality when the staple grain costs from $1\frac{1}{2}$ to 2 Rs. for 30 lb. In ordinary years, as he states, they are sold at from 60 to 90 lb., and he considers that when prices rise so as to permit of the purchase of only 30 to 40 lb. per rupee, such a rate cannot long be maintained without a corresponding rise in mortality. On the average, for five years ending 1874, the price of rāgi in Salem was, from January to July, from 37 to 38 lb. per rupee, and from August to December it ranged from 35 to 40 lb. From January to June 1875 the staple was sold at 31 or 32 lb. per rupee. From July to November prices rose to 23 lb., and between January and June 1876 the price was from 20 to 24 lb. From July a steady rise set in, reaching 44 lb. in October, 10 lb. in November, and 9 lb. in December, when the famine was fairly recognised and starvation stared us in the face on every side. The following table shows the course of the famine for the years 1877 and 1878:—

Particulars.	1877.												Particulars.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Number of lb. of rāgi per rupee	18-8	18-8	18-0	18-0	17-9	16-6	13-2	12-4	12-6	13-2	19-8	22-0	Number of lb. of rāgi per rupee
Number of persons on works (weekly average)	24,629	39,180	46,120	54,115	55,824	48,501	42,212	61,302	47,409	67,661	63,359	36,943	Number of persons on works (weekly average)
Number in camps (weekly average)	..	..	..	5,665	7,664	10,984	20,761	45,531	148,761	98,842	15,210	9,755	Number in camps (weekly average)
Number on gratuitous relief (weekly average)	6,836	4,309	5,777	20,136	47,053	70,176	85,091	120,206	161,015	122,419	47,565	16,849	Number on gratuitous relief (weekly average)
Registered deaths	10,258	10,416	12,947	11,963	15,260	14,177	19,656	21,852	21,112	16,515	13,028	10,268	Registered deaths
Registered births	2,971	2,410	2,719	2,815	2,838	2,219	2,437	1,929	1,395	1,416	1,332	1,195	Registered births
Rainfall (inches)	..	..	1-73	..41	3-37	2-59	1-01	..94	10-50	11-06	3-64	1-87	Rainfall (inches)
Particulars.	1878.												Particulars.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Number of lb. of rāgi per rupee	22-8	21-4	23-0	25-6	24-0	20-8	20-2	20-6	26-0	33-0	34-0	36-2	Number of lb. of rāgi per rupee
Number of persons on works (weekly average)	23,889	32,168	32,825	33,200	35,239	27,371	30,482	34,847	13,921	7,845	3,586	2,002	Number of persons on works (weekly average)
Number in camps (weekly average)	6,863	6,557	6,586	7,168	7,436	8,006	10,819	10,262	6,353	3,367	1,166	274	Number in camps (weekly average)
Number on gratuitous relief (weekly average)	14,976	10,387	15,581	13,371	11,565	9,883	8,877	8,436	7,992	6,328	4,423	..	Number on gratuitous relief (weekly average)
Registered deaths	7,425	6,735	4,486	3,132	3,043	2,960	3,992	4,381	3,429	3,239	3,465	4,552	Registered deaths
Registered births	990	915	709	633	653	657	1,015	1,167	1,320	1,300	2,008	2,196	Registered births
Rainfall (inches)	..01	..	..15	2-14	3-76	3-67	4-79	5-65	5-16	4-60	3-72	..60	Rainfall (inches)

The price list is not quite an index of the scarcity, as quotations for dry grains were often a mere form, there being none in the market. The bulk of the population was fed on imported rice, the price of which rose up in August 1877 to one rupee for 11 lb., and for a short period to one rupee for 5 lb. On one date, at the market on the Shevaroy Hills, the price actually rose to one rupee for 2 lb. For the first nine months the district staff was battling almost unaided with the famine. With the exception of one Bengal Civilian, whose services were chiefly utilised in trying magisterial cases, a Staff Corps Officer, a Medical Officer on inspection duty, and a Special Deputy Collector or two make up the sum of the assistance from outside. Meanwhile the duty of providing and superintending camps, hospitals, works, kitchens and payments, the inspection and organisation of gratuitous relief, and, in fact, the whole burden and heat of the day, was thrown on the ordinary district staff. It was not until September 1877, when 136,941 deaths had been registered,¹ when 307,776 of the population were being gratuitously fed, and the south-west monsoon had failed, that the Viceroy's visit bore fruit. Then the Public Works Department, whose share in famine relief works had previously been somewhat restricted, was more largely employed in providing work for the poor, and a flood of famine officers from all parts of India was poured over the district. The heavy rains were then setting in and the burden and heat of the day were past; but distress still prevailed, and the sequelæ of the great crisis were still strongly marked. It would be hard to exaggerate the horrors of that trying time, when cholera, starvation, small-pox, famine diarrhoea, dysentery, dropsy, and fever were claiming their victims by thousands; the dead and dying lay so close in the camp hospitals that it was difficult to move without treading on them, and hard to distinguish the one from the other, and up to the pitiless sky floated the black or yellow-green smoke from the pyres on which as many as 24 bodies were sometimes burnt together in a single camp; when the cattle lay gasping for breath, licking the dust for food, and when for miles not a drop of water was to be found. The fruits of the avenue trees, the very leaves and grasses, the roots and berries of the jungles, failed to meet the demand; the ties of maternal affection failed, and even respectable women sold their honour for food. But the sufferings of the people were not yet over. The survivors were to a great extent smitten, a shower of rain or a breath of cold wind smote them down by hundreds, guinea-worm prevailed to an extent never witnessed before, and such was the depraved blood and vitality of the poorer classes, that the slightest scratch or abrasion turned into a spreading and sluggish ulcer.

The excessive north-west monsoon of 1877 drowned the crops; blights, smut, and insects, in quantities before unheard of, spoiled or devoured the residue. Then came the locusts, almost shutting out the sky and covering square miles in their flight. The south-west monsoon of 1878 was also excessive, and the cumbric crop suffered heavily, the tender flowers being washed off, so that the seeds could not form. Then, again, from their fast-

¹ The registered mortality, it will be readily understood, was no criterion of the actual loss of life, owing to the defective machinery by which these statistics are collected.

nasses in the jungles and on rocky hill sides came the young locusts, in uniform of black and gold, marching in armies to the cultivated fields. The Government officers of all kinds did their best to cope with this last stroke of misfortune, but the ryots mostly looked on in helpless inaction and would not struggle against their fate. Even this, however, passed away, and with the north-east monsoon of 1878 came the finest crop ever seen in the district; stocks were replenished, prices fell, numbers on works and relief fell off, and the weary officials were at last released from their heavy tasks.

Floods on a large scale are unknown. The Pālār, in fresh, is occasionally injurious to riparian interests, and breached tanks, especially when a chain of tanks breaches, cause damage, but more generally to property than to life. In the autumn of 1874 heavy floods occurred, notably in the Pālār and the basin between the Pālār and Yēlagiri hills. The railway line was carried away in several places and a considerable portion of the town of Vānambādi was swept into the stream. In 1878 a "plump" of rain, as the Engineers call it, fell east of the Mukanūrmalai and washed away the railway embankment. Such excessive and concentrated rainfall does not appear to have been calculated for when the railway was built, as may be inferred from the enlarged outlet provided when the bridges were rebuilt. In May 1872, and again in May 1874, the district suffered from cyclones, which, though they did not, owing to absence of cultivation in those months, do much damage to crops, caused terrible mortality in cattle and breached numerous tanks. The cyclone of November 1880 played havoc in Attūr. Every anaikat from Bēlūr to Thalaivāsai was washed away, as also the large bridge on the trunk road near Thalaivāsai: some twenty tanks breached and many houses perished. The flood fortunately came in the day-time and only six lives were lost. The damage done was estimated at half a lakh of rupees. There was some damage done in the Swēthanadi valley also, but on a smaller scale, and the chief anaikat at Viraganūr escaped.

The only census of the district from which safe deductions can be made is that of 1871, though it is probable that for rough calculations the earlier enumerations were sufficiently near the mark. In 1800 the population was 612,871, in 1822 it was 1,075,985, in 1833 a famine occurred in which 28·3 per cent. of the people are supposed to have died, and the total in 1838 was only 898,233; in 1850 it was 1,195,367. Since that time a census has been held in every quinquennium, the total in 1866-67 being 1,619,233. Besides these quinquennial numberings of the people an Imperial census is to be held once in ten years, the first of which was held in 1871, when the population was returned as 1,966,995, or a trifle under two millions, being an increase of 21·5 per cent. over the total of the previous census, which Dr. Cornish regarded as abnormal, and therefore indicating that the previous census was untrustworthy. The males were 975,502 and the females 991,493. The whole population gave 262·8 per square mile. Of the whole population, 96·6 per cent. or 1,901,060 persons were Hindus, of whom 64·1 per cent. or 1,218,973 were Saivas, 35·5 per cent. or 674,011 were Vaishnavas, and 4 or 7,741 Lingāyats. The balance or 335, which is the total of representatives of other sects, is too small to form a percentage. In a total of 52,312

Masalmans, forming only 2·7 per cent. of the population, 48,327 were Sunnis and 827 Shias, 9 were Wahabis, and 3,149 were classed as "others." The Christian population totalled 13,333 or 0·7 per cent., 12,255 of whom were Roman Catholics and 1,078 were Protestants. If the European (256) and Eurasian (377) element is deducted, the totals credited to Missions are 12,063 Roman Catholics and 637 Protestants. Amongst Hindus the Vannians (504,571) predominate. These, elsewhere spelt Vunniars, are by Dr. Cornish said to be "agricultural labouring castes" and synonymous with Pallis. The Vaniars are "oilmongers." The Vellalars or "cultivators" (473,563) come next, then Pariahs (273,193) and "others" (204,199). As regards the occupation of the people, 336,327 males were "cultivators" and 118,206 "labourers," mostly agricultural labourers. These figures added together, and doubled to include females, would give only 454,533, or about one-fourth of the population, as engaged in cultivation. Dr. Cornish elsewhere sets down more than one-half as employed on the land: two-thirds would be nearer the truth. The "industrial" classes numbered 71,062 males, "personal service" or "domestics" 30,941, of whom many are probably employed on the land, and "commercial" 24,225. The service of Government employed 2,082 persons.¹ Under the heading of "industrial" are 40,956 males employed on "dress," of whom the majority are weavers. There are few villages of any importance in which this industry is not practised, but it suffered severely during the famine. Only 55,133 persons or 2·8 per cent. of the population could read and write, and of these only 276 were females. This is an item in which the next census will show a marked improvement. It is worth noticing that the Native Christian population is not so well educated as the Mahometan community, only 3·8 per cent. of the former being able to read and write against 7·3 per cent. of the latter. The population in 1880 is considerably less than that returned by the census of 1871. The census of March 1878 showed only 1,559,896 inhabitants remaining, which, without allowing for the normal growth of population up to 1876, showed a decrease of 407,029 souls or 20·7 per cent. of the population. The population of 1871, adding $1\frac{1}{2}$ per cent. per annum, would have increased to 2,119,219 by 1876, and this, according to Dr. Cornish's figures, would give a total mortality of 559,323 from the commencement of the famine up to March 1878, when the census was taken. The registered deaths from April to December 1878 exceeded the registered births by 20,774, so that the total diminution of population during the two years of famine may be estimated at 580,097. The castes enumerated in the census volume are as follows:—The *Brahmans* (28,817) or priest caste, who, when not in Government service, are mostly employed in the service of the different pagodas, as vakils, writers, &c. *Kshatriyas* (4,085) or warriors, mostly agriculturists, and a few in Government service. The Chettis or trading caste (29,217), who also find employment in public offices. The *Vellalars* or cultivators (473,563) also contribute a large number to the public service, as also do the *Kanakkars* or professional accountants (2,976). Besides these there are the *Kammālans* or artisans (36,781), the *Idaiyars* or shepherds (90,398), the

¹ This is not intelligible: the Village Munsifs alone would amount to this number.

Kakkalars or weavers (88,602), the *Vunniars* or agricultural labourers (*Pallis*) (504,571), the *Kusarars* or potters (12,148), the *Sātāni* or mixed castes (43,197), the *Sembadavars* or fishermen (21,083), the *Shānārs* or toddy-drawers (also termed *Nādars*) (56,474), the *Vannāns* or washermen (24,684), the *Ambattans* or barbers (19,784), the *Pariahs* (273,193), and "others" (204,199), who are supposed by Dr. Cornish to be the Malaialis; but these latter are Kānchi Vellalars. Trade is by no means confined to the Chettis, who are rivalled by the Masalmans, Weavers, Vaniars and Sātānis. Almost the whole trade in hides and dyes is in the hands of the Masalmans proper or the Labbais. The enumeration above given of the castes affords however but a very faint idea of the number, every day increasing, of subdivisions amongst the people, each of which is regarded as a separate caste. Thus, for instance, the Lambādis and Brinjāris, half gipsies, who inhabit the jungles and carry grain, salt, and jungle produce, are not mentioned. So too the Chucklers, who deal in leather. The merchants generally belong to the Chetti caste. Gold, iron, wood, and stone are wrought by Āchāris, who, however, by no means work at these materials indiscriminately, each being considered the inalienable and hereditary right of particular classes; and the weavers of silk, cotton, wool, &c., are divided into Patnals and Kakkalars, the former being engaged on the finer textures, and the latter, with other still lower castes, in making the coarser kinds of cloth.

"Building again employs a separate race of artisans; and they similarly are divided into castes according as they use the trowel, do rough stone-work, or merely raise mud walls. But other moulders of clay, the potters, are generally considered an inferior race to the cultivating classes, who rank immediately below those that have been already described, and take precedence in the order given."

"The agricultural body forms by far the largest portion of the population. It may be arranged in three great classes, and these are found scattered all over the district, after the fashion of the Hindus, more according to the nature of the soil to be wrought on—as the worker in gold will, neither he nor his, weld iron—than according to any geographical limits.

"The Vellalars like the highland on which the 'dry' grains are grown. With many of the crops they plant cotton in ridges, which is picked after the harvest by their families, cleaned, spun at home, and sold at the nearest market. They breed cattle, and often pay the assessment on their land with the sale of young stock; whilst the dairy produces plenty of ghee or clarified butter, which is used by the natives in great quantities. They are a very hardworking race, and, however rich they may be, the women of the family are not allowed to sit idle.—The wives of the wealthiest men may be seen at the markets far and near, selling their thread, curds, ghee, and the produce of the kitchen-garden.

"The Pallis, on the other hand, love to deal with irrigation. Low wet rice grounds are almost always cultivated by these men, or also by the Pullers, who resemble them in disposition, but are a somewhat inferior caste. Their women do not work, if they can help it; and this race generally does not share in the industrious habits of the Vellalars.

¹ Dykes on Salem, p. 10 sq.

"The latter are, however, resembled in their pleasing characteristics by the third great class, who are called Reddis, and are employed mostly in garden cultivation. They are a very hardworking race, and their women take an active share in the labours of life, are good traders, and usually shine at the weekly market. This garden cultivation does not answer to European ideas, such as the name would suggest, but in India is a very important branch of agriculture; and when the rains fail, in seasons of scarcity, this cultivation may be the means of averting a famine.

"Where the soil is rich and black, a well is dug, which in good situations gives enough water for two acres all the year round; and on this land a vast variety of kitchen vegetables, tobacco, and some particular kinds of grains are grown in the greatest abundance. These Reddis are a Telugu race, and found straggling down the eastern side of the district from the countries to the north, where that is the language of the people generally. There is also a body of Reddis in the north-west, on the borders of Maisūr, who are Kanarese. Their lands are generally a fine red soil, on which the best rāgi is grown in great quantities; but there, as water can only be got at a great depth, well-cultivation is scarcely known. There the soil is so dry that the Reddi makes his granary under ground, and when the small circular opening by which the raggy is thrown in has been securely closed, the grain, on rolling back the stone, will be taken out uninjured, though perhaps two or three generations shall have passed away in the meanwhile.

"The dispositions of the three races similarly differ. The Vellālar is frugal and saving to the extreme; his hardworking wife knows no finery, and the Vellālīchi willingly wears for the whole year the one blue cloth which is all that the domestic economy of the house allows her. If she gets wet, it must dry on her; and if she would wash her sole garment, half is unwrapped to be operated upon, which in its turn relieves the other half, that is then and there similarly hammered-against some stone by the side of the village tank, or on the banks of the neighbouring stream. Their food is the cheapest of the 'dry' grains which they happen to cultivate that year; and not even the village feasts can draw the money out of a Vellālar's clutches: it is all expended on his land, if the policy of the revenue administration of the country be liberal, and the acts of Government such as to give confidence to the ryots or husbandmen; otherwise their hoarded gains are buried. The new moon, or some high holiday, may perhaps see the head of the house enjoy a platter of rice and a little meat, but such extravagance is rare.

"The Pallis and Pullers are the very reverse; they have no heed for the morrow, but spend their money as fast as they get it. Their women wear the gayest-coloured cloths to be found in the bazaar; ornaments are eagerly sought for; and their diet is the best rice they can afford, with meat as often as it is to be had or can be eaten by the Hindu without injury to his health.

¹ Great care has to be taken in doing this, as the pits are generally filled with carbonic acid gas, and an unwary person descending into them dies at once. The natives lower a burning wick into the pit and do not descend until the wick is no longer extinguished.

"The Reddis, both Kanarese and Genta, are as provident as the rice-growers are improvident. They spend their money on the land, like the Vellālars, but they are not parsimonious; they are always well dressed if they can afford it; the gold ornaments worn by the women or the men are of the finest kind of gold; their houses are always neat and well built; and (if fairly dealt with) they invariably give the idea of good substantial ryots. They chiefly live on rāgi, and are a fine, powerful race. Besides these three classes, there are many others, such as the Lingāyats and Natams.

"The lowest class are the Pariahs; and they, too, affect numerous divisions, of different degrees of respectability. They are also extensively employed in agriculture, and from their ranks the village watchmen are chosen. As village police, the place of these men is sometimes usurped by another race, called Madigavāndlu or Chucklers, who speak Telugu, and seem, like the Reddis, to have originally come from the north. The fights between the two factions are often very serious, and are generally caused by the preference being given to one or other of the two races, contrary to the established custom of the village.

"The agricultural classes, as well as the artisans, are divided into two great factions, the 'right' and 'left' hand castes; and it is now extremely difficult to make out what the difference is; which perhaps is the reason that the hatred of the rival sects is so fierce and bitter. On all religious occasions tom-toms are beaten and horns wake the welkin round. If the 'right-hand men' are making high holiday, the Pariahs are the musicians; and if their adversaries feast, the Chucklers come to the front; but if it is a mutual feast, and by some change in the village the weaker party, having got the ascendancy, should try to alter the custom in favour of their own servants, then 'Cry havoc, and let slip the dogs of war,' for broken heads are sure to be the result.

"The Chucklers are chiefly engaged in preparing leather, making up such articles as Hindus require of that material for ropes, shippers, &c., and occasionally are found as cultivators.

"The religion of the Hindus is a wide field for inquiry. In Salem, however, all the cultivating classes worship whatever may be the village idol, and Mariamma, one of the inferior goddesses, seems to be the most popular. A Palli is generally the attendant priest, and officiates for all alike. 'Pillary dōvadu,' or the 'Belly God,' also occupies a high place in the religious estimation of the ryot.

"If the mild Hindu would go a journey, or plough the field that is to support him and his family for the coming year, "Pillary dōvadu" must be first invoked to help the work in hand; incense must burn, and the milky cocoanut must be broken before the aldermanic god. There may be no idol near, but the god will still be remembered in prayer; and it is common to see a stone set up in the corner of a field, perhaps under the cool shade of the tamarind tree, which, marked with a patch or two of red or yellow paint, receives as sincere adoration as would be paid to a more pretending shrine, and serves to fix the feeble thoughts of the simple husbandman."

¹ Such portion of the above memorandum on population as has not been taken from Dr. Cornish's Census Report, has been abstracted from Dykes' interesting book on Salem.

The following are but a few of the caste sub-divisions unnoticed above:—

Thus one man, calling himself a Śēnakudian, explains that by this he means a Chetti; one Chendu Lāla styling himself a Kanojia,¹ explains that this signifies a Brahman amongst Rājputs, an explanation not readily reconcilable with the general impression that Rājputs are Kshatriyas. Sārvaria and Gaudia were also said to be synonymous with Kanojia. Kanadian, which would properly mean a native of Kanara, is the name of a caste, just as Gentu, which generally denotes a native of the Telugu country, is used by Naidus and others as a caste name. One Kanadian professed to be a Sivachāra by conversion, which is possible (*vide infra*). It is by no means easy to distinguish a caste from a mere soubriquet: thus the Telugu oilmongers, who use one bullock to turn the oil-press, are known as onti-yeddu-gāndla-vāndlu, to distinguish them from the Tamil oilmongers, who use two bullocks for the same purpose.²

The Pallis, one of the most numerous of the agricultural castes in the district, are divided into the Arasani Pallis, the Pandara Pallis, &c.; again they are known as “Anju-nāl” (5 days) and “Pannendu-nāl” (12 days) Pallis, according as they perform the funeral ceremony on the fifth or twelfth day after death. The Padiachis, not so common in this district as farther south, are said to be a division of Pallis. The Gollas are said to include Naidus, and to be of two kinds, viz., shepherds or true Gollas—in which caste Krishna assumed one of his avatāraṁs—and Bokshani Gollas, who work in treasuries, count money, &c. The Gollas are said strictly to exclude from caste any one who has been mutilated, a rule contrasting strangely with that mentioned below as prevailing amongst a sub-division of the Morasukāpus who enforce mutilation. Jēdar, the caste name assumed by some Chettis, generally denotes a weaver, Kaikalar being another caste name having the same meaning. A Mudali may also be a Jēdar, and Devānga is another caste name assumed by those who follow the same industry. Mēdarakāran is a caste name amongst basket-makers, of whom others say that they belong to the Sivārajāti. The latter apparently must not be confused with the Sivārajāti, said to be the same as the Boyer or bearer caste; and again one Thimmariya Naidu, who said that he was a Boyer, contended that this was identical with the Besta caste, and included both fishermen and palanquin-bearers. It is not generally recognised that the term “Boy,” applied to the Madras body-servant, who is as often as not a Pariah, is really a contraction of the Telugu word Boyyi or “bearer,” the name so familiar in Bengal. The Pariah derives his name from parai, a drum or tom-tom, such as is used in making proclamations, and which no man of another caste could beat under penalty of expulsion. Panichavan, a corruption of “Pani-seygiravan,” literally

¹ These caste names and their significations have been noted in the course of business, and may be incorrect in some instances, as natives are often strangely ill-informed on the subject of caste which so nearly touches them.

² By a strange coincidence, on the day when this was written the writer came across the following passage in Household Words for 30th October 1858: “A certain tribe of wise oil-makers in Telingana, who use two oxen in the mill when pressing out their oil, will hold no communication with another tribe which uses only one. They will follow neither the same gods nor the same leaders; they will not marry nor give in marriage; they will not eat nor pray with them, for the two-oxen men hold their one-ox brother a being accursed, degraded and outcast.”

means “one who works,” but is the caste-name of the class whose business it is to carry news of death to the relations of the deceased, and to blow the thārai or long curved trumpet. The Virasaivas and Sivachāras are properly speaking worshippers of Siva, but it is not apparently necessary that all Saivas should be Sivachāras, who are said to be all Lingāyats; nor is it easy to understand here whether a caste or a cult common to many castes is intended. The Linga Baljas are said to be a caste of Chetti who tie the lingam in a little silver ornament on their arms. The sadjai, a silver box, often as large as two inches by three, containing the lingam, is worn on the chest, suspended by a string round the neck, by certain Vellālars, who have a curious custom, called Padmāsanaṁ, in reference to the treatment of the dead, who are not laid out as is common in other castes, but are trussed up in a squatting posture, a string being passed round the neck and made fast behind to keep the body upright. The Baljas themselves again recognise many sub-divisions, as the Musūku Baljas, said to be the chief amongst Baljas, whose women wear veils; the Gāzulu Baljas, who sell bangles; the Pasupulēti Baljas (cf. pasupu = saffron), who cultivate and sell saffron and other dyes; the Suganaanchi Baljas, &c. Of the Saivas generally the Rev. Mr. Phillips says that their religion is probably more ancient than that of the Vaishnavas, “being a species of Phallic worship, akin to that of the ancient Chaldeans, Egyptians and Greeks.” Here Mr. Phillips has hardly gone far enough, as the classical tradition clearly traces the importation by Dionysus of the Thyrsos and Phallos from India, whence, through Greece, it penetrated to Rome and the further west. How far however the prevalence of the Phallic cult amongst the non-Aryan population of the south is due to importation, or whether it is indigenous, it is difficult to say. The tendency to worship the generative power would probably be instinctive with all primitive races. It is amongst the Sivachāra people however that the cult has reached its greatest development, and the pith of their doctrine is contained in the Kanarese proverb—

“ಜಂಗೆಮನಿಗೆ ಕುಲವಿಲ್ಲಾ ಕುಲಕ್ಕೆ ಹೊಲವಿಲ್ಲಾ”

which may be interpreted “To the Jangam (or pure Lingāyat) there is no such thing as caste,” i.e., all Virasaivas, whether born so or converted, run eat together, &c., “and for the lingam there is no such thing as impurity or pollution,” that is, as some Virasaivas interpret it, so long as the sadjai or other vessel containing the lingam is in contact with the owner, he may have promiscuous intercourse without loss of caste. The same idea is found in the homely proverb which abnegates the co-existence of conscience and a priapism in Urdu more poetically expressed in the saying “There is no shield against the arrow of fate,” and in the Italian saying “Quando Messer Bernado el bacioco stā in colera el in sua raba non riceve lege, et non perdona a missuna dama.” The more respectable Virasaivas however repudiate this interpretation, affirming that it is only in reference to the catamenia of women and pollution which a death generally entails on the family of the deceased that they do not follow the ordinary prejudices. The importance of the actual contact of the lingam with its wearer may be inferred from the former custom that whoever lost his lingam was

expected to commit suicide. (Cf. Wilks, 2nd Edit., vol. i, p. 515.) "Purnaiya, the present minister of Maisi, relates an incident of a Lingayat friend of his who had unhappily lost his portable god, and came to take a last farewell. The Indians, the more enlightened nations, readily laugh at the absurdities of every sect but their own, and Purnaiya gave him better counsel. It is a part of the ceremonial preceding the sacrifice of the individual, that the principal persons of the sect should assemble on the bank of some holy stream, and placing in a basket the lingam images of the whole assembly, purify them in the sacred waters. The destined victim, in conformity to the advice of his friend, suddenly seized the basket, and overturned its contents into the rapid Kāvēri. 'Now, my friends,' said he, 'we are on equal terms: let us prepare to die together.' The discussion terminated according to expectation. The whole party took an oath of inviolable secrecy, and each privately provided himself with a new image of the lingam." There is according to general report a catholicity amongst the Sivachāras not found in other Hindu cults, in that they admit converts. Wilks, for instance, mentions that originally Brahmans were excluded and looked down on by the Jangams. Certain Paligars are said to have made women of other castes converts by tying the lingam under cover of the proverb above mentioned. There are Kanadian Sivachāras, Morasu Sivachāras, also called Goundans, Moniakarājāti Sivachāras, &c. It is by no means strictly true that the castes are so stereotyped as to wholly prohibit a passage from one to another, as is exemplified by the Tamil proverb "Kallan Maravan: ganathūl Agamudian; molla molla Vellālan, Vellālan Mudaliar," i.e., a Kallan, by which may be meant a common thief, may come to be a Maravan, who is possibly an uncommon thief; then by respectability he may develop into an Agamudian, and by slow and small degrees become a Vellālan, from which he may rise to be a Mudaliar. Cases certainly have been known where a Pariah was accepted as a Pillai, and where other Sudra caste persons were known to have been the sons of Mahabharata parents. The Morasukūpu has been mentioned above, and a sub-division of this class, known as "Veralu ichē kāpulu" or "the people who gave their fingers," deserves mention as being largely represented in the Bālāgūṭi.

The origin of this custom is narrated by Wilks (p. 273, vol. i, 2nd Edit.) at some length. It is briefly this: Mahadeo or Siva was in great peril, and had concealed himself in the kernel of a "lingatunda" from a rakshasa who was pursuing him, to whom a husbandman indicated, by the little finger of his right hand, the hiding place of Siva, who was only rescued from his peril by the interposition of Vishnu. On emerging from his hiding-place Siva decreed that the husbandman should forfeit the offending finger. The culprit's wife, "who had just arrived at the field with food for her husband, hearing this dreadful sentence, threw herself at the

† They are found in the Bagalur and Berikai Palaisams in the villages of Reddakundalu, Muduguriki, and Amuthukondapalli; at Kakadassam near Thalli; at Urakasundaram near Denkanikōta; at Sankara Rayanapuram, Udiadurgam, and Osekalli near Kelamangalam; at Kērupalli on the Udenapalli road; and at Samanapalli and Moranapalli on the Sulagiri road: possibly at many other places.

feet of Mahadeo. She represented the certain ruin of her family if her husband should be disabled for some months from performing the labours of the farm, and besought the deity to accept two of her fingers instead of one from her husband. Mahadeo, pleased with so sincere a proof of conjugal affection, accepted the exchange, and ordained that her female posterity in all future generations should sacrifice two fingers at his temple as a memorial of the transaction and of their exclusive devotion to the god of the ling."

The practice is accordingly confined to the supposed posterity of this single woman, and is not common to the whole sect of Morasukūl. The practice now observed in this district is that when a grandchild is born in a family, the eldest son of the grandfather, with his wife, appear at the temple for the ceremony of boring the child's ear, and there the woman has the last two joints of the third and fourth fingers of her right hand chopped off. It does not signify whether the father of the first grandchild born be the eldest son or not, as in any case it is the wife of the eldest son who has to undergo the mutilation. After this, when children are born to other sons, their wives in succession undergo the operation. When a child is adopted the same course is pursued. The temple where this is done is Sithibēṭṭa near Nandigūl in Kolār, and the god is named Sithi Bairava. Owing however to the expense of the journey it is now becoming common to have the operation performed by the nearest blacksmith. Wilks says that in his time the practice was observed in 2,000 houses. The number of families which observe it must be considerably greater now. The women protest that the operation causes no pain. A ligature is passed round the finger, and after the joint is chopped off the stump is dipped in gingelly oil, and they say that there is no bleeding. A very good skin is formed over the stump, which is well covered and looks like a congenital malformation. Of the Vellālers there are at least eleven sub-divisions and perhaps more. Amongst certain classes a curious prohibition exists forbidding the eldest daughter-in-law from performing any ablutions after the daily evacuation, except on the day when she bathes, which may be once in ten or fifteen days; they have a superstition that the family would grow poor if this rule was transgressed. Amongst the Baljas there are other divisions called the Gampakammavāllu and the Ilavallakammavāllu, who are also said to be Naidus; the former of the two sects is represented at Andiappanūr. The Balinja-wālas appear to be the same as the Baljas or Linga Baljas. The indifference with which the caste suffixes seem to be used is very perplexing. Thus of two Vellālers who were "annan-thambi" or brothers, one called himself a Pillai and the other a Goundan. The Vellālers again keep the record of their native places by being known as Thondamandalam, Konga Vellālan, Kānchimanandalam, Shēramandalam, and Sholumandalam Vellālers. The Malaialis of the chief hill-ranges are Kānchimanandalam Vellālers. The Kavarais are said to be identical with the Baljas. The Bondiliars are said to be a sub-division of Rajputs. The Shengundars are weavers, some calling themselves Mudaliars, and are probably identical with the Kaikalars. Other weavers are called Jēdars, of whom some are Chettis. The Janapara are weavers who weave dungary; others are called Devāngūlu. Amongst some Kaikalars a custom prevails by which one woman in each family becomes

prostitute, retaining her caste. The girl chosen is taken to the temple, where a sword is placed beside her with a thali under it. The thali is then tied to her neck by any woman present, and then she returns to her own house, where she is permitted to carry on any amours she chooses. She gets her share of the family property just as if no such ceremony had taken place. The Mankavarai claim to be salt-makers amongst Naidus, and the same industry is also represented by the Uppilajati, which is said by some to include Wudders.

The Shānār or toddy-drawer is also known as Idaiyan, which seems to be a Telugu synonym. The Idaiyans are shepherds; as also some Irulars, who are mostly jungle tribes, and the Kurumbers. One Thummana Goundan, who styled himself of the Ukkiljati, said that he was also a Kurumban, and that the two names came to the same thing, only that the former was used by the Kanarese people. Some of the Vannān or washerman caste call themselves Yēkālīs. The Vēdars are hunters by caste, and some of them call themselves Turuvalar; at least this was given as a caste name by one Muttavēdi whose family were hunters. The Turuvalar are distinguished as the Kattukudugirajati, a name derived from a custom amongst them which authorises temporary matrimonial arrangements. The Reddis, according to their proverb, would claim to be the cultivating caste *par excellence*, e.g., భూమినికల్పి పట్టపాడుకొనేవాండ్లు రెడ్లు, i.e., "those are Reddis who get their living by cultivating the earth." They have many sub-divisions, which may eat together but may not intermarry. The Yerlamā Reddis however do not eat with the others, and abstain from fish and meat; nor will they take chunnam to eat with their betel from the hands of a Brahman. This sect is represented at Alangayam. Elsewhere in the Tirupatūr Taluk there are some forty or fifty houses of the Panta Reddi. The Peddakanti, Kamma-Nayadubi, Deshūr, Pakanāti, Koditi, Peramudi and Chirumudi Reddis are but sparsely if at all represented. One Rangasāmi Naidu said that he belonged to the Muttarāja caste, but it is not known what caste this was; he said that he was descended from some Paligar. The Jogi caste comprises people who catch snakes, and keep pigs, and practise mendicancy. Of the class who here style themselves Mārawādīs little is known; they are said to trade in pearls, corals, &c., but that is all. The name seems to be common enough in Bombay, and those who bear it are said to be soucars. The Agamudians, who are said to be connected with the Maravans, are rarely represented in this district. The Vadugars are said not to be a caste, but to include all who speak Telugu, as Besta, Wudders, &c. Mention has already been made of the Chettis, but their sub-divisions are innumerable. Thus there are the Morasu and Bēri Chettis who eat mutton, and the Nagarath Chettis who do not. The Valayakāra Chettis are said to be pure Gentus. The Vellān Chettis are cultivators, the Janapa Chettis make gunny bags, the Jēdar Chettis weave cloths, and, to descend lower in the social scale, there is a thieving class known as Kora Chetti, which is supposed to be a high caste in that industry. The thief slang of the district would be worth investigation. There are cant synonyms for almost every person, thing, and emergency with which they have to do. Unluckily a list of the more ordinary terms has either been lost or destroyed by mistake. The Padaiāchis, less common here than in the south,

are said to be a division of the Pallis. The Pallans are another agricultural class, of lower origin and position than the Pallis. The Valluvars seem to be a superior sort of Pariahs, and are said to be the descendants of a Brahman and a Pariah woman. They act as pujāris or gurus to the Pariahs. The Morasukāpus, who mostly speak Kanarese, must be distinguished from the Morasa Vellālars, who speak Tamil. What the Udaiāns are is not very clear. Some say they are a race of Kshatriyas; others call them Pulli Vellālars, and others again say that they are identical with the Nāttamans. The latter are said not to be a separate caste, the name being applicable to the highest persons in each caste. They are rarely found out of the Talaghāt, and are there less common than further south. The Sāliār are a class of weavers said to be descended from a Kshatriya woman and a Vaisya man. What the Kāyāth caste may be has not been ascertained.¹ The Pandārams are said to be Saivas who live by begging. They are less common here than in the south. The Thumbirāns, also comparatively rare, are said to be something of the same kind as the Pandārams, only more respectable. They seem to exercise some priestly functions. Dikshatar is not the name of a caste but a title, like Pundit, given to those supposed to be of pious life and learned in the Vedas. One Krishnien called himself a Thādan by caste; he was pujāri to the Venkatrāmanasami Koil at Mukanūr; his father's name was Chinna Dāsari. This assumption of the Brahman suffix "ien" is not uncommon. Thādan or Dasan appears to be the Tamil equivalent of the Telugu Dāsari, this being the name given to a class of people who go from house to house beating a gong and begging. In the neighbourhood of Mārāndahalli an entirely new caste has arisen in comparatively recent years named Pinchikuntar. These people are servants to the Kudīānavars, or cultivators, a name assumed commonly by Vellālars and Pallis. The story is that a certain Vellālan had 102 children, 101 males and 1 female.² Of the males one was lame, and his 100 brothers made a rule that each of them would provide him with one kolagam of grain and one fanam each year. They got him married to a Telugu woman of a different caste, and the musicians who attended the ceremony were paid nothing, the brothers alleging that as the bridegroom was a cripple the musicians should officiate from charitable motives. The word Pinchikuntar is a corruption of the Telugu words *Bhiksha* = begging, and *kunti* = lame. *Bhiksha* in Tamil is *pinchai*, whence *pinchi*, and *kunti* turned into a plural Tamil noun becomes *kuntar*. The descendants of this married pair, a Vellālan and a Telugu woman, having no caste of their own, became known as Pinchai or Pinchikuntars. They are treated as "Kudipinnai" by the Vellālars, and to the present day receive their prescribed miras from the Vellāla descendants of the 100 brothers, to whom, on marriages and other festivals, they do service by relating the genealogies of such Vellālars as they are acquainted

¹ In Bengal the name is applied to the writers in the cutcherries, called gumastas in the south.

² There is a touch of realism about this worth noting. The one female has no part to play in the story, and seems to have been introduced as a sort of set-off to the 101 males. Any one might have invented a story about the 101 males, but when the one female is introduced unnecessarily, the tendency would be to credit the story, as, if a fabrication *in toto*, the odd female would have had no place.

with. Some serve the Vellalars in the fields and others live by begging. Another caste, sparsely represented in Dharmapuri and the Denkanikōta Division of Hosūr, and largely in Maisūr, is that of the Kunchiliars, or in Kanarese Kunchigars. They are a division amongst Sudras, speaking Kanarese, and include both Vaishnavas and Saivas. They are cultivators by trade and intermarry amongst themselves, but may eat in Morasakāpu houses. Their origin is not certainly known, but their tradition is that a certain nawāb, who lived north of the Tungabadra, sent a peon to search for ghee twelve years old. In his travels south of the river, the peon met a lovely maid drawing water who supplied his want. Struck by her beauty he watched her bathing-place, and stole one hair which fell from her head in bathing which he took to the nawāb. The latter conceived the idea of marrying the girl, and sent an embassy, which was so far successful that the girl and her family came to his residence and erected a marriage pandal. Subsequently they repented, and, thinking that the marriage would be a *mésalliance* (the nawāb was probably a Masalmān), fled in the night, leaving a dog tied in the pandal. It is not clear what the dog has to do with the story as he is not mentioned again. In their flight they came to the Tungabadra, which was in full flood, and, eager to escape, they consented to marry the fair maiden to a Kurumban who ferried them across the stream. The Kunchigar are the descendants of this girl and the Kurumban. This however gives no clue to the etymology of the word Kunchigar. The story goes on to say that in their haste they forgot a little girl behind them, who was seized by the nawāb, who thirsted for vengeance, and thrown into the air so as to fall on knives-placed to transfix her. Some miracle interposed to save her, and the Ārō Kunchigar, who live in Maisūr, are said to be her descendants. The etymology of this name is also a mystery. The above however give but a faint idea of the number of castes. Amongst those omitted are the Ashtashastri, Aravēlaniyogalu, Kālabasti, Gōlakondavipuri, Kenāji, Padakkunādi, Vaiganāsalu and Shōlia said to be sub-divisions amongst Brahmans; the Karagutti, Kōdi, Nīrpāchi, and Malayādi Vellalars; and sundry classes, not clearly identified, who call themselves Anjikarai, Uppāndi, Eruttukārar, Odōkārār, Kallāndi, Kongabirāttu, Kānnan, Kūthādi, Kaliyān, Kāndiyar, Chekkān, Olūnikode, Suttumān, Songanār, Thammattiyār, Thirumudi, Tholuvār, Dombāravār, Thogattār, Thuluvan, Thoppar, Tharjilu, Nāvithar, Nāyar, Nīnān, Nātham, Niyōgalu, Bommakāran, Paṭlikārār, Bōgam, Bālukamsala, Pūdra, Budubudugalu, Malamār, Māvaliyān, Madavāndi, Murikināti, Mōlakārār, Madiga, Malemān, Viramushti, Vadam, Valanādi, Jainiyar, and many others too numerous to mention here. The caste-marks are known by various names. Thus the Vishnu trident is called generally tiruchennam; it is also called nāmam. Tirunūru and vibūdhi denote the marks of a Saiva. Bottu is the dot worn on the forehead by some Vaishnavas, especially Rajputs. Gendam is the sandal mark of a Saiva, kunkumam is the red dot worn by women of both sects. The Tēngalai or left-handed Vaishnavas wear a more angular trident than the Vadagalai or right-handed; it also has a slight projection downwards, forming a sort of prolongation of the centre prong of the trident. This little line is known as the pātham. The centre prong is called tiruchūranam or strichuranam, and the whole is called tiruman. These names however are mostly confined to Brahmans, nāmam

being used by Sudras to denote the caste-mark of both sects. The Saiva mark is commonly three smears of ashes or chalk across the forehead in a line with the eyebrows. The Vishnu trident is said to be an emblem of Vishnu lying on his back and viewed from the ground at a distance; the right and left prongs being the soles of his feet and the centre prong Prajāpati; the pātham may be intended for the appendages, but possibly this is a slander invented by the Saivas. Certainly some of the head and tail pieces which appear in illustrations of native books seem to bear out the theory. Another explanation is that the pātham is Nīlādēvi, one of Vishnu's wives, in prints represented by a lotus flower in which Nīlādēvi was born. The centre mark is Stridēvi, the most beautiful of the three wives. The right and left prongs are the feet of Vishnu. In prints a sort of box is delineated under the centre lotus flower and called pītām. This is supposed to represent Bhādēvi, the third wife, but is not included in the caste mark as the bridge of the nose is taken to be Bhūdēvi. Female devotees amongst Vaishnavas wear a horizontal line of white chalk with a perpendicular line of red or yellow. So amongst Saivas, females wear three horizontal smears of chalk and a bottu or spot of red in the middle. It sometimes occurs that a Saiva wears the Vishnu mark and *vice versa*.

The mass of the people are poor; they are fairly honest, except when engaged in litigation; nor is their heathen morality to be despised when compared with the practice of European nations. Rāgi is the staple grain consumed by the lower and rice by the upper classes. So long as the wants of the day are supplied, the poorer classes take little thought for the future. The force of custom, the closely drawn ties of kindred in undivided families, and caste rules have much to do with this. Where discontent prevails it is generally amongst the so-called educated classes. The ordinary agriculturist rises before dawn, if indeed he has not slept in his field all night; ploughing, baling with the *picotta*, and such like employments occupying him until the heat of the day warns him that he and his cattle need repose. The morning meal is generally the cold remains of the previous night's supper, the latter being often the only meal cooked, but when they can afford it they have three full meals a day. Towards the afternoon he resumes work and often stays out until "lamp-lighting time," when he returns to his home. A piece of white cloth round his loins and another for his head, with, in cold weather, a rough *cumbly* (blanket) form his only attire. His wife is equally simple in her mode of life. Her one cloth may or may not be annually renewed at the Pongal feast in January, and ear-rings and nose-rings, more or less as the husband's circumstances admit, form her bravery together with the inevitable *thālī*. The children sometimes, to the age of ten years or more, go in a state of nudity, relieved perhaps by a piece of string round the waist which sustains the "araimudi" or heart-shaped piece of silver, which calls attention to what it purports to conceal. The *ravikai* or jacket is worn generally by Masalmānis and by women of caste, but rarely by the lower orders, except above the ghāt where the colder climate renders it necessary. The wealthier classes dress in public more richly, as may be warranted by their means, though in their houses their attire is very scanty. The people are, as a rule, well made, often handsome, the younger women being noted for the grace and symmetry of their figures. The houses and furniture of the people are the same as

throughout the Karnatic. Over the Talaghat and the greater part of the Barahmahal Tumil is the language in general use. Telugu is generally spoken in the northern portion of Krishnagiri, and in the Belaghat Kanarese has the mastery; Telugu and Tamil, the latter comparatively rarely, being also spoken.

The normal rates of wages for unskilled labour are as follows:—Men,

2 annas; women, 1½ annas; children (male or female), 10 pias. The *Wudder* or navy caste get twice as much,

but they generally work by task, at which they gain more than by daily wages. Were their providence equal to their industry, they would surely rise in the social scale, but they rarely save. They mostly speak Telugu. The wages of a working goldsmith vary with the value of the materials, but may be taken on an average at 8 annas per diem. A blacksmith gets 8 annas, a carpenter from 8 to 10 annas, bricklayers from 6 to 10 annas.

The chief industry is weaving, which is carried on in almost every large town or village, and the weavers of Salem and Ghazipur are especially noted. Carpets of great beauty and superior workmanship are made in the Salem jail. Good iron and steel are made, but only on a small scale, an attempt to utilize the mineral wealth of the district on a large scale having failed owing to the cost of charcoal. In Salem there are several cutlers, whose wares for temper and finish are reputed throughout India. Jaggery, cotton, hides, indigo, saltpetre, salt, grains, betel, arca-nut, coir, jungle produce, &c., pass freely in and out of the district, but there is no trustworthy source of information regarding imports and exports.

Savings are for the most part invested in jewellery or spent in adding to stock. That a great portion of surplus cash goes to the grog-shop may be inferred from the falling off in abkari during and since the famine. The ryots are backward in the matter of digging wells, the sums obtained for this purpose under the Land Improvement Act having, in the majority of cases, been spent in procuring food. In fact, so long as the peasantry are in a state of indebtedness, they have no particular object in effecting improvements, as any surplus wealth they may accumulate goes into the pocket of their creditors. It is not probable that money is ever lent for less than 1 per cent. per mensem, and doubtful borrowers have to pay from 3 per cent. and more.

The following table, which shows the operations of the License Tax in 1878, is a fair gauge of the wealth and prosperity of the people:—

Trade, Dealing, or Industry.	Class.	Annual Income.		Number of Persons taxed.	Rates of Tax on each Person.	Total of Taxes paid.		
		From	Rs. to Rs.		Rs.	Rs.	A.	P.
In grain	VIII.	5,000	10,000	1	100	100	0	0
	IX.	2,500	5,000	5	50	250	0	0
	X.	1,250	2,500	99	25	2,475	5	6
	XI.	500	1,250	269	10	2,676	0	0
	XII.	200	500	966	4	3,840	0	0
In cloth	IX.	2,500	5,000	19	50	950	0	0
	X.	1,250	2,500	23	25	575	0	0
	XI.	500	1,250	298	10	2,800	10	0
	XII.	200	500	710	4	2,820	0	0
	IX.	2,500	5,000	2	50	100	0	0
In leather	X.	1,250	2,500	4	25	100	0	0
	XI.	500	1,250	9	10	90	0	0
	XII.	200	500	3	4	12	0	0
	IV.	25,000	30,000	1	500	500	0	0
	VI.	15,000	20,000	1	300	300	0	0
Money lending ..	VII.	10,000	15,000	1	200	200	0	0
	VIII.	5,000	10,000	5	100	500	0	0
	IX.	2,500	5,000	33	50	1,650	0	0
	X.	1,250	2,500	110	25	2,725	0	0
	XI.	500	1,250	325	10	3,238	0	0
In twist	XII.	200	500	837	4	3,320	6	0
	X.	1,250	2,500	4	25	100	0	0
	XI.	500	1,250	15	10	150	0	0
	XII.	200	500	110	4	440	0	0
	X.	1,250	2,500	1	25	25	0	0
Smiths	XI.	500	1,250	3	10	30	0	0
	XII.	200	500	72	4	280	0	0
	VIII.	5,000	10,000	1	100	100	0	0
In brass	XI.	500	1,250	11	10	110	0	0
	XII.	200	500	13	4	52	0	0
In tamarinds ..	XII.	200	500	2	4	8	0	0
In saffron	XII.	200	500	1	4	4	0	0
Lapidaries	XI.	500	1,250	1	10	10	0	0
Copper smiths ..	XII.	200	500	5	4	16	0	0
	X.	1,250	2,500	2	25	50	0	0
In bullocks	XI.	500	1,250	20	10	200	0	0
	XII.	200	500	30	4	120	0	0
Blacksmiths	XII.	200	500	3	4	8	0	0
	IX.	2,500	5,000	1	50	50	0	0
In gold	X.	1,250	2,500	2	25	50	0	0
	XII.	200	500	10	4	40	0	0
In jaggery	XII.	200	500	21	4	84	0	0
	XII.	200	500	2	4	4	0	0
In tobacco	XII.	200	500	6	4	24	0	0
	XI.	500	1,250	10	10	100	0	0
In cocoanuts ..	XII.	200	500	13	4	54	0	0
	IX.	2,500	5,000	1	50	50	0	0
In oil	X.	1,250	2,500	5	25	125	0	0
	XI.	500	1,250	35	10	350	0	0
	XII.	200	500	51	4	200	0	0
In ghee	X.	1,250	2,500	2	25	50	0	0
	XI.	500	1,250	1	10	10	0	0
	XII.	200	500	12	4	48	0	0

NOTE.—Owing to failure of collection, Col. 6 is not exactly the product of Col. 5 multiplied by Col. 4.

Trade, Dealing, or Industry.	Class.	Annual Income.		Number of Persons taxed.	Rate of Tax on each Person.	Total of Taxes paid.		
		From	Rs. to Rs.			Rs.	A.	P.
Shop-keepers ..	VIII.	5,000	10,000	1	100	100	0	0
	X.	1,250	2,500	1	25	25	0	0
	XI.	500	1,250	22	10	220	0	0
In oil-seeds ..	XII.	200	500	239	4	956	0	0
	XII.	200	500	3	4	12	0	0
	VIII.	5,000	10,000	2	100	200	0	0
Contractors ..	IX.	2,500	5,000	2	50	100	0	0
	X.	1,250	2,500	3	25	75	0	0
	XI.	500	1,250	5	10	50	0	0
Carpentry ..	XII.	200	500	8	4	32	0	0
	XII.	200	500	27	4	108	0	0
	XII.	200	500	15	4	60	0	0
In sheep ..	XI.	500	1,250	2	10	20	0	0
	XI.	200	500	2	4	8	0	0
	XI.	200	500	1	10	10	0	0
Stone-cutters ..	XI.	500	1,250	1	4	4	0	0
	XII.	200	500	8	4	28	0	0
	XII.	200	500	1	4	4	0	0
Waddlers ..	XI.	500	1,250	1	4	4	0	0
	XII.	200	500	8	4	28	0	0
	XII.	200	500	1	4	4	0	0
Bricklayers ..	XI.	500	1,250	1	4	4	0	0
	XII.	200	500	3	4	8	0	0
	XII.	200	500	3	4	8	0	0
In bricks ..	XI.	500	1,250	5	10	50	0	0
	XI.	500	1,250	5	10	50	0	0
	XI.	500	1,250	5	10	50	0	0
Sawing timber ..	XI.	500	1,250	5	10	50	0	0
	XI.	500	1,250	5	10	50	0	0
	XI.	500	1,250	5	10	50	0	0
Weaving ..	XI.	500	1,250	5	10	50	0	0
	XI.	500	1,250	5	10	50	0	0
	XI.	500	1,250	5	10	50	0	0
In sundry articles ..	XI.	500	1,250	32	10	320	0	0
	XI.	500	1,250	32	10	320	0	0
	XI.	500	1,250	32	10	320	0	0
In timber ..	XI.	500	1,250	2	25	50	0	0
	XI.	500	1,250	2	25	50	0	0
	XI.	500	1,250	2	25	50	0	0
In nuts ..	XI.	500	1,250	2	25	50	0	0
	XI.	500	1,250	2	25	50	0	0
	XI.	500	1,250	2	25	50	0	0
Indigo factory ..	XI.	500	1,250	1	10	10	0	0
	XI.	500	1,250	1	10	10	0	0
	XI.	500	1,250	1	10	10	0	0
Tannery ..	VIII.	5,000	10,000	2	100	200	0	0
	IX.	2,500	5,000	1	50	50	0	0
	X.	1,250	2,500	8	25	200	0	0
Bamboos ..	XI.	500	1,250	14	10	140	0	0
	XI.	500	1,250	12	4	48	0	0
	XI.	500	1,250	1	10	10	0	0
Butcher ..	XI.	500	1,250	1	10	10	0	0
	XI.	500	1,250	1	10	10	0	0
	XI.	500	1,250	1	10	10	0	0
Pottery ..	XI.	500	1,250	1	10	10	0	0
	XI.	500	1,250	1	10	10	0	0
	XI.	500	1,250	1	10	10	0	0
Salt ..	XI.	500	1,250	1	10	10	0	0
	XI.	500	1,250	1	10	10	0	0
	XI.	500	1,250	1	10	10	0	0
Brokersage ..	XI.	500	1,250	1	10	10	0	0
	XI.	500	1,250	1	10	10	0	0
	XI.	500	1,250	1	10	10	0	0
Avaram bark ..	XI.	500	1,250	1	10	10	0	0
	XI.	500	1,250	1	10	10	0	0
	XI.	500	1,250	1	10	10	0	0
Hardware ..	XI.	500	1,250	1	10	10	0	0
	XI.	500	1,250	1	10	10	0	0
	XI.	500	1,250	1	10	10	0	0
Sweetmeat ..	XI.	500	1,250	1	10	10	0	0
	XI.	500	1,250	1	10	10	0	0
	XI.	500	1,250	1	10	10	0	0
Shroffa ..	XI.	500	1,250	1	10	10	0	0
	XI.	500	1,250	1	10	10	0	0
	XI.	500	1,250	1	10	10	0	0
In dubbahs or hide bottles to contain ghee, oil, &c.	XI.	500	1,250	1	10	10	0	0
	XI.	500	1,250	1	10	10	0	0
	XI.	500	1,250	1	10	10	0	0
Total ..				4,930	..	33,635	10	0

One man is held to be sufficient for the ordinary every-day labour on a farm of 3 acres of wet or 6 acres of dry land, if assisted in the heavy work of planting, weeding, reaping, and threshing. His wages are supposed to be 480 measures of grain per annum = Rupees 12-8-0, plus an annual payment of Rupees 3 (the wages in the northern being lower than in the southern taluks). Twenty-seven measures of seed are required for an acre of wet and six measures for an acre of dry land. Irrigated crops are weeded twice if sown broad-cast, but once only if planted. Dry crops are generally weeded only once. Manuring is applied, as a rule, by treading in leaves on wet and penning out sheep on dry land. For wet lands the average is 120 bundles of wild indigo or other leaves per acre, and this is supplied annually to all fields thought worth manuring. Eight pens of 200 sheep each, at a cost of four measures of grain per diem, is the usual allowance per acre for dry lands. The implements said to be required for a farm of 3 acres of irrigated or 6 acres of dry land are a plough, a manooty, an axe and chopper, three small weeding hoes, and three sickles. These are made gratis by the village artisans in consideration of their annual fees, the materials being found by the cultivators. Wood can be had for nothing, but iron costs Rupees 1-8-0 per maund, which will suffice for a year's repair to the implements above-named. The staple crops are paddy and ragi, the latter being almost exclusively the food of the labouring class. The yield was assumed, for purposes of assessment, to be 641 Madras measures in paddy and 347 Madras measures in the other three staples for the *Talaghāt* taluks, the outturn in the *Bārahmahāl* and *Bālāghāt* taluks being the same in paddy, but somewhat less on the average of dry grains. Ragi grows to perfection in the *Bālāghāt* and is above the average in the *Bārahmahāl*. Kambu is about the same as in the *Talaghāt*, but gram, though remarkably fine, is an uncertain crop, and yields little more than half as much as the other staple grains. In the northern taluks the *regur* is 20 per cent. A pair of oxen could manage a farm of 3 acres dry, but not more than an acre of wet land. In fact wet land is almost invariably ploughed by four, five, or six pairs of oxen working together in the field, and if the owner has not enough of cattle of his own he must hire or borrow them. On a holding of 2 acres wet and 3 dry of average land, the net profit in a fair year would not probably exceed Rupees 60 per annum, or about Rupees 5 per mensem; in a bad year the yield would barely pay the kist and often not even that. The position of the poorer farmers may be gauged from the fact that they will desert their farms in numbers if a wage of Rupees 4 per mensem is assured them. The mass of the peasantry are in debt. The habit of indebtedness is so ingrained in their nature, that, if they all started fair to-morrow, 50 per cent. would be in debt again by the end of the year. The Government share of the produce being 50 per cent. of the net produce, estimated in money according to the commutation rates, and Rupees 9-11-2½ being the average paid by each pattadar, the annual income of the Government ryot may be fairly estimated. The following statement shows the rent roll for Fasli 1281 and Fasli 1286:—

Fasli 1281.	Single Pattas.		Joint Pattas.		Total.	
	Numbers.	Assessment.	Numbers.	Assessment.	Pattas.	Assessment.
		RS.		RS.		RS.
Under Rs. 10	103,035	3,98,090	39,805	1,35,842	142,860	5,33,932
Exceeding Rs. 10 & under Rs. 30	31,737	4,62,840	22,465	3,67,720	54,252	8,30,560
" " 30 " " 50	3,620	1,32,857	2,714	99,416	6,334	2,32,273
" " 50 " " 100	1,301	82,010	882	58,237	2,183	1,40,247
" " 100 " " 250	246	33,528	129	16,924	366	50,452
" " 250 " " 500	13	5,170	5	1,965	18	7,136
" " 500 " " 1,000	1	534	1	853	2	1,382
Upwards of Rs. 1,000						
Total	140,003	11,35,003	68,012	7,23,972	208,015	18,61,981

NOTE.—Information in the form given for Fasli 1286 is not available for this Fasli.

Fasli 1286.	Single Pattas.		Joint Pattas.		Total.	
	Number of Ryots holding Single Pattas.	Assessment.	Number of Pattas.	Number of ryots holding Joint Pattas.	Assessment.	Number of Pattas.
		RS.			RS.	
Under Rs. 10	100,000	3,16,015	42,405	125,564	1,82,055	142,495
Exceeding Rs. 10 and under Rs. 30	21,351	2,98,441	19,642	81,613	2,91,400	90,383
" " 30 " " 50	2,071	67,207	1,914	9,890	61,663	3,085
" " 50 " " 100	981	59,758	705	3,814	41,780	1,666
" " 100 " " 250	133	16,339	101	434	14,218	234
" " 250 " " 500	8	2,814	6	24	1,950	14
" " 500 " " 1,000	1	533	1	2	770	2
Total	124,635	7,61,067	64,174	220,341	5,03,996	188,900

The number of villages in the district according to the quinquennial return for Fasli 1286 was 4,021, of which 600 were uninhabited. Besides these there were 3,051 hamlets, of which 494 were uninhabited. The details of these villages and hamlets were as follows:—Ryotwar 4,762, villages in shares 36, rental villages 68, jodi and inam villages 394, mitta or zemindari villages 1,449, and palaiapat villages 399. The details of village establishment will be found in the notice of each taluk. The total establishment retained is as follows:—Karnams 927, Munsifs 280, Munsifs and Monigars 1,793, Monigars 179, Toties 12, Uddaris 11, Talaiyaris 2,325, Vettians 2,350, joint Talaiyaris and Vettians 92, and the total cost Rupees 2,38,607 per annum, the cost of unsurveyed villages included. The number of cattle in the district according to the statistical returns for 1878-79 was as follows:—Buffalos 40,090, bullocks 230,919, cows 201,410, donkeys 5,521, goats 376,064, horses 1,065, ponies 2,607, pigs 19,520, and sheep 339,390. Bullocks are chiefly used for ploughing and buffalos occasionally. There is a very superior breed of cattle raised in the jungles reaching down from Alambadi along the banks of the Kavēri. The Trichengode cows are also famous as good milkers. One of these costs from 30 to 40 rupees; a good pair of travelling bullocks from Rupees 50 to 250 a pair, and at the latter price will do nine miles or more in an hour if pressed. Ordinary ploughing

cattle cost Rupees 25 a pair. The general price of other domestic animals is as follows:—Tattoos (ponies) 15 to 30 rupees, donkeys 7 to 10 rupees, sheep 1½ to 2 rupees, goats 2 to 3½ rupees, pigs 4 to 10 rupees, fowls 3 to 5 annas, chickens 1 to 2 annas, ducks 4 to 10 annas.

There were 8,278 carts and 115,712 ploughs. The number of houses is as follows:—

	Number of Houses.	Number of Inhabitants.	Average Number of Persons to a House.
Terraced	1,204	6,869	5.7
Tiled	39,074	232,525	5.9
Thatched	349,586	1,715,948	4.9
Unknown	1,655	11,464	6.9
Total	391,519	1,966,807	5.0

The following return shows the acreage in Government villages cultivated in each crop in Fasli 1284 before the famine, and Fasli 1287 during the famine:—

Particulars of Crop.	Fasli 1284.	Fasli 1287.	Remarks.
	ACRES.	ACRES.	
I. Food-grains or Corn Crops—			
Rice—One crop, irrigated	95,000	80,000	
Second crop, irrigated	17,000	9,000	
Unirrigated	16,000	8,000	
Chelam	71,000	72,000	
Ragi	369,000	230,000	
Varagu or Arikalu	52,000	55,000	
Kambu	319,000	371,000	
Korrulu or Thenai	14,000	17,000	
Millet or Samai	67,000	54,000	
Pulses	220,000	166,000	
Miscellaneous crops	12,000	5,000	
Total No. I	1,319,000	1,068,000	
II. Seeds—			
Coriander seed	9,000	2,000	
Gingelly-oil seed	69,000	48,000	
Oil-seeds of various sorts and nuts	52,000	29,000	
Total No. II	130,000	79,000	
III. Green and Garden Crops—			
Sugar-cane	2,000	1,000	
Chillies	8,000	6,000	
Tobacco	9,000	7,000	
Turnerie and Saffron	2,000	1,000	
Betel-leaf gardens	1,000	1,000	
Plantain gardens	4,000	1,000	
Miscellaneous vegetable crops	3,000	7,000	
Total No. III	29,000	21,000	

Fractions of 1,000 have been omitted in this table: when they exceed 500 the sum is raised to the next highest figure, and when they fall short of 500 they are omitted.

Particulars of Crop.	Fasli 1284.	Fasli 1287.	Remarks.
	ACRES.	ACRES.	
IV. Topes and Orchards—			
Cocoanut tope	3,000	4,000	
Areca-nut tope	3,000	3,000	
Tamarind tope	1,000	..	
Total No. IV ..	7,000	7,000	
V. Special Crops—			
Hemp and Flax	1,000	..	
Cotton	11,000	10,000	
Coffee, Tea, and Chinchona	..	5,000	
Indigo	2,000	2,000	
Total No. V ..	14,000	17,000	
Grand Total ..	1,400,000	1,195,000	Fraction of 1,000 have been omitted in this table: when they exceed 500 the same is raised to the next highest figure, and when they fall short of 500 they were omitted.

The statistical returns for 1878-79 give the cultivated acreage of both Government and Zemindari lands in detail as follows:—

Chief Products.	Government.	Inam.
	ACRES.	ACRES.
Cereals—		
Wheat (<i>Triticum vulgare</i>)	416	1
Rice	111,767	11,735
Great millet or Chulam (<i>Sorghum vulgare</i>)	52,323	10,558
Spiked millet or Kambu (<i>Panicum spicatum</i>)	281,196	29,956
Italian millet or Themai or Korra (<i>Panicum italicum</i>)	17,114	984
Ragi (<i>Eleusine coracana</i>)	219,840	24,217
Cheena or Samai or Chamalu (<i>Panicum miliare</i>)	46,442	4,459
Rhoda, Varagu, Ariga or Arikalu (<i>Panicum miliaceum</i>)	66,569	6,325
Maize (<i>Zea mays</i>)	93	2
Total ..	787,765	87,237
Pulses—		
Gram or Bengal-gram (<i>Cicer arietinum</i>)	934	51
Cajan-pea, Red-gram or Bhoil (<i>Cajanus indicus</i>)	11,320	1,099
Horse-gram (<i>Dolichos uniflorus</i>)	83,021	16,363
Green-gram (<i>Phaseolus Mungo</i>)	4,685	126
Black-gram (<i>Phaseolus radiatus</i>)	6,650	249
Thettipayiru	695	..
Field-gram or Narippayiru	2,020	143
Avurai	18,376	1,946
Total ..	132,901	19,973
Orchard and Garden Produce and Topes—		
Plantains	2,000	237
Brinjals	352	31
Mangos	72	..
Cocoanut	3,136	233
Topes of various kinds	68	5
Total ..	6,628	506

Chief Products.	Government.	Inam.
	ACRES.	ACRES.
Drugs and Narcotics—		
Tobacco	5,313	779
Coffee	9,677	..
Others	1	..
Total ..	15,491	799
Condiments and Spices—		
Chillies	5,651	349
Onion	132	63
Coriander seeds	409	205
Fenugreek or Vendiam	82	..
Betel leaves	395	104
Areca-nut	2,176	338
Total ..	8,845	1,064
Sugar—		
Cane	707	31
Palm or Palmyrah	1,094	61
Total ..	1,801	92
Oil-seeds—		
Mustard	82	..
Sesame or Gingelly	18,745	3,223
Lamp-oil	24,840	2,843
Ground-nut	937	132
Total ..	44,604	6,198
Dyes, not Forest—		
Indigo	697	..
Saffron	838	38
Others	27	..
Total ..	1,562	38
Fibres—		
Cotton	11,453	21
Flax	..	2
Mulberry (silk)	212	10
Total ..	11,665	33
Grand Total ..	1,010,262	115,920

The same returns give the area cultivated and waste as follows:—

Whether Inam or Government.	Area of District in Acres.	Area cultivated.					
		Irrigated.		Unirrigated.		Total.	
		First Crop.	Second Crop.	First Crop.	Second Crop.	First Crop.	Second Crop.
Government ..	ACRES. 2,711,522	ACRES. 84,446	ACRES. 31,862	ACRES. 319,505	ACRES. 74,449	ACRES. 903,951	ACRES. 106,310
Inam ..	231,909	11,604	1,869	96,164	6,274	107,758	8,163
Total ..	2,943,521	96,050	33,731	915,659	80,722	1,011,709	114,473

Whether Inam or Government.	Area of District in Acres.	Area uncultivated.				Total Area assessed.	Total Assessment.
		Cultivable but not cultivated.	Pasture and Forest Land.	Barren or Waste Land uncultivable, including Forams-bake.	Total.		
	ACRES.	ACRES.	ACRES.	ACRES.	ACRES.	ACRES.	RS.
Government.	2,711,522	791,637	21,689	994,245	1,807,571	1,708,659	22,42,164
Inam ..	231,990	62,042	1,670	60,529	124,241	169,809	2,90,984
Total ..	2,943,521	853,679	23,359	1,054,774	1,931,812	1,878,468	25,33,448

It is not quite clear what this statement is founded on, as the total acreage accounted for gives only 4,599 square miles, whereas the district contains between 7,483 and 7,882 square miles.

Regarding cotton there are some interesting details in Proceedings of the Board of Revenue, No. 2,168, dated 30th July 1879. The area cropped was as follows:—

Fasli.	Cultivation.	Outturn.	Value.	Yield per Acre.	Cost of Cultivation per Acre.
	ACRES.	CWTS.	RS.	LB.	RS. A. P.
1285	12,630	5,156	1,52,605	46	8 0 0
1286	11,507	4,395	1,31,877	43	
1287	8,912	3,773	1,12,366	47	

The latter fasli showing a falling off as compared with Fasli 1285 of 29 per cent. in acreage and 27 per cent. in value owing to excessive and untimely rains and blight. The indigenous cotton only was grown.

The last item was estimated as follows:—Seed 6 annas, ploughing Rupees 2, manure Rupees 2-8, hoeing and raking 8 annas, weeding 12 annas, gathering Rupee 1-14. The assessment of the land was omitted; this would be fully Rupee 1-8. The retail price of cotton retained for local consumption in the district was Rupees 122 in Fasli 1286 and Rupees 111 in Fasli 1287 per candy of 500 lb. It would take about 11 acres to produce one candy, and if, adding the assessment, or say Rupees 16-8, the cost of cultivation was Rupees 104-8 (8 × 11 + Rupees 16-8) the profit on 11 acres would be about Rupees 6-8 or about Annas 9-6 per acre! The profit on wholesale prices, with cost of carriage added, would appear to leave no margin whatever for the cultivators. The condition of the weavers, said to number 18,000, was reported as deteriorating owing to large importation of cheap English goods.

The particulars of area irrigated in 1877-78 and 1878-79 is given as follows:—

Particulars of Land.	Area irrigated.													
	Sown from April to November 1878.				Sown from December 1878 to March 1879.				Whole Year of 1878-79.				Percentages of Increase or Decrease in 1878-79.	
	In comparison with 1877-78.		In comparison with 1877-78.		In comparison with 1877-78.		In comparison with 1877-78.		In comparison with 1877-78.		In comparison with 1877-78.		In comparison with 1877-78.	
	Total Area.	Increase.	Total Area.	Decrease.	Total Area.	Increase.	Total Area.	Decrease.	Total Area.	Increase.	Total Area.	Decrease.	Total Area.	Increase.
	5	6	7	8	9	10	11	12	13	14				
Cultivable Area in Acres.	74,751	15,007	..	41,557	..	1,292	116,308	13,715	..	..	..	..	..	..
Cultivated Area in Acres.	8,552	158	..	2,119	231	..	10,671	419	..	..	..	..	..	..
Total Area in Acres.	83,756	15,256	..	43,699	..	1,061	127,665	14,186	..	..	..	..	..	..
Government land ..	2,709,120	..	..	1,018,419	..	..	1,738,880	..	..	..	..	..	..	..
Inam land ..	233,600	..	..	136,935	..	..	185,600	..	..	..	..	..	..	..
Zamindari ..	889,800	..	..	290,711	..	..	551,040	..	..	..	..	..	..	..
Total ..	3,832,320	..	..	1,446,065	..	..	2,475,920	..	..	..	..	..	..	..

According to this statement the total area of the district is 5,988 square miles.

The actual revenue due to irrigation in the district was estimated as follows for Fasli 1287 :—

Particulars.	Area.	Assessment, Quit-rent, or Water-rate.
<i>Government lands charged as irrigated.</i>	ACRES.	RS.
Dry crops charged as irrigated	1,118	3,753
Lands irrigated and charged as cultivated with wet crops ..	95,164	5,29,166
Total ..	96,282	5,32,919
Deduct—		
Remission on account of excess or failure of water ..	..	13,660
Other remissions and usual deductions	..	88,333
Total Remissions ..	..	52,023
Remainder ..	..	4,80,896
<i>Inam and Zemindari lands charged as irrigated.</i>		
(a.) Inam paying quit-rent	13,188	23,959
(b.) Inam and Zemindari land paying water-rate	370	1,087
<i>Lands irrigated free of all charges.</i>		
Inam area	1,873	..
Zamindari area	493	..
Total Area irrigated ..	112,206	..
Deduct land included twice over in items marked (a) and (b).	370	..
Remainder land irrigated and the total assessment, quit-rent and water-rate	111,836	5,05,912
Remission of assessment on wet lands left uncultivated for deficiency or excess of water-supply, besides that on cultivated lands shown above	3,297	15,413

This statement is however to a certain extent misleading, as it does not include any portion of the peshkash in zamindaris, which being a lump payment cannot be divided into charge for wet and dry lands, tirvajasti only coming to account.

The following is a statement showing the irrigated area and revenue due to irrigation up to the latest date for the last four years :—

Years.	Area.	Revenue.	Remarks.
	ACRES.	RS.	
1875-76 ..	91,205	3,88,104	
1876-77 ..	79,003	2,88,560	Decrease due to remissions on account of famine.
1877-78 ..	97,559	4,14,991	Increase owing to favourable season.
1878-79 ..	100,011	4,36,431	Do. do.

The following statement shows the sources of irrigation in the district :—

Nature of the sources of Irrigation.	Sarcar.		Private.		Dasabandam.		Total.	
	Fasli 1281.	Fasli 1286.	Fasli 1281.	Fasli 1286.	Fasli 1281.	Fasli 1286.	Fasli 1281.	Fasli 1286.
Tanks	2,120	2,109	631	622	229	199	2,980	2,950
River channels ..	335	377	27	5	7	4	369	386
Spring channels ..	118	141	11	14	..	..	129	155
Anaikats	432	446	115	106	13	10	560	562
Wells	17,719	16,839	22,046	33,738	4,438	3,559	51,203	54,116

The statement below shows the different classes of irrigation works in the district :—

Class.	Tanks.	River Channels.	Spring Channels.	Anaikats.	Wells.
Works with ayakat exceeding 600 acres.	1	..	..	..	..
Do. do. do. 500 do.	2	..	..	1	..
Do. do. do. 400 do.	9	..	..	..	..
Do. do. do. 300 do.	11	1	..	4	..
Do. do. do. 200 do.	37	1	..	8	..
Do. do. do. 150 do.	47	13	..	9	..
Do. do. do. 50 do.	340	59	4	73	..
Do. do. below 50 do.	2,480	312	151	467	54,116
Total ..	2,920	386	155	552	54,116

The *fera natura* are daily diminishing in numbers, as every hill-man carries a gun and shoots for the pot everything that comes in his way, regardless of sex, age, or season of the year. Bison and even elephants are occasionally seen on the Javādis. Cheetas and bears are to be found in most of the hilly tracts. Tigers are very rare. Sambur may be found towards Pennāgarum and in a few places in the Hosūr Taluk. Hyants, black buck, deer of kinds, wild pig, a species of armadillo (Pangolin), and a few wolves go a long way to complete the catalogue. Pea and jungle fowl, partridge and quail are to be had all the year round, and duck, teal, snipe, florican, &c., can be had in season. The average number of deaths from wild beasts and snakes is 270. The cost of keeping them down is about Rupees 800 per annum.

Salem, the capital, is a Municipality with a population of 50,012 and a revenue of about Rupees 42,800 per annum. There are 11 other towns with a population of over 5,000. They have all been mentioned at length in the taluks to which they belong.

The following statement shows the revenue of the district for a series of years :—

Year.	Land Revenue.	Transit Duties.	Licenses.	Small Farms.	Motapha.	Stamps.	Total Revenue.
	£ s.	£ s.	£ s.	£ s.	£ s.	£ s.	£ s.
1805-6 ..	182,348 15	5,392 14	2,562 7	938 1	..	..	191,786 18
1820-21 ..	178,295 0	17,329 18	4,023 12	2,351 15	506 18	2,185 11	213,686 15
1834-35 ..	164,471 7	17,255 10	5,140 0	698 10	807 3	1,764 4	197,136 15
1850-51 ..	177,535 9	..	8,650 0	870 19	7,345 13	2,291 7	196,693 9

The revenue and expenditure for the years 1860-61 and 1870-71 in abstract and detail are :—

		1860-61.	1870-71.
		RS.	RS.
Total revenue		23,21,215	30,20,914
Total expenditure on Civil Administration		4,95,839	7,03,167

Revenue.	1860-61.	1870-71.	Expenditure.	1860-61.	1870-71.
	RS.	RS.		RS.	RS.
Land revenue	20,01,517	23,21,911	Refunds and Draw-backs	9,464	3,491
Forest	..	64,676	Land revenue	2,05,395	2,26,682
Excise on spirits and drugs	1,39,430	3,61,862	Medical	4,427	15,241
Motarpah	70,941	..	Forest	4,195	9,271
Assessed taxes	16,431	54,815	Assessed taxes	813	596
Stamps	55,996	1,35,235	Stamps	2,683	4,349
Post Office	13,729	21,324	Post Office	11,016	16,614
Law and Justice	12,961	34,645	Administration and Minor Department	4,417	6,358
Police	..	5,809	Law and Justice	1,15,180	1,62,189
Education	1,236	2,770	Police	45,995	1,41,177
Interest	2,329	7,337	Education	7,587	22,604
Miscellaneous	6,645	9,930	Ecclesiastical	..	7,809
			Printing	..	2,665
			Allowances and Assessments	56,206	55,785
			Miscellaneous	19,043	9,232
			Superannuation, retired, and compassionate allowances	18,518	20,102
Total Receipts	23,21,215	30,20,914	Total Charges	4,95,839	7,03,167

The figures for 1874-75 vary very little from those for 1870-71, and it would be useless to carry the comparison farther down as the effects of famine are still perceptible in almost every branch of revenue.

The district having no sea-board, emigration is inconsiderable; but a few coolies go to Ceylon, the French colonies and Burmah. There is no immigration to speak of.

WEIGHTS AND MEASURES. The ordinary weights and measures are as follows :—

Of Time.

60 Tharparais	..	..	..	= 1 Vinādi.
60 Vinādis	..	..	..	= 1 Nāligai or Indian hour of 24 English minutes.
2½ Nāligai	..	..	..	= 1 Orai or English hour of 60 English minutes.
3¾ do.	..	..	..	= 1 Muhūrtham.
7½ do.	..	..	..	= 1 Jāmam or watch = 3 English hours.

8 Jāmams	..	..	..	= 1 Nāl or day.
7 Nāls	..	..	..	= 1 Wāram or week.
15 do.	..	..	..	= 1 Paksham or fortnight.
30 do.	..	..	..	= 1 Māsam or month.
6 Māsams	..	..	..	= 1 Ayanam or half year.
2 Ayanams	..	..	..	= 1 Varusham or year.

The tharparai, orai, muhūrtham, and ayanam are either imaginary or obsolete. According to another computation one muhūrtham = 2½ nāligais. The paksham is either sukla (bright) or krishna (dark), according as the moon does or does not shine in that particular fortnight.

With the mass of the people there is no accurate idea of time. The time of day is approximately given by saying that the sun was so many *mārs* or fathoms above the horizon on east or west. Of night they speak as so many *nāligais* after sunset or lamp-lighting (a vague term for 7 to 8 p.m.) the middle watch, so many *nāligais* before sunrise; they count also from the rising and setting of the moon. Of distance they speak as so many *nāligais* journey, and one *nāligai vari* may be accepted as one mile; 4 a.m. is indicated by "I went for one purpose" (*nān onukku ponēṭṭi*), a euphemism. Some vague time between 4 and 5 p.m. is the "anthi ēri" or time of tying the evening plough. The expression "the sun was overhead" is comparatively rare for midday.

Of Grain.

64 Rupees weight	..	..	..	= 1 Mānam.
8 Mānams	..	..	..	= 1 Vallam.
40 Vallams	..	..	..	= 1 Kandagam.

Of Solids.

1 Tolah	..	..	..	= 1 Rupee weight
3 Tolahs	..	..	..	= 1 Pallam.
8 Pallams	..	..	..	= 1 Seer.
5 Seers	..	..	..	= 1 Viss.
10 do.	..	..	..	= 1 Thadaiyam.
8 Viss	..	..	..	= 1 Maund.
10 Maunds	..	..	..	= 1 Pothi.
2 Pothis	..	..	..	= 1 Baram.

Of Distance.

12 Inches	..	..	..	= 1 Foot or Adi.
3 Feet	..	..	..	= 1 Gajam or yard.
6 do.	..	..	..	= 1 Mār or fathom.
¾ Nāligai Vali	..	..	..	= 1 Mile.
7½ Nāligai Vali or 1 Kādam	..	..	..	= 10 Miles.

Of Land.

33 Square Feet	..	..	..	= 1 Kuli.
40 Kulis	..	..	..	= 1 Acre.

or

16 Annas = 1 Kuli.
40 Kulis = 1 Acre.

or

1,000 Links = 1 Decimal.
100 Decimals, = 1 Acre.

There are numerous land measures, for which see Chapter V.

The grain measures vary all over the district, and even in the same taluk two or more sets of measures may be current.

For the last three or four years establishments have been at work in the taluks stamping the measures; but the results have been most unsatisfactory, as may be seen from the following extract from a letter from Mr. H. E. Stokes, the Acting Collector, to the Board of Revenue (cf. Proceedings Board of Revenue, No. 930, dated 9th July 1880):—

“The question is the revision of the table for the conversion of local measures in the calculation of prices of grain. The Board are aware of the way in which the original table was prepared. The desire was not to introduce any new standards, nor to make any attempt at obtaining uniform measures, but to ascertain what were the standards locally known and recognized. Collectors were therefore directed to ascertain the local standards, and to send up to the Board, after testing, the most accurate specimens of each procurable. These were again examined in the Board's Office, and conclusions arrived at as to the values of the local measures which were made the basis of the Board's table.

“The Salem District was a rather unlucky one on which to try this plan. Not only were the local measures very various, but the use of metal measures was not general, and a large number of the specimens sent up were of bamboo. The recognized local standards which the measures sent were supposed to represent were, as I recollect, not reported. When stamping was introduced, viz., at various dates from the end of 1876 till the beginning of 1878, the Board's standards, to which it was assumed the local measures must conform, were found not to be very accurate, but were further entirely vitiated by neglect of the fact that the Board's standards were in average rice, whereas the universal practice of the district is to test measures with gram, which (taking average gram) is 3 or 4 per cent. heavier than rice.

“To remedy this state of things some unauthorized and generally unintelligent attempts were made to adjust the standards. The Assistant Collector ordered the introduction of the Salem measure (136 tolas gram) into Attūr, where the true standard was 154 of gram; a stamping maistry transferred from Salem to Nāmakal introduced without orders the Salem measure, altering the standard from 150 tolas gram (double measure) to 136; the Vāniambādi Sub-Magistrate altered without any authority the town standard from 86 tolas rice to 90 tolas gram; and the Sub-Collector, Mr. Wilkinson, took it into his head that it would be a good thing to introduce the pukka seer of 80 tolas into the Sub-division and ordered accordingly; but he made a mess of it, for, instead of a seer of 80 tolas rice, he introduced one of about 77 tolas, as the 80 tolas is weighed in gram.

“The system of test by volume of water ordered by the Board has never been introduced in the district, and the only method of test in vogue is by weight of horsegram, sometimes very old, sometimes moderately so, some-

times mixed; but often, it is probable, one or other as suits the interest of the stamping maistry, to please the merchant who brings the measure. The difference between the weight of old and new gram is 16 or 17 per cent. In Salem Taluk the gram used for testing is said to be ten or twelve years old, and in other taluks the gram in use is nearly as old. The use of a test of this kind has, it appears to me clearly established, enlarged the measures by degrees. Thus the Rāsipūr Sub-Magistrate reports that the people complain that the new measure, though supposed to be 136 tolas, is really one-eighth measure larger than the old māmūl measure, which was 144 tolas. Complaints have also reached me from Dharmapuri that the measures stamped when operations were begun some years ago are now too small, and this is attributed to use; but the real cause is the gradual enlargement of the standard, as the testing gram gets lighter with age. At any rate, if the māmūl standards are expressed in old gram, the result of the use of this as a test makes the Board's table and standards inapplicable, inasmuch as the measures actually used are considerably larger, and prices consequently considerably lower than they are supposed to be. * * *

“The measures referred to are stamped measures now in use, and collected with reference to Board's Proceedings, No. 1,662, dated 13th June 1879. I arrange them in groups. The first comprises the measures supposed to be equalized with the Salem measure, for which the Board's standard was 132 tolas of rice and the customary standard 136 tolas of gram. The second group is the Sub-division measures which Mr. Wilkinson attempted to make the pukka seer, i.e., 80 tolas of rice, but which are now supposed to contain 80 tolas of gram. The third comprises the rest of the district. The Vāniambādi standard is 90 tolas, the rest are from 63 to 66 tolas of rice, but tested for the like weights of gram. For grain tests of the measures, I procured four specimens of rice and gram actually on sale in the bazaar and used them mixed.

“From this it will be seen that, assuming the correctness of the Board's heaping table and of the measures sent up from the taluks, it results that the old gram used for testing averages 102.39 tolas to 100 cubic inches. The Board's conversion data give 116.59 tolas to 100 cubic inches. Hence it would appear that the recorded prices are some 15 per cent. out.

“It is no use attempting to remedy this state of things as long as the present system of test continues.”

For the proposals to remedy the existing confusion the reader is referred to the Proceedings above quoted.

The currency is generally in rupees, annas, and pies. The pies are commonly called “cash,” the English sovereign being known as “pound cash.” The poor classes commonly speak of a “duddu” = 4 cash or $\frac{1}{4}$ of an anna, but there is now no such coin. The ordinary quarter anna is called “mukkāl duddu” or $\frac{3}{4}$ of a duddu. The anna, as its name implies, is the sixteenth of a rupee, and the silver coins are ordinarily spoken of as so many fractions, $\frac{1}{8}$, $\frac{1}{4}$, or $\frac{1}{2}$ of a rupee as the case may be. The “ $\frac{1}{2}$ duddu” is a term used for 2 cash, a coin representing that value having been formerly coined. The 2-anna piece is called a “panam” or “fanam,” “panam” being the generic term for money. The “varāṅṅam” or pagoda, = $3\frac{1}{2}$ rupees, is a coin often spoken of in computation. In rural tracts there are traces of a

coinage not generally known. Thus in one case¹ a sum of money stated to be "Puli 69, Maili 26, and Kāsi 54" was said to be the equivalent of Rupees 243-9-3 in Fasli 1231 = A.D. 1821. The puli was probably a gold coin with a tiger (puli) engraved on it, and = about $3\frac{1}{2}$ rupees or one pagoda. The "maili" may have borne the representation of a peacock (maiya), which would bring us possibly back to the days when gold and peacocks were exported from the Wynaad Ophir; the kāsī seems to be our old friend "cash." Cf. Col. Read's report, p. 248 Chap. V.

¹ Suit No. 1 of 1879 on the file of the Sub-Collector.

CHAPTER IV.

DEPARTMENTS.

Up to the year 1875 the abkārī revenue was conducted on the "farming" system, the farmers having the monopoly of the sale both of arrack and toddy. In the year 1875 the Salem District was selected by the Board of Revenue as a suitable one for the introduction of the improved excise system, as it was known that under the old farming system most of the taluks had been managed on a somewhat similar plan by former renters, inasmuch as they had manufactured nearly all the spirits required for each taluk at a central distillery, under their own superintendence, and had supplied them to the vendors on the dowle system, i.e., the vendor who undertook to sell the largest quantity of liquor per mensem was given the license for any particular locality, and he paid for the liquor to the renter as soon as he received it, recouping himself as he sold it to his customers. What Mr. Dalrymple terms the "experimental excise system" had already been on its trial in five other districts, and the plan adopted for Salem was based on this, the new system being supposed to combine the moral checks of the Sadr distillery system (which professed to secure the maximum of revenue from the minimum of consumption) with the financial advantages of the farming system, and would be free from many of the defects which were inherent in both those modes of managing the excise revenue. The main differences between the improved excise system and the experimental excise system are—(1) that under the former the duty on spirits is fixed with reference to the actual selling price of spirits in the districts concerned, instead of being an arbitrary rate; (2) that the contractors are not permitted to sell spirits beyond a fixed maximum price, in order to prevent their securing to themselves a large profit on a small and easily managed consumption, to the detriment of the excise duty and the neglect of the supply of outlying tracts of country; and (3) that a minimum guaranteed revenue for each district is arrived at by tenders in the open market, so that a public estimate may be occasionally obtained of that normal consumption of spirits in each locality upon which the State is entitled to levy its excise. The improved farming system requires that all spirits shall be sold at certain specified strengths, and at retail rates between certain specified minima and maxima. It also provides, as far as possible, for the manufacture of all spirits at central distilleries, which are subject to Government inspection, and requires that detailed accounts shall be kept at all distilleries and shops for the information of the officers of excise. In the last year of the farming system (1873-74) the total abkārī revenue, the

toddy and arrack farms being combined, was Rupees 3,72,088. The tender accepted for arrack (Messrs. Wilson and Company) promised a guaranteed revenue of Rupees 3,41,000, and the toddy farm sold talukwar for Rupees 1,39,430, the two combined promising Rupees 4,80,430. From various causes—the bad seasons, high prices charged, competition of toddy, &c.—the new arrack contract broke down in the very first year, and Government accepted a compromise whereby the renters were allowed to pay on issues only. Then came the famine, and, what with loss of population, bad seasons, general poverty, &c., the renters never had a fair trial. When the period of the contract entered into in 1875 had expired, Messrs. Wilson and Company again tendered a guaranteed revenue of Rupees 1,77,584 and the toddy, sold talukwar, totalled Rupees 1,25,000 for the whole district. The toddy contractors fell almost immediately into difficulties; one of them died in jail and the arrangements were disturbed not only in this but in other districts. Messrs. Wilson and Company have also claimed concessions which had to be granted in other districts, and on the whole the question of what this branch of revenue can yield is not yet solved. The bad seasons from which the country has been suffering cannot last for ever, and the next contract in 1881 may be expected to be of a stable nature. Valuable information on the subject will be found in a report from Mr. Dulyell to the Chief Secretary, dated 23rd September 1876, and another to the Board of Revenue, dated 22nd April 1874.

This department has recently undergone much disorganization and is now being reorganized. A few years ago a District Engineer had under him a Range Officer of the Executive Engineer class at Salem and Hosūr, a Supervisor in charge of a range at Tirupatūr, and another working in the south of the district, with an Overseer for each taluk. The Executive Engineer at Salem now supervises the Assistant Engineer at Hosūr, and the subordinate department is about to be reduced; so it is impossible to write anything definite on the subject. The roads have all been handed over to the Local Fund Boards, who keep their own Engineers, and it is understood that minor irrigation works are to be repaired by the Collector, while all departments will carry out the repairs of their own buildings.

The district is not one of those in which a Government Chaplain is stationed, but once in two months a Chaplain from Bangalore comes out to officiate at the Remount Depot and Hosūr, and, when there is a Chaplain on the Shevaroy's, he is bound to visit Salem and officiate once a month. Clergymen on leave on the Shevaroy's are appointed to be *pro tem*. Chaplains at Erkāḍ, for which they draw Rupees 100 a month, and are provided with accommodation at the parsonage, for which they pay Rupees 30 per mensem. Otherwise the district is wholly unprovided for as regards the Church of England. The church on the Shevaroy's belongs to trustees. That at Salem, which is a monument of good taste on the part of the architect, Mr. Chisholm, was

¹ Since the above was written the Assistant Engineer was reduced and the Executive Engineer has now entire charge of all Public Works Department operations in the district.

erected partly by local subscriptions and partly by a Government grant-in-aid. The church at Hosūr was built by the S.P.G. aided by subscriptions. The S.P.G. is supposed to work in the Hosūr Taluk, where the Society is only represented by a catechist, who is occasionally supervised by a native clergyman from Bangalore. The rest of the district is occupied by the London Mission and Lutheran Evangelical Mission (Protestants), and by the French Foreign Mission (Roman Catholics). The London Mission has two chief stations at Salem and Tirupatūr, and commenced work under the Reverend H. Crisp in 1827 at Salem. Several schools which had been established and supported by the Collector, Mr. M. D. Cockburn, were at once given over to the charge of the Missionary. This gentleman died in 1832, and the Mission was in abeyance until 1833 when Mr. Walton took charge. The schools then contained 350 heathen children, and on Sundays the number of hearers had increased from 5 to 50. In May 1840 the Reverend J. M. Lechler arrived, and in June of the following year, when the Reverend J. Walton died, took entire charge of the Mission, laboured alone for 21 years, and, while still in harness, was seized with cholera and expired on the 17th June 1861 in the fifty-seventh year of his age. In the course of 21 years he naturally made experiments in more than one direction. The first plan which he tried was to establish schools over the greater part of the district, where Christian books were taught, and where he and his assistants preached during their periodical visits. This plan failed because the masters were all heathens and could not be prevailed upon to teach the Catechism and Christian lessons. The second plan was to collect scattered families willing to place themselves under Christian instruction and to form them into Christian villages, giving them pecuniary assistance to start as cultivators. The catechists in charge proved unfaithful, and the people, when the assistance begun was not continued, went back to their old habits and beliefs. A female orphanage was commenced in 1840 with 4 girls, and the numbers gradually rose to 14, 22, 40, and at last 70 girls. A similar school was started for boys, and in connection with it a school of industry. This school of industry appears to have had a somewhat chequered history. A Christian carpenter and three young men first constituted it. In 1851 a European master and superintendent was needed: the institution then numbered 14 young men, to whom the trades of carpentry, smithery, and brick-laying were taught. In 1853 the number of inmates had risen to 35. A second European assistant was then engaged and considerable improvements made. Treble the number of workmen could then have been employed, but, to the surprise (!) of the Missionary, many of the people went away to the rail-road and other places where they found easier work and greater pay. In 1858 there were 16 young men in the school, who were instructed in the truths of Christianity while learning a respectable trade. This school, though not fulfilling Mr. Lechler's expectations, did good work, and was only abolished after his death, as it was deemed unadvisable to continue it under the altered circumstances of the Mission. His widow, who is a large house-owner and coffee-planter on the Shevaroy's, still takes an interest in the affairs of the Mission, in which two of her sons-in-law are labouring. According to Mr. Lechler's report for 1859, a year and a half before he died, the statistics of the Mission were as follows:—

catechists 11, out-stations 4, communicants 35; "under Christian instruction about 350." As far as can be made out, *all* these were not baptized, for in the report for 1858 the number of baptized persons is given as 144, while the number under "Christian instruction" is given as "somewhat above 300." The schools were: Boys' Orphan and Boarding Asylum containing 39, Girls' Orphan and Boarding Asylum containing 25, Industrial School 25 lads, and six country day schools containing 75 pupils.

Mr. Lechler erected a Mission-house at Salem, a fine substantial Gothic church, and school-rooms for boys and girls. He also opened a Bible and book depôt in the Bazaar Street, Salem. The Reverend C. Campbell from Bangalore took charge of the Mission after Mr. Lechler's death until the arrival of the Reverend G. Mabbs in January 1862. Mr. Mabbs in consequence of ill-health was often away for lengthened periods from the district, so that he was able to do but little; and in November 1865 he was transferred to Travancore, when the Reverend W. E. Morris took charge of the station; but after three years the work proved too much for him. He was obliged to go home in February 1869 to recruit his shattered health with the hope of returning, but that hope was never realized, as his medical advisers decided that he should never again attempt to live in the tropics.

In January 1869 Mr. Phillips took charge of the Salem Mission in addition to the Tirupatūr station, an account of which will follow. There were at the end of that year 11 out-stations, 14 native preachers, 129 communicants, 475 baptized persons including communicants, 5 boys' schools containing 125 scholars, and 2 girls' schools containing 84 girls, in connection with the Mission.

In February 1870 the Reverend Henry Toller and his wife arrived to take the place of Mr. and Mrs. Morris, but within six weeks of their arrival Mr. Toller was suddenly attacked with cholera and died in a few hours. Mrs. Toller returned home in the very same ship in which both had come out.

The Directors were greatly perplexed when they heard of the sudden death of Mr. Toller. They had lost four men at Salem during the preceding eight years, two by death and two by illness, and naturally feared the consequences of sending another man there. They therefore proposed to give up the district to the Arcot Mission, and transfer Mr. Phillips from Tirupatūr to the Coimbatūr District. Apart, however, from the inability of the Arcot Mission to take the district, the Local Committee strongly and unanimously opposed the proposal. They pointed out the effect it would have in breaking up the symmetry of the Mission field, Salem being the connecting link between the Madras, Bangalore, and Coimbatūr Missions; adjoining the latter on the south, and Bangalore on the north, and only half a day's journey from Madras by rail. The result was that the Directors relinquished the idea of giving up the district, and Mr. Phillips has continued in charge of the Mission from 1869 to the present time, except when at home on furlough in 1873-74, when the Reverend H. Rice, who had been appointed to succeed him at Tirupatūr, superintended the work from that station.

The strength of the Mission according to the report of 1878, or 17 years after its commencement, was as follows:—native preachers 5, reader 1,

out-stations 5, communicants 26, baptized (including communicants) 154, boys' school 1, containing 80 pupils, and a girls' school containing 39.

Among the converts of this Mission are *five Brāhmans*, but one went back to heathenism under great pressure from his relatives.

Since the commencement of the Mission 52 years ago, the Society have kept *only one Missionary* in the district 43 years, and *two Missionaries* for 9 years.

There are now 2 Missionaries in the district assisted by 15 native preachers. In round numbers there are 950 baptized persons, the proportion of native preachers to baptized persons being 1 to 63½.

The Lutheran Evangelical Mission has a little chapel on the Shevaroy, which is occasionally visited by one of the Missionaries from Trichinopoly or Tranquebar, but this can hardly be said to be one of the chief stations of that Society.

The Roman Catholic Mission is divided into eight districts as follows:—

Salem, including 9 centres of work at Salem, Chettiampatti, Chinnampatti, Yedapadi, Reddiūr, Kaniampatti, Sankagiridurgam, Kattēri, Kalkavēri, and Madiampatti, with 3,795 adherents in 114 villages. In this district is the principal church of the Salem District with its presbytery, and six minor churches with presbyteries, one church with no presbytery, and two chapels.

Akkaveram and surrounding villages with 565 converts; this district contains a church and residence for the priest and a convent for nuns.

Ērkād (Shevaroy), European, East Indian, and Native Roman Catholic population 685. A church and bungalow are provided here.

Koilūr-Dharmapuri, with 8 centres at Koilūr, Sāvadiūr, Nellimaratham-patti, Mallāpuram, Pallipatti, Tenkaraikōttai and Bēlagundūr. In this district are 3,146 converts in about 40 villages. A principal church, presbytery and convent are provided at Koilūr; and one church with presbytery, three chapels with presbyteries, and fourteen chapels without presbyteries, are scattered over the different villages.

Koilūr-Tirupatūr.—This district contains 2,554 converts, one principal church and presbytery, three minor churches with one presbytery, and four chapels.

Kosavampatti is partly in the district of Trichinopoly; but in the Salem District it boasts of 748 converts in about 20 villages, with two churches and presbyteries and three chapels.

Kangaceli has some villages in South Arcot; but in Salem it has 1,698 converts in about 40 villages, two churches with presbyteries, and one chapel with presbytery and six chapels without presbyteries.

Madagondapalli.—This district is at present governed by the Vicariate Apostolic of Bangalore, the seven preceding being under the Bishop of Pondicherry. This, however, is not a permanent arrangement, but may be modified according to the number of Missionaries available. Twenty-five years ago the whole district of Salem was under a single priest; there are now ten or more. Madagondapalli is the chief station, where a pretty church, giving quite a home-like look to the village, has been erected. The stations annexed to it are Mattakēri, Mārdanapalli, Attipalli, and Dāsuriipalli; 1,200 Christians, mostly Sudras, form the congregations. The grand total for the

district is 14,391. Brāhmans and Kshatrias excepted, all the higher castes are fairly represented in these numbers. The above details have been furnished by the courtesy of Monseigneur Laouenan, the Bishop of Pondicherry. The devotion to duty shown by these Missionaries is beyond praise, but their lives are so retired that, unless sought out, their presence in the neighbourhood might long be unsuspected. Men of high culture and sometimes of high birth give up all in Europe to live and fare like the native peasantry for whom they labour, and subsist on a pittance which is thought barely sufficient for a native clerk. For thirty and forty years they live this life of monotony but high endeavour, never returning to Europe of their own free will. Both in the past and present they have conciliated the admiration of all but their most bigoted opponents, and not rarely their loss is felt as a loss to the whole district. When, at the close of the famine, in which his efforts had been unceasing, Father Brisard of Salem put on the crown of immortality, there was not a European in the district who did not regret him as a friend. The famine orphans of the sub-division were handed over *en masse* to Père Thirion of Dharmapuri, in whom the little waifs have found a kind and indulgent father. The disparity of numbers between the Protestant and Roman Catholic converts is generally accounted for on the ground that the Protestant Missionaries are more exacting in the tests applied before baptism; but the antiquity of the Salem Mission is quite enough to account for the difference. The following is a translation of a memorandum in French which Père Thirion was kind enough to draw up :—

" St. François Xavier, Apostle of India, came from Portugal to Goa in 1540 and made innumerable converts in the ten years during which he preached the Gospel in this land. Towards the end of the sixteenth century the Reverend Jesuit Fathers took up the work which he had commenced, and had much success in preaching over the whole south of India, where they founded many flourishing Missions. In 1606 the celebrated Robert de Nobili,¹ a relation of the Pope Julius the Third and of the Cardinal Bellarmain,² arrived in India and entered on a career of preaching which lasted forty years, during which he worked incalculable good by his wisdom and indefatigable zeal. Deeply versed in all the languages and customs of the country, he made himself 'all things to all men' to win the people to the faith. He adopted the habit of life of the Brāhmans and observed all the *āchārams* or customs of the higher castes, and crowned his work by founding the Christian Church at Madura. After this, accompanied by his Brāhman disciples and native servants, he turned his steps to Salem about the year 1630, to carry his mission towards the north. Passing by Trichinopoly he reached Shendamangalam (in Nāmakkal), capital of the State of Ramachandra Nāyakar, a tributary to the king of Madura, where the great 'Saniyāsi' was received with all distinction, the king himself offering him a handsome site on which to build a church. The Missionary, however, thought himself bound to push on to Salem, and was forced, for the moment, to decline the generous offer."

¹ Known to the natives as Tattava Nadar padagol or "prédicateur de la vraie sagesse."

² Bellarmine.

" Salem was then the capital of the State of Salapatti Nāyakan,¹ another chief tributary to the king of Madura. At the very outset the population of Salem manifested an unmistakable hostility to the efforts of the Father Robert de Nobili, and refused him everything, so that he was reduced to pray for shelter in an abandoned *chāvadi* outside the town. There he was subjected to all sorts of privations and contemptuous treatment and at last fell dangerously ill: his followers, however, failed to persuade him to leave this inhospitable city. Warrior by nature, he set himself resolutely to conquer or die in planting the cross in this country. After he had endured a severe and long trial of forty days of suffering, the pagans, touched by so much virtue and patience, came in crowds to visit the new 'guru,' and to listen to his teaching. The brother of the king of Sattiamangalam, then a refugee at Salem, was, with his four sons, amongst the most assiduous attendants. A great number of persons of distinction received baptism; the king of Salem conceived the desire to see the great man and hear his doctrine, which filled him with wonder, and he ended by bestowing on him his confidence and true friendship, and defended him against the calumnies and plots of the priests of the idols, who were stirred with anger against the preacher and sought to persecute him. The Brāhmans and other experts had numerous conferences before the king, and the missionary, refuting victoriously all their fables, had little difficulty in showing to them the sublimity and sanctity of the Christian doctrine. From this date, A.D. 1630, Christianity was established in Salem, and a fair church, surmounted by the cross, arose in the middle of the town. That the crusade developed itself towards the north, and that Missionaries came from Salem and neighbouring places to preach the Gospel in the kingdom of Māisūr, and especially at Koilūr-Dharmapuri, may be presumed from the fact that in 1675, or fourteen years after the death of Robert de Nobili at Mailapūr in Madras, the Reverend Father Jean de Britto passed through Sattiamangalam on his way to visit the two Missionaries installed at Dharmapuri. Of these, both Europeans, one was named Susiāpōre Swāmiar and the other Antoniar. Tradition has it that, in the outset, a European priest was assigned exclusively to minister to the higher castes and was called the 'Priest of the Brāhmans,' while another, called 'Pandāram Sāmi,' ministered to the Pariahs of the neighbourhood, so that caste prejudices might not stay the progress of conversions. Father de Britto was subsequently recalled to Europe by his superiors; but, again returning, made his way by Gingee through the wild forests of the Javādis to Dharmapuri. Thence he proceeded to his mission in the Marava country, where he was put to death in an outburst of fanaticism after having baptized more than 10,000 pagans in a single year. He has been happy in his death, being the only canonised martyr of India. Towards the middle of the eighteenth century religion advanced its standards in all directions throughout the country, and the number of converts is said to have reached a total of three millions when the deplorable suppression of the Company of Jesus took place. This was a misfortune felt as irreparable to the present day; for the Missions of India, founded at the price of so many privations, being deprived of their Missionaries, many of the Christian communities were lost,

¹ Shila Naik? cf. page 71, Vol. II.

and it was not until towards the commencement of the nineteenth century that the work could be seriously taken in hand. Then Vicar-Apostolic Bishops with Missionaries were sent forth by the Sovereign Pontiff to sustain and re-establish the Missions of India. First, about 1785, Monseigneur de Tabraca and Mottot, and after them, about 1795, Monseigneur Dolichia and the famous Abbé Dubois came to Pondicherry, followed in 1819 by Monseigneur D'Halicarnasse and Monsieur Jarrige. The little church at Koilūr was enlarged and rebuilt in 1822 by the Missionary Sahadeva Nādar, and again enlarged and restored, under Monseigneur Bonnard de Drusipare, by Monsieur Fricand, and again by Monsieur Gouyon. Lastly it was completely demolished and rebuilt on a much larger scale with a cupola and nine naves, under Monseigneur Godelle, by Monsieur Thirion, now in charge; but even this does not suffice for the Christian population, and it has been found necessary to build at Koilūr a large number of chāvadis to shelter the numerous pilgrims who come from great distances to the grand festivals. The Missionaries are grateful for the favour of Government, under which (by the Pope Rules) a large tope, tax free, has been planted for the convenience of the public; but they deplore the loss of an annual grant of Rupees 42 granted by Government to their ancient and historic church. At the time of the conquest of Maisūr the Abbé Dubois assisted with his sympathy and valuable advice in the struggle against Tipu Sultan. Besides the natural sympathy of a common European origin, there were other reasons why the celebrated Abbé should interest himself in the success of the English arms, namely, the hostility and cruelty which the Christian community had experienced at the hands of Tipu Sultan, who, without any provocation, had ordered the destruction of the important church at Koilūr and of another at Kadagatūr, and had exported by force to Maisūr half the Christian population, whom he sought to convert to Mahometanism. The Rupees 42 annually given by Government were regarded as a compensation to the Mission for the losses and injuries which they had suffered at the hands of the Masalmans. It may be hoped that my feeble voice may be heard and approved by a generous Government, so that this small but valued alms may be restored to the church of Koilūr, honoured but lately by the presence of the Governor of Madras and other distinguished representatives of English rule.

"We have established, according to our feeble means, a school for little orphan girls¹ and neophytes, superintended by three nuns from Pondicherry. This little institution prospers, and promises to work in its little sphere for the regeneration of Indian women, hitherto neglected.

"NOTE.—To understand the concessions made by the Missionaries of former times to caste usages, reference is necessary to the different circumstances of time and place which rendered them legitimate, and they were, in part at least, sanctioned, after long controversies, by the legitimate authority of the Pope. Since those times, usages opposed to religion were ruthlessly and irrevocably abolished amongst the Christians, despite the defection of a great number whose religious impressions were not fully consolidated. If it

¹ All the female orphans of the sub-division, some 200 in number, were taken over, without any pecuniary assistance from Government, by the Koilūr Mission, and are being carefully brought up by Father Thirion and his coadjutors.

was permissible to a philosopher to say "Perish the world for an idea," still stronger reasons existed to justify the Pope and the Missionaries in saying the same for the scrupulous maintenance of the ascertained faith of God. In former times usages, legitimate or deemed a matter of indifference, were observed and maintained by the Missionaries as suggested by human wisdom and by the example of St. Paul, who made himself all things to all men that he might win them all to Christ: and as the Saviour did not disdain to become man to save men, so, in the same spirit, the Missionaries of former times did not disdain to become Indians to save the Indians; and we, their successors, are bound to make to caste those concessions, legitimate and approved by the superiors, and by the more common wisdom of mankind."

Under the heading of Ecclesiastical the cemeteries of the district deserve notice. Many brave men, who died in the service of their country, lie buried in them, and the inscriptions over their tombs become daily more and more illegible. It is not inappropriate, therefore, to append a list of the Europeans who have found a last resting-place in the district, so far as their names are known.

Year.	Name, Parentage, and Age.
SALEM CEMETERY.	
1813	21st April. Lieutenant Charles Thomas Ellis, of H.M.'s 1st Regiment of Royal Scots, aged 25 years 9 months and 9 days.
1818	4th June. Charles Carpenter, Esq., of the Honourable Company's Civil Service on the Madras Establishment, aged 44 years.
1818	17th September. William Heath, son of Josiah Marshall Heath and Charlotte Catherine Heath his wife. Born May 20th, 1818.
1820	19th January. Lieutenant-Colonel Fehrszen, H.M.'s 53rd Regiment, aged 34 years. Died at Namakal of cholera. This is probably a cenotaph.
1823	16th January. Maria Rosalie, wife of W. D. Davis, Esq., aged 27 years.
1824	16th June. Mrs. Ann West.
1824	26th June. Robert John Hunter, Esq., aged 28 years.
1824	5th July. Louisa, wife of Robert J. Hunter, Esq., aged 24 years.
1825	5th February. Jane, the beloved wife of Captain H. Coyle, of the 28th Regiment Native Infantry.
1829	7th May. Eliza Steffe, the beloved wife of the Rev. H. Crisp, in her 24th year.
1830	28th February. Edward Robert Hargrave, Esq., of the Madras Civil Service, and 18 years Collector of the Zillah of Salem, aged 56 years.
1831	22nd February. Ensign John Harrison Stapleton, of the 39th Regiment Native Infantry, aged 20 years.
1831	2nd June. Captain Thomas Robson, of the 26th Regiment Madras Native Infantry, aged 40 years.
1831	28th October. The Rev. Henry Crisp, Missionary of the London Missionary Society, aged 28 years.
1832	4th February. Robert Deacon, Captain in the 18th Regiment Native Infantry, aged 34 years.
1833	18th July. George Campbell, the infant son of Captain George Burn, 14th Regiment Native Infantry, aged 11 months.
1835	24th March. John Symons, Lieutenant in the 13th Regiment Native Infantry, aged 32 years.
1836	29th May. John McDonald Minto, Captain of the 15th Regiment Madras Native Infantry, aged 33 years.
1837	23rd, 24th, and 25th July. Mary Ann Bevan, and Emma Julia and Adcl, the wife and daughters of Captain Henry Bevan, of the 27th Regiment Native Infantry—all of cholera.
1837	11th September. James Glen, Esq., late of the Madras Medical Service.
1839	4th February. James Corbett Tayler.

Year.	Name, Parentage, and Age.
SALEM CEMETERY—(Continued).	
1829	25th March. Archibald Douglas, late Lieutenant in the Corps of Madras Engineers.
1830	28th March. Louisa Margaret, the beloved daughter of William and Maria Clarke, aged 4 years 7 months and 13 days.
1839	18th August. Mrs. Anna Walton, the beloved wife of the Rev. George Walton, aged 36 years and 3 months.
1840	18th August. James Moreton Walhouse.
1841	9th June. Rev. George Walton, Missionary at Salem, aged 39 years and 6 months.
1842	6th April. Isabella Helen, daughter of John and Charlotte Helen Cadenhead, aged 1 year 2 months and 23 days.
1842	23rd April. Eugene Chateletier Merchant, aged 30 years 1 month and 5 days.
1842	1st December. Frederick Mole, Esq., Madras Civil Service, aged 30 years.
1845	17th March. Emelia, daughter of Charles and Emelia Ann Mortlock, aged 23 years 10 months and 10 days.
1846	8th February. Robert Fitzsimons, late Head Writer of the Salem Collector's Catcherry, died of cholera at Ghazipur.
1846	25th May. Charles Warner, son of Captain Lancaster, of the Horse Artillery.
1846	6th June. Archibald Hamilton, Madras Civil Service, aged 27 years.
1847	14th September. Mary Ann, the beloved wife of the late Mr. Luke Madden, of Chittoor, aged 43 years and 6 months.
1848	10th June. D. Cadenhead, Esq., aged 38 years.
1849	16th April. Mary Ann Sophia, daughter of the late W. O. Shakespear, Esq., aged 26 years and 6 months.
1849	22nd June. Louisa Isabella, daughter of G. Quanbrough, Lieutenant, Indian Navy, and Wilhelmina his wife, aged 3 years 8 months and 12 days.
1851	5th April. Rev. C. Josiah Taylor, of the Church Missionary Society, Missionary at Panchidali, Tinnevely, aged 43 years.
1853	3rd February. Heinrich George, son of the Rev. C. Ochs, and Sarah his wife, aged 3 years and 6 months.
1853	9th August. Josepha Jennings, the beloved wife of Mr. J. L. Bantleman, Merchant, aged 27 years and 8 months.
1854	26th January. Mr. Cosmo D'Santos, of the Medical Establishment, aged 65 years.
1854	30th May. Edmund Robert Joseph, the infant son of Mr. J. L. Bantleman, aged 1 year and 3 months.
1854	August. Thomas, infant son of Esther Rahm by her former husband Mr. C. Crowe, aged 3 months.
1858	15th April. Emily, the beloved daughter of James and Leila Fischer, aged 11 months and 21 days.
1860	18th June. Emma, beloved daughter of Major E. B. Marsack, 12th Regiment Native Infantry, and of Louisa his wife, in the 4th year of her age.
1861	31st May. Leila, the beloved wife of Mr. James Fischer, aged 21 years 8 months and 28 days.
1861	10th July. Major-General Nicholas Fenwick Johnson, aged 58 years.
1862	16th December. Mrs. Wilhelmina Amelia Gilles, the second and beloved daughter of Apothecary George Sampson, of the Madras Medical Establishment, died at Munchavadi, aged 15 years and 4 days.
1862	16th December. Esther, the beloved wife of Mr. C. Rahm, aged 27 years.
1863	10th March. William Green, late Sergeant of the D Company, 2nd Battalion, Madras Artillery, and Inspector of Police, Chittoor District, aged 47 years.
1863	28th April. Henry Stewart Hill, Lieutenant in the Madras Staff Corps, aged 23 years.
1865	14th October. T. H. Tate.
1867	30th June. Maria Leonora, wife of W. Roath, Esq., Pensioned Deputy Collector, aged 59 years.
1867	27th July. The infant son of Captain and Mrs. Picton Warlow.
1868	8th November. Montague Edwin Foord, Captain, Madras Staff Corps (Sappers and Miners), fourth son of Colonel H. S. Foord, Madras Artillery, aged 32 years 8 months and 8 days. Shot accidentally by his own Shikari who was trying to save him from a bear.

Year.	Name, Parentage, and Age.
SALEM CEMETERY—(Continued).	
1869	25th May. George Frederick Fischer, aged 25 years.
1869	21st September. Vere Leventhorpe, the little son of Charles N. Pochin and Annie his wife.
1870	15th March. Henry Toller, Missionary, aged 25 years.
1870	Charles Norman Pochin, of the Madras Civil Service, aged 44 years.
1870	13th August. Guy A. Bloomfield, aged 2 years 3 months and 29 days.
1871	15th May. Emma Jane, the beloved wife of Mr. William Brown, Jailor, Central Jail, Salem, aged 26 years.
1871	8th October. Francis Gerald, son of Captain Picton Warlow and Eleanor his wife, aged 9 months and 8 days.
1871	10th October. Emma Eliza, the beloved child of John and Ann Bower, aged 6 months and 4 days. Died at the Salem Railway Station.
1873	21st February. James Fischer. Age not given.
1873	27th October. Edward Frederick Elliott, Madras Civil Service, Judge of Salem, aged 39 years 4 months and 21 days.
1874	14th December. Elizabeth Harriett, daughter of Thomas and Mary Ann Clarke, aged 27 years 11 months and 4 days.
1875	16th August. Ellen, the beloved wife of Thomas Bailey, Assistant Traffic Manager, Madras Railway, aged 33 years.
1875	The Rev. A. Younker, Missionary, Church Missionary Society, aged 61 years.
1875	5th October. Clara Maud, the beloved daughter of John and Matilda James.
1878	19th April. Percy O'Connell, the dear son of B. C. and M. Dumphy, aged 8 months and 8 days.
1878	18th September. Louisa, the beloved wife of Edward Simmons, aged 23 years 3 months and 3 days.
In the compound of the London Mission, Salem.	
1846	5th May. Miss Ann Machell, aged 44 years.
1861	17th June. The Rev. J. M. Lechler, aged 56 years and 9 months.
SHEVAROY HILLS.	
Protestant Cemetery.	
1853	31st December. Constance Johnston, eldest child of William Johnston, M.A., H. E. I. C. S., and Agnes his wife, aged 5 years 9 months and 14 days.
1855	23rd June. Norman Morrison, Esq., aged 49 years.
1855	23rd July. Emily Ramsay, daughter of H. D. Cook, Esq., Madras Civil Service.
1855	16th August. Catherine Ramsay, wife of H. D. Cook, Esq.
1859	24th August. Walter Dykes, aged 1 year and 7 months, the beloved child of the Rev. B. Davies, B.A., and of Anne his wife.
1859	5th September. Val. Jordan McMaster, aged 1 year 8 months and 5 days.
1859	10th September. Florence Emily, aged 5 years and 9 months, the beloved child of the Rev. B. Davies, B.A., and of Anne his wife.
1860	3rd July. William Martin, aged 47 years and 6 months.
1860	24th August. Constance, infant daughter of Captain A. H. Marsack, 15th Regiment Native Infantry, and of Constance his wife.
1861	22nd August. Margaret, infant daughter of Robert Maxwell, of Madras, and Jane his wife, aged 1 day.
1861	28th August. Jane, wife of Robert Maxwell, aged 38 years.
1863	30th June. Gertrude Eliza, youngest daughter of Major and Mrs. Hunter, aged 5 days.
1866	29th June. Howard Barth Lechler, aged 10 years.
1868	9th April. Edith May, infant daughter of Rev. W. E. Morris, of Salem, aged 8 months.
1868	12th July. Reginald Percival Dawes, aged 2 years and 22 days.
1869	20th April. C. F. Chamier, Esq., Civil and Session Judge of Salem.
1869	18th May. Brinard Anthony Daly, aged 48 years and 6 months.
1872	10th September. Catherine Lenora Grainger, aged 4 months and 15 days.

Year.	Name, Parentage, and Age.
SHEVAROY HILLS—(Continued).	
Protestant Cemetery—(Continued).	
1872	17th September. Robert Edward Orr, aged 1 year and 17 days.
1872	28th October. Alice Florence Norfor, aged 17 years and 6 months.
1873	3rd April. William Clarke, aged 53 years.
1874	3rd June. Johanne Marie Anderson, aged 1 year and 2 months.
1875	28th June. Mary Anne, the beloved wife of the Rev. J. W. Gordon, of the London Mission, Vizagapatam, aged 64 years.
1876	26th January. Arthur John Dodson, C.E., of the M.I.C.C., aged 57 years.
1877	8th October. Wilhelmina, daughter of William and Emily King, aged 1 day.
List of Persons buried who have no Tombs over them.	
Mrs. Ball, Mrs. Raham, Mrs. H. Short, Mr. W. Short, Mr. Montserrat's infant, Mr. Foote's infant, Major Huddleston's son, Mrs. Daly.	
Tablets in the Church.	
1848	10th June. Duncan Cadenhead, Esq., aged 38 years.
1850	30th January. W. E. Lockhart, Esq., for 5 years Collector of this district, who died at Hosur and was interred at that place.
1854	5th June. Caroline Harriett Emily, second and beloved daughter of J. R. Boyson, Esq., and Matilda Margaret his wife, aged 4 years and 11 months.
1854	21st June. Matilda Margaret, wife of John Robert Boyson, of Madras, Solicitor, aged 29 years.
1861	31st May. Leila, the beloved wife of Mr. James Fischer, aged 31 years 3 months and 28 days.
1861	23rd October. Louis Blenkinsop, Esq., Engineer, Department Public Works, aged 34 years (buried at Harur).
GREEN HILLS CEMETERY.	
1866	Mrs. M. Orr.
1875	15th February. Mrs. Eliza Copp, widow of the late G. Copp, Esq., aged 49 years 3 months and 6 days.
1877	14th November. Eleanor Gilbert, aged 1 year 5 months and 10 days.
Persons buried who have no Tombs over them.	
Charles Ernest Edward Grant, Mary Jane, Edmund Jane, Richard Jane, Mrs. Charles Grant.	
LUTHERAN MISSION CEMETERY.	
1876	12th May. A. Fritz Mayr, aged 4 years 10 months and 16 days.
ROMAN CATHOLIC CEMETERY.	
1872	7th May. Mary Anne, the dearly beloved wife of James Campbell, aged 46 years.
1876	30th June. Caroline Berne, wife of Veterinary Surgeon R. Berne, R.A., aged 29 years.
Persons buried who have no Tombs over them.	
Mr. Mayers, Captain Markham's son, Mrs. Desicourt.	
NĀMAKAL.	
1821	21st June. Brevet Captain G. W. Dover, of the First Regiment of Native Infantry, aged 30 years.
1821	26th June. Richard, son of Brevet Captain G. W. Dover, aged 6 years.

Year.	Name, Parentage, and Age.
TRICHENCODE TALUK.	
Sankagiriūrgam.	
1808	27th August. William Ash, Lieutenant, 1st Battalion, 7th Regiment Native Infantry, aged 22 years.
1820	18th June. Lieutenant Robert Waters, of the 25th Regiment Madras Native Infantry, son of Robert Waters, Esq., Bloomsbury Square, London, aged 23 years.
ATTŪR.	
1799	6th May. John Murray, Lieutenant-Colonel, Commander of the 1st Regiment of Native Cavalry in the Honourable East India Company's Service, aged 50 years.
1828	5th February. Jane, wife of Captain Coyle, 23th Regiment; interred at Salem.
ŪTANKARAI TALUK.	
Irumattūr.	
1846	28th December. Octavius Orlando Bridgeman, son of the late Major Gunning, 10th Regiment Native Infantry, aged 7 years.
Harūr.	
1861	23rd October. L. B. (Louis Blenkinsop, cf. tablet in Erkad Church, <i>supra</i> .)
DHARMAPURI TALUK.	
Dharmapuri Fort Glacis.	
1819	16th October. James Ives, Esq., late a Lieutenant-Colonel in the Honourable Company's Madras Establishment, aged 37 years. Distinguished himself at the head of his corps at the battle of Mahidpore; died of a return of fever contracted in the zealous discharge of his duty in the field. Erected by his widow, Maria Wilhelmina.
1875	2nd November. Thomas Hartnell, aged 25 years 6 months and 22 days.
1875	8th November. Maria, daughter of Thomas Hartnell, aged 2 years 10 months and 17 days.
1877	30th June. Little Allie (Albert Asked), the beloved son of Charles Alfred and Jane Agnes Montgomery, aged 1 year and 8 days.
ADAMANKŌTTAI.	
1846	8th February. Mrs. Cherezna Younker, wife of the late Mr. John Younker, aged 57 years.
1846	21st March. Captain J. W. Rumsey, 44th Regiment Native Infantry, aged 49 years.
PENNĀGARAI.	
1799	13th July. Captain James Turing, Commandant of the Garrison of Pinagra, and the 1th Battalion Native Infantry.
TIRUPATŪR TALUK.	
Tirupatūr.	
1861	2nd May. Gunner Robert Jones, A Troop, Madras Horse Artillery.
1869	26th February. Thomas Leonard, son of Alfred and Angelica Sharp, aged 3 months and 23 days.
1869	21st May. Arthur Alexander, son of Joseph and Agnes Wrightman, aged 2 years 1 month and 19 days.

Year.	Name, Parentage, and Age.
TIRUPATŪR TALUK—(Continued).	
Tirupatūr—(Continued).	
1870	9th September. George Alexander, only son of Samuel Thomas and Anne Fisher, aged 10 months and 26 days.
1877	29th March. John Montgomery Caldwell, a Bengal Public Works Officer sent to the Madras Presidency on famine relief works, aged 40 years 4 months and 21 days.
1877	6th April. Sophia Mary, daughter of Edward MacDonald and Maria Stevenson, aged 6 months.
In the London Mission Church, Tirupatūr.	
1867	28th December. Mary Jane, wife of the Rev. Maurice Phillips of the London Mission, aged 24 years and 8 months.
1867	29th December. Dora Lechler, daughter of the Rev. Maurice Phillips, aged 5 days.
JOLĀRPETT.	
1870	11th April. William St. Clair Miller, aged 11 years 6 months and 11 days.
1875	22nd May. James Freeman, Coffee Planter, Shevarey Hills, aged 81 years 7 months and 25 days.
VĀNIAMBĀDI.	
1856	25th June. Henrietta Amelia, daughter of John Cornall and Henrietta Midford, aged 7 years and 11 months. (This tomb is on the side of the road from Natrampalli to Vaniambadi.)
KRISHNAGIRI TALUK.	
Krishnagiri.	
1867	5th August. Sarah Charles, the wife of Captain J. Wright, 1st N. V. Battalion, aged 26 years. There are many other tombs in this cemetery, some of great age, but not one of them unfortunately bears any inscription.
RĀYAKŌTA.	
1795	12th November. Elizabeth Keaser; the rest of the inscription is illegible.
1802	20th March. Captain John Innes, of the Honourable East India Company's Service, aged 40 years.
1806	31st July. Thomas W. Krebs, son of Lewis Krebs, Store Serjeant, aged 5 years 1 month and 20 days.
1811	29th November. Colonel R. M. Strange.
1819	19th November. Lieutenant Alexander Campbell, of the Rifle Corps, aged 28 years.
1821	16th April. Ensign William Roy, late of the 5th Extra Battalion of Native Infantry, aged 20 years.
1823	25th February. Oliver Lloyd, Lieutenant, 1st Battalion 25th Native Infantry, aged 19 years.
1831	7th November. Lieutenant Henry Kerrel, 9th Regiment Native Infantry, aged 28 years.
1834	September. Captain W. P. Burton. (Erected by his widow.)
1837	8th December. John, son of Serjeant-Major John and Elizabeth Rarter, H.M.'s 15th Dragoons, aged 4 years and 9 months.
1843	8th October. Hubert John, eldest son of Captain John Campbell and Maria his wife, aged 7 years.
1845	29th December. Christiana Clementina, daughter of Apothecary Christopher and Grace Elizabeth Oliver his wife, aged 1 year 8 months and 12 days.

Year.	Name, Parentage, and Age.
HOSŪR TALUK.	
Hosūr.	
1850	30th January. Walter Elliott Lockhart, M.C.S., Collector of Salem, aged 49 years.
1842	5th February. John Edward Bunkall, aged 38 years and 9 days. There is another tomb, but no inscription.
MATTAKERI.	
1842	20th May. Rhoda, daughter of John Ratliff, Esq., Civil Service, aged 3 months.
1843	10th June. Patrick, infant son of Captain John Hill, A. C. General, 24th Regiment Native Infantry.
1846	19th October. William, son of John Ratliff, Esq., of the Madras Civil Service, aged 3 years and 8 months.
1850	1st September. Elizabeth, daughter of Serjeant William Farmer, aged 1 month and 2 days.
1855	10th August. Catharine Lennon, daughter of James and E. Lennon, D'Troop, M. A. Pensioner, aged 11 years and 10 months.
1857	31st August. John Peter, son of W. A. Borthwick, Clerk, Remount Office, aged 6 years and 6 months.
1858	30th April. Eva Joanna, child of Matilda and Charles Evers, Second Apothecary, aged 1 year and 11 months.
1858	6th May. Edwin Emilius, child of Matilda and Charles Evers, Second Apothecary, aged 3 years and 5 months.
1863	16th December. Alice Louisa, daughter of Mr. J. P. Barringer, Overseer D. P. W., aged 8 months.
1866	16th January. Alexander, son of Andrew and Margaret Milne, aged 2 months.
1868	April. Mary, infant daughter of F. G. Shaw, Esq., Staff Veterinary Surgeon, aged 20 days.
1868	9th May. Florence, daughter of Catharine and John Peel.
1868	31st July. Catharine, the beloved wife of Sub-Conductor John Peel, Remount Depot, aged 38 years.
1870	29th June. John Murray, Apothecary, Madras Establishment, aged 62 years 7 months and 22 days.
1870	30th July. Elizabeth, daughter of William Borthwick, aged 6 years 4 months and 20 days.
1872	18th June. Harriett Mabel, daughter of Samuel Wells, M.D., aged 7 months and 17 days.
1872	11th September. Mr. Samuel Graham, "the respected Coachman of six successive Governors of Madras," aged 52 years.
1872	26th October. Rose Adeline Charlotte, daughter of W. W. and Anne Honey, aged 5 years 5 months and 16 days.
1873	20th April. Harriet, wife of Samuel Wells, M.D., aged 35 years 4 months and 17 days.
1876	15th March. Catharine Frederica, the beloved wife of Serjeant D. G. Mootham, aged 33 years and 16 days.
1876	13th August. Major Glover, Madras Veterans.
1878	18th January. Henry Clement, son of D. G. and Mary Mootham, aged 8 months and 1 day.
1878	13th October. Walter Sydney Morse, son of F. W. Morse, Esq., Assistant Engineer, aged 2 months and 13 days.
1879	15th November. J. R. Lowry, Esq., Executive Engineer, D.P.W., aged 55 years.

Higher and middle class education is maintained or aided by Government from Provincial Funds, as is also female education, while schools of the lower class are supported by or aided from Local Fund Boards and the Salem Municipality. The inspecting agency consists of a Deputy Inspector for each circle and five Inspecting Schoolmasters, all under the supervision of the Inspector of Schools,

Fourth Division. Uttankarai is the only taluk in which there is not a middle-class school; in Attūr and Trichengode there are aided middle-class schools, and in each of the others a Government school. In each circle there is a Normal school maintained by the Local Fund Board, at present stationed at Salem and Krishnagiri, in which men are trained to be masters and taught in the course required in the elementary schools for the standards under the Result system. At Salem the Government school, formerly called the Zillah School, was raised to the status of a second-grade college in 1879 and prepares students for the First Examination in Arts. In addition to the Government and aided schools there are many pial schools as well as the London Mission High School, Salem, which receive no grants from Government or the Local Boards, so that the following table, including only such schools as are under inspection, does not show the whole number of persons under instruction in the district.

Description of Schools.	Number.	Number of Pupils.	Cost per Mensm.	Remarks.
Government College	1	344	RS. A. P. 553 2 10	The figures in columns 1 and 2 refer to the second and third quarters of 1880, and the cost is the average for 1879-80.
Do. Middle-class Schools	5	407	580 15 1	
Do. Girls' Schools	3	152	122 4 8	
Middle-class. { Grant-in-aid Schools ..	6	308	349 15 10	
{ Municipal Schools	2	234	158 14 4	
Local Fund { Normal Schools	2	35	240 0 0	
Board. { Salary System Schools	9	578	248 11 5	
{ Combined System do. ..	70	1,674	989 9 7	
Result System Schools	66	1,108	944 15 0	
Pial Schools (Unaided)	109	1,403	231 12 1	
Total	273	6,443		

Great interest is shown by the people of this district in education, and it is to be hoped that, notwithstanding the famine, which has proved a severe check to educational progress, a marked advance will be shown at the census of 1881 as compared with the returns of the previous census, when only 2·8 per cent. of the population could read and write. There were then, according to the returns, only 190 schools in the district, but the Local Fund Act, passed in 1871, gave a stimulus to popular education by providing the funds for its extension, and in 1874-75 there were 230 schools, Government or aided, with 7,140 pupils. This does not include all the unaided pial schools, which may be taken at an average of 12 per taluk or 108 in all. Allowing 10 children to each pial school, about 1,080 children must have been receiving elementary education from this source. An attempt was made in 1873 to force the union system on the district, according to which villages were to be clubbed together and a house rate levied for educational purposes; but the late Lord Hobart refused to be a party to forcing the poor to pay for what they did not want, and this scheme fortunately fell to the ground. The educationalists have so interlarded their system with such words as "combined," "mixed," "primary," "results grant system," "salary aided

system," "Local Fund schools," "grant-in-aid," "middle schools," &c., that it is not very easy for an outsider to master the shibboleths, but good work is being done. Quite recently an Educational Grant-in-aid Code has been published by order of Government, which considerably modifies the rules previously in force; it will be found in the Supplement to the *Fort Saint George Gazette*, 24th February 1880.

The forests, with the exception of the reserves, have not been demarcated; hence their exact area cannot be ascertained; it has, however, been roughly calculated at 2,251 square miles. For the better supervision of the forests, which are very scattered, they have been apportioned into ranges as follows:—

The Attūr Range comprises two taluks, viz., Nāmakal and Attūr, under the charge of a Forest Ranger.

In the Nāmakal Taluk the only forests are those of the Kollinalais, which have been roughly calculated at 216 square miles: the chief timbers met with are Venghay (*Pterocarpus marsupium*), Nammai (*Conocarpus latifolia*), Blackwood (*Dalbergia latifolia*), Kadukai (*Terminalia chebula*), Tamarind (*Tamarindus Indica*), Jack, Kāt Maddi (*Terminalia tomentosa*), Sampangi (*Michelia Champaca*), and Sandalwood (*Santalum album*).

The sandalwood is worked departmentally; other timbers are worked under the license system.

In the Attūr Taluk are situated the northern slopes of the Pachaimalais, the Peria Kalrāyan and the Chinna Kalrāyan (private forests); the area of all these hill forests is about 35 square miles. The chief timbers are those already enumerated under the Nāmakal Taluk, together with Acha (*Hardwickia binata*), Selluvānji (*Albizia odoratissima*). Sandalwood and timbers designated as belonging to the first class, such as Venghay, Teak, &c., are worked departmentally, other timbers being worked under the license system.

Until recently the Chinna Kalrāyan hill forests were leased to Government by the Pattagar on a payment of Rupees 12,500 for twenty years, but the lease was annulled by orders of Government (*vide* G.O., No. 3,370, dated 7th December 1877). The lease of the Peria Kalrāyan forest is also under litigation.¹

The Salem Range comprises the Salem and Trichengode Taluks and the forests of the Shevaroy, the Bodamalai and the Arunūttimalai (north-east of Salem), total area about 300 square miles, under the charge of a Forest Ranger. The chief timbers are Teak (stunted *Tectona grandis*), Blackwood (*Dalbergia latifolia*), Muli (*Cedrela toona*), Nammai (*Conocarpus latifolia*), Kadukai (*Terminalia chebula*), Satinwood (*Chickrassia tabularis*), Acha (*Hardwickia binata*), Venghay (*Pterocarpus marsupium*), Selluvānji (*Albizia odoratissima*), Catechu (*Acacia catechu*), and Sandalwood (*Santalum album*).

The working is partly departmental and partly license.

The Harūr Range comprises the taluks of Uttankarai and Tirupatūr under the charge of a Forest Ranger.

In the Uttankarai Taluk are situated the Chittōri hill forests, the western slopes of the Ariagoundan Nād, the Kōttaipatti and Tirtamalai forests, and a portion of the Javādi hill forests: total area about 300 square miles.

¹ Since settled and confirmed to Government.

The timbers are similar to those in the Salem Range. Departmental felling and the license system are in force. The Naiamalai¹ is a tract of private

forest to the east of the Shevaroy's belonging to the
PRIVATE FORESTS. Mittadar of Chekkadipatti. In the Tirupatūr Taluk are situated a large portion of the Javādis and the Yēlagiris, total area about 200 square miles. The timbers are the same as in the Salem Range and worked departmentally. Besides the Naiamalais, a part of the Ariagoundan Nād, the Naikanūr Jāghir on the Javādis, and the Vellakuttai Jāghir belong to private parties.

The Sub-division Range comprises the taluks of Hosūr, Dharmapuri, and Krishnagiri, under the charge of a Sub-Assistant Conservator.

The Hosūr Taluk contains the hill forests south of Denkanikōta towards the Kāvēri, namely, the Mēlagiri, Kōtagiri, and Manchi hills (rising to about 4,000 feet), the Bilikal hill forests west of Anchitti and the Achawood tracts on the banks of the Kāvēri; the total area is about 500 square miles. Chief timbers Teak (*Tectona grandis*), Blackwood (*Dalbergia latifolia*), Venghay (*Pterocarpus marsupium*), Acha (*Hardwickia binata*), Kadukai (*Terminalia chebula*), Mali (*Cedrela toona*), Nammai (*Conocarpus latifolia*), Selluvunji (*Albizia odoratissima*), Bilvaram, Vilva-maram (*Ægle marmelos*?), and Sandalwood (*Santalum album*), all worked departmentally.

The Dharmapuri Taluk contains the Gutrayan² hill forests and the Pennāgaram Achawood tracts, area about 450 square miles. The timbers are the same as in the Hosūr Taluk and worked departmentally.

The Krishnagiri Taluk contains the forests of the Maharājagarh hill, north of Krishnagiri, and the Rāyakota forests; area about 250 square miles. Timbers chiefly Neem (*Azadirachta Indica*), Tamarind (*Tamarindus Indica*), and various jungle woods worked under the license system.

Under the head of Reserves are included certain forest tracts which have been demarcated and surveyed. These have been
RESERVES. formed into reserves for the supply of fuel. There are ten along the south-west line of railway, viz., six near the Shevaroy Hill station, one at Mallāpuram, one at Harūr, one at Ūttankarai (two blocks), one at Singārapett, and two a little to the south of the Bangalore branch between Tirupatūr and Krishnagiri. The four reserves designated A, B, Ammanēri, and Kanjēri are all situated in the Attūr ghāt (Shevaroy Hill Railway station) jungles close to Salem, through the centre of which the railway line runs. The Pillapalli and Kariappakombai reserves lie to the east of the Shevaroy Hill station. The Mallāpuram reserve abuts on the east side of the railway line close to the Mallāpuram Railway station. The Harūr reserve is six miles east of the Morupūr Railway station. The Ūttankarai reserve is 4 miles and the Singārapett reserve 12 miles east of the Sāmalpatti Railway station. The D or Burgūr reserve is 5 miles south of the Bangalore line and 16 miles west of Tirupatūr. The E reserve is 2 miles south of the Bangalore line and 18 miles west of Tirupatūr.

The trees met with in the reserves are mostly good fuel-yielding trees of which the following are some of those most commonly found:—

Zizyphus glabrata (Karukattan), *Prosopis spiciigera* (Parambai), *Conocarpus*

¹ In Attūr, but apparently worked from Ūttankarai.

² This is a mistake. The Gutrayan belongs to Hosūr.

latifolia (Nammai), *Dichrostachys cinerea* (Vadatala), *Acacia leucophlea* (Vel-vēlam), *Cassia fistula* (Konē), *Albizia odoratissima* (Vel-vaghē), *Albizia lebbek* (Vaghē), *Premna tomentosa* (Podangie Nari), *Copparis pyrifolia* (Sangatira), *Erythroxylon Indicum* (Semblichan), *Grewia rothie* (Adave),¹ *Strychnos nuxvomica* (Yetti), *Pongamia glabra* (Pungam). Besides these there are the *Acacia amara* (Thurinji), the *Wrightia tinctoria* (Pala), stunted Satinwood, *Diospyros montana*, *Albizia amara*, the Babul, Neem, *Cassia florida*, *Acacia catechu*, *Canthium didymum*, Tamarind, &c. The estimate was 4 tons of firewood fit for railway consumption per acre, but on experiment 2½ tons was found to be the outturn.

The following statement shows the acreage, expenditure, and receipts of each reserve from date of formation up to 31st March 1880:—

No.	Name of Reserve.	Date of Formation.	Acreage.	Expenditure.	Receipts.
				RS. A. P.	RS. A. P.
1	A Reserve	1866-67	1,976½	4,436 6 11	5,960 5 0
2	B do.	1866-67	799½	3,435 0 1	80 5 9
3	C do.	1866-67	587	7,564 5 9	316 13 9
4	D do.	1866-67	221	2,427 4 10	51 0 0
5	E do.	1866-67	1,070	3,205 6 4	377 1 6
6	Kuriyappa Kombai Reserve	1873-74	531½	1,058 15 2	50 0 6
7	Pillapalli Reserve	1873-74	981	1,240 3 8	32 10 8
8	Ammanēri do.	1872-73	253	1,727 14 5	27 0 0
9	Ūttankarai, two blocks	1872-73	469	1,302 8 5	45 0 0
10	Singārapett Reserve	1874-75	2,624½	2,098 4 6	179 0 0
11	Harūr Reserve	1874-75	1,177	1,351 13 9	60 0 0
12	Kanjēri do.	1878-79	Not surveyed.	277 6 6	13 5 4
	Total ..			30,135 10 3	7,192 10 6

There is only one plantation, viz., a small sandalwood plantation,

PLANTATIONS. 5 miles² in extent, formed in 1874 on the Mēlagiri Hills close to Denkanikōta; the elevation is about 3,000 feet.

It is not proposed to extend it, as the reservation of tracts where there is a natural growth of this tree is deemed preferable to any attempts to plant on cleared land. The total forest revenue and expenditure of the district for the period of five years commencing from 1875-76 was as per subjoined statement:—

Years.	Receipts.	Expenditure.
	RS. A. P.	RS. A. P.
1875-76	64,015 0 0	43,117 0 0
1876-77	59,920 11 8	25,816 3 5
1877-78	63,666 10 2	20,797 7 7
1878-79	60,637 15 5	20,417 6 7
1879-80	65,946 1 8	20,628 12 7

¹ So the Assistant Conservator spells it. The name is not found in Balfour or Drury.

² So the Forest Officer says. The extent is probably 5 square miles.

Further particulars will be found in Proceedings, Board of Revenue, No. 996, dated 3rd March 1877, and G.O., No. 1,529, dated 22nd July 1879. Between 1862 and 1876 the revenue from sandalwood alone was Rupees 1,47,537.

The following woods were collected for the Paris Exhibition:—

Acacia Arabica (Karu-vēlam).—Common throughout the district in the plains. Wood close-grained and tough, of a pale brownish red colour; used for building purposes, axles, and the naves, spokes and felloes of wheels, ploughshares, &c.

Acacia sundra (Karungāli).—Common in the plains. The timber is very hard, tolerably close-grained and durable, of a dark red colour, veined with streaks of a darker shade. It is very heavy and is regarded as the best for posts in house-building. The tree is abundant, and grows to a fair size. Chips of this wood boiled in water produce a dark purple dye: the tree yields a gum similar to catechu.

Acacia leucophloea (Vel-vēlam).—Grows on the plains and slopes of the hills within an elevation of 1,000 feet. Timber dark coloured, hard and durable, seasons well and takes a fine polish. The wood is not much in demand. From the bark mixed with jaggery an ardent spirit is distilled. The bark yields a tough and strong fibre used for large fishing nets and coarse cordage. The roots rival the Pi-maram in exhaling an offensive odour.

Ailanthus excelsus (Pi-maram).—Found in the forests of the plains. A large tree; wood light and not durable. Exhales an intolerable stench, whence its name (pi = faeces + maram = arbor). Employed in making doors of native houses.

Alangium decapetalum (Alanji).—Found in the jungles of the plains. Timber handsome and strong, of a dark colour. Used for agricultural, &c., purposes.

Albizia amara (Thurinji).—Met with on the plains and slopes of the hills within an elevation of 1,000 feet. Timber hard and strong, of a dark reddish colour. Used for agricultural purposes, naves and felloes of wheels, &c.

Albizia lebeck (Kāt-vāgai).—Found on the plains. Wood very durable, hard and close-grained, of a light colour. Used for building purposes, furniture, &c.

Albizia odoratissima (Selluvanji or Kal-Thurinji).—Met with generally on the slopes of hills in the district up to an elevation of 2,500 feet; is also occasionally met with on the plains; height 30 to 40 feet. Heartwood of a rich brown colour, tough and strong, seasons well, works freely, takes a fine polish, and is fairly durable when kept dry. Used for naves, spokes, felloes, oil-mills, and furniture. The tree is very abundant and grows in almost any soil.

Artocarpus integrifolia (Pila-maram).—Met with on the hills; also cultivated on the plains. Timber at first somewhat pale-coloured, but afterwards assumes a darker tinge. Employed for making furniture, picture-frames, &c.

Atalantia monophylla (Kāt-ellimicham).—Found in the plains. Shrub. Wood hard, heavy and close-grained, of a yellow colour. Not much used.

Azadirachta Indica (Vēpam or Neem).—Found in the jungles of the plains,

also occasionally met with on the slopes of the hills up to an elevation of about 1,000 feet, 20 to 30 feet high. A useful and ornamental tree. Timber dark reddish colour, hard, heavy, and durable. Used for building and agricultural purposes, also employed in making rice-pounders, &c. The bark is remarkably bitter and is used medicinally by the natives. From the seed is expressed an acrid bitter oil of a deep yellow colour, used medicinally and for burning in lamps. A gum is also got from the bark and used medicinally as a stimulant.

Bassia latifolia (Kāt-ilupai).—Found in the plains. Timber hard and strong, of a dark colour. Used for naves of wheels and purposes of a like nature. An oil is expressed from the seeds which is used in lamps and in cooking by the poorer classes.

Bassia longifolia (Ilupai).—Found in the plains. Used for beams, &c. A juice which exudes from the bark is used medicinally. An oil expressed from the fruit is used for lamps among the poorer classes. The cakes which are left after the oil is expressed are used as a substitute for soap. The wood is beautifully variegated, light brown and whitish, even-grained, hard, and strong.

Bombax Malabaricum (Kāt-Ilavam).—Found in the plains and up to an elevation of about 2,000 feet on the hills. Wood soft and spongy. Wood not used; the wool of the pods used for stuffing pillows, cushions, &c. A gum exudes from the bark.

Borassus flabelliformis (Panai-maram).—Known as the palmyra palm in English. Largely distributed over the district. The stem when old becomes very hard and durable if protected from moisture. Used for house-building purposes, irrigation troughs, &c.

Canthium didymum (Nekani).—Found on the plains and slopes of hills at an elevation of within 1,000 feet. A small tree. Wood hard and of a darkish tinge. Used for agricultural purposes.

Cathartocarpus fistula (Sara-konnai).—Found in the plains and slopes of the hills up to an elevation of 2,000 to 3,000 feet. Middling size, wood close-grained and dark. Bark used for tanning.

Cedrela toona (Tūn-maram).—Found in the forests on the hills at an elevation of about 3,000 feet. The sapwood is whitish, the heartwood red or reddish brown, light, even, open-grained, easily worked, and polishes well. Highly valued as a furniture wood, used for door panels and carving. From the flowers a red or yellowish dye is made.

Chickrassia tabularis (Agalai or Shāli, or Chittagong).—Found on the hills at an elevation of 2,000 feet and upwards. A large tree with light reddish wood, very close-grained. It is employed much by cabinet-makers for furniture. The bark is powerfully astringent.

Chlororylon Swietenia (Purasu or Satinwood).—Found on the plains and hills up to an elevation of about 1,000 feet. The wood, which is of a yellow or light orange colour, is close-grained. It is durable and will stand immersion in water. Though not a tree of large size, planks of 12 or 15 inches broad may be obtained from it. It is very suitable for picture frames and ornamental decoration, and if well varnished will preserve its handsome appearance for a long time, but it is apt to split.

Conocarpus latifolia (Nummai or Vellai Nāga-maram).—Found on the

slopes and hills up to an elevation of 3,000 feet. A large tree with smooth white grey bark. The wood is light coloured with a purple heart. It is universally used for axle-handles and poles for carrying loads; in many parts of the district the axes of native carts which have to carry heavy weights on rough roads are made of it. It warps and splits in seasoning, and unless kept dry is not very durable. It is specially esteemed for many economical purposes for house-building and agricultural implements; from incisions in the bark a fine white hard gum is obtained similar to gum-arabic, employed in cloth printing and sold extensively.

Cordia angustifolia (Narvilli).—Grows on the plains. A small tree; wood very tough and of a light colour. Occasionally used for making handles of agricultural implements.

Cratava Nurvala (Mavalingam).—Grows on the plains. A small tree. Wood soft and light coloured. The bark and leaves are used medicinally.

Dalbergia latifolia (Eruvadi).—Found in the forests on the plains and on the hills and slopes at an elevation of about 2,000 feet. A magnificent tree, abundant in the forests, producing blackwood or rosewood. As a timber for furniture it is in great request. It is likewise used for ordnance purposes.

Dichrostachys cinerea (Vedatarai).—Grows on the plains. A small tree. Wood very hard, light coloured. Beyond making walking sticks, the wood is not used in the district.

Diospyros melanoxylon (Karunthambi or Ebony).—Grows in the forests on the plains and on the hills up to an elevation of about 3,000 feet. Wood whitish, with a red tinge, tough and fairly durable. Used for building and shafts of carriages. The centres of old trees generally consist of an irregularly-shaped mass of jet black ebony. Trees before felling are generally tested by boring into the wood to see whether the ebony in the centre is sufficiently large. The heartwood is used by cabinet-makers for inlaying and ornamental turnery.

Eubelia officinalis (Nelli).—Grows at an elevation of about 4,000 feet. Wood hard and durable, of a reddish colour, used for building purposes, furniture, &c.

Eugenia caryophyllifolia (Kātu-nāga).—Found on the plains and on the hills up to an elevation of 4,000 feet. Wood close and even-grained, not very strong or durable, except in water of a brown colour.¹ Used for well work and in native house-building.

Eugenia jambos (Jambunāga).—Found on the plains and occasionally met with on the slopes of the hills. Wood of a reddish tinge, not very durable. Used in native house-building. The fruit is eaten and is known as the rose-apple in English.

Ficus virens (Āla-maram or Banian).—Grows on the plains and on the hills up to an elevation of 1,000 feet. Wood light and porous. Used for plank-ing, &c. A fibre is made from the descending suckers.

Hardwickia binata (Achay).—Sapwood small, whitish; heartwood dark, reddish brown, sometimes nearly black, close and fine-grained, strong, very hard and very heavy. Liable to split, but does not warp; takes a fine polish,

¹ See in Forest Office note. The meaning intended to be conveyed is probably that the wood is of a brown colour and more durable under water than when exposed to the air.

and is exceedingly durable. Used for bridge and house-posts and for ornamental work. The bark yields a strong fibre. It is found mostly in the dry forests of Denkanikōta and Kōttaipatti, but not everywhere.

Mangifera Indica (Mā-maram).—Grows in the plains and in mountain forests up to an elevation of 4,000 feet. A large tree. Wood coarse and open-grained, of a dull grey colour, not durable. Used for making doors of native houses, boxes, and planking, &c. The bark and leaves are used medicinally and a gum exudes from wounds in the bark; lac is produced on it. The mango is the most esteemed of Indian fruits, but uneatable except when produced from a grafted tree.

Melia azadirachta (Malai-vēmbu).—Introduced. Planted throughout the district. Wood handsomely marked and rather durable. Used for building purposes and for furniture-making.

Morinda citrifolia (Nonā-maram).—Found on the plains. Wood close-grained, light, and tough, of a yellowish brown colour, used for native shoes. The root yields a red dye which is fixed with alum.

Nauclea cordifolia (Manja-kadambai).—Grows in the plains and hills to an elevation of about 4,000 feet. Wood exceedingly beautiful, resembling box-wood, close-grained, smooth, light yellow in colour, will not stand wet, but otherwise is good for furniture. It can be procured from 2 to 3 feet in diameter. Used for house-building purposes, planking, &c.

Nauclea parvifolia (Nir-kadambai).—Found on the plains and on the hills up to about 4,000 feet elevation. Wood light chestnut coloured, firm, and close-grained; will not stand wet. Used for building purposes, planking, &c.

Pongamia glabra (Punga-maram).—Found on the plains. Wood light, tough, and fibrous, coarse and even-grained, of a light yellowish brown colour. Used for a variety of purposes. An oil expressed from the seeds is used for lamps, &c.

Prosepis spicigera (Parambai).—Found in the plains and hill forests. Wood dark red, straight, and close-grained, but easily worked, hard, and durable. The tree attains a considerable size. Used for building purposes, cart-wheels, &c.

Pterocarpus marsupium (Venghay).—Grows on the plains and hills up to about 4,000 feet elevation. Attains a considerable size, with an erect, but not very straight, stem, sapwood large, whitish. Heartwood reddish brown, or nut-brown, close-grained, tough and strong. Seasons well, takes a fine polish, and is durable. The heartwood is full of gum resin, and stains yellow when damp. Makes beautiful furniture, and is much used for doors and window frames, posts, and beams. Highly valued for cart-building. It is considered—next to Teak—the most valuable tree, and the timber often fetches the same price as Teak. Used for building purposes, wheels, yokes, &c. A reddish green resin, which exudes from the bark, is known as “kino.”

Sapindus emarginatus (Pūvānkottai).—Grows on the plains and hills. Wood close-grained, of a pale yellowish colour, not durable. Used for door frames, posts, &c. The seeds are used instead of soap.

Santalum album (Sandana-maram or Sandal tree).—Found on the plains and hills, &c., up to an elevation of about 4,000 feet. The sapwood is white and scentless; the heartwood is of a yellowish brown and strongly scented. Used for ornamental purposes and for incense. An oil used as a

perfume is distilled from the roots and chips or pieces of the heartwood. It is an important article of trade, and is largely exported to China and Arabia.

Spondias mangifera (Kattu-mā-maram).—Found on the plains and hills to about 3,500 feet elevation. Wood of a greyish colour and soft; used for planking, &c.

Strychnos nux-vomica (Yetti-maram).—Grows on the plains and hills up to about 4,000 feet elevation. Wood of a light brown colour, streaked with white, hard and durable; used in the construction of carts, house-building, ploughs, &c.

Strychnos potatorum (Tettānkottai).—Found on the hills up to an elevation of about 4,000 feet. Wood hard and durable, of a greyish colour; used for house-building purposes, &c.

Shorea lacifera (Jallari).—Grows on the hills. A large tree very abundant in the hill forests of Denkanikōta. Its timber, strong and of a greyish colour, is very useful for house-building and many useful purposes. The Hindus are very fond of offering the flowers in their temples; and the women add to their charms by intertwining the blossoms in their hair; lac is procured on the tree.

Tamarindus Indica (Pulia-maram).—Grows on the plains and hills up to about 4,000 feet elevation. Wood very hard, close-grained, of dark reddish colour. Employed in the construction of oil-presses, rice-pestles, sugar-presses, carpenters' mallets, and as planking. The heartwood is very durable and excellent for turning, but the outer wood is apt to be eaten by insects.

Tectona grandis (Tēk-maram or Teak tree).—Found on the hills from 1,000 to about 3,000 feet elevation. Wood very hard, strong, and durable, yellowish brown in colour; used for house-building and a variety of purposes. The leaves, which contain a red dye, are used as plates and for thatching and to wrap up parcels.

Eleagnella Belleisia (Tani).—Found on the hill slopes within 1,000 feet elevation up to about 4,000 feet. Wood light-coloured and rather soft, tolerably durable. Wood not much used.

Terminalia Berryi (Vella-marudu).—Found on the plains and hills up to an elevation of 3,500 to 4,000 feet. Wood hard and durable, of a brownish colour; utilized for house-building purposes, &c.

Terminalia chebula (Kadukai).—Found on the plains and hills up to about 4,000 feet elevation. Wood hard and heavy, of a brown colour, takes a good polish and is fairly durable; it is used for furniture, carts, agricultural implements, and house-building. The bark is employed for tanning and dyeing. Hollow round galls found on the young twigs are very astringent and are used to make writing-ink, in tanning, and in dyeing. The galls are called *bedalai*.

Thespesia populnea (Pū-arasa-maram or Tulip tree).—Found in the plains. Wood strong, straight, even-grained, and durable, of a pale reddish colour; used for gun-stocks, naves, felloes, &c.

Wrightia tinctoria (Palai).—Found on the plains and hills up to an elevation of about 4,000 feet. Wood white and close-grained. The wood not much used. An indigo is extracted from the leaves.

Wrightia antidysenterica (Veppāla-maram).—Found on the slopes of the

hills within about 1,000 feet elevation. Wood light brown in colour, used for furniture making. Wood light brown in colour, tolerably hard, strong, and durable; used for building purposes, beams, &c.

Zizyphus glabrata (Karukattan).—Found on the plains. Wood lightish brown in colour, tolerably hard, strong, and durable; used for building purposes, beams, &c.

Zizyphus jujuba (Yellend).—Grows on the plains. Wood close-grained, hard and durable, of a yellowish brown colour; used for beams, frames, &c.

Besides the above forest trees deserve mention:—
Ficus religiosa (Wood-apple).—Found wild in the jungles; wood light brown, close, even, fine-grained, strong and hard. Used for house-building, naves, oil-crushers, and agricultural implements. The wood is often eaten by beetles.

Eleagnella marmelos (Bael fruit or Vilva-maram).—Wood yellowish white, occasionally even a pinkish tinge; close and smooth-grained. It is used for work, fairly tough and durable, and not heavy. Used for drums, wheels, writing-boards, combs, boxes, and in turnery.

The list of "reserved" timbers may be increased or reduced. "Unreserved" timber are issued freely to ryots, who want timber for building or agricultural implements, by Tahsildars, and in some villages officers.

The following are the trees of the forest:
Acacia stipulata (Saeilnai), *Schleichera trijuga* (Puluvai or Pu-man),
Rottlera tinctoria (Kapilarang or Kapilapodi), *Morinda citrifolia* (Nōns-ma),
Manja Pavuttai-maram, Balfour), *Cassia fistula* (Kāt-konnai), *Alamy-*
decapetalum (Alanji), *Ulmus integrifolia* (Ayah-maram, Balfour), *Euku-*
acemosa (Athee), *Ehretia aspera* (Adali), *Maba burijolia* (Irumbili), *Ja-*
visiflora (Karankattai), *Careya arborea* (Kumbi; Pailai-maram, Balfour),
Albina arborea (Kumbadari), *Nauclea cadamba* (Kuddappai; Vella-
 Balfour), *Homoglossa cadescens* ² (Karadipungun), *Pongamia*
inga-maram, *Acacia amara* (Therinjī), *Vitex altissima* (Mialadi
 Balfour), *Butea frondosa* (Murukūn; Porasu-maram, Balfour)
 (Mali), *Strychnos potatorum* (Thethan), *Strychnos nux-vomica*
vietenoides (Mavalingum), *Canthium didymum* (Nekani,
 iluvai), *Greveia leaficata* (sic) (Uduppai), *Cluytia collina*
 m), *Odina Wodier* (Wodiyān), *Dalbergia frondosa*
num & *beriflorum* (Vennangu), *Bignonia xylo-*
panco, ni-maram, Balfour), *Greveia tiliaefolia*
 Tukkana-maram), *Polyanthia Corinthia*
), *Eliodendron Rozburghii* (Siri), *Premna*
 Teuk-maram, Balfour), *Cordia myxa*
 t), *Wrightia tinctoria* (Pālai-maram),

Rottleriformis (Velthannakum ;

ra (Vadatharai), *Zizyphus*

chan), *Erythrina Indica*

Padri), *Terminalia*

Chanania latifolia

*alir-vidi).

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Hibiscus sabdariffa (Sevappa-Kashurum Kerai-nār), the Roselle, yields a fine and silky fibre. It should not be gathered more than two days before being prepared, and exposure to the sun imparts a brownish tint to the fibres. The specimens exhibited from this district in 1874 were not comparable to those sent from Cuddapah, which were 6 to 7 feet long.

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GUMS, RESINS, AND OILS, &c.

Azadirachta Indica (Vopam), *Egle marmelos* (Vilvam), *Pterocarpus marsupium* (Venghai), *Semecarpus anacardium* (Sarankottai), *Butea frondosa* (Kātmurkām), *Eriodendron anfractuosum* (Kātelevem ?) *Ailanthus excelsus* (Pinragonthu), *Prosopis spicijera* (Parambai), *Chloroxylon swietenia* (Poras), *Embllica officinalis* (Nelli), *Conocarpus latifolia* (Naummai), *Hardwickia bin* (Acha), ——— (Silla), *Mangifera Indica* (Mā-maram), *Canarium stri* (Kunghlium), *Acacia amara* (Thuringi), *Acacia leucophloea* (Vel-vēlam), & *Arabica* (Karv'vēlam), *Peronia elephantina* (Vellam), *Albizia odorat* (Selluvanji), *samum Indicum* (Nallennuai), *Pongamia glabra* (Punge

Azadirachta Indica (Voppennai), *Bassia longifolia* (Ellupennai), *Cocos nucifera* (Thengai ennai).

In addition may be mentioned—

Mallotus Philippinensis (*Rottlera tinctoria*?) (Kupli podi).—Common in the Denkanikōta, Javādi, and Kalrāyau tracts. The red mealy powder of the capsules is a valuable product and might be a source of considerable revenue in many of the forests; it is used as an orange dye, principally for the ripe capsules are gathered in March and rubbed together or shaken in bags till the farina separates.

SEEDS AND LEAVES, &c.

Cassia toro (Thagara-virai).

Bixa orellana (Kuragumanjal-virai).—A valuable dye, known as "Arnotto," is produced from the pulp surrounding the seeds of this plant. It is prepared by macerating the pods in boiling water, extracting the seeds, leaving the pulp to subside, the fluid being subsequently thrown off. The residuum, with which oil is sometimes mixed, is placed in shallow vessels and dried in the shade. When properly made it should be of a bright red colour.

Spindus emarginatus (Puchankottai).—The shells of the nuts are used by natives as a substitute for soap.

Strychnos potatorum (Tettankottai).—The nuts are used in clearing muddy water, the method pursued being to rub the inside of the utensil with the nut previous to pouring in the water, which rapidly deposits the suspended matter.

Elettaria cardamomum (Yelakai).—Cardamoms. Used as a spice or flavouring ingredient.

Cassia auriculata (Āvārampi).—Used for tanning.

————— (Sombupat).—By boiling yields a yellow colour.

————— (Pesugupat).—A rose-coloured dye is extracted from the bark by boiling with galls &c.

Acacia leucophloea (Vel-vēlai).—Used in the manufacture of arrack.

Morinda citrifolia (Nonnapattai).—A yellow dye is produced by boiling with alum mordant.

Rottlera tinctoria (Kuplipodi).

Ventilago Maderaspatana (Puplichakkai).—The bark of a creeper which abounds throughout the jungles. It yields a fine purple dye and finds a ready sale in the local market and for export to Bombay, &c.

Wrightia tinctoria (Palai-nīlam).—Indigo is produced from the leaves.

Canarium strictum (Karupu-muddipal).—Burnt as incense in native temples.

Frateria Indica (Vellai-muddipal).—Burnt as incense in native temples.

Terminalia chebula (Kadukai).—Used with other stuffs to produce, by roasting and boiling, a yellow or black dye, also extensively used for medicinal purposes.

Sapindus indicus (Shiakai).—Used by natives as a substitute for soap.

Ardisia anacardium (Sherangkottai).—Used medicinally and for colouring cloths: the colour is improved and fixed by the mixture of a little lime and water.

Bassia longifolia (Illupai).—Yields an oil used for burning in lamps.

Azadirachta Indica (Vēpam).—Used medicinally and yields a bitter oil.

Pongamia glabra (Pungamkottai).—An oil is extracted from the seeds, used for burning in lamps also medicinally.

Sesamum Indicum (Yellu).—An oil extracted from the seeds is used in native cookery and is a good substitute for olive oil.

Wrightia tinctoria (Palai-yilai).—An inferior kind of indigo is produced by boiling the leaves.

Cocos nucifera (Thengai).—The ordinary coconut: yields an oil and fibre besides having an edible pulp.

No list of forest products would be complete which contained no reference to lac, which is found principally in the Denkanikōta forests. It is chiefly worked up into ornaments and varnishes; the red colouring matter, which is now exported in small quantities only, being used as a dye. The natives employ raw lac in making the bangles worn by the lower classes, while the best shell lac is turned into similar ornaments of greater value, as also into beads and rings. Shell lac is also extensively consumed in the manufacture of sealing wax, liquid varnish, and the composition of certain inks.

In connection with forests the operations of the Jungle Conservancy Fund may be mentioned. The following statement shows the assets and expenditure of the fund for a series of ten years:—

Year.	Receipts.			Expenditure.		
	RS.	A.	P.	RS.	A.	P.
1870-71	38,281	11	1	14,781	8	11
1871-72	29,307	10	10	24,167	5	9
1872-73	38,219	9	8	56,688	12	5
1873-74	28,302	15	0	30,690	14	6
1874-75	23,187	0	4	24,747	10	2
1875-76	23,623	12	4	28,076	4	2
1876-77	16,758	2	1	35,772	12	7
1877-78	19,108	11	8	20,971	3	2
1878-79	35,488	6	2	13,084	9	6
1879-80	47,441	6	1	13,843	14	10

Two hundred and thirty-two topes aggregating 2,431 acres in various stages of growth were maintained in the year 1870. The total number of trees as returned was 179,633. The toddy contractor enjoys all palm trees on Government waste lands. As regards trees on patta lands he has to make his own arrangements with the owners. The leaves used for that purpose are not generally sold, as all *oleivetti* trees are, as a rule, held on patta. The price per tree is 3 pies. If, however, there is any surplus of the leaves separately, they are sold by auction.

The price at which palmyrah trees (as a rule past bearing) are sold for building and other purposes varies as follows:—

	RS. A.		RS. A.
Salem	1 0	Uttankarai	1 4
Attūr	1 0	Hosūr	1 12
Namakal	1 0	Dharmapuri	1 12
Trichengode	1 4	Krishnagiri	1 12
Tirupatūr	1 4		

Scattered tamarind and other trees are generally given on patta: the rate is 3 annas per tree. Where the trees are situated in woody or jungle tracts, they are rented out from time to time.

When applications for lands containing trees already held on patta are received, the rule is to give the tree pattadar the option to take the land on patta, but if he refuses to take it, to give the patta to the applicant, putting him in possession of the trees also. Where there are already two pattas, one for land and the other for trees, the tree assessment is credited towards the demand on the land. There is, however, reason to believe that this rule is not universally enforced and that Government occasionally gets the double rent.

Palmyrahs, however, form an exception. Lands containing palmyrah trees stand in one man's name while the trees are in that of another. The trees are credited to Jungle Conservancy. In some cases the same person has different pattas, one for the land and the other for the trees. In some cases in which a patta for the land only is held, but the palmyrah trees growing thereon is enjoyed by the pattadar, the land is assessed at a separate tax. This is in consequence of an order in 1874 that the separate palmyrah tree pattas should cease in all cases in which the same individual held patta for both land and trees in that district. This order was not however fully carried out.

When applications are received for lands containing timber trees, and which either border on or are situated in woody or jungle tracts, it is usual to consult the Forest Department before making the adamānam. Then the value of the trees is collected and the adamānam made absolute. The rules permit the adamānam being made without conferring the right to cut trees, but this has not been generally acted up to. Also if the lands are sold for contain valuable trees, but are not situated in jungles, the trees are sold to the applicant and the adamānam made after the price has been paid. There is obvious reason for collecting the value of the trees from the pattadar. As a tree worth Rupees 30 may stand on land assessed at 3 annas, the adamānam would give the ownership of the tree, and there is nothing to hinder the pattadar from cutting down the tree and selling the timber for the land, pocketing the difference between one year's assessment and the value of the timber.

The district has one central and sixteen subsidiary jails. The following is a statement showing the average strength, admissions, and discharges during the years 1870 and 1871.

of it. There is still something to be specially at Dharmapuri, where the sub-creation. The carpets manufactured at The following, communicated by Mr. sent, is a list of dye stuffs and materials for dyeing wool:—

	Colours obtained.	How used.
1) ..	Blue and its shades, green, purple and black.	Maceration in solutions.
2a) ..	Yellow, orange ..	Boiling with alum and soap sand.
3) ..	Red, crimson, scarlet ..	Do. do.
4) ..	Yellow, green, orange ..	Soaking in water after indigo solutions. Turns into green.
5) ..	Red, crimson, scarlet ..	Dye extracted and boiling with alum and lime-juice.
6) ..	Brown and its shades ..	Boiling with alum.
7) ..	Black	Soaking in hot water after indigo solution.
8) ..	Used in blue colours ..	Mixed in the indigo.
9) ..	Do. black do. ..	By steeping.
10) ..	Do. blue colours ..	Boiled and mixed in the indigo.
11) ..	Do. red colours ..	With log-wood and lac to produce light and dark colours respectively.
12) ..	Do. do. ..	

entry, basket-work, weaving, shoe-making and other trades are and practised in the Central Jail, where also the convicts are, or were, to read. The jail manufactures, however, are chiefly utilized to meet demands of the Police for uniform, sandals, &c.

There are two Local Fund Boards in the district, one circle being contiguous with the sub-division taluks of Hosūr, Krishnagiri, and Dharmapuri, and the other including the remainder of the district. The Boards are composed as follows. The president, who is always the Collector, belongs to both Boards, which have each 12 official and 14 non-official members; the Salem Board has 15 non-official members. The average revenue for the years 1874-75 to 1878-79 were—Salem Rupees 61,075. The following is a statement showing the average strength, admissions, and discharges during the years 1870 and 1871.

asset

mortality and sickness, together with during the year 1875, of prisoners at

	1875	
	Male.	Female.
Average prisoners during the year	449.65	15.46
Total admissions	696	33
Total discharges	583	29
Total admission of sickness	..	..
Total death	..	..
Percentage of death to admission of sickness	..	..
Percentage of death to average number in jail during year	..	..
Gross expenditure	..	..
Total cost per prisoner for rations, clothing, establishment, &c., &c.	..	..
Total value of jail manufacture	..	..
Average amount earned by each prisoner	..	..

If these figures¹ are correct, it is difficult to reconcile them with the statement which was epitomized by Mr. McIver for the *Imperial Gazette*. Central Jail in 1875 contained 521 prisoners, costing Government Rs. 34,934, or Rupees 69-7-3 per prisoner; 917 prisoners were admitted during the year, and out of 371 sick there were 14 deaths. The value of jail manufactures was Rupees 8,169." The subsidiary jails in the district are often empty, and seldom hold more than two or three prisoners. During the famine, however, the jail population largely increased, the population in 1877 being as follows:—

Class of Jail.	Number.	Mortality.
Central Jail	6,688	300
Subsidiary Jails	18,913	111

The jails and their compounds were then often full to overflowing. It was little needed to guard the prisoners, who fared better in jail than outside. Special buildings, often of the flimsiest character, had to be erected to house the enhanced numbers, but there was little or no mortality traced to overcrowding. The old District Jail at Salem had a notorious reputation for unhealthiness, but the new Central Jail has a more salubrious character, and when cholera was raging all over the district, it afforded a remarkable immunity from the disease. The improvement in the subsidiary jails is also a notable feature. The standard plans of the subsidiary jails are as follows:

revenue assessment, rent value of the land, &c., according to the tenures on which the land is held; of the proceeds of tolls; of Provincial Service grants sanctioned by Government; of the balance of the Road Fund constituted under Madras Act III of 1866 (this item has disappeared from the accounts); of contributions from the funds of other circles and Municipalities for the construction and maintenance of communications; and of such other appropriation¹ in excess of two-thirds of the collections from the land-cess as may be assigned by the Local Fund Boards with the sanction of Government.

Union Fund.—This fund is at present in abeyance.

Endowment Fund.—This comprises income from funded or other property of dispensaries, choultries, &c., and market rents.

General Fund.—This is made up of all money belonging to the Local Fund Board not applicable solely to the purposes of Road, Union, and Endowment Funds. It consists of one-third of the land-cess, of bungalow fees, contributions, grants, school fees, subscriptions, interest, proceeds of sale of property and avenue rents.

Land-cess.—The cess on land is levied at the maximum rate of one anna in the rupee and forms the chief source of income to Local Funds. It produces about 1,50,000 rupees in the Salem and about Rupees 60,000 in the Hosūr Circle.

Tolls.—Tolls are levied at five places in Salem and at six places in Hosūr and yield an annual revenue of about Rupees 24,000.

PROVINCIAL GRANT.—On the first establishment of Local Fund a large sum of money was granted by Government on account of the distressed state of the district, but, in consequence of the distressed state of the district, has been withheld since 1877.

SPECIAL FUNDS.—These consist of the Surplus Pound Fund, ferry, Fishery, and Grass Rents and Rent on Avenues. These yield about Rupees 13,000 for the Salem and Rupees 10,000 for the Hosūr Circle.

The expenditure is roughly as follows:—

GRANT I, New Works.—None of any importance are now under construction.

Repairs.—There are 113 roads in the Salem Circle and 38 in Hosūr. Sufficient grants to keep these roads in good working order are made each year as far as the funds at the disposal of the Circle Boards admit, and all dispensaries, travellers' bungalows, school-houses, choultries, &c., which require repair are put in order. A sum of about Rupees 96,877 in Salem and Rupees 31,112 in Hosūr was thus spent in 1874-75, the year before the famine. A sum of Rupees 3,500 in the Salem Circle and Rupees 2,000 in the Hosūr is set aside towards the maintenance of avenues on the existing roads.

GRANT II, Payment for Inspection.—A sum of Rupees 2,230 in the Salem Circle and Rupees 1,100 in Hosūr is budgeted for annually for four Inspecting Schoolmasters in the former and two in the latter. In 1879-80 a third Inspecting Schoolmaster on Rupees 35 per mensem was entertained.

¹ It would be irregular to make any appropriation from the remaining one-third of the land-cess until all the requirements of the purposes to which the General Fund should, by law, be applied have been fully met.

for the Hosūr Circle, but in the following year one on Rupees 25 was dispensed with on account of the establishment of a separate Normal School for Hosūr.

Training Schools.—A Normal School on a small scale, costing Rupees 1,270 per annum, has been established at Salem, and the establishment of another at Krishnagiri in the Hosūr Circle has been sanctioned at an annual cost of Rupees 1,878.

Local Fund Schools.—There are in the Salem Circle 10 lower-class schools under the salary system and 50 under the combined system, of which 3 are girls' schools. The annual cost of these schools is about Rupees 13,000. In the Hosūr Circle there are no schools on the salary system maintained from Local Funds, but the schools on the combined system number 25 and cost about Rupees 5,000 per annum.

Result Grant Schools.—According to the latest lists of schools sanctioned by the Local Fund Boards for examination for result grants, there are 94 such schools in the Salem and 64 in the Hosūr Circle, and Rupees 2,000 and 1,000 respectively are budgeted for these schools. The grants are awarded on the annual examination of the Deputy Inspectors. Those schools only are eligible for grants the masters of which have been vaccinated, and pupils who have not been vaccinated are excluded from the examination.

ary books to the value of Rupees 540 in Salem and Rupees 300 purchased and supplied to taluk depôts for sale to Local Grant Schools. Inspecting Schoolmasters are employed of these books, being allowed a commission of 15 per cent to cover the cost of conveyance to schools, &c.

and Dispensaries.—The Local Fund dispensaries, of which there are six in Salem and three in Hosūr, cost Rupees 9,730 and 5,000 respectively per annum. The Government pay 25 per cent. of the salaries of the medical officers in charge for the treatment of Government servants in these dispensaries.

Vaccination.—The details of the establishment maintained for vaccination are given below. Suffice it here to say that a First-class Deputy Inspector, assisted by 20 Vaccinators, is in charge of the Salem Circle, and a Second-class Deputy Inspector, assisted by 9 Vaccinators and 3 Probationers, is in charge of the Hosūr Circle. The annual cost of these establishments amounts to Rupees 4,480 for the Salem and Rupees 2,570 for Hosūr Circle.

Bungalows.—There are twelve public bungalows in the Salem and ten in the Hosūr Circle. The annual cost of the establishment maintained is Rupees 700 for the former and Rupees 314 for the latter.

Choultries.—There are six choultries in the Salem Circle and one in Hosūr, which provide accommodation for all classes of the native community. The construction of a similar chattram at Mattakēri in the Hosūr Circle has been sanctioned and will be undertaken in 1880. Besides these there are ten choultries in Salem and seven in Hosūr, built by the late Collector Mr. Orr, and a small establishment is maintained for keeping them in good order. These choultries cost Rupees 600 for the Salem and Rupees 96 for the Hosūr Circle.

The other expenditure under Grant III is as follows:—

Head of Account.	Salem.	Hosūr.
	RS.	RS.
For improvement of water-supply	1,000	500
Improvement of village sites	500	1,000
Scavenging establishments	6,500	6,240
Contribution to Provincial Funds on account of the Medical College	1,530	590
Contribution to salary of Inspectors of Vaccination	1,530	590
Contribution to Salem Municipality for Civil Dispensary	2,000	..
Miscellaneous, including cholera charges, inspection charges of Zillah Surgeon, lunatic charges, &c.	840	580

GRANT IV, Miscellaneous.—This grant comprises the contribution for controlling establishment at the Presidency and in the Collector's Office, the establishment of the Local Fund Board's Office, contingencies, travelling allowance to non-official members, printing and other charges. This amounts to Rupees 3,250 in the Salem and Rupees 1,700 in the Hosūr Circle.

The chief objects for which the funds are administered are the maintenance of communications, sanitation and education.

The mileage budgeted for is as follows:—

	MILES.
Hosūr Circle	434
Salem do.	1,094
Total	1,528

There are, however, only 1,342½ miles of regular roads in the district according to the talukwar totals, or 1½ miles for every 10 square miles ($\frac{7,604}{10}$) of area; besides these there are 348½ miles of famine roads and roads of the second class, which, though useful, cannot be said to be fit throughout for carriage traffic. The total allotment for the budgeted mileage in 1878-79 was Rupees 1,03,325, or Rupees 67-10-0 per mile. Considering the smallness of the allotment it is wonderful in what condition the roads are kept. In fact the roads are the pride of every district official, most of them being shaded by splendid lines of avenues, planted mostly by forced labour in the time of Mr. Orr (1829 to 1838). In those days it was a far cry to Madras, and as a rule what "master pleased" was done. Old ryots still tell the tale of the "zulum" made by the irascible Collector, whose horsewhip occasionally made Ramasami wince; but generations of grateful travellers and the sufferers themselves in the end testified to the profit and comfort derived from these *travaux forcés*.¹ The roads were for

¹ In the old days the villagers along the lines of road enjoyed the fruits of the avenues in return for keeping the roads in order. This did not work, and the roads were taken over by Government. In 1872 the question of the right of the ryots to the avenues was mooted and decided against them, but in ignorance of the real reason, which was that the *quid pro quo* was no longer exacted from the villagers, cf. Dykes, 426. When Mr. Dalyell visited Natrapalli on abkari duty in 1876, an old ryot who had planted the avenue in Mr. Orr's time advanced his claim, but when Mr. Dalyell asked him if it was not true that in former times those who enjoyed the usufruct of the avenues repaired the roads at their own cost, the aged cultivator put his hand on his mouth and said "Appah!"

years a bone of contention between the Revenue Officers and the Public Works Department, the former affirming that they did the work cheaper and better than the professional department, which pocketed 25 per cent. of the repair allotments for supervision. After oscillating between the two departments, the roads have finally been made over to the Local Fund Boards, which maintain their own engineering establishments as follows:—

Salem Circle.		Hosūr Circle.	
	Rs.		Rs.
1 Engineer, pay Rs. 500 + 100 travelling allowance ..	600	1 Engineer, pay Rs. 200 + 50 travelling allowance ..	250
1 Estimator, pay Rs. 35 ..	35	1 Clerk, pay Rs. 15 + 8 travelling allowance ..	23
3 Lascars, pay Rs. 7 each ..	21	2 Lascars, pay Rs. 6 each ..	12
3 Overseers, pay Rs. 60 + 15 travelling allowance each ..	225	3 Overseers, pay Rs. 60 + 15 travelling allowance each ..	225
3 Overseers, pay Rs. 45 + 15 travelling allowance each ..	180	3 Sub or Assistant Overseers, 25 + 15 travelling allowance each ..	80
6 Assistant Overseers, pay Rs. 25 each ..	150	3 Lascars for Overseers, pay Rs. 6 each ..	18
6 Lascars, pay Rs. 7 each ..	42		
Per annum ..	15,036		
Contingencies ..	394	Per mensem ..	608
Total Cost ..	15,430	Total Cost per annum ..	7,296

In the latter arrangement the Hosūr Circle is somewhat overweighted, for while 25 per cent. of the Salem Circle allotments leave a considerable margin after providing for the engineering staff, 25 per cent. of the Hosūr Circle allotments barely cover the cost of the modest establishment maintained. It is not easy to remedy this, for even if the Tirupatūr and Uttankarai Taluks were added to the Hosūr Circle the latter would not profit, as the expenditure in those taluks always exceeds the revenue which they supply, and were it not for the wealth of the Talaghat taluks the Salem Board would find some difficulty in providing for them.

In speaking of communications the railway must not be omitted, regarding which see below "Railway," page 263.

Regarding sanitation the hospitals of course rank first (see below "Medical," page 199.) There are sanitary establishments maintained by quasi-voluntary contributions supplemented from Local Funds in twenty-two villages of the Salem and ten villages of the Hosūr Circle.

The following is the vaccination staff maintained:—

Salem Circle.		Hosūr Circle.	
	Rs.		Rs.
1 Deputy Inspector ..	70	1 Second-class Deputy Inspector ..	40
6 First-class Vaccinators, 3 on Rs. 18 and 3 on Rs. 15 ..	99	3 First-class Vaccinators on Rs. 15 each ..	45
14 Second-class Vaccinators on Rs. 10 each ..	140	6 Second-class Vaccinators on Rs. 10 each ..	60
1 Peon ..	7	3 Probationers on Rs. 5 each ..	15
Fixed batta to Deputy Inspector ..	15	1 Peon ..	7
		Fixed batta to Deputy Inspector ..	15
Total per mensem ..	331	Total per mensem ..	182
Per annum ..	3,972	Per annum ..	2,184
Batta to Peon ..	22	Extra pay to Vaccinators ..	160
Extra pay to Vaccinators ..	300	Batta to Probationers ..	60
Contingent charges ..	36	Contingent charges ..	30
Stationery and Postal charges ..	100	Stationery and Postal charges ..	80
Batta to mothers ..	50	Batta to mothers ..	50
Total ..	4,480	Total ..	2,570

The work done in the years 1876-77 to 1878-79 was as follows:—

Year.	Salem Circle.		Hosūr Circle.	
	Number vaccinated.	Number successful.	Number vaccinated.	Number successful.
1876-77 ..	10,548	9,727	9,320	7,772
1877-78 ..	34,863	33,603	16,915	14,328
1878-79 ..	9,072	8,630	7,393	6,244

Great strides have been made in this branch of prophylactic medicine. No village officer is now appointed who has not been vaccinated or had small-pox. Prisoners in jails are vaccinated, and no child in aided schools can earn anything for the school unless both he and the teachers are protected in this way. The share which the Local Fund Board takes in promoting education has been noticed above (see "Education," page 173).

Jurisdiction in civil cases is exercised by the District Judge, the Subordinate Judge, and by five District Munsifs. In petty cases the village heads have jurisdiction. Jurisdiction in criminal cases belongs to the Sessions Judge, the District Magistrate, the three Divisional Magistrates, and the Treasury Deputy Collector and Magistrate, who all have first-class powers; the Assistant Magistrate, when there is one, who may or may not have first-class powers; the Taluk and Sub-Divisional Sub-Magistrates of the second class, of whom there are nineteen; to nine Third-class Magistrates, and one bench of Magistrates. There are thus 35 Criminal Courts. The maximum distance of any village from the nearest court is 45, and the average distance 19 miles. The Village Magistrates, of whom there are 2,073, have jurisdiction in petty

cases. Revenue suits can be heard and determined by the Collector, the three Divisional Officers, and by the Treasury Deputy Collector and the Assistant Collector when cases are referred to them, and by the District Judge in appeals. The distribution of the Civil Courts can be ascertained from the following, which is a statement showing the number of officers of each class in the judicial establishment in the district of Salem, the extent of their jurisdiction, and the territorial limits of their original and appellate authority during the year 1875.

Number of Officers of each class.	Extent of their pecuniary Jurisdiction.			Territorial limits of their Original authority.	Territorial limits of their Appellate authority.
	Original.	Appeal.	Small Cause.		
District Judge.	Over all original suits and proceedings of a civil nature in the absence of the Sub-Judge.	All appeals from the decrees and orders of Sub-Judges and District Munsifs, where such appeals are allowed and where the value of the subject-matter is Rs. 5,000 or below.		Over the whole district.	Over the whole district.
Subordinate Judge.	Over all original suits and proceedings of a civil nature.	Over such appeals from decrees and orders of District Munsifs as may be referred by the District Judge for disposal.	Above Rs. 50 to Rs. 500 (Section 23, Act III of 1873, and G.O. dated 18th March 1873).	Over the whole district. In small causes, over the Salem Revenue Taluk.	None, except in cases specially referred.
District Munsif of Salem.	Over all like suits and proceedings not otherwise exempted from his cognizance, the amount or value of the subject-matter of which does not exceed Rs. 2,500.	None	Up to Rs. 50 (Section 23, Act III of 1873, and G.O. dated 18th March 1873).	Salem, Attur, Omapur, and Sankagiri (old taluks).	None.
District Munsif of Namakal.	Do.	None	Do.	Namakal, Paramathi, Ghazipur, and Tri-chengode (old taluks).	None.
District Munsif of Tirupatūr.	Do.	None	Do.	The whole of Tirupatūr Taluk, the northern portion of Uttankarai Taluk as divided by the Ponar river, and the northern portion of Krishnagiri Taluk (old taluks).	None.
District Munsif of Dharmapuri.	Do.	None	Do.	The whole of Dharmapuri Taluk, the southern portion of Uttankarai Taluk as divided by the Ponar river, and the southern portion of Krishnagiri (old taluks).	None.
District Munsif of Hosur.	Do.	None	Do.	Hosur and Denkanikota (old taluks).	None.

Statements 14 and 15 in the Appendix show the work performed by the different Courts.

The Zillah Surgeon resides at Salem, but inspects all dispensaries in the taluks, of which there are nine, once a year, supervising the work of the Apothecaries and Hospital Assistants in charge. At the chief town there is an hospital under the Municipality, in charge of a Native Surgeon, which is visited daily by the Zillah Surgeon, as also the Jail Hospital. The Remount Depot is under Honorary Surgeon Wells, M.D. The Collector and Divisional Officers have medical subordinates attached to their establishments, who assist in vaccination, peregrinate in the villages when outbreaks of cholera or fever occur, and make *post-mortem* examinations when required. The following is a synopsis of the work performed in the hospitals of the district for the years 1875-76 to 1878-79:—

Name of Hospital.	In-patients.				Out-patients.			
	Number in 1875-76.	Number in 1876-77.	Number in 1877-78.	Number in 1878-79.	Number in 1875-76.	Number in 1876-77.	Number in 1877-78.	Number in 1878-79.
Salem Municipal Hospital ..	205	203	337	202	12,225	8,285	8,748	13,734
Eckad ..	41	86	219	172	1,741	1,768	1,893	3,327
Namakal ..	122	169	65	73	1,772	2,029	1,603	3,198
Tirupatūr ..	14	121	127	178	3,799	3,124	3,247	5,264
Attur ..	..	29	163	66	2,533	2,346	2,202	2,627
Sankagiri-dargam ..	..	88	42	106	..	3,501	2,326	3,958
Harūr ..	..	..	..	46	..	1,687	2,468	1,942
Hosūr ..	..	146	140	221	..	7,290	6,277	4,890
Krishnagiri ..	113	108	230	355	4,559	3,654	4,119	5,323
Dharmapuri ..	..	..	170	185	4,297	4,244	4,272	4,504

As regards vaccination and sanitation *vide supra* under Local Fund Board. There is only one Municipality in the district, viz., the chief town Salem.

The Municipal Commission consists of 8 official and 9 non-official members, the Collector of the district being *ex-officio* president. The working of the Municipality, its income, expenditure, &c. are given below in the taluk notice of Salem, q.v., p. 30, Vol. II.

Exclusive of village watchmen the District Police force in 1876 consisted of 1 Superintendent, 1 Assistant Superintendent, 20 Inspectors, and 1,095 Constables, costing Rs. 1,47,786, furnishing one policeman to every 6.86 square miles and every 1,761 of the population. The cost of the force is at Rs. 0-1-2½ per head of the population. According to the statistical returns for 1878-79 the total number of the police was 1,139. A trifling addition to the force in the chief town is contemplated. The District Superintendent has the four Talaghat taluks under his immediate charge, and exercises supervision over the Barahmahal taluks and the Balaghat, which are in charge of the Assistant Superintendent with head-quarters at Tirupatūr. The Head-quarter Inspector resides at Salem and looks after the office work of the Superintendent's office. In the Taluk Notices the police economy in the different ranges has been separately noticed.

The number of letters, newspapers, parcels and books received in and despatched from Salem are shown in the subjoined statement:—

POST OFFICE.

Year.	Letters		Newspapers		Parcels		Books	
	Despatched.	Received.	Despatched.	Received.	Despatched.	Received.	Despatched.	Received.
1861-62 ..	253,323	275,235	6,953	26,419	1,978	3,440	592	1,789
1865-66 ..	344,108	316,050	6,409	27,523	1,846	4,271	378	2,163
1870-71 ..	534,320	283,375	11,810	28,607	1,034	1,852	1,656	4,757

The following are the details of which the foregoing is an abstract :—

Statement of Letters received.

	Letters										Newspapers					
	Delivered at the window or sent out for delivery by Peons.					Retained in Office as unclaimed, or for redirection, or for District Post.					Delivered at the window or sent out for delivery by Peons.					
	Total Number received.					Total Number received.					Grand Total.					
	Paid.	Unpaid.	Service.	Registered.	Paid.	Unpaid.	Service.	Registered.	Paid.	Unpaid.	Paid.	Unpaid.	Service.			
Total for the year 1861-62.	128,595	46,189	46,131	2,178	27,583	16,556	7,523	481	155,178	62,744	53,664	2,659	275,235	16,077	2,088	4,214
Total for the year 1865-66.	171,403	42,866	42,424	5,662	27,921	17,134	6,883	756	199,324	60,997	49,307	6,422	316,050	16,932	1,414	5,171
Total for the year 1870-71.	256,398	46,451	..	10,305	49,745	23,772	..	1174	306,643	70,253	..	11,479	388,375	23,161	985	101
Total ..	556,396	136,536	88,555	18,149	105,249	57,455	14,406	2,411	602,145	193,994	102,961	20,560	979,680	55,196	4,457	9,486

	Parcels										Books.		Total.			
	Delivered at the window or sent out for delivery by Peons.					Retained in Office as unclaimed, or for redirection, or for District Post.					Number of Indian Book-post.					
	Total Number received.					Total Number received.					Grand Total.					
	Paid.	Unpaid.	Service.	Unpaid.	Service.	Paid.	Unpaid.	Service.	Paid.	Unpaid.	Paid.	Unpaid.		Service.	Number of Steamer Books delivered.	Number of Indian Book-post.
Total for the year 1861-62.	2,992	635	413	19,069	2,723	4,627	25,419	1,359	810	795	1,606	902	932	286	1,494	1,780
Total for the year 1865-66.	2,324	846	1,027	12,276	2,054	6,198	27,529	1,217	772	1,922	1,333	870	2,071	356	1,807	2,163
Total for the year 1870-71.	4,053	268	39	27,214	1,252	140	28,607	450	610	620	1,627	684	641	534	4,223	4,757
Total ..	9,369	1,543	1,479	65,559	6,030	10,965	82,554	3,026	2,192	3,337	3,466	2,456	3,644	1,176	7,524	8,700

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Statement of Letters posted for despatch.

	Letters										Newspapers									
	Posted in this Office.					Returned.					Posted in this Office.					Returned.				
	Grand Total.					Grand Total.					Grand Total.					Grand Total.				
	Paid.	Unpaid.	Service.	Registered.	Total.	Ordinary Letters.	Registered.	Total.	Ordinary Letters.	Registered.	Total.	Paid.	Unpaid.	Service.	Total.	Returned.	Redirection.	Returned.	Grand Total.	
Total for the year 1861-62.	164,529	47,559	40,754	3,892	256,554	5,287	135	5,422	1,317	1,317	1,317	253,323	2,357,750	3,207	6,314	616	28	6,958	6,958	
Total for the year 1863-66.	211,721	55,021	54,310	6,241	330,293	13,302	223	13,525	..	..	..	344,108	1,149	..	2,882	1,378	..	6,409	6,409	
Total for the year 1876-71.	405,717	95,040	2,113	11,322	514,192	19,768	360	20,128	..	..	..	534,320	7,257	..	3,225	1,328	..	11,910	11,910	
Total ..	781,967	200,620	97,177	21,455	1,101,039	38,647	718	39,365	1,317	1,317	1,317	1,141,751	10,763,750	10,314	21,827	3,922	28	25,177	25,177	
	Books										Statement of Migrant Articles.									
	Posted in this Office.					Returned.					Grand Total.					Returned.				
	Grand Total.					Grand Total.					Grand Total.					Grand Total.				
	Paid.	Unpaid.	Service.	Total.	Ordinary Letters.	Registered.	Total.	Ordinary Letters.	Registered.	Total.	Paid.	Unpaid.	Service.	Total.	Returned.	Redirection.	Returned.	Grand Total.		
Total for the year 1861-62.	391	467	364	1,222	1,222	..	..	1,222	..	..	1,222	..	..	..	..	..	..	..	..	..
Total for the year 1863-66.	330	360	258	948	948	..	..	948	..	..	948	..	..	..	..	..	..	..	..	..
Total for the year 1870-71.	1,188	1,412	1,829	4,429	4,429	..	..	4,429	..	..	4,429	..	..	..	..	..	..	..	..	..

Of late years the statistics of correspondence passing through the Post Office have been deduced from an examination of all articles received for delivery during the weeks 8th to 14th February and 8th to 14th August of each year. The following statement for the years 1875-76 and 1878-79 has been prepared on that principle.

Detail of Articles.	For the year 1875-76.		For the year 1878-79.	
	Number given out for delivery.	Number returned undelivered.	Number given out for delivery.	Number returned undelivered.
Letters paid	531,206	5,200	597,324	14,768
Do. unpaid	99,870	7,254	89,830	14,560
Do. service privileged	37,440	26	..	..
Do. registered	21,554	156	23,920	1,534
Papers	40,664	104	60,190	1,170
Packets	11,752	..	10,400	208
Parcels	3,636	..	3,926	130
Total ..	737,022	12,740	785,590	32,370

There are reading rooms or literary associations at Salem, Ērkād, Hosūr and Tirupatūr. The chief source of charity is the Thopūr Chattram Fund, from which *serais*, *bandy-pettahs*, &c. are being provided all over the district. Those at Salem, Thopūr, Jolārpett, Ātūr, and Tirupatūr are amongst the best; but native liberality has left little to be done in this respect so far as the wants of native travellers are concerned. It would be rare indeed on any line of road to come to a village of importance where shelter for man and beast had not been provided in days gone by.

The Madras Railway has 133 miles and 36 chains of line in the district, the south-west main line running from the 120th mile 21st chain from Madras to the 241st mile 32nd chain, and the Bangalore branch extending from the 132nd mile south-west line at Jolārpett to the 144th mile 25th chain on the branch.¹ The annual cost of maintaining each mile of the line is about Rupees 1,150.

The following are the Railway stations in the district, with an estimate of the annual receipts at each under the separate heads of passenger and goods traffic:—

	For 1875.		Passenger.		Goods.	
	Rs.	A. P.	Rs.	A. P.	Rs.	A. P.
Vaniambadi	17,348	2 11	44,435	7 3	..	..
Jolārpett	49,418	2 11	..	..	455	7 3
Tirupatūr	20,948	2 11	77,495	7 3	..	..
Samalpatti	4,126	5 7	9,621	8 9	..	..
Morapūr	8,336	5 10	20,001	13 1	..	..
Mallapuram	3,920	0 0	4,780	14 7	..	..
Shovarooy Hills	2,520	0 0	3,335	7 3	..	..
Suramangalam (Salem)	92,781	13 1	82,385	7 3	..	..
McDonald's Choultry	1,622	11 8	970	14 7	..	..
Sankagiridargam	7,508	2 11	16,993	10 2	..	..
Total ..	2,09,039	15 10	2,60,479	1 5	..	..

¹ These particulars were given in a letter from the Manager, dated 13th September 1873.

The following are the heights of the various stations above sea-level:—
 Vaniambadi 1,152.95 feet, Jolarpett 1,319.82 feet, Tirupatūr 1,271.52 feet,
 Samalpatti 1,261.46 feet, Morapūr 1,305.03 feet. (The highest point in
 the south-west line is between this and the next station and exceeds 1,400
 feet.) Mallāpuram 1,386.59 feet, Shevaroy Hill Station 1,243.48 feet, Salem
 919.67 feet, McDonald's Choultry 783.59 feet, Sankagiridurgam 876.38
 feet, Erode 539.47 feet.

The registration staff consists of a District Registrar on Rupees 150 *plus*
 commission, with four Clerks costing Rupees 42 per men-
 sem, and 15 Sub-Registrars, of whom 7 receive Rupees
 30 per mensem *plus* commission, and 8 are unpaid, being already either
 Deputy Tahsildars or Taluk Sheristadars. The Sub-Registrars' Clerks are
 paid from the fees. Those Sub-Registrars who hold no other post are
 allowed a peon on Rupees 6 per mensem. The total cost of the staff is
 Rupees 465 per mensem *plus* commission, which varies according to the
 work done.

The following is a statement of registrations, receipts and expenditure
 for Registration Offices in the district of Salem during the years 1874 to
 1878:—

Years.	Total number of Documents registered in Books I, III, and IV.	Aggregate value of Property trans- ferred by Documents registered.	Total amount of ordinary Fees.	Total of other Receipts.	Total Receipts.	Total Expenditure.	Excess of Receipts over Cost of Establish- ments.
		RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A.
1874-75 ...	5,615	19,72,757 15 5	8,272 5 0	1,329 7 0	9,601 12 0	6,712 14 5	2,888 13
1875-76 ...	6,012	23,14,532 13 10	8,660 5 0	1,375 1 0	10,035 6 0	7,065 11 10	3,169 10
1876-77 ...	6,334	19,35,733 12 11	9,162 15 0	934 10 0	10,097 5 0	7,351 4 1	2,706 5
1877-78 ...	7,352	20,47,995 2 4	10,327 9 0	1,017 14 0	11,375 7 9	8,014 11 2	2,169 12
1878-79 ...	8,562	24,68,563 4 5	11,995 14 0	1,483 4 10	13,479 2 10	10,533 5 3	2,875 13

A considerable increase from 1877 to 1879 in the total number of registered documents appears attributable to pressure of the famine inducing well-to-do classes to pledge or sell their lands.

A full account of the origin and working of the
 Remount Depot. Remount Department will be found in Chapter V, Vol. II.

Every Railway station is a Telegraph station also. Besides the railway
 wires the Government wires pass to Bangalore along
 trunk road No. I, and at Hosūr a Telegraph station has
 been opened for the use chiefly of the Remount Depot.

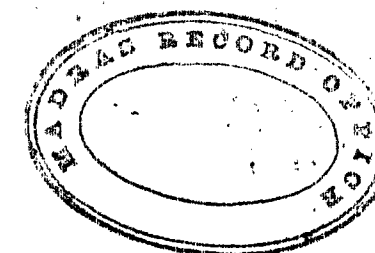
The working of the Settlement Department is referred to in the following
 chapter on the revenue system and history of the dis-
 trict.

SETTLEMENT.

SURVEY.

The following statement embodies the results attained
 by the Survey Department up to the year 1877:—

Number.	Taluk.	Total Area.	Area excess by Survey over old measurement.	Date of commencement of Survey and under whom.	Cost per Acre. Revenue pay- ing and for Survey.	Cost per Acre. Zamindari for Demarcation and Survey.
1	Namakkal ...	sq. MILES. 378 08 338 19	sq. MILES. + 40 64 + 29 95	Captain W. H. Hessey, August 1859.	RS. A. P. 0 4 2	RS. A. P. 0 1 5
	Total ...	716 87				
2	Attur ...	773 45 44 72	+ 78 50 + 33 07	Captain W. H. Hessey, January 1860.	0 2 2	0 1 6
	Total ...	824 17				
3	Salem ...	815 40 103 27	+ 38 13 + 88 12	Captain G. A. Searle and Captain W. H. Hessey, April 1860.	0 2 10	0 1 8
	Total ...	923 67				
	Shevaroy Hills ...	146 53		Captain W. H. Hessey, June 1861.		
4	Trichengode ...	428 12 208 38	+ 6 25 — 26 57	Captain W. H. Hessey, December 1859.	0 2 6	0 0 8
	Total ...	634 50				
5	Dharmapuri ...	700 84 213 07	+ 35 02 + 60 35	Captain W. H. Hessey, July 1861.	0 3 3	0 1 6
	Total ...	913 91				
6	Tirupatūr ...	505 05 154 51	+ 10 78 ...	W. Beaumont, Esq., January 1862.	0 4 1	
	Total ...	719 56				
7	Uttankarai ...	741 65 465 21	— 33 74 + 5 04	W. Beaumont, Esq., February 1862.	0 2 6	0 0 9
	Total ...	906 85				
8	Krishnagiri ...	371 68 281 63	+ 43 66 + 126 74	W. Beaumont, Esq., March 1862.	0 3 0	0 1 7
	Total ...	653 31				
9	Hosur ...	869 02 393 00	+ 36 14 + 153 92	W. Beaumont, Esq., September 1862.	0 3 9	0 1 0
	Total ...	1,262 02				
	Grand Total ...	7,644 39				



CHAPTER V.

REVENUE HISTORY.

DURING the war which was brought to a close by the treaty of 1792 two persons, whose influence is strongly felt to the present day in the Salem District, were engaged in various military duties in the Bārahmahal. These gentlemen were Captain Read, the first Collector of Salem, and Munro, afterwards Sir Thomas Munro, Governor of Madras. The latter was then about 31 years of age, of which 13 had been passed in this country. Not content with the mere routine of military duty, Munro had devoted himself to the study of the Oriental languages, his proficiency in which, though as far as can be seen mainly confined to Hindustani and Persian, had already brought him to notice, and in 1788 we find him on the general staff of the army and associated¹ in the Intelligence Department with Captain Read who, during the first war with Tipu, superintended the convoys and communications in the Bārahmahal. The Company's servants appear at this time to have neglected the languages of the people whose affairs they were appointed to administer. "This was universally the case,"² not in the military department alone, but in the departments of justice and revenue, over which civilians presided; and the consequence was, that all the real business of the State came to be transacted by Native Assistants and Interpreters. A good deal of inconvenience resulted even at the Presidency; but there, as well as in the old provinces, where a patient people had become accustomed to the usages of their masters, the machine, though subject to occasional checks and crosses, worked, upon the whole, satisfactorily. In proportion as the limits of the empire extended, however, it was felt that so clumsy a method of government and finance would not answer. Native Assistants and Interpreters, brought up amid the corruptions of the capital, were not to be trusted in places where English habits were unknown; and the farther the power of England was pushed back from the coast, the more urgent became the necessity of striving to do without them. This was particularly the case in the Bārahmahal. Inhabited almost exclusively by Hindus, who from time immemorial had followed the customs of their fathers, who had never, up to the present moment, had any intercourse with Europeans, and were moreover suffering from the effects of war recently waged among them, the Bārahmahal, it was felt, would require the presence of discreet men in order to reconcile its people to a foreign yoke; and the very first

¹ Gleig's *Smaller Life of Munro*, New Edn., 1861, p. 31.

² *Life of Munro*, p. 63 sq.

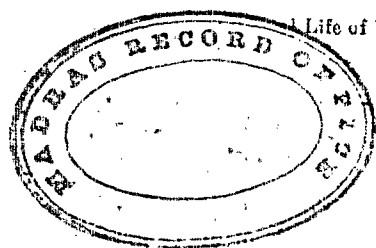
requisite in the individuals appointed to conduct so delicate a charge was their ability to communicate directly with the inhabitants. There was not a civil servant at Madras competent to do this: therefore Lord Cornwallis made choice of Captain Read as the fittest person to undertake the task, and Read selected as his Assistants, Mr. Munro, with two other military officers." These two officers were Captains Graham and MacLeod. Gleig speaks of Read as "one of the ablest of the many able men whom the school of Indian warfare and politics ever produced." Munro's opinion of him will be found in the following extract¹ from one of his own letters to his father, dated from Dharmapuri, 14th April 1793:—

"I mentioned to you in a former letter the amount of my allowances, and that beyond them I cannot get a sixpence. I observe the Glasgow politicians have given a large fortune to Captain Read, and some pickings to me. Read is no ordinary character; he might, in Maistūr, have amassed as much money as he chose, and by fair means too; but he was so far from taking advantage of his situation for this purpose that he even gave up his bazaar and many other perquisites of his military command, and received nothing but his prize-money and commission, which altogether, I believe, amounted to about six thousand pounds. Whatever I might have done, had I been left to myself, I could get no pickings under such a master, whose conduct is invariably regulated by private honor and the public interest. These, and an unwearied zeal in whatever he undertakes, constitute the great features of his character. The enthusiasm in the pursuit of national objects, which seizes other men by fits and starts, is in him constant and uniform. These qualities, joined to an intimate knowledge of the language and manners of the people, and a happy talent for the investigation of everything connected with revenue, eminently qualify him for the station which he now fills with so much credit to himself and benefit to the public. He will, however, I am afraid, be removed in March, or, at the farthest, July, 1794, in order to conform to system, which requires that civilians only should be Collectors. I have urged him to address Lord Cornwallis, to solicit a continuation in office; but I don't believe he will do it: his principle is to exert himself, and to leave it to Government to discover the necessity of employing him. When we were together at Srirangapatnam, during the cessation, I prevailed on him to apply for the management of the Bārahmahal. His Lordship replied that he could not venture to interfere, for it would bring all the civilians on his head. He however, a few days after, actually sent him a commission to command the forts in the ceded provinces, and to settle the revenue. Read was, however, of opinion, and I believe he was right, that Lord Cornwallis would have done this of himself, without any solicitation on his part." Read's judgment was also well borne out by Messrs. Graham and MacLeod. The former, working in Krishnagiri under Read's immediate supervision, enjoyed advantages which were wanting to MacLeod: his work has been to some extent more lasting; of the personal interest which he took in the division under his charge many proofs still exist, while of the trust and affection which Read, Munro, and Graham inspired, the language of the people up to a recent date was sufficient evidence. MacLeod was somewhat

¹ *Life of Munro*, p. 68.

overweighted in his charge and too far away from Read to benefit much by verbal intercourse; and, laboriously industrious and clear-sighted though he was, Read's forte did not lie in his pen. Hence, as might be anticipated, MacLeod's work, though good, and considering the novelty and difficulty of his surroundings wonderfully good, did not come up to the standard of that of the other three, and did not stand the test of time so well. To his thorough knowledge of his district and careful administration thereof, Buchanan, a close observer, more than once bears testimony. That men of honesty, exceptional ability, and with their hearts in their work were appointed to the newly-acquired territory was a matter for congratulation, as the task with which they had to grapple was formidable. Lying in the track of three great wars, what battle had not devastated in this tract had been consumed by the contending armies. The more gentle rule of the Maistur Rājās had for years been succeeded by the iron grasp of Haider, though under him there was the redeeming feature that, if the revenue was exacted rigidly, there was some hope of justice in the last appeal. With Tipu matters were different. Exactions went on equally as before, but the hand of locusts, which under the guise of revenue underlings preyed on the people, was multiplied. Less reached the tyrant's treasury, but more was wrung from the suffering ryots, who had no hope of redress at Srirangapatnam. Tipu "knew no way" of checking abuses but by augmenting the number of men in office, and sending two Assophs to almost every province, instead of one to prey upon the inhabitants. The defalcation of the revenue, which had formerly been about twenty per cent., was now above fifty. His bigotry led him to make none but Masalmans Tahsildars; most of them could neither read nor write, and were often selected from the lowest ranks of the military, at the annual muster in his presence, merely from some fancy that he took in their looks. These men were frequently recalled in the course of a year or two, and placed at one of the principal boards. This so disgusted the old servants of his father, that many of them retired from public affairs to lead a private life in their own houses." It is with the order which the four able administrators above mentioned evolved out of the chaos in which they found Salem, and the subsequent changes of the District Revenue history that this chapter has to do.

Before passing to the review of this subject a list of the different officers who have administered the district finds a fitting place here.



Life of Munro, p. 121.

"This system was not, however, understood at first by the Company's Government; and when the heads of the village were recognised as the sole authorities, the whole fabric was destroyed. And again, when Government commenced treating with each individual ryot, a fatal blow was struck at that system of joint-revenue responsibility which had before been so sure a check against the over-assessment of the weak. Secure in the majesty of the new laws, the heads of the villages commenced favouring the rich and powerful, at the expense of the poor and needy. The total revenue paid by the village was well known, but who, save the ryots themselves, could detect alterations in the proportions of the several shares, unless by a long investigation; for which time could not be spared? Throughout the district generally, the lands situated near the houses in each village were cultivated, their productive powers thoroughly known, and usual assessment proportionally high; whilst further off, there was much ground which was tilled only occasionally, and abundance even of what never had been brought under the plough, though capable of being so. There was a perfect source of confusion; but then there was an accurate system of accounts the village communities, showing all these particulars, and in most villages giving all other particulars regarding the land for a number of years past that could possibly be required. Under the village management, the accounts were carefully scrutinized by the other villagers, and might really be depended upon; which ceased to be the case when these headmen were singled out, and supported by the British Government; they could then easily overrule any such scrutiny, and the door was opened, unless some radical change were made in the system, to a course of unbounded fraud and favouritism. For instance, it was evidently more easy to evade the demand of Government on the outlying lands, of which the assessment could only be roughly estimated, than when cultivating the home fields; hence there was a decided move, in that direction, to which, however, other causes, such as increased security, would also tend; and many were irregularities which, checked effectually under the village system, soon manifested themselves felt by the new revenue authorities."

"The orders of Government for the settlement of the district of Salem simply that the rates of the assessment should be so fixed that the ryots might be compelled, with justice, to adhere to the terms of settlement for at least five years." In carrying out these orders the Government had been calculated by Colonel Read and his assistants so as to give the Government all that could possibly be taken from the land, and yet enough for its cultivation and the creation of such small capital as was requisite to meet agricultural losses and the fluctuation of seasons; the supposition that the soil was to be held by small ryots proprietors then possessed the power of suiting the holding to their means, and bringing up such fields as they did not require."

"It was however absolutely necessary to make use of the native system of collecting the revenue, till the survey being complete the whole country, a survey assessment should be fixed; and in the meantime continued to employ the head farmers of former times, and allowed them, rent-free, in payment of their services, to ostensibly derive any advantage in collecting the

by the ryots; for the portion to be given to the renter by each, which might not be altered, save by Read or his assistants, had been duly fixed, whilst the total amount of collections in each village was also accurately known. These rates had been determined as nearly in accordance to the village registers as was possible in the hurry of the first year's occupation of the country; and it therefore was considered, that, with the corrections made in the following year, the temporary arrangements might be strictly adhered to, till, as the survey proceeded, supplanted gradually by the lease settlement which was to be formed on this general survey assessment."

These "corrections made in the following year" cannot be passed over unnoticed as it will be seen that, the moment his hands were at all free, introduced the thin end of the wedge of the ryotwari system which these small beginnings developed into what it is at the present day. The first settlement with individual ryots marks a phase of considerable importance in district history. Finding that under the system of renting by villages and hobalis as above stated there was very improper interference on the part of the Patels, especially, when the making good the loss caused by failure of some of the ryots by others was required, Read adopted a different form of settlement from Fasli 1203, which is briefly stated in paragraph 5 of his report to the Board for that fasli as follows:—

"In the first settlement of those districts I judged it advisable from the fact that I thought there was in embracing too much detail, to make only a general assessment of the land rent; but, relying on the single ability of my assistants, I have this year extended my original plan of dividing landed property. Pursuant of that, many of the farms composing village lands are now given in rent to the first and second class of ryots below the Patels by whom those ryots now hold them immediately of Government. By that means they are advanced from a state of dependant servitude, and extreme poverty, to become proprietors of their own farms, and to be more immediately under the Government's protection; they are freed, by their rents being fixed, from the payment of additional assessments on every favorable crop, and the farming being thereby extended to many thousands more than last year, the circumstance proportionately in favour of population." "The ryots now held their lands direct of Government, their rents being determined with reference to enquiries held in the last year, and the registers of the previous year, their (ryots) own offers and the offers made by the Patels. The basis of the fasli amounted to Pagodas 27-63, inclusive of Sibbandi, which in the previous fasli was paid by the Patels, but exclusive of extra revenue amounting to Pagodas 1-11-0."

And Government being particularly anxious that settlements should be established, Read directed that until the survey was completed the assessment fixed, the rents paid by the several ryots in Fasli 1203 should remain permanent, and that as the survey proceeded the settlements completed the settlement in lease for five years with such alterations as might be introduced.

Considerable increase in the extent of cultivation was attributed to the quietness of the settlement.

ing warfare; and it was supposed, that the following year would show no material change in the agricultural statistics of the district;—expectations doomed to be disappointed, for 1794 again showed great changes. In some parts of the country, much land had been brought under the plough that was waste the year before, and, on the other hand, a portion of the cultivation had been given up, and allowed to revert to its original state of waste, which no man was willing to claim, and still less pay assessment for. Where the season had been favourable, the extent of land taken up greatly exceeded the quantity relinquished; where unpropitious, the reverse; in short, the agricultural world continued to exhibit considerable variations in those features which, it had been fondly hoped, would remain unchanged for years over some eight thousand square miles. Nothing daunted by these unexpected results, it was still argued, that the inopportune causes, which had been productive thereof, would gradually become less powerful, and that the next settlement would be so near the mark, that, for the rest of the time which the survey might occupy, the officers conducting it would be spared the trouble of making annual settlements as well, such yearly alterations involving then minute inquiries into the circumstances of each individual ryot, and consequently consuming a vast quantity of time, that could otherwise have been devoted to the acceleration of the survey.

"Orders were accordingly issued, that the annual settlement of 1794 should be considered permanent pending the conclusion of the survey."

The lease settlement contemplated that the extent entered in each ryot's holding in the first year of the lease should remain in his occupation unchanged throughout the term; that during the term he should pay the full assessment fixed by the survey on the lands each year; but should not be permitted to give up the occupation of any of the lands so entered. Accordingly, as each taluk was surveyed, the five years' lease to the ryots or Panchasul Jamabandi as it was then termed, was to be concluded. Read's directions as regarded the settlements to be made until the completion of the survey were not strictly and uniformly carried out in all the three divisions. Captain Graham continued to make settlements villagewar instead of with individual ryots; Munro acted up to the strict letter of the instructions, of course with the variations caused by the ryots taking up fresh and throwing up old lands, and MacLeod was making settlements each year afresh with reference to old registers of rent, offers by ryots, and estimates.

In the tract watered by the Kaveri the villages were leased out for a grain rent to principal inhabitants during the first two years, (Faslis 1202 and 1203), and in the subsequent years to the ryots of each village.

The above systems in the surveyed and the unsurveyed taluks continued till 1796, when, in July of that year, Read, doubting whether his orders that, in unsurveyed taluks, the settlement of Fasli 1203 should be permanent till superseded, on completion of the survey, by leases had been carried out, directed his Assistants not to make any variations in the settlements of 1204

¹ Both before and after the survey there were here and there lands in the Talaghat given to ryots for a grain rent.

or 1205 and to introduce the lease system in surveyed taluks only. He was then meditating whether the lease or some other system would best suit the condition of the Salem ryots, and having, during the course of his tours throughout the surveyed taluks in which lease system had been introduced, heard numerous complaints that binding the ryots to the same lands for a number of years, despite constant changes in their stock and circumstances, produced considerable hardship, resolved to adopt a different mode of settlement which practically annihilated the lease system. Accordingly, anticipating that the survey of the whole district would be completed by the end of that year, he drew up a circular of instructions for making future settlements and submitted them to his Assistants for a free expression of their opinions. Under this circular ryots were allowed the option of keeping lands either under the lease system or under annual settlements; the latter mode of settlement allowing them to give up early in each year whatever lands they might not choose to cultivate for that year, and to retain for any number of years what lands they liked, subject to payment of assessment, provided they gave intimation of their wishes at the beginning of each year. It further directed that where the lease is entered into after the promulgation of the circular the terms should be strictly adhered to, but that, in the case of leases which had been already entered into, the ryots could give up all lands they would not be able to cultivate. The circular contained all the principles of the ryotwar system, and was in fact the notification already issued by Read to the people of Tirupatūr, the portion of the district that had always been under his immediate superintendence. His three Assistants were not favorably disposed to the kind of settlement indicated, as they feared that the cancellation of leases and the freedom to give up lands would diminish the revenue. Munro, however, pointed out that the ryots could not be bound to pay the same rent for a number of years owing to fluctuation of stock, &c., unless a remission of from 15 to 20 per cent. was allowed. Thus Read's proposed mode of settlement had neither the approval of his superiors nor that of his own Assistants; all were for lease settlements as conducive to the permanency of revenue and the prosperity of agriculturalists; and yet he was so sanguine as to the eventual success of it that on the 16th December 1796, he publicly and formally gave a settlement, in harmony with his own views, to the ryots of Salem as their charter.

This circular is printed here *in extenso* :—

“KAULNAMA OR PROCLAMATION IN THE NAME OF THE KUDIS, VARTAGANS, AND OTHER RYOTS OF THE DISTRICT TIRUPATUR.

No. 1.—OBJECTS OF THE SURVEY.

“Whereas your district has been surveyed, and the rents of it fairly ascertained, in order to secure to the Sarkar its dues, and to the industrious the advantage that accrues from the improvement of land, it is proposed to effect these salutary purposes by the following regulations.

2.—GENERAL DIVISION OF LANDS.

“The tirwa or rent of all lands that were assessed and farmed out at the time of the survey being fixed, they are in future to be denominated *Potkat Nilam*, and those which, not being then assessed and farmed out, remained unoccupied, *Nagari Nilam*.

3.—OF LANDS PERMANENTLY RATED.

“The *Potkat Nilam* being measured and valued, the rent of every individual field in it, when at a full rent, is *fixed for ever*, that is to say the Sarkar is never to require more, or receive less, nor you to pay it less or more than their present rates, unless, when those actually dry shall hereafter be converted into wet by the constructing of tanks, cutting of canals or the means that may hereafter be undertaken at your desire or with your consent at the expense of the Sarkar, when their rates will be proportionably raised according to the consequent increase of the produce, and in like manner *fixed for ever*. But if you carry on such works at your own expense, plant tops of palmiras, coconuts, tamarind, mango, orange, lime, or plantain trees, gardens of betel-nut, betel-leaf, sugar-cane, or any other such production on which a high rent has been formerly exacted, you may depend on receiving the advantages accruing from them and from every improvement of your lands, while you continue to pay the established rents; those constituting, except in the case above mentioned, the annual demand upon them, on the part of the Sarkar *for ever*. Upon these principles, you may rent out lands, which you may raise in value by tillage and manure, at rates greatly exceeding the Sarkar rates, if there be a demand for them, while you will continue to pay the fixed rates to the Sarkar *for ever*.

4.—OF LANDS CHANGEABLY RATED.

“The *Nagari Nilam* being measured by meadows, or tracts, divided at some places only into fields, and no rent put on it because cultivation alone gives it value, it will be divided off into fields as demanded, when the rates of it will be determined according to its actual state, and a corresponding proportion of the average tirwa rates of the village to which it may belong. The tirwa of the *Nagari* of villages in which there is little or no cultivation, will be regulated by the average rates of the three nearest villages. The *nagari nilam* is generally divided on account of the variable properties acquired by cultivation, exclusive of its inherent qualities, into *Bidu* or fallow and *Bunjar* or waste, and the former into seven descriptions, corresponding with the number of years it may be *unoccupied* at the time of valuation. As *Sagubadi*¹ or arable is supposed rather to recover than to lose its active power by lying one year in fallow, and gradually to lose it from being a longer time unoccupied, each description is to be rated as follows. For one year's fallow 10 annas the first, and every year after; for two years' fallow 14 annas the first 16 the second, and every succeeding year; for three years' fallow 12 the first, 14 the second, 16 the third; for five years' fallow, 8 the first 11 the second 16 the third; for six years' fallow 6 the first 9 the second 16 the third; and for seven years' fallow 4 the first 8 the second 16 the third. As it is supposed that by the time lands have lain seven years fallow they lose so much of the vegetative property they acquired by cultivation as to approximate to the state of such as never have been cultivated, all that may be fallow a greater number of years, and all *Bunjar* whatever are to be rated the same, that is 4 annas the first 8 the second and 16 every succeeding year.

5.—OF TAXES INCLUDED IN THE LAND RENT.

“The Jodigai or quit-rent of all Inam lands is to continue till the end of the current year Fusly 1205 as at the time of the survey. All taxes levied upon castes or trades on account of ghatarugu, Pethwari &c., articles of the sayar included in the land rent, to remain as at the time of the survey to the end of the current year Fusly 1206. That is every caste or trade is to be required to pay, jointly, the same amount for the year, which will be more or less, than they then paid individually, according as their number has increased or decreased, while they will altogether contribute the same they did that year to Government, for which purpose those of every village must occasionally meet to assess themselves, and not leave it to their chettis, patels, or others to regulate their share.² Pullawarth Pasivari and other articles commonly farmed out will be given in rent to the highest bidders, by the patels and karnams with the sanction of the Collector, by whose patta they will be held in farm.

¹ In original written Assangwolie.

² See Glossary sub voc. *Pullawarth*.

6.—RATES TO BE EXACTED OF THE CULTIVATORS.

"The above rates of tirva being generally equal to one-third of the Punja or dry, and two-fifths of the Nanja or wet crops in money, and these being the portion of the produce which the *Kumbis* or *Sudras* [who divide the crops with their tenants] have always paid to the *Sarkar*, their *Karakars*¹ or immediate lessors, they are on that account to be required of all *Kumbis*, *Sudras*, or ryots who are *Ulladis* or *Parakudis* inhabitants of the Company's districts. As many ryots may desire to cultivate lands unoccupied after *Pertasi*, when the season for sowing the principal crops usually grown in every description of the soil from which it derives the greater share of its value is passed, and when there is only time left to sow the inferior kinds of grains in each, only 12 annas of the ordinary tirva of the Punja and 14 of the Nanja will be required for lands that may be rented after the 1st of Arpisi or 10th of October to the 30th of Punguni or end of the year.

7.—RATES TO BE EXACTED OF HEAD FARMERS.

"As *Sukhavasis* who farm and, being under the necessity of employing the ryots whose occupation is agriculture to cultivate their lands, cannot afford the ordinary *Sarkar* rates of tirva, four-fifths only of the ground rent shall be required of them. This indulgence will be exclusively extended to all Brahmins, whose laws don't admit of their holding the plough, and to all persons who can prove their having served the Company as sepoys twenty years, because they are unaccustomed to labor. It will likewise be granted to such other persons as the Collector may think entitled to it from their condition, but may have stock to employ in farming. But lands so disposed of, are only to be continued in such favourable terms while the original grantees may occupy them; and to be resumed by the *Sarkar* whenever they part with them, that they may be included again, with other lands, that pay the *Sudras'* tirva. As *Sukhavasis* may be helped to defraud the *Sarkar* by procuring lands in their name for others, whoever shall be convicted of doing so, and their accomplices, shall be fined a year's rent of the lands so obtained, and banished the district.

8.—RATES TO BE EXACTED OF REFUGEES.

"As encouragement for *Parakudis* or refugees from the *Karnatic* or *Balaghat* to settle in the Company's territory, only half the *Sudras'* or ordinary *Sarkar* tirva will be required of them for three years or other period, for which lands may be granted them. The increase of population inducing this measure a pair or two galls of the dry and a cowry or chey of the wet will be given for every two ploughs or ryots; that is half of each description for every one, and in the same proportions for any number. The condition of granting lands on those terms being the grantees residing in the Company's district, they will not be continued to any other who may purchase the lease, unless the grantee and all the ryots who emigrated with him, or an equal number, and proved to be his followers, remain in the Ceded Districts. As a farther inducement for aliens to come and live under the Company's Government, the principal of every party that comes shall have the patelship of any village he may prefer, provided—the number of ploughs he may bring with him be equal to a quarter of the ploughs actually belonging to it, that there be unoccupied lands sufficient in it for the additional number of hands, and that he be qualified for that situation. If incompetent or he should not desire it, any other person of its number for whom the party may declare a preference shall be appointed. As *Parakudis* from other districts belonging to the Company pretend to have emigrated from the *Karnatic* or *Balaghat* in order to procure lands so much under-rated, whoever shall be found guilty of such fraud or connive at it shall be fined a year's rent of the lands so obtained and punished besides with utmost severity.

9.—RATES TO BE EXACTED OF MULBERRY, &c., PLANTERS.

"The Company being desirous to introduce the manufacture of silk and other valuable productions, only one-sixteenth of the ordinary rates of tirva will be required for lands growing the mulberry, Mauritius cotton, the *Opuntia*, black pepper, coffee, cinnamon,

¹Mr. H. E. Stokes suggests *Karakars*, cf. Glossary sub voce *Karakar*.

cardamoms, sandal, or other exotic plants for the first seven years, and after that only half of those rates while they continue to grow them. That being the express condition of their tenure, when such lands are appropriated to the culture of native productions it shall be considered an infringement of the engagement on the part of the grantee, and he shall consequently be required to pay their ordinary rates for the period they may have been so appropriated. Any person who shall procure lands professedly for the culture of exotics, but designedly for native productions, and defrauding revenue, shall forfeit the produce, be fined a year's rent at the ordinary rates and banished the district.

10.—OF ANNUAL FARMERS AND LEASE-HOLDERS.

"The period for which you may severally choose to rent lands depending on a variety of circumstances, and distinctions being necessary to your understanding the conditions of your respective tenures, those who agree to hold them from year to year, or for the space of one year only are to be denominated *Varushaguttagaikars* and those who agree to hold them for a number of years, or during the present lease *Shraya-guttagaikars*.

11.—THE CONDITIONS OF TENURE OF ANNUAL FARMERS.

"The improvement of lands depending on the means employed for the purpose during a succession of years, every *Varushaguttagaikar* who may cultivate certain fields in any one year shall be allowed the privilege of occupying them the year following, and so long as he shall continue to pay regularly the established rent of them; so that such obligations as he shall enter into with the *Sarkar* relative to farms shall be considered as no longer binding upon him, than from their dates to the end of the current year, but as binding upon the *Sarkar* to the end of the present lease. He must not however quit his village till he answer all demands upon him for the term of the year.

12.—THE CONDITIONS OF TENURE OF LEASE-HOLDERS.

"Whoever from thinking it will add to the security of their possession, or desiring to avoid the trouble of annual stipulation, shall desire to have *pattas* for the whole or for part of their land in *shraya-guttagai* will in like manner be allowed the privilege of occupying them while they continue to pay regularly the established rent, but their obligations must be considered as mutually binding from their dates to the end of the lease, unless he procures a person who will enter into the obligations expressed in his *putta*, and pay up his rent for the term of his lease.

13.—TIME PRESCRIBED FOR THE SETTLEMENTS OF ANNUAL FARMS.

"Since the obligations entered into between the *Sarkar* and *Varushaguttagaikars* are binding upon them for the current year only, to the end they may extend or reduce their farms according to their circumstances, by retaining or rejecting certain fields as they may choose from year to year, that makes it necessary for them always to declare, during the *Kalavadi* or ploughing season, which they intend to cultivate, that *pattas* may be given and *muchilikas* received as hereafter directed and the rents of every farm duly collected.

14.—TIME PRESCRIBED FOR THE SETTLEMENTS OF FARMS IN LEASE.

"As *shraya-guttagaikars* will often desire to cultivate more lands than they may hold in lease by the addition of some fields to their farms in *Varushaguttagai*, it will be equally necessary for them under such circumstances to declare, during the *Kalavadi*, which they intend to cultivate, that, mutual obligations for the current year being entered into with them on account of lands they hold in *Varushaguttagai*, their rents as *Varushaguttagaikars* may also be registered as productive to revenue for the year.

15.—PENALTIES FOR PLOUGHING LAND WITHOUT PREVIOUSLY ENGAGING TO PAY ITS RENT.

"Whoever having already ploughed their lands shall neglect to report them to their *Petal* and *Karnam* shall, be fined half their tirva, and whoever shall, after the publishing of

this proclamation, proceed to cultivate lands without previously receiving a patta for them, shall be deprived of their produce or, if they should not be so, one-eighth of their tirma.

16.—THE WHOLE RENT OF EVERY FIELD TO BE REQUIRED OF WHOEVER MAY PLOUGH A PART OF THEM.

"As some fields in the Patkat are left in fallow by reason that the poorer ryots from want of means cannot plough the whole of them, and many objections occur to the distribution of them into plots as their accommodations would require, you are enjoined to occupy such fields only as you may be able to cultivate entirely; for whoever shall hereafter plough any part of a field in the Patkat, shall be required to pay the rent of the whole. The Nagari being generally in meadows, it will be parcelled out and measured at the time of demand in such portions as may be desired by the candidates.

17.—MODE OF APPLICATION FOR LANDS.

"All persons who desire land to cultivate must apply in the first instance to the Patel, or Karnam of the village they prefer in which they see land unoccupied, when, if *Patkat nilam*, they will be informed of its fixed rents, and if *Nagari nilam*, of its tirma for the year, or portions of the average tirma of the village according to the number of years it may have lain uncultivated; or, if that be deserted, according to the average tirma of the three neighbouring villages. The next step when they resolve to settle is to require the Patel and Karnam to draw out pattas and muchilikas specifying the said rates of tirma, field by field, for each description of land, and the conditions of tirma. If *Sutras*, it only remains for them to sign the muchilikas or obligations and give them to the Patel who will deliver them the pattas or grants on their receiving the Collector's signature, but, if *Sukhavasis*, *Parakudis*, or *Totakars*, they must take the pattas and muchilikas to the Collector, with such persons as may be necessary to satisfy him as to the propriety of granting them the indulgent terms held out to them respectively, when, if he approve, he will sign and give them the pattas, which will specify that a fifth of the amount will be required of *Sukhavasis*; one half of *Parakudis* and a sixteenth of *Totakars*; they will then deliver their muchilikas, or counterpart of their grant as binding them to the performance of their engagement.

18.—MODE OF OBTAINING ADVANCES FOR CULTIVATION, &c.

"When the ryots of a village, or any number of them, require small advances to procure their subsistence, seed, or other necessary articles, they must determine how much will be sufficient, and desire their Patels and Karnams to apply for them, engaging to be jointly responsible for the amount. When one or two only require as much as may be necessary to purchase cattle, dig a well or cut a canal, you must then ascertain the probable cost, and, having found a Patel or some other ostensible person to stand security for the amount, desire your own Patel and Karnam to apply for it. If you find they are dilatory, proceed with your security to the Tahsildar and require him to obtain it for you. If a month elapse without an answer, then go yourself and represent your case to the Collector.

19.—FARMERS WHO DESIRE IT PERMITTED TO THROW UP THEIR LEASES THE CURRENT YEAR.

"As all the *Patkat Nilam* of your districts was entirely disposed of in *shrayaguttagai* when the survey was made in Pramādicha (F. 1202), these regulations may seem to apply to it but partially. But as many of you, from inexperience of leases, have taken more lands in *shrayaguttagai* than you have been able to cultivate every year, and suffered of consequence from inability to pay up the rents of such fields as you have been obliged to leave uncultivated, it is now determined to absolve you of all engagements you entered into that year, to the end that, after due consideration of your circumstances, you may rent as many fields as you think you will be able to cultivate every year in *shrayaguttagai*, and as many as you may choose to cultivate for the current year only in *Varashaguttagai*.

20.—THE PERFORMANCE OF FUTURE ENGAGEMENTS INDISPENSABLE.

"Though a consideration of your condition has induced the putting it again in your own power to accommodate yourself, it must be understood that this indulgence is not to apply to land you may have already cultivated the current year; for the rent being fixed upon every field of the *Patkat Nilam*, and that of every one in the *Nagari Nilam* being easily ascertained by the rules now laid down for that purpose, whoever ploughs a field must pay the rent of it whether previously stipulated or not for the current year, and whoever stipulates for one or any number of fields must pay their rent, whether he ploughs them or not, for the period of his engagements.

21.—FARMERS TO BE INDIVIDUALLY ANSWERABLE FOR THE RENTS OF THEIR OWN FARMS.

"The first step you take towards settling in any village must be the demanding of its Patels and Karnam a patta for the lands you choose, and the giving them muchilika binding yourselves to be individually answerable for their rent by instalments as may be stipulated in the Kisthandi.

22.—FARMERS TO BE JOINTLY ANSWERABLE FOR THE AMOUNT OF THEIR VILLAGE RENTS.

"As, owing to decay and sickness among farmers and their cattle, desertion, &c., and deaths among themselves and their labourers, the frequent loss of crops by excessive droughts, or incessant and heavy rains, many are unable to pay their rents, it becomes further necessary that the Ulkudi ryots of every village be bound in joint responsibility for the rent of all the lands that may be cultivated or held in farm the current year; they will therefore be required to bind themselves to make good the deficit that may arise among them from inability by contributing the amount in proportion to their individual rents.

23.—MODE BY WHICH FARMERS MUST INDEMNIFY THEMSELVES FOR ADVANCES ON ACCOUNT OF THE DEFAULTERS.

"Every defaulting becoming thereby wholly the concern of the farmers, it will consequently be their business to assist those who meet with such misfortunes by ploughing their fields for them, supplying them with seed for succeeding crops and, when necessary, with food; also to stimulate the idle and watch the suspected. The expense incurred by such assistance, or by paying up the balances of a defaulter, is not to be considered as a donation, for though the claim of the Sarkar upon them be thereby dissolved, he will remain the debtor of his brother farmers, whose business will be to secure his crops, his cattle or other effects for their own indemnification, which they may sell off wholly or in part, as they may think it safe to trust him or be inclined to favour him. In every instance that such a transaction cannot be immediately settled between the defaulter and the other farmer, the Karnam must open an account between them, and, the balance, being recovered from time to time, must be paid to them in due proportions of the sums which they may have severally contributed.

24.—ALL THE FARMERS' CONTRACTS TO BE COMMITTED TO WRITING.

"Your several conditions of tenure with the Sarkar being thus defined, it is next of importance to your advantage and security in general that all contracts which you may reciprocally enter into with one another may be committed to writing, such as, 'the shares of interest which farmers in partnership may severally have in their concern, the condition of tenure between farmers and their tenants,' and 'the terms of service between masters and their servants.' All of you therefore, who have not taken that precaution already, are now required to enter all transactions that are pending into written agreements, corresponding with the directions and forms prescribed to the Karnams to ensure their being done with the greater exactness. As differences that daily arise among

you cannot be adjusted from the want of such written documents, or written notice is hereby given that in future the Collector will reject all claims unsupported from such neglect, and leave the plaintiffs to depend upon the defendants free choice for the payments of debts and the performance of such engagements as may subsist between them.

25.—BETWEEN FARMERS IN PARTNERSHIP.

"The shares of interest which *Kudis* or Joint *Kudis* severally have in their farms depending on the number of hands and cattle and the quantity of seed they may have respectively, when they begin to cultivate, they are required to employ the *Karnams* of their respective villages to draw up *risinamas* specifying every individuals' share according to his contribution towards the general stock, in which it must always be observed as a rule, that whoever is to receive his share in kind must, in the event of his partners dying or absence, pay up the money rent of the whole farm to the Sarkar.

26.—BETWEEN FARMERS AND THEIR TENANTS.

"The privilege of cultivation being granted both to *varushaguttagaikars* and *shreyaguttagaikars* while they continue to pay regularly the established *tirwa* to the Sarkar, and it being practicable by good husbandry to double the value of their lands, they may of course let them out to *chillarai kudis* or tenants at rates which (are) above their fixed *tirwa*, which they must remember is the utmost they are ever to pay the Sarkar. In such cases it is required of them to exchange with their tenants *kad pottas* and *machilikas*, specifying whether their rents be 'wholly in money' or 'wholly in kind,' 'partly in money and partly in kind,' and if neither 'what portion of the crops' which engagements must never be infringed by taking the *varam* in place of the *tirwa* when grain is dear, or the *tirwa* in place of the *varam* when grain is cheap; and the rule must also be remembered that, if the farmer die, or abscond, the tenants must in all other events be answerable to the Sarkar for the whole of the rents.

27.—BETWEEN MASTERS AND THEIR SERVANTS.

"All *guttagaikars* or *kudis* whether of the Sarkar or others, and all *Jalandars* whatever are likewise ordered to give their *Jibankars* certificates of the terms on which they are hired. When monthly servants, their wages must be specified, whether in money or kind, and in what proportions. When hired for the year, it must be particularized whether their wages be all or in part, grain, money, or part in cloth. When their wages is a share of the annual produce, the proportions of the dry and wet crops must be mentioned. When a certain quantity of grain besides a share of the crops, each must be specified. When a *Jitamkar* is promised his master's daughter in marriage as the reward of his service, the period of his servitude must be determined. When the master only promises to defray the expense of his marriage after serving him a certain time, it must be mentioned whether the amount be left to the master's determination or specific, and in either case the length of service must be fixed. When the master engages to maintain him for life on condition of his working for him as long as he is able, that and whatever else may be agreed upon must be included in the certificate.

28.—SUCH WRITTEN ENGAGEMENTS THE ONLY LEGAL CLAIM-UPON THE PERSONS OR PROPERTY OF THE CULTIVATORS.

"You are to regard the written engagements you enter into with your *Patels* and *Karnams* on account of the Sarkar, and with one another in private transactions, as the only legal claims upon your persons or property, and, unless particularly stipulated therein, you are not to be responsible, in future, for each others failures. Consequently if your *Patels*, *Karnams* or *Chettis*, the *Bratmans* of your village or district, or any person whatever propose to make *lafriks* or levy contributions upon you as *rasim*, *varatim*, *nera*, *grama karch*, *kacheri karch*, *dewdn karch*, *darnya karch*, *manavatt*, *arunakshi*, *viluvakshi*, over and above what is specified in your *pattas* or *risinamas*, or require you to build their houses or plough their fields without due compensation, you may refuse compliance and, if compelled, you may be sure of redress on application to your *Tahsildar* or Collector.

29.—OF CONTRACTS FOR TANK REPAIRS.

"The Sarkar and the country in general having sustained great losses by *kuttaikodigaidars* allowing tanks to go entirely to ruin from the want of repairs, it is here resolved that the Inam of whatever *kuttaikodigaidar* shall fail any one year to make the requisite repairs to his embankment shall be excheated and annexed to the Sarkar lands. As the non-performance of this contract might proceed from inability, any *kuttaikodigaidar* who shall apply to the Collector for the means shall be supplied with money at the usual rate of interest. Should the *gumasta* of any *kuttaikodigaidar* neglect during his absence the tank intrusted to his charge so as to incur the failure of his Inam, his absence shall not be admitted as entitling him to a restoration of it, or any alleviation."

Dharmapuri, 15th November 1796.

To return however to the consideration of the survey and settlement. "It was generally understood* that, throughout India, where the cultivating ryots held direct of the Government, a half share of the produce was the assessment payable to the State, which was also supposed to be the average scale of division when made between the ryot and any other parties through whom he might hold his land. From the annual division of crops, in the course of time, a fixed quantity of the produce of each field had gradually, with reference to the fertility of the soil and expense of cultivation, been mutually agreed upon as the amount of fixed assessment thereon; and, over much of the Salem District, this had again been commuted from a payment in kind to a money assessment. When the channels for irrigation were fed by the *Kaveri* or other large rivers, the water from which came charged with rich silt, or by large artificial reservoirs, known commonly as tanks, the Government share, or, in other words, the assessment, was estimated at three-fifths of the produce, and was gradually decreased, according to the supply of water, through eight classes, till it was only a fourth.

"The assessment on 'the dry lands,' however, to facilitate accounts, was always entered at a half of the produce, whatever might be the fixed quantity in grain which, in the course of time, had been declared payable on each particular field. The ryots, if they thought themselves hardly dealt with in this latter arrangement, either on wet or dry lands, had always the option of handing over to the officers of Government the actual share in kind, either of the 'wet' or 'dry crops,' though, doubtless, in Indian States, expedients would never be wanting such as would effectually stop anything short of dire necessity from inducing their subjects to take a step like this, if it were distasteful to the ruling powers. The 'dry lands,' like the 'wet,' were also in reality divided into several classes, with reference to their fertility, and according to the value of the grains which they were capable of producing." Under the native mode of management "when the

* Dykes, p. 32. temporary ruler† of the village arrived from the native court, the only accounts usually produced were those which gave the general state of the arable lands in his villages; and, to fix the amount of assessment payable to him, it was simply shown how much was cultivated that season of the 'wet land' of each class, and similarly, the extent of cultivation in each of the four sub-divisions of the 'dry' arable. On this information, which doubtless was thoroughly scrutinized by the eye of self-interest, the bargain was struck between the renter and the villagers for the current season, or perhaps for a short term

of years. Now came a very different state of affairs, and the first result of the survey was, to show that the assessment hitherto collected had been by no means the supposed proportion of the crops. When it was a money payment, the prices taken to compute the value of the Government share had been always considerably below the real market rates; and when paid in kind, native ingenuity had met native rapacity successfully. The half share was, indeed, an exchequer delusion.

"There were three courses open to the settlement officers, two of which offered several advantages for the speedy assessment of the country. To continue the village arrangement which has just been described was the most obvious." To this course however there were various objections.

"The second course* was to obtain from the village accounts what had hitherto been the fixed portion of the crops on each field, or, where it existed, the money assessment, and on that basis draw up an individual settlement with each ryot; which was a step beyond the usual operations of the village renters under any native government.

"This, however, it would be soon found, involved a survey, and the third alternative, which was undoubtedly, as by far the most tedious, infinitely the most just and advisable, under all circumstances; and this was the course, therefore, finally adopted. The whole of the arable lands in the district were minutely surveyed, the extent of each field was accurately ascertained, and the assessment payable thereon having been duly fixed according to certain rules, each and all of these particulars were registered with the utmost care,—a record that might, as far as possible, give back to the ryots what they had lost, when the abolition of the village system deprived them of the protective powers inherent to its municipal institutions; and to which record, in all time to come, the officers of Government, whether to do justice between man and man, or secure the revenue of the State, might refer with implicit confidence."

Roughly speaking the basis of the assessment was that the Government share of the crop was fixed at what was supposed to be, one-third of the produce on dry lands, and two-fifths on wet lands; but occasionally one-half on dry, and a tenth more on wet lands, was the share taken. A report was submitted on the settlement by Colonel Read, which has been summarised by Mr. R. K. Puckle, C.S., and is printed at length below (see p. 247, sq.).

Reading with the lights now available it is easy to find flaws in Read's work. The children of to-day accept as accomplished facts what sixty years ago would have been regarded as miracles, and farther back again as products of the black art, whose authors deserved the torture and the stake. It is in no captious spirit that we must admit that Read and his associates erred. What should excite our wonder is that they did so much and did it so well. Firstly it was against them that the survey and assessment had to a great extent to be carried out by native agents, who, even when honest, could hardly avoid mistakes in the mass of details to which weight had to be given in making the classification and settlement. "The attention of the

surveyor,† it is gravely stated, was also given to the personal health and strength of the ryot, the quantity of his farming stock, and what small capital he might by his neighbours be thought possessed of; and finally, the result thus obtained and corrected

was compared with the assessment paid on the field for the past, and what was offered for the current year. If all three amounts were nearly alike, the average was struck, and that was fixed as the final assessment." As we have seen (in 1792,* when the country first came under the Company's Govern-

* Dykes, pp. 33, 44. ment, the revenue was fixed for that year almost entirely on the village registers; and as these accounts had been the chief guide in the survey assessment, the fact that the final result of those measures gave an excess is the amount to be collected from the Salem District of one-and-twenty per cent., would at first sight seem rather inexplicable. But the survey brought to light a vast quantity of cultivation, which, in the occupancy of influential ryots, had, under the native rule, hitherto paid no assessment; and over a large extent of the country, from time to time, the favourites from the courts had succeeded in getting favourable rates fixed on their lands permanently. All these indulgences, which tended directly to lower the revenue, the survey assessment entirely swept away, save in certain specified cases. In proportion to the abilities of Read's three Assistants and their peculiar fitness for such operations, would, of a consequence, be the difference between their temporary settlements in 1792, and the amount of revenue finally fixed in their respective divisions by the surveys which they had severally conducted; and their characters must have been somewhat dissimilar, for this difference is very great.

"Colonel Read frankly admitted that he could not account for it; but time has satisfactorily. One Assistant was Captain Munro, then known to a few private friends as a man of rare talent, but afterwards celebrated on all sides as one of the wisest men that ever came to India. He possessed wonderful influence with the natives, and his settlement in the first instance would on that account naturally be less liable to error. When corrected by the survey, the total assessment for his division showed an excess of less than four per cent. on the revenue temporarily fixed for the first year, whilst of the other two divisions, the excess in the south was more than thirty per cent., and in the north, the increase, though somewhat less, was still very great. Those to whose charge these portions of the district had been intrusted were not men of equal ability; and the results of later years have shown too clearly that over a large portion of the southern division the assessment, though temporarily paid, and perhaps with ease, was not fixed, even by Munro, with equal success for the future prosperity of the country."

The above estimate of the relative value of the work done is partly borne out by an account of the year 1850, from which it appears that 75 per cent. of the lands assessed by Read were in cultivation at that date, whereas, owing principally to over assessment, in tracts assessed by his Assistants the highest percentage of assessed lands retained by the ryots was 69 per cent. in one taluk; 65 and 63 per cent. in two more; 60 per cent. in four taluks; 59, 55 and 53 in three others, and in Omalūr, assessed, strange to say, by Munro, only 50 per cent. of the lands on which he fixed the tribute had been found worth retaining. Other causes too operated to raise unduly the estimate of what the land could pay. The south of the district was the richest, including Attūr with its twofold river system, and the tract commanded by the Kāvūrī.

"The inhabitants† were comparatively wealthy, and it needs not a very long experience of India to know at once that there the greatest abuses would exist. There the concealed cultiva-

† Dykes, p. 38.

† Dykes, pp. 45-47.

tion would be found to have existed, under the native rulers, to a greater extent than elsewhere, and there favourable rates would have been, and doubtless were, obtained for far more land than in other parts of the district. But the sins of the fathers were visited on the children. These very advantages, surreptitiously procured, enabled the ryots to pay rates ostensibly high on the remaining portion of their cultivation, which not only misled the surveyors and their superiors, but acted on the next generation with great severity. When there was an end of this, and of such capital as their forefathers had succeeded—which was but rare—in hoarding up, the rates thus fixed, and till then paid from such sources with apparent ease, were found very heavy, and in many instances what the ryots could not give. The consequence has been, that lands, which are perhaps the best in the village, lie waste to this day [1850]. But in the Northern Division, a small portion of which was surveyed by Read himself, the result has been very different; and all, or much of the success there, is probably owing to those circumstances having been duly taken into account, and the assessment finally fixed with more judgment.

"There was of course much liability to error, from the manner in which the survey and assessment were formed. After the first year, the inferior crops would perhaps be grown, to deceive the surveyor, though the field was capable of bearing the most valuable grain; the village accounts, if forthcoming, would be tampered with, and every imaginable artifice would be resorted to, that could in any way depreciate the value of the land. Modifying the assessment according to the circumstances of the ryot, was, however, a grave and manifest error, for which the natives cannot in any way be held responsible."

The strangest feature of the early history of the district is the fact that, though Read's orders were imperative that he should introduce a lease settlement for five years, he ended by introducing an annual ryotwari settlement; in doing which, in a long correspondence, he succeeded in converting Munro to his views. This correspondence is not worth quoting *in extenso* here. Read never did himself justice with his pen, and both he and Munro not unfrequently descend into an obscurity of style which it is difficult to penetrate; while the positions advanced, even by the latter, are occasionally such as cause us to ask with wonder whether he was the contemporary and fellow-townsmen of Adam Smith, whose great work was published when Munro was five years old. The fact is that these able and honest men, without traditions to guide them, had to grope about in the dark, seeking truth, and it is to their honor that they found it. Mr. Dykes thus sums up the conclusions at which they arrived in an early stage of their correspondence:—"So far, therefore,* both parties were agreed on the absolute necessity of one grand and fundamental principle—all lands were to be made over to the ryots outright. The assessment on the land is so much as long as it is duly paid, do what you like with your property, lay out your capital fearlessly, increase the value of the ground a hundredfold, the Government will never call for more,—the land is yours. There were two points on which they differed:—the rules gave perfect freedom to the ryot to transfer his capital from one land to another without let or hindrance, and to make such changes annually, whilst, making the engagement on the part of Government irrevoc-

* Dykes, pp. 115-117.

able, the ryot had the option of throwing up all such obligations at the end of each year; and without any risk to himself, as regards all advantages therefrom, he was in reality a perpetual leaseholder. Munro, on the other hand, then strongly deprecated the abandonment of so much of the original scheme as bound each ryot for a term of five years, and allowed him to pick and choose annually as he liked; being of opinion that the revenue must inevitably suffer if the ryots could thus yearly give up what fields they did not fancy, and, without any restrictions, exchange the valuable and highly-assessed lands for less-productive waste, generally at a distance from the village, and on which no specific rates had been fixed at the survey. He would give the soil away outright, because, as he most justly observes, nothing would so effectually induce the outlay of capital. If free to suit his little means yearly, the ryot's circumstances might improve more rapidly, but the interests of the Government might suffer. Although the survey assessment had been fixed on each field, and it was, to all intents and purposes, in itself a separate and distinct holding, still the sons of the soil should not exercise their simple minds as to this field yielding well, and that not; no, they should be content with what they had got, and be bound down for five years at least."

Read saw early enough the evils which must arise from the periodical haggling even of a lease settlement, if otherwise practicable, and in a circular in 1796 "recorded* his deliberate conviction, founded on the experience of four years, that the settlement under leases, such as are understood by that name in other parts of the world, was then impracticable in Salem, as the share of the produce taken for the State was so large Favourable terms to the ryots were as essential to the establishment of a 'lease settlement' as just; but 'the revenue must not be sacrificed.' There was in fact nothing then left to the cultivators from which might be created the capital absolutely requisite for a strict adherence to such agreements. An English farmer might be glad of his lands under a ninety-nine years' lease: but this country had not then been nine years under the British rule, which its people still regarded somewhat in the same light as those that had come and gone before in quick succession. How poor the ryots were, Munro has described in able language; they had no confidence in the Government; and the ryots were as fit to become fundholders as leaseholders. A permanent revenue, such as those in high places wished then to consider it, was not to be had; the amount could be gained from the soil, with the most trifling fluctuations, but through a cultivating, not a 'leaseholding' ryotry.

"Read not only detected the error, when all seemed so fair, but had the courage to stem the tide of popular opinion. If leases had been established, what years of misery would have been spent in vain efforts to enforce agreements, which the ryots had not the means to meet, and to carry out a scheme for which the country was not then ripe, nor, to the extent then proposed, ever will be suited. Read not only secured the Salem ryots from this misery, but the 'sundry rules' in this very circular were the foundation-stones of the ryotwari settlement, under which, though the rates of assessment remained unchanged, and prices fell materially, the Salem ryots nevertheless prospered."

These sundry rules have been quoted at length above. Some of them were

obviously faulty, as for instance the favorable terms offered to Brāhmans and refugees; the proposals to turn out old headmen of villages to make room for new-comers, and that ryots should be jointly responsible for defaulters. The chief point of interest, and one which in late years gave rise to some controversy, is contained in rule three.

"The 'patkat vilam' being measured and valued, the assessment of every individual field in it, when at the full rate, is fixed for ever; that is to say, the Government is never to require more, or receive less, nor you to pay less or more, than the present rate, unless when those fields actually 'dry' shall hereafter be converted into 'wet' by the constructing of tanks, cutting of canals, or other means that may hereafter be undertaken at your desire, or with your consent, but at the expense of the Government, when the rates will be proportionably raised, according to the consequent increase of the produce, and in like manner fixed for ever. But if you carry on such works at your own expense; plant tops of palmyrae, cocoanut, tamarind, mango, orange, lime, or plantain trees; gardens of betel-nut, betel-leaf, sugar-cane, or any other such productions, on which a high rent has been formerly exacted, you may depend on receiving the advantages accruing from these, and from every other improvement of your lands, while you continue to pay the established rates; these constituting, except in the case above mentioned, the annual demand upon them, on the part of the Sarkār, for ever. Upon these principles, you may rent out lands, which you may raise in value by tillage and manure, at rates greatly exceeding the Sarkār rates, if there be a demand for them, while you will continue to pay the fixed rates to the Sarkār for ever."

Other rules showed a liberal tendency in the facility offered to the ryot for resigning land which he does not desire to retain and taking up such as he thinks preferable; while, in the provisions relating to lands held from year to year by "annual tenants," and lands held under leases, with the liberty allowed to the ryots of choosing which system they would, the results of the doubts which had been working for years in Read's mind are embodied. The Board of Revenue, strange to say, appear to have been in the dark while their able lieutenants were fighting the ryots' battle; and the controversy between them went on for some time longer. Munro had already recognised that permanency of revenue was incompatible with a lease settlement, writing as follows:—

"As, in order to preserve things in this State, a degree of persevering attention will be required, which cannot always be easily found, I would recommend that the gross revenue of all the lands included in the lease settlement, exclusive of service inams, should be reduced twenty per cent.:" an opinion reiterated in the following words:—"But though I see no reason to believe that the actual collections from the country have ever been higher under the Company's Government than at earlier periods, I still think that they ought to be diminished." As an instance of the hold which the ryotwari system had on his mind the following may be quoted.

"I do not think* it is a thing to be desired, that Government should have no tenants but a few great proprietors. They would contribute nothing to the security of the revenue, for they are as likely as the petty farmers to fail, from misfortune or imprudence, and more likely to do so from design; for they are more capable of intriguing and combining together, in unfavourable seasons and times of hostility, for withholding their rents, under various pretexts. On the contrary, by adapting the system of collection to the condition of the inhabitants, the country is filled with a multitude of small independent

farmers, who extend or contract their farms according to their different success. This freedom will in time produce all the various gradations of rich and poor proprietors and large and small farms; and by leaving every man who does not choose to serve another, to set up for himself, the fairest chance and the widest scope is given to the progress of industry and population; the people are themselves happier than they could be parcelled out among great landholders; they are also more easily managed, and the Collector, by being obliged to enter into engagements with them all, is better able to judge of the state and resources of the country."

On this phase of the controversy Mr. Dykes observes that "though* in the first part of this letter his adherence to the original lease system is again declared, the latter portion points out very strongly the manifold advantages of Colonel Read's plan; and Captain Munro evidently looks on the ryotwari system as destined to be the inevitable arrangement under which the district was in future to be managed. In most able language has he fairly and fully demonstrated, that 'this annual settlement,' if founded on a survey assessment, fixed with due regard to the ryot's prosperity, is in fact 'a lease settlement' for the ryots. Let the rates of assessment be low enough, the land must become valuable; there will be no reckless abandonment even of fields taken up only yesterday, still less of hereditary holdings; and the ryotwari system, where suited to and formed, as in Salem, on the customs of the country, must do well.

"Munro's opinions were changing, and the remaining half of his letter to Read, of the 5th September of this year (1797), is the only link now required to complete the chain of reasoning by which he, whom after-times call the father of the ryotwari system, came to think, not only that yearly settlements were best, but that the ryots must also further be left to choose for themselves, and must not be bound to hold for a second year what they do not want,—fields which they find it better not to keep."

It was admitted by both parties that the ryots were poverty-stricken; "the lands ploughed to-day† were left waste to-morrow; the agricultural stock was insufficient; the crops were, to a certain extent, precarious; and the price of grain had fluctuated hitherto, whatever it might do in future. Further, the ryots in general only drew from the land the wages of labour, the land having itself no value in the market; and the number of fields in the hands of one man rarely, if ever, made more than a very small farm; notwithstanding which, the ryots were obliged by their poverty to be constantly altering the extent of these limited holdings. These were realities which all had observed, and reasoning on which, Read had deduced the impossibility of the lease settlement. Munro is therefore asked, could ryots with such inadequate means be bound to hold their lands for a term of years; could such agreements be enforced, however much the ryot had suffered; why remissions were found absolutely necessary, where the number of fields was annually increased or decreased as the ryot thought fit; and if payment were insisted upon, and the ryot a beggar, in such cases, what security could they get to fall back on, seeing that the land had no value;—make the neighbours stand security, and seize their property; or hold the whole village

answerable, and levy jointly? The first would be hard,—would merely ruin the industrious; the latter, it is declared by Read, would be unjust; and it is finally pointed out, that head farmers, or men holding land on a large scale, were rapidly disappearing, whilst the mass of ryots, tilling only a few fields each, was as rapidly increasing."

In his reply to these queries Munro's views as to making ryots jointly responsible for each other are unsound; his views however as to the creation of head farmers are distinct and unmistakeable. "It may be said* that

there never was any class of head farmers in these districts; and as there are none now, it is neither the interest of Government, nor of the people in general, that they should be established. The fair mode of settlement is, that rents should be equal to all men, and that every man should just have as much land as he can cultivate with his own stock."

"Government does not meddle with the affairs of husbandry further than collecting the rents. It, however, may be said, that in doing this from such a number of individuals, its ignorance of their circumstances is often hurtful to agriculture, by making it exact payment where remission ought to have been granted; but that the head farmers, being fully acquainted with the condition of all those under them, would proportion indulgence to the extent of their various misfortunes. It is not certain that they would always make the proper use of their knowledge, and if they did, it would not, after all, make it advisable that the country should be rented by them; for the casual and temporary evils which might arise from the ignorance of the servants of Government, would be nothing in comparison to the lasting injury which the country would sustain from being divided among great landholders.

"Great farmers are more likely to produce poverty than to relieve it, for, in proportion as they increase, small farmers decrease, by being converted into labourers. Though there are properly no great farmers in this country, there are many who are something similar to them. These men, when a poor farmer has not stock enough to cultivate his farm, supply the deficiency, on condition of receiving a share of the produce; but their terms are either originally so hard, or afterwards rendered so by taking usurious advantage of his inability or want of punctuality, that these contracts most frequently terminate in their getting possession of all his little stock, and even insisting on his working for them until he discharges,—which he probably never will,—some real or pretended balance that they have contrived to accumulate against him. His labour is now so much more profitable to them than to himself, that in times of scarcity they will supply him with grain, and endeavour to preserve him, for the same reason that they wish to preserve their cattle. This is merely what often takes place under all governments, but more especially under those which are arbitrary and rapacious. The great farmers, being uncertain how long they may hold their lands, have no motive for improving them, and still less for being anxious about those of the under-farmer; and though they may know that his future prosperity would be beneficial to themselves, they seldom have patience to make the experiment, but follow the shorter road of making the most of him for the present. They feed him when in want, but they prevent

him from becoming independent and able to feed himself. Wherever a country is divided among great farmers, the poor are numerous, because there are then only two classes,—rich proprietors and poor labourers. The more the lands are divided among small farmers who have the means of cultivating them, and the fewer the number of great farmers, the fewer also will be that of the labouring poor, and the less the necessity of supplying them with grain in times of scarcity."

In concluding he formulates in the following language his "opinion* as to the best mode of forming a permanent settlement of the revenue of this country. The lease founded upon this survey having been abandoned, cannot possibly, for many reasons, be re-established as before: its duration, of only one year in most districts, and two in a few, was of too brief a date to admit of any accurate estimate being formed of its probable consequences. It appeared most likely, however, that, though the settlements might always have been realized, yet the condition of the inhabitants would have been little bettered without a considerable reduction in them. The great point in making a settlement is the rate of assessment; all other regulations connected with it are of very inferior importance. It needs no arguments to show, that the lower it is, the better for the farmers. I have proposed such an abatement as, when the cheapness of cultivation and the great returns from the seed are taken into consideration, will be found to leave them in possession of as great advantages as any race of husbandmen in the world. It must not, however, from this be inferred that land will become saleable on a sudden; for the frontier situation of these districts, and other reasons, must long prevent it from generally attaining any value at all, and perhaps for ever from attaining that value which it bears in Europe. The plan which, it appears to me, would be best calculated to secure to the people the fruits of their industry, and to Government a permanent revenue, is comprised under the following heads:—

- "1. A reduction of fifteen per cent. to be made on the lease assessment.
- "2. The country to be rented immediately of Government by small farmers, as at present, every one receiving just as much land as he demands.
- "3. Settlements to be annual; that is to say, every man to be permitted to give up, or take, whatever land he pleases every year.
- "4. Every man to have a part or the whole, of his lands in lease, who wishes it; and in order to encourage the application for leases, all lands held under annual tenures, to be taken from the occupants and given to such other farmers as may demand them in lease, on their paying to Government, as purchase-money, one year's rent for any particular field, or one half-year's rent for the whole farm.
- "5. Villages and districts to be responsible for all individual failures.
- "6. All lands included in the lease should remain invariably at the rent then fixed, after the proposed reduction of fifteen per cent.
- "7. All lands not included in the lease should be rented at the average of the village to which they belong.
- "8. Lands included in the lease, being given up and allowed to be waste for any number of years, should, when again occupied, pay, the very first year, the full rent as before.

"9. All castes, whether natives or aliens, to pay the same rent for the same land.

"10. No additional rent ever to be demanded for improvements. The farmer who, by digging a well, or building a tank, converts dry land into garden or rice-fields, to pay no more than the original rent of the ground.

"11. No reduction of the established rent ever to be allowed, except where the cochineal-plant, mulberry, &c., are cultivated." As Mr. Dykes

observes, "Munro now admitted* that all the advantages of the lease would be secured by the proposed ryotwari system naturally. He no longer thought that annual

changes cannot be expected to produce any good effects, or that as many have failed and will fail under the one mode as under the other. On the contrary, he had been led to think that this liberty, though attended with little loss to the public, is of wonderful service to the farmers; that restrictions can be easily evaded; and that adapting the system of collection to the condition of the inhabitants is the best policy. He did not affirm, as has been urged, that the ryotwari system should be introduced anywhere and everywhere, that it was the grand panacea for all the agricultural ills of India. He was no enthusiast; he had simply been convinced that at present leases could not possibly answer in Salem, however admirable their effects elsewhere."

It will thus be seen that, a few errors in consonance with the spirit of the day excepted, these two gentlemen had worked out, and formulated, what is actually the ryotwari system prevailing at this date in the Salem District. It was not however until a dark cycle had been passed through that the district at last emerged into full enjoyment of the privileges which Read and Munro would fain have bequeathed to it.

The Board, who were ignorant of the changes introduced, desired to be furnished soon with a report on the survey and settlement, as also on the permanent settlement of districts in lease. This was in June 1797, but as Read wished that, if it should be decided whether the ryots would prefer the

annual or lease settlement, both the systems should be tried, and as the Charter gave the ryots the option of choosing either, he desired to give his instructions of December 1796 a trial for some time, and in the meantime invited the opinions of his Assistants on the effects of

the two settlements with reference to the poverty of inhabitants, cheapness of land; high rental of lands fixed at the survey and a variety of other matters. Consequent on the introduction from Fasli 1207 of the ryotwari system foreshadowed in the above charter, under which the ryots were allowed to throw up lands at their option, the revenue of that fasli fell off to the extent of Pagodas 54,049 below that of Fasli 1206 and by upwards of 20,000 pagodas below that of Fasli 1202, which caused much sensation in the Board, who requested to be furnished with full information as to why the settlements in lease were cancelled. Notwithstanding these repeated demands from the Board for a report, and his own wish to explain fully the reasons of the change in the mode of settlements, Read was unable to comply with the Board's requisition, chiefly owing to pressure of other work and his ill-health. The Assistants, however, made their reports in which they

stated that under the annual settlements adopted, the ryots had all the advantages which the Government thought could be secured to them under a lease settlement alone, with the further advantage of having it in their power to accommodate themselves to their circumstances by throwing up each year all such lands as they might not be able to cultivate, and that the ryots had in consequence cancelled their engagements in lease. This was natural, and thus the settlements of 1207 and 1208, during which Read remained, and of subsequent years were "annual," the assessments being those fixed by the survey on the lands. The lease system survived to a very insignificant extent.

Mr. Dykes describes the position as follows:—"The immediate* and expected result of the new agricultural policy was a heavy falling off in the revenue for 1798. Colonel Read, in anticipation, had again written to his Assistants, and requested that they 'would report so fully, on the cause of so great a decrease, as will either prove the expediency or in expediency of the measures that have been taken; that the Board, being thereby enabled to judge of them, it may finally direct our conduct in regard to settlements.'

"The eleventh rule of the ryotwari charter did state that the annual agreements of the ryots were binding on the Government only to the end of the present lease; but in the third rule it was distinctly laid down that the survey, or as Munro calls it, the lease assessment, was fixed 'for ever;' and the ryotwari system was looked on as equally fixed. The people of Salem had good grounds for believing it to be the final settlement of the country, and Read was not justified in considering this still an open question for the Board's decision.

"Munro answered promptly, that the causes of so great a decrease were simple enough. The assessment was high, and hitherto, if a ryot relinquished any of his fields, the assessment on such lands was charged additionally, for the future, on what he kept, as it was considered that he had merely concentrated stock. If he positively could not pay, if the stock had passed into the hands of others, still there was no diminution of the total revenue, for the deficit was collected from the neighbours, whose gains, it was supposed, would, and ought to, if they did not, equal his losses. And some such system was absolutely requisite for the first few years, when the native revenue officials were neither so zealous nor so trustworthy; but now their efforts for the collection of revenue have to be carefully scrutinized and sometimes counteracted.

"The present 'ryotwari' freedom of action was then utterly unintelligible to them, and diametrically opposed to all they had hitherto been accustomed to; and, fearing the result, they were not much inclined to communicate the system in all its free details to the ryots generally; in which they were perhaps partly influenced by the recollection of losses of revenue, and pay stopped in consequence, in times past,—a disagreeable process, that they doubtless reasoned might likewise be a concomitant result in times to come. They had seen it ordered, that the assessment should be fixed lightly, but the revenue should not be sacrificed; and they might think similarly, the ryots are to have perfect freedom, but they must not pay less to Government. Munro, however, foreseeing this, had gone through the whole of his

* Dykes, pp. 166, 167.
Vide Read's letter to Assistants, dated 31st July 1797, para. 7.

* Dykes, pp. 165, 166 to 171.

division, and explained personally to the people what was the real nature of the charter; and states it as his opinion, that the freeing the ryots of the proposed lease restriction was on the whole extremely proper."

In a private letter* dated September 1798, Munro enlarges on the situation as follows:—"The Barahmahal has now been completely surveyed, and the rents of it fixed: they are, on an average, nearly what they were under Tipu; the inhabitants paid the same then as now, but the deficiency of his receipts arose from the peculations of a host of revenue officers. The rents here, as I believe in every other part of India, are too high. This circumstance, joined to the general poverty of the people, is a great obstacle to every kind of improvement, and it has hitherto prevented the lease from being settled. Government have desired it to be made so as to sit light upon the inhabitants; but they were not aware that, in order to effect this, they must relinquish twenty or twenty-five per cent. of the present revenue. This reduction will be recommended to them by every argument that can be thought of; but I am not sure that they will have resolution enough to agree to it. I do not myself approve of attempting to establish a general lease at once over the whole country.

"There are many arguments against such a measure, founded on the poverty, the ignorance, and the manners of the people, which it would be tedious to detail. I rather wish to continue the plan now followed, which consists in letting every farmer please himself: he may take as much or as little land as he pleases every year; he may reject his old fields and take new; he may keep a part or the whole, for one year or twenty, as he finds it most convenient; and as every field has a rate of assessment, which never varies, he knows perfectly what he has to trust to, and that this rent can never rise or fall, but exactly in proportion to the extent of land he occupies. All that is required of him is that he shall give notice, between the 12th of April and the 12th of July, of whatever land he means to relinquish in order that it may be given in these months, which are the principal seasons of cultivation, to any other man who wants it. If he fails in this, he is obliged to pay the rent for the ensuing year. By persevering in this system, the farmers would soon know how much land they could manage, they would cease to abandon whatever fields they had in any degree improved; and this practice, which would answer every purpose of lease, would gradually extend over the whole country. If we endeavour to establish the lease everywhere at once, it could not be permanent; for ignorance and inexperience, both on our side and on that of the farmers, would lead many of them into engagements which they would not be afterwards able to fulfil.

"The Barahmahal contains about six hundred thousand inhabitants,¹ among whom there are above sixty thousand farmers, who hold their land immediately of Government; but as the same man is frequently reckoned two or three times, from having farms in different places, and as a father and son often appear separately, the whole number of independent farmers is probably not above forty-five or fifty thousand. There are not ten men among them who pay one hundred and fifty pagodas of rent (£52 10s.);—

¹ The whole district of Salem apparently is meant here.

the rents of the middling class of farmers run usually from about ten (£3 10s.) to twenty pagodas (£7); so that you see we have no great landholders in this part of India.

"Many causes concur to prevent the existence of such an order of men: the oppression of Government and frequent wars, which hinder the accumulation of property, by fines or plunder; the universal practice of early marriage, and of equal inheritance of all male children, and the simplicity and the cheapness of cultivation. Whenever a farmer's servant saves a few rupees, he buys a pair of bullocks; his plough does not cost him a rupee (two shillings); he rents a few acres from Government, and commences farmer himself. If he is successful, he continues his business; and if he meets with an accident, he sells his cattle (probable value £1 10s.) to pay his rent, and returns to his former employment of common labourer. In such a state of things, it is almost impossible that great landed property can ever be obtained by any one man, unless by fraud or violence.

"The great number of farmers in the Barahmahal necessarily occasions much detail in the management of revenue; but there is no difficulty in it,—nothing is required but constant attention; and where this is given, it is both better for the country and easier for the Collector to receive the rents directly from sixty thousand farmers than by the medium of ten or twelve zamindars or great landholders."

In October 1798, the expected communication from the Board* was received calling for Colonel Read's final report. "The Members of the Board of Revenue in the strongest terms point out how it had been their impression all along, that the annual and temporary settlement for 1794 was to be upheld till progressively supplanted by quinquennial leases, as the survey of each district was concluded; whilst now, to their extreme astonishment, they learn for the first time, after the lapse of no less than four years, not only that neither policy has been carried out, but that the whole lease system, in direct opposition to the opinion of his three Assistants, had been formally annulled, and that, too, on Colonel Read's own responsibility, though such authority was vested in the Government alone. The revenue had fallen short of that for 1794 by £18,900 (nearly two lacs), and even below 1792 as much as £8,750; and for these measures, and this sad result thereof, a minute explanation is peremptorily demanded."

The required explanation, though not far to seek, was apparently never given. The second war with Tipu just then broke out, and Colonel Read and Munro were recalled to military duty. The former never returned to his old charge; but before his return to England drew up and presented to the Board of Revenue a report on the Salem District, which, as summarised by Mr. Puckle, is given below. Munro also never returned to Salem as a district officer; but, taking advantage of a report that the ryotwari system was to be bound up into large farms, he did not leave the district without administering a parting kick to the zemindari system. This was in a letter to Read, the purport of which is very much to the same effect as that to his father in September 1798 which has been given above. There was no one in Salem to assert the merits of the system introduced by Read; for though MacLeod remained behind, he never counted for much in the gradual

* Printed Selections from District Records, pp. 52, 53.

† Dykes, p. 175.

formulation of Read's policy. The way was therefore cleared for assimilating the policy of Madras to that of Bengal and the zamindari system was to blight the Baramahal and Talaghat.

Before proceeding to the consideration of this important phase of district history, it is desirable to give some further details regarding Read's administration; the preceding sketch has been adapted for the general reader; but for the district officer the following details are not without interest. When Captain Read took charge of the district he found that under Tipu it consisted of 27 taluks as follows :—

- | | |
|---------------------|-------------------|
| 1. Salem. | 15. Morapur. |
| 2. Attur. | 16. Kaveripatnam. |
| 3. Shendamangalam. | 17. Virabadrug. |
| 4. Namakal. | 18. Rayakota. |
| 5. Kattuputtur. | 19. Krishnagiri. |
| 6. Paramatti. | 20. Kallavi. |
| 7. Sankagiridrug. | 21. Mattur. |
| 8. Omalur. | 22. Singurapett. |
| 9. Nangapalli. | 23. Tirupatūr. |
| 10. Adamankottai. | 24. Parandapalli. |
| 11. Pennagaram. | 25. Vaniambadi. |
| 12. Dharmapuri. | 26. Kangundi. |
| 13. Tenkaraikottai. | 27. Javadi. |
| 14. Harur. | |

Captain Read, in the first year of his administration, divided these taluks into 36, of which 14 were assigned to Captain Graham, 12 to Captain Munro, and 10 to Captain MacLeod. The names of the taluks and head-quarters of the several divisions were as follows :—

Captain Graham's, or the Northern Division, with head-quarters at Krishnagiri—

- | | |
|------------------|-------------------|
| 1. Krishnagiri. | 8. Singurapett. |
| 2. Jagadevi. | 9. Rayakota. |
| 3. Maharajagarh. | 10. Virabadrug. |
| 4. Vaniambadi. | 11. Kaveripatnam. |
| 5. Parandapalli. | 12. Javadi. |
| 6. Kallavi. | 13. Kangundi. |
| 7. Mattur. | 14. Tirupatūr. |

Captain Munro's, or the Centre Division, with head-quarters at Dharmapuri—

- | | |
|-------------------|--------------------|
| 1. Sankagiri. | 7. Tenkaraikottai. |
| 2. Trichengode. | 8. Harur. |
| 3. Yedapadi. | 9. Dharmapuri. |
| 4. Mallasamudram. | 10. Pennagaram. |
| 5. Nangavalli. | 11. Adamankottai. |
| 6. Omalur. | 12. Kattuputtur. |

Captain MacLeod's, or the Southern Division, with head-quarters at Salem—

- | | |
|----------------------|-------------------------|
| 1. Salem. | 6. Anantagiri Division. |
| 2. Chinnagiri. | 7. Viraganur. |
| 3. Belur. | 8. Kattuputtur. |
| 4. Shendamangalam. | 9. Namakal. |
| 5. Rasipur Division. | 10. Paramatti. |

In Fasli 1204 he abolished the taluks of Jagadevi, Maharajagarh, and Parandapalli in the Northern, and in the next fasli Kattuputtur in the Southern Division. In Fasli 1206 the taluks were rearranged and reduced to 25 as follows :—

- | | |
|--------------------|---------------------|
| 1. Tirupatūr. | 14. Trichengode. |
| 2. Chinnagiri. | 15. Krishnagiri. |
| 3. Dharmapuri. | 16. Kammennellur. |
| 4. Omalur. | 17. Viraganur. |
| 5. Vaniambadi. | 18. Shendamangalam. |
| 6. Kunnattur. | 19. Namakal. |
| 7. Salem. | 20. Paramatti. |
| 8. Belur. | 21. Pennagaram. |
| 9. Attur. | 22. Tenkaraikottai. |
| 10. Rasipur. | 23. Virabadrug. |
| 11. Nangapalli. | 24. Kangundi. |
| 12. Sankagiridrug. | 25. Mallapadi. |
| 13. Yedapadi. | |

These taluks remained unchanged during the rest of his administration. It is not to be supposed that there were as many Tahsildars as there were taluks, as some of the Tahsildars had charge of more than one taluk, with separate pay for each. In the first year of British rule the Tahsildars collected their pay from the ryots themselves; but from the next fasli they were paid from the Government treasury.

The ināms granted to village officers on account of their services having been alienated to persons who had no claim to them, or to such as were unable to do the work required, were ordered to be resumed in Fasli 1206, and it was determined to substitute a percentage allowance according to the rates given in the subjoined table.

List of Payment fixed for Patels and Karnams in the Zillah of Salem.

	Beriz.	Percentage.	Fixed Payment.	
			Patels.	Karnams.
From 1792-3 to 1802.	M.R.S. A. P.	M.R.S. A. P.	M.R.S. A. P.	M.R.S. A. P.
	35 0 0	4 2 8	1 7 4	1 7 4
	87 8 0	3 15 4	3 7 5	3 7 5
	175 0 0	3 12 0	6 9 0	6 9 0
	350 0 0	3 8 8	12 6 4	12 6 4
	700 0 0	3 5 4	23 5 4	23 5 4
	1,050 0 0	3 2 0	32 13 0	32 13 0
	1,160 0 0	2 14 8	40 13 4	40 13 4

List of Payment fixed for Patēls and Karnams in the Zillah of Salem—(Continued).

	Bēriz.	Percentage.	Fixed Payment.			
			Patēls.		Karnams.	
From 1792-3 to 1802.	M. RS. A. P.	M. RS. A. P.	M. RS. A. P.	M. RS. A. P.	M. RS. A. P.	M. RS. A. P.
	1,750 0 0	2 11 4	47 6 4	47 6 4	47 6 4	47 6 4
	2,100 0 0	2 8 0	52 8 0	52 8 0	52 8 0	52 8 0
	2,450 0 0	2 6 4	58 11 2	58 11 2	58 11 2	58 11 2
	2,800 0 0	2 4 8	64 2 8	64 2 8	64 2 8	64 2 8
	3,150 0 0	2 3 0	68 14 6	68 14 6	68 14 6	68 14 6
	3,500 0 0	2 1 4	72 14 8	72 14 8	72 14 8	72 14 8
	3,850 0 0	1 15 8	76 3 2	76 3 2	76 3 2	76 3 2
	4,200 0 0	1 14 0	78 12 0	78 12 0	78 12 0	78 12 0
	4,550 0 0	1 12 4	80 9 2	80 9 2	80 9 2	80 9 2
	4,900 0 0	1 10 8	81 10 8	81 10 8	81 10 8	81 10 8
	5,250 0 0	1 10 8	87 8 0	87 8 0	87 8 0	87 8 0
	5,600 0 0	1 9 10	90 6 8	90 6 8	90 6 8	90 6 8
	5,950 0 0	1 9 10	96 1 1	96 1 1	96 1 1	96 1 1
	6,300 0 0	1 9 0	98 7 0	98 7 0	98 7 0	98 7 0
	6,650 0 0	1 9 0	103 14 6	103 14 6	103 14 6	103 14 6
	7,000 0 0	1 8 2	105 11 8	105 11 8	105 11 8	105 11 8
	7,350 0 0	1 8 2	111 0 3	111 0 3	111 0 3	111 0 3
	7,700 0 0	1 7 4	112 4 8	112 4 8	112 4 8	112 4 8
	8,050 0 0	1 7 4	116 13 0	116 13 0	116 13 0	116 13 0

As to how far these orders were carried out the records are not clear. The old accounts preceding the permanent settlement show that the ināms were continued to Totis, Tundalgars, and Shroffs, though the lands were, in the Survey accounts, entered as under Government, indicating thereby that they had been resumed. As to Karnams and Manigars in the Talaghāt the accounts of some of the villages show that the remuneration was not the same and varied each year; this indicates that some salary system was established; but on what principle is not known. The Permanent Settlement accounts of Mittas in the Bārahmahal show that, even in Fasli 1211, all the village servants were in enjoyment of ināms, and in Fasli 1212 a percentage system was introduced as regarded Karnams and Manigars.

The following remarks appear in one of the statements submitted by Mr. M. D. Cockburn with his jamabandi report for Fasli 1236:—

"The māniam which they formerly enjoyed has been stopt from Fasli 1206, and they were allowed, agreeably to the centage inserted herein on the average of the bēriz of each village. Captain Graham granted to the villages under his management, besides former māniams, a ready-money payment: this was only to the Patēls; but other extra profits or emoluments the Karnams enjoyed. In some of the villages where māniams were not fixed, the centage according to Colonel Read's rule was fixed. Captains MacLeod and Munro fixed the māniams on the bēriz of cultivated and on an estimate of uncultivated land agreeably to the above rule.

"The Patēls were allowed to draw their allowance from their respective villages, but the Karnams (were allowed them) on any one village they chose."

At this time there were no courts of justice, no police, and no engineers. Read was every thing. In June 1792 he represented to the Board that

great inconvenience was felt for want of currency, and obtained permission to establish mints at Krishnagiri and Sankagiridrug; but the mints, failing to work successfully, were given up in the next year. In the same year (1792) a famine threatened this district and the Karnatic. Then Captain Read established two poor-houses, one at Tirupatūr and the other at Pennāgaram, for a short period. He established a system of granting Takāvi, or advances to cultivators, which in those days were absolutely necessary. The country having been subject to the depredations of Chila Naik and other poligars of notoriety Read put down all such lawless characters with a high hand. The severity of one of the punishments inflicted by him will be seen from the following extract from one of his reports to the Board of Revenue:—"I punished one man of a gang lately convicted of driving off the inhabitants' cattle several times to the other side of the Kāvēri by depriving him of his ears." He gave protection to the inhabitants of the Bārahmahal against thefts of cattle, which were then rife, by the establishment of Kāvalgārs. He restored a large number of irrigation works which were then out of repair and constructed a few of which the "Read Sahib Hissa Ēri" near Tirupatūr is one: the name of Captain Graham is preserved in the "Green" or "Green Sahib Ēri" near Krishnagiri, and the "Munro Kuttai" or Munro's guntā, near the head of the Thopūr ghāt in Dharmapuri, shows that Munro was not backward in the good work. Read encouraged the culture of cotton, sugar, indigo and other valuable products, making advances to those who undertook to cultivate them.

Reference has already been made to the fact that on his way home Read drew up at Madras, and presented to the Board of Revenue a long report on the Salem District, in which he gave not only the system and standards on which its survey assessment had been fixed by him, but also a vast amount of statistics, both agricultural and commercial, classified with great care and accuracy and forming most valuable data for comparing the past and present condition of the district.

Read's survey and assessments obtaining to the present day in the unsettled Government villages¹ and in all the permanently settled² villages of Salem and the Bārahmahal, it is necessary that his system should be detailed in full. Special establishments consisting of native subordinates were entertained, who were taught in and charged with this work. On proceeding to a village the surveyor's first duty was to measure the whole of the land under occupation, field by field, noticing at the same time who in each case was the occupant. A further measurement was then made of all lands which were arable but had not been brought under the plough within the memory of man; and when a rough estimate had been made of the remain-

¹ I.e., those villages in which the ryotwar settlement of 1871-1874 was not introduced.

² This is the term used to distinguish those villages held on zamindari tenure, which are called "permanently settled" because as long as they continue zamindari Government cannot alter their peshkash or assessments: as a matter of fact the Zamindar cannot touch the latter except in the way of reducing them and that subject to certain limitations. In the one case of improved water-supply the assessments of such village can be increased. Where, in sales for arrears of peshkash, it may happen that such villages are bought in on account of Government, they are liable to a revision of the assessment like other ryotwari villages.

ing extent included within the village boundaries, viz., jungle or barren waste, mountain or swamp, as well as all land covered by water, standing or running, or set apart for roads, irrigation channels, building ground or any other public purposes, (which lands, however, were measured with more care), the whole area within the limits of the village had been recorded.

The following is a translation of a circular (which has a very feeble ring), issued by Captain MacLeod to his surveyors regarding the measuring of lands:—

“Instructions given for the conduct of the Paimaishdars in Salem by Captain MacLeod, Collector.”

“1. Whoever is employed in the business of surveying lands must be answerable for their measurement and take care that there is no mistake either more or less.

“2. You must survey the lands without practising any deception.

“3. The chain which is fixed for measuring land is correct.

“4. Upon remeasuring of lands, if any difference more or less is discovered no excuse will be admitted, and you must be active in your duty.

“5. You are to deduct all real waste lands, such as are hilly, rocky, as well as those that lie close to the hedges, if there be any, and seem unfit for cultivation.

“6. If there be any $\frac{1}{2}$ or $\frac{1}{4}$ or $\frac{1}{8}$ or $\frac{1}{16}$ part of lands which seem fit for cultivation, and are laid waste under pretence of being stony lands, you should include them in the measurement.

“7. If the person who is employed for surveying lands is clever there will never be a difference of even $\frac{1}{2}$ piece of land more or less.

“8. Uligai Maniams, Ulkandayams, Devadayams, Batta Vartti Maniams, Devastana Maniams and Nandavayams or flower gardens, and also Faldar Maniams, &c., should be measured, and you are not to deduct any ground whatever from the gross measurement.

“9. You are to keep a distinct account of all the lands already, and those that are to be, cultivated: in future there is no occasion to measure lands which are laid waste and totally unworthy of cultivation, for showing even ground (F), but they must be estimated and a distinct account kept showing so many guntas of this kind of land; and if the lands which were not cultivated formerly can now be cultivated you must fix the Tirwa (taram?) according to the best of your judgment; afterwards people will be sent to fix the Tirwa for the villages.

“10. The way to fix the Taram, or class, of the nanja land is as follows: the quality of the land must be considered, also the supply of water, whether it can yield one or two crops in a year, and class the lands accordingly.

“11. In the Salem District the nanja kandayam or tax varies from three-quarters of a fanam to four fanams.

“12. Betel, sugar-cane, plantain and turmeric gardens should be taxed as 1st Taram, but you should never tax immediately.

“13. You must enquire the mamul taxes that have been levied for nut and coconut gardens, and levy the same upon them at present, and at the time of settling jamabandi these taxes will perhaps be increased or decreased.

“14. Particular care must be taken in estimating the repairs of broken lakes, channels and anaikats, and what produce the Sarkar can derive if they are repaired: a detailed account of the same must be forwarded to the Huzur, because advances must be made in future to the inhabitants of such villages. The amount of advances required must be mentioned and when they will be repaid to the Sarkar.

“15. If you can find any proper places for digging and building new lakes, channels and anaikats you should keep account of the same.

“16. Tamarind or any other productive trees that are in the backyards of any inhabitants' houses must be exempted from the account of measurement, and no taxes should be levied upon them.

“17. You should take account of all productive palmyrah trees, and if they are very numerous and difficult to be counted report must be made on that head.

“18. If any ready money collections were omitted in the accounts of former years you must report the same, and, after you receive an order, you may enter them in the account.

“19. If you should hear that any excessive collections have been made, or unjust actions committed either now or in future you must report the same; if you do not, and it should become known through any other means, you will be considered as participating in the same.

“20. It is very bad if you write any false accounts, it is a deception if you put more or less in the account, and is unjust to the inhabitants; this you must consider properly. Such conduct will be punished.”

The different long and square measures adopted in the survey of the different taluks are given below:—

Unirrigated Land.

Mallapadi.
Vaniambadi.
Kunnattur.
Tirupattur.
Krishnagiri.
Virabadradrug.
Kammennellur.

In these taluks a chain of 33 English feet was used, as in Bellary and Cuddapah. 1 square chain = 1,089 square feet, and 40 square chains or guntas = 1 Imperial acre.

Pennagaram.
Dharmapuri.
Tenkarnikottai.

In some parts of these taluks the 33 feet chain, and resulting acre, were introduced, as in the preceding item. In other parts of the taluks the gunta was the measure; it was 24 fathoms square, and the fathom 8 English feet. The gunta therefore is $192^2 = 36,864$ square feet = 846 acre.

Sankagiridrug.
Tribengode.
Omalur.
Yedapadi.
Nangunavalli.

The gunta of 24 fathoms square, the fathom being 8 feet. This gives $192^2 = 36,864$ square feet = 846 acre.

Salem.
Bélur.

The gunta of 64 fathoms square, the fathom being 6 feet $4\frac{1}{2}$ inches. This gives 408^2 or 166,464 square feet = 382 acres.

(The Ballah of Coimbatore.)

Viraganur.
Attur.

The gunta of 36 fathoms square, the fathom being 6 feet $4\frac{1}{2}$ inches. This gives 52,455 square feet = 1209 acres.

Paramatti.

The ballah of 96 fathoms square, the fathom being 6 feet $4\frac{1}{2}$ inches. This gives 374,544 square feet = 86 acres.

Namakal.
Shendamangalam.

The ballah of 96 fathoms square, or 86 acres as in Paramatti; but in some parts 64 fathoms square, the fathom being 6 feet $4\frac{1}{2}$ inches. This gives 166,464 square feet = 382 acres as in the Salem Taluk.

¹ For the measures used in the Balaghat see p. 294 *infra*.

Chinnagiri.
Rāsipūr.

The double gunta or 86 fathoms square, 2 being double the gunta of Attūr, and therefore 2·418 acres. The single gunta of 64 fathoms square, or 3·82 acres as in Salem, and the ballah of 96 fathoms square, or 8·6 acres, as in Paramatti, are also used.

Irrigated Land.

Mallapādi.
Vaniambādi.
Kunnattūr.
Tirupattūr.
Krishnagiri.
Virabadradrug.
Kammēnellūr.

The gunta as in the "Unirrigated."

Ponnagaram.
Dharmapuri.
Tenkaraikōttai.
Sankagiridrug.
Trichengōde.
Omalūr.
Yedapādi.
Nangavalli.
Salem.
Bēlūr.

In some parts the gunta of $\frac{1}{2}$ acre as in the "Unirrigated" land. In other parts the chain was 32 feet and the gunta 1,024 square feet = ·023 acre.

The gunta of 32 English feet square, being 1,024 square feet = ·023 acre.

The gunta of 32 country or 29 English feet square, being 841 square feet = ·019 acre.

The gunta of 9 fathoms square, the fathom being 6 feet 4½ inches. This gives 3,270 square feet = ·0756 acre.

The gunta of 841 square feet as in Salem, except in the lands watered by channels from the Kāvēri where the gunta was measured with a rod of 24 country or 21·7435 English feet. A rod square, or gunta = 473 square feet; and 120 guntas = 1 chey of 1·302 acres.

Paramatti.
Nāmakal.
Shendamangalam.

The gunta of 841 square feet as in Salem. In some parts the rod was 36 country or 32·074 English feet, and the square rod or gunta = 1,062 square feet = ·024 acre.

Rāsipūr.
Chinnagiri.

N.B.—The gunta is sometimes called kuli, and the ballah, vallam. The bām or fathom is called "Mār."

With the survey the assessments also were fixed. The several taluks were surveyed as follows :—

Tirupattūr	in 1203	Salem	in 1205
Chinnagiri	in 1204	Bēlūr	
Dharmapuri		Attūr	
Omalūr		Rāsipūr	
Vaniambādi		Nangapalli	
Kunnattūr		Sankagiridrug	
		Yedapādi	

Trichengōde	in 1205	Paramatti	in 1206
Krishnagiri		Ponnūgaram	
Kammēnellūr		Tenkaraikōttai	
Viraganūr	in 1206	Virabadradrug	in 1207
Shendamangalam		Kangundi	
Nāmakal		Mallapādi	

The following is the summary of Colonel Read's report on the settlement of Salem, referred to above, by Mr R. Kaye Puckle, C.S., by whom the following introductory remarks were written :—

"Colonel Read's report is the only complete account of the original settlement of the district to be found in the Salem records. This report, though very full, and written with great ability and research, is so overlaid with revenue terms in Tamil, Kanarese, and Hindustani, with calculations in money and measures no longer in general use, with topographical descriptions of a country now better known from maps, and with treatises on subjects but indirectly connected with the settlement, that its utility as a book of reference is almost lost to those who have not time to study it, or to search for the valuable statistics and curious information it contains.

"To render it therefore easier of reference, topographical descriptions, statements of no present value, extracts from standard works, &c., &c., have been omitted; the useful tables have been rewritten; figures denoting measurements, grain, or money have been converted into acres, Madras measures, rupees, annas and pice; English equivalents for native terms have been inserted; and the bare report is given (curtailed of all that does not immediately relate to the settlement or to the condition of the country early in the present century) with the addition of foot-notes to illustrate the meaning, or to explain any marked discrepancy between the former revenue system and that of the present day."

"A knowledge of the situation, extent, divisions, and description of the country, being material in the administration of its affairs, the first settlements were no sooner completed, and other revenue matters put in train, than I entered upon a geographical survey in January 1793, and in August following I had the pleasure of presenting your Board and Government with maps of all the districts; but as these were only sketches, and inaccurate from the slender means and haste with which the survey was executed, I began another in August 1794 with proper instruments, and upon a much larger scale. From its being impossible for me to prosecute a business of that nature and pay due attention to the many other duties of my station, I could only propose to set it on foot, and employed Mr. Mather, a professional Surveyor, to carry it on. That proved a very arduous undertaking, principally on account of the unhealthiness of the hills, but fortunately Mr. Mather survived repeated attacks of the hill fever and finished his survey.

"2. As exhibiting the aspect of the country in respect to hills, plains, woods and rivers, the true shape and extent of districts, and as containing every village and tank in them, it is one of the most particular surveys of the kind in India, and probably one of the most correct. When it is considered that it is done upon a scale of one inch to a mile, that the districts contain above 6,000 square miles, and that it was completed within four years and a half, it will appear to be a singular proof of what can be done by an individual who exerts himself in the service of his employers.

"[Here follows a description of the position and general aspect of the Salem District. Also comparative tables of hills and distances, and lists of rivers and roads, on account of the general character of the climate, the prevalent diseases, the mode of treating them, &c.]

"22. I divided the country¹ ceded to the Company into three divisions or collections, and consigned the immediate charge of them to my three Assistants,² that, freed from the ordinary routine of business, I might have the more time for the general direction of affairs, and the variety of investigations comprehended in my survey, and proposed system of revenue.

"23. When this country was ceded to the Company, that part of it south of the Toppaiyar (Thopai river or Vepadiar) was composed of 8, and that north of the river of 18, districts.³

"24. Some of these being too large, and others too small for tahsildaries, districts or sub-collections of land rent, the larger were divided into two, three or four parts, and as many of the smaller were joined together as appeared most convenient for the purpose. The Board of Revenue, observing material difference in the collections, ordered a new arrangement in 1796.

"[Here follow lists of villages and places in which excise duties were levied, the estimated area of Government lands, &c.]

"101. I was at a loss, from having no precedent or example for a guide in this novel undertaking, how to enter upon it, and every step I took presented fresh difficulties; but by perseverance they were gradually surmounted, and in June 1793 I had the honour of submitting the result of my labours in a report on the principles I had devised for regulating a land assessment. The dryness of the subject, the method in which it was necessarily treated, and other defects, make it tedious in perusal, but the principles therein laid down are just, and are the grounds of the survey that has been made; though it has been necessary in the valuation of lands to modify these principles, by the combination of other circumstances with the intrinsic value of the soil.

"107. There are about 50 different coins current in the Ceded Districts, but the following are the only ones used in accounts⁴ :—

¹ The country thus ceded in 1782 comprised the Talaghat and Barahmahal Divisions, or all the Salem District except the Talaghat (the present Hosur Taluk) which was also ceded in 1799.—R.K.P.

² Viz., the Southern Division, or all Attur and parts of the Namakal, Salem and Sankugiri Taluks to Captain MacLeod; the Centre Division, or all Dharmapuri and parts of the Namakal, Salem, and Sankugiri Taluks, to Captain Munro; the Northern Division, or all the Krishnagiri, Tirupattur, and Uttankarai Taluks, to Captain Graham.—R.K.P. (So Mr. Puckle writes, but this is incorrect, e.g., part of Uttankarai belonged to Munro—vide *supra* p. 240.)

³ The Talaghat and the Barahmahal.—R.K.P.

⁴ The figures here given cannot be reconciled to each other. If the cash be taken as the unit, and 986 cash are worth 1 rupee, the star pagoda is worth Rs. 3-10-5 $\frac{1}{2}$. If the Kantiraya fanam be taken as the unit, and one fanam is worth 300 cash, or 4 annas 10 $\frac{2}{3}$ pice, the Company's rupee is worth 976 cash, and the star pagoda 3,558 $\frac{1}{2}$ cash or Rupees 3-10-2 $\frac{1}{2}$. But if the star pagoda of 12 Kantiraya fanams be taken as the unit, and valued as customary at 3 $\frac{1}{2}$ rupees, the Kantiraya fanam is worth 4 annas 8 pice, or 3 $\frac{1}{2}$ Maili fanams of 80 cash each, as given in the statement. The want of uniformity in the

1	Maili or Company's Cash.																		
8 $\frac{1}{2}$	1	Anna or 16 part of a Gopali fanam.																	
18 $\frac{1}{2}$	2 $\frac{1}{2}$	1	Anna or 16 part of a Kantiraya fanam.																
80	9 $\frac{1}{2}$	4 $\frac{1}{2}$	1	Maili or silver fanam.															
150	16	7	1 $\frac{1}{2}$	1 Gopali fanam.															
300	37	16	3 $\frac{1}{2}$	2 $\frac{1}{2}$	1 Kantiraya fanam.														
386	121 $\frac{1}{2}$	52	12 $\frac{1}{2}$	7 $\frac{1}{2}$	3 $\frac{1}{2}$	1	Company's Rupee.												
1086	133 $\frac{1}{2}$	58	13 $\frac{1}{2}$	8 $\frac{1}{2}$	3 $\frac{1}{2}$	1 $\frac{1}{2}$	1	Pondicherry Rupee.											
1300	160	75 $\frac{1}{2}$	16 $\frac{1}{2}$	10	4 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 Gopali chakram.										
3000	369	160	37 $\frac{1}{2}$	23 $\frac{1}{2}$	10	3	2 $\frac{1}{2}$	2 $\frac{1}{2}$	1	1 Kantiraya chakram									
3600	443	192	45	28	12	3 $\frac{1}{2}$	3 $\frac{1}{2}$	2 $\frac{1}{2}$	1 $\frac{1}{2}$	1	1 Star pagoda.								

"[Here follow detailed accounts of the weights and measures in use in Salem, the native system of chronology, the sub-division of lands into wet, dry, and garden, treatises on matter, earth, water, air, &c.]

"166. An equal division of the gross produce between the raiyats and the Government being the custom all over India, half the produce was taken in these districts as the basis of assessment.¹

"Previous to the division of the crops, there are commonly certain deductions made from the gross produce before and after threshing, also before and after measurement, as fees for civil, religious, judicial, municipal, rustic, and even domestic services, likewise for alms to devotees and other privileged mendicants. Originating wholly in local custom, these deductions are regulated differently in every two villages, upon the land, the produce, or ploughs. Part of them being public, and part of them private charges, they may be considered as no material deduction from the Government or raiyat's share.²

relative values of the other figures is probably owing to their conversion into the nearest Tamil fractions of annas and pice, and to great accuracy having been disregarded so long as the number of cash in the Maili and Kantiraya fanams and in the star pagoda were relatively correct. In the following pages the pagoda has been converted into rupees at 3 $\frac{1}{2}$ rupees to the pagoda; the Kantiraya fanam at 4 annas 8 pice, or 12 to the pagoda; the Maili fanam at 1 anna 3 pice, or 45 to the pagoda; and the cash at 80 to the Maili fanam or 3,600 to the pagoda.—R.K.P.

¹ In this and the following ten paragraphs Colonel Read describes the revenue system that he found existing. This equal division however applied only to the dry crops and to crops grown on ordinary tank-irrigated lands. Vide paragraph 168.—R.K.P.

² These fees known as svatantram became a *bond fide* charge on the raiyats when grain rents were abolished by the English Government; for the assessment was based on a division of the gross produce, without reference to fees or charges, which though customary, were no doubt regarded by our Government as optional on the part of the raiyats.—R.K.P. M.R.Ry. Venkata Subba Rao has unearthed the following letters which show the nature and extent of the deductions on this account from the raiyats' produce in the Barahmahal and Talaghat Divisions :—

"DEAR SIR,

"When I was working about expenses of cultivation at Dharmapuri some months ago I made out long detail about the division of the crops, vartanas, &c., Centre Division. but I found such various modes almost in every village that I saw no possibility of reducing them to any regular standard.

"Swatantrams, vartanas, miras and raiyats is (sic) I believe only the same thing expressed in different languages. The division of the paddy crops in my district is in general as follows :—

" 167. Rents in kind are most common where money is scarce, but in countries where that cause is removed, they may be necessarily continued from the precariousness of the crops. The raiyats prefer rents in kind when grain is cheap,

LAND RENTS IN KIND.	Sarkar.	Ryot.	Total.
Sankagiridrug	6	4	10
Omair	5	5	10
Dharmapuri, Tenlaraikottai, &c.	4	6	10

" All deductions are made before the division except what is called Kayam or fixed mēra, which the ryot pays from his own share to five persons in nearly the following proportions per plough :—

	Kandagam.	Coor.	Balla.
Smith	0	1	4
Carpenter	0	1	4
Toti	0	1	4
Barber	0	0	12
Washerman	0	0	12
Total on 1 plough	0	5	4

" The common mēra is called the 12 because it never exceeds that number, but often falls short of it; in dry grain it is usually distinguished by the appellation of Rasi and in wet by that of Binda kharch.

Binda of two candis bijavari of paddy—

	Smith	Carpenter	Toti	Nirkatti	Barber	Washerman	Potmaker	Peon or Kaugani	Swamis	Pillari	Perumal	Ishwar	Mari	Coor.	Balla.
1 Binda.	1	1	2	1	1	1	1	1	1	1	1	1	1	19	8
Total of 2 candies	13													19	8
Do. of 1 candi	6½													9	12

" The above is from an account made out for 2 candies, viz., 1 watered by tanks and 1 by wells.

Charity on 1 candi seed—

	Smith	Carpenter	Toti	Deo	Nirkatti	Fakirs, Dāsaris, Jungums, &c.	Coor.	Balla.
	0	0	0	0	0	0	10	0
	0	0	0	1	0	0	0	0
	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0
Add Binda above	0	0	0	0	0	0	13	0
Total Binda and charity kharch on 1 candi seed,	0	0	0	0	0	0	13	0
Candi	1	2	12					

¹ Mr. H. E. Stokes observes that this entry clearly ought to be 1½ ballas and not 1 a balla.