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MADRAS RECORD OFFICE

Government of Madras

Revenue

DEPARTMENT

G.O. No.	441	Press <i>Original</i>
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20TH JUNE 1888, No. 441, REVENUE.

GOVERNMENT OF MADRAS.
REVENUE DEPARTMENT.

READ—the following Proceedings of the Board of Revenue (Revenue Settlement, Land Records and Agriculture), dated 11th May 1888, No. 211 :—

W. WILSON, Esq., M.A., C.S.

Read—the following letter from E. B. HAVELL, Esq., Superintendent, School of Arts, to the Commissioner of Revenue Settlement and Director of the Department of Land Records and Agriculture, dated Madras, 5th May 1888, No. 227 :—

With reference to G.O., dated 24th October 1887, Mis. No. 6411, Revenue, I have the honor to submit my report on the arts and manufactures of the Malabar and Coimbatore districts.

2. *Cotton weaving*.—There is very little in this industry to call for special remark. The following may be noticed :—

Colored cloths.—At Bhaváni in the Coimbatore district about 60 families weave inferior colored cloth worn by females. In Coimbatore, 100 families weave a dark-red cloth worn generally by Mahomedans as a head handkerchief or upper cloth ; it is woven with white stripes.

White cloths.—Coarse white cloths worn by ryots are woven in villages all over the districts ; about 500 families in Coimbatore town weave superior white cloths with brocaded ends, but they are not to be compared with the finest manufactures of Madura and other places. Common white and colored cloths are also made at Kollegál. The weavers number about 382 families.

3. *Cotton carpets*.—Fifteen families at Bhaváni weave cotton carpets. Their productions are very glaring in color on account of the cheap bazaar dyes which are commonly used. The best native designs, too, are generally spoilt by the introduction of some common European pattern badly arranged. Bhaváni is said to have been once famous for its dyes ; but the art seems to have been lost, for indigo is the only dye which is prepared locally. Country thread is nearly always used for the warp, while English thread is preferred for the weft. The explanation given is that English thread is not strong enough to be used as warp. This practice is just the reverse of that which is usually adopted for cotton cloth weaving. Another point to be noticed is the custom of arranging the warp for cotton carpets perpendicularly ; this entails a rather awkward arrangement for working the “healds” of the loom, but probably when the pattern is intricate it is, on the whole, the most convenient method. There can be no doubt, however, that for the commoner patterns of simple stripes, the horizontal position saves much time ; it is seldom adopted, probably because the weavers’ houses are, as a rule, too small to admit of it.

4. *Silk weaving*.—In Coimbatore town a few families weave silk turbans and cloths of ordinary quality. Fifteen families at Kollegál are engaged in the same industry. Their cloths are generally of plain crimson color (either Cochineal or lac dye) with the ends simply brocaded ; all the specimens which were shown to me were badly woven and not remarkable in any other respect. Common bazaar dyes seem to be now the most popular ; formerly it is said the town was noted for the fineness of its lac dye. I append a memorandum on the silk culture carried on in the taluk prepared from the notes kindly supplied to me by M.R.Ry. K. Subroyer, Sheristadar of Kollegál.

5. *Printed cottons*.—At Tirupúr and Dhárápúram in the Coimbatore district, a few families make rough palampores and other chintzes of a common description.

6. *Grass-mat weaving*.—The Pálghat mats are well known. The best are made in several villages near the town of Pálghat; but common ones are made in many places in both districts. The mats are woven with the split stalks of *Cyperus pangorei*, a sedge which grows in the locality. The female members of the family generally prepare the sedge for weaving by dexterously splitting it into about four strips and at the same time removing the pith from the inside. These strips are laid in the sun and when dry are ready for weaving unless it is desired to color them—a deep red is produced by boiling the strips in water with Sappan wood and Kasa leaves (*Memecylon edule*, Roxb.). Black is obtained by steeping strips which have been already dyed red in a mixture of wood ashes and black mud taken from the beds of tanks. Yellow from turmeric is sometimes used; but it is not permanent. The mats are woven with much care; it is said that a good mat will hold water for 24 hours; even the strings forming the warp are prepared by the weavers themselves from country hemp in preference to the cheap twine which they can obtain in the bazaars.

7. *Gold and silver work*.—The gold ornaments in the Malabar district, especially those worn by Nayar and Tier females, are very fine; in fact I have seen none finer in any part of India. The drawings, which I forward herewith, will give a better idea of them than a written description. Figures 1, 2, 3 and 4 show one type, necklets made up of a repeat of some highly conventionalized form such as a tiger's tooth (figure 1) or cobra's hood (figure 2) stamped from a die and finished by chasing. The central link in figure 3 is the tali or marriage token. The other type is made up of minute plates and wires and pellets of gold soldered on to a wedge-shaped foundation as shown in figures 5, 6, 7 and 8. The fringe of gold pendants, which most of the patterns have, has a peculiarly light and graceful effect which the drawings do not express. Figure 7 shows an elaborate piece of work which, it is said, occupied a workman for three months; figures 5, 6 and 8 are, however, better designs. The necklets are tied on by a silk thread connecting all the links and are generally finished at either end by a tassel as shown in figure 9. Figure 10 is an ornament worn by Moplah women. It consists of a number of chains, the links being thin plates of gold pierced or otherwise ornamented, which are arranged in rows and attached at either end to an ornamental plate of gold. It is not strictly speaking a neck ornament, as it is unusually long, falling right over the bosom like a native flower garland. Figure 9 is another Moplah pattern, a simple but effective arrangement, set with rubies and emeralds. In the Coimbatore district, the silver ornaments worn by the Vellala caste are also noteworthy. Figure 11 is the type of wristlet worn, but such a fine specimen is not often met with. It is worked in the same way as the gold ornaments (figures 5, 6, 7 and 8). Figures 12 and 13 show two kinds of armlets. The pattern of the first is probably suggested by the shape of the garlic bulb, but it is called by the fanciful name of "parrot's beak;" the other consisting of small hollow cylinders generally strung together in a double row, sometimes plain and sometimes with ornamental ends (as in the example), may have been derived from the practice of wearing receptacles for charms to protect the person, though the intention in this case is now lost sight of.

8. *Brass-smiths*.—Kunhimangalam and Cherupalcheri are the chief places in the Malabar district for brass-smith's work. The workmen are exceptionally skilful in casting vessels of all kinds, lamps, &c., especially large cooking vessels, often 5 or 6 feet in diameter, called "Urutes" (figure 14), which are used at great festivals. The shapes of the various vessels are interesting and characteristic. Figures 15 and 16 are two forms of water vessels in common use. Figure 17, a hand lamp, is suggestive of classic design, while the temple lamp, figure 18, might call to mind the seven-branched candlestick sculptured on the arch of Titus. Figure 19 is an ornamental stand between three and four feet high, used at the marriage ceremonies of Moplabs to hold *pán supári*. In the Coimbatore district, there are about 50 families of brass-smiths at work at Anapalayam near Tirupúr. They make bell metal gongs and trays besides the ordinary domestic utensils. The gongs seem to be made of the ordinary native composition of four parts copper to one of tin; they are very roughly hammered

and badly finished. All the work turned out is of an inferior description. In Coimbatore town, there are about 45 families of ordinary workmen.

9. *Black-smiths, Carpenters and Wood carvers*.—They are the ordinary workmen found in every district. Iron is smelted in a few jungle villages in the Walawanád taluk of Malabar, and Bhaváni and Satyamangalam taluks of Coimbatore; but the industry seems to be fast dying out. In wood carving, there is nothing worth noticing in either district.

10. *Lapidaries*.—About ten families at Chettipalayam, a village near Tirupúr in the Coimbatore district, work crystals for spectacles and make crystal and glass beads and various kinds of ornaments, lingams and other sacred symbols and images. The process is exceedingly simple like all native processes, but the work turned out is neat and well finished. The crystals, &c., are ground on emery discs which are prepared as follows:—Corundum, which is said to be found in the neighbourhood, is first pounded up to any desired degree of fineness, a sufficient quantity of lac to form the disc is melted up and mixed with the powdered corundum; as the lac cools, it is flattened out to a circular shape on a stone which has been first sprinkled with a little more of the powder to give the surface of the disc the proper texture. A number of discs are prepared in this way with corundum powdered more or less finely to suit the quality of the work. They are attached by a little melted lac to the ordinary native lathe which is worked with a bow in the ordinary way except that the crystal worker turns the lathe with the right hand and works with the left and does not, like the carpenter or metal worker, employ an assistant. The discs are of course kept wet while the crystals are being ground. Smooth wooden discs are used for the final polishing processes, the crystals being worked with water and a paste made of corundum very finely ground. Crystals are procured locally and from the surrounding districts. The amethysts found at Vallam near Tanjore are sent to Chettipalayam to be polished. The workmen, however, are not particular in choice of materials; when they have no special order on hand, they will use any colored pebble or pieces of broken glass to make up into ornaments.

11. The Coimbatore District Manual states that good gunny of sunn hemp is manufactured in some of the villages situated in the north of Erode and south of Bhaváni taluks; but I could obtain no information in those localities regarding the industry. It has probably died out.

12. I append a detailed statement giving particulars of the number of workmen and the industries in which they are engaged, and also the memorandum on silk culture referred to above:—

ENCLOSURE No. 1.

Place.	NUMBER OF FAMILIES.					Other particulars.
	Cotton weavers.	Goldsmiths.	Carpenters.	Blacksmiths.	Potters.	
<i>Malabar district.</i>						
Calicut	..	28	14	16	..	Four carpenters can do ordinary carving. Sixteen families of ordinary brass-smiths and four families of skilled workmen who can cast images, lamps, &c. (Basel Mission Weaving Establishment and Tile Works).
Cannanore	116	37	13	17	..	<i>Weavers.</i> —Twenty-four families make inferior white cloths; ninety-two families inferior colored clothes; forty-three families of leather workers; four families of brass-smiths. (Basel Mission Weaving Establishment).
Cheruplacheri	..	3	12	7	..	Three families of brass-smiths who can cast lamps, images, &c., and do ornamental work.
Kunhimangalam	30	2	..	4	12	Twenty families of skilled brass-smiths who can do all kinds of cast and beaten work.

Place.	NUMBER OF FAMILIES.					Other particulars.
	Cotton weavers.	Goldsmiths.	Carpenters.	Blacksmiths.	Potters.	
Malabar district—cont.						
Pálghat.. ..	47	232	207	54	140	Cotton weavers.—Inferior white cloths. Seventeen families of grass-mat weavers. Nineteen families of ordinary brass-smiths.
Odavanur	..	..	..	..	..	
Manjalur	..	..	..	..	..	
Yedatarai	..	..	..	..	..	Villages near Pálghat where grass mats are made. Odavanur and Manjalur, ten families each. Yedatarai, about six families.
Tellicherry	65	30	38	20	..	Cotton weavers.—Inferior white cloths. Four families of ordinary brass-smiths. (Basel Mission Weaving Establishment).
Coimbatore district.						
Bhaváni	85	9	6	4	6	Cotton weavers.—Inferior white and colored cloths; fifteen families of cotton carpet weavers; four families of ordinary brass-smiths.
Coimbatore	600	60	95	50	60	
Dhárápúram	24	25	15	13	24	Cotton weavers.—About 500 families make white laced cloths of fairly good quality, the remaining 100 weave a closed striped cloth worn chiefly by Mahomedans. Five families of silk weavers, ordinary work. Common grass mats, fifty-five families; twenty-five carpenters can do ordinary carving; fifteen skilled workmen; fifty families of leather workers.
Kollegál	382	22	20	4	7	Cotton weavers.—Inferior white cloths. Thirty families of leather workers; seventeen families of the dyer's caste making inferior palampores.
Tirupúr	60	5	5	4	4	Cotton weavers.—Common white and colored cloths. Ten families of silk weavers making cloths of ordinary quality; four families of ordinary brass-smiths.
Villages near Tirupúr—Anapalayam	..	..	..	..	..	Cotton weavers.—Chiefly inferior colored cloths. Five families of the dyer's caste making inferior palampores.
Chettipalayam	..	..	..	..	..	About fifty-four families of brass-smiths, of which thirty-six families do plain beaten work; eleven families make gongs, trays, &c., of beaten bronze; seven families cast chumbus, lamps, images, &c.
						Ten families of lapidaries making crystal spectacles, ornaments, lingams and vighrams.

ENCLOSURE No. 2.

SILK culture in the Kollegál Taluk of Coimbatore.

Mode of cultivating the mulberry plants.—In the rainy season, immediately after the fall of rain, fields containing black soil or clay are ploughed 4 or 5 times into furrows, and the soil loosened. On another fall of rain, mulberry cuttings each one foot in length are planted in small pits a yard apart in the same manner as sugarcane are planted. Within two days these cuttings begin to take root and to sprout. At this time the plantation is weeded and the soil around the plants broken up and fresh earth mixed therewith. At the end of 4 months the plants grow to perfection.

About the rearing of silk-worms.—One seer of cocoons is usually bought for one rupee. They are laid in large bamboo trays (resembling sieves) which are suspended by ropes for eight days out of the reach of rats and ants. On the ninth day the moths begin to come out of the cocoons. They are at once removed to another bamboo tray in which they are kept for one day. Next day the male moths are taken out and thrown away. Before the evening of that day female moths lay their eggs and the next day they are also removed from the trays and thrown away. The trays are then hung about the roof and covered with thin cloth to protect the eggs from flies, ants and lizards. On the seventh day after the eggs are laid, the silk-worms begin to

come out. At this stage the worms are fed with small cuttings of tender leaves of mulberry plants five times in the day and five times in the night. Thus they are fed for seven days. On the eighth day they discontinue feeding and lie down without moving. In this state they are said to be attacked with fever. On the morning of the next day they recover and are fed as before with small cuttings of mulberry leaves. In this way they are fed for four days. Then they are attacked with "fever" a second time and discontinue feeding. Next day they are again fed as usual. After the lapse of four more days they are attacked with "fever" a third time. Next day they recover as usual and are fed with full-grown mulberry leaves for four days longer, when they are attacked a fourth time. At the time of the first "fever" the worms in one tray are transferred to two trays. On the second attack the worms in two trays are removed to eight trays, for the third "fever" they are removed to sixteen trays and for the fourth to thirty-two trays. In four days after the fourth attack the worms grow large and change color from white to purple. At this stage they discontinue feeding altogether and are removed to bamboo tatties called "*chendrigai*." Three days afterwards they begin to spin cocoons. During the process the tatties are exposed to the morning sun at sunrise for about half an hour and then hung up to the roof inside the house. In two days more the cocoons are collected in bamboo baskets; a sufficient number are laid aside for a fresh propagation and the rest are subjected to a steaming process to kill the chrysalides. The silk is unwound from the cocoons by putting them in a chatty with boiling water and a few cleaning nuts (Ponnalngai) and attaching the ends of two or more cocoons to a light wheel turned by hand. The cleaning nuts probably serve as a solvent for the natural gum secreted by the silk-worm for building the walls of his cocoon together. There does not appear to be any specific disease prevalent in the taluk among the silk-worms. They are said to be affected in abnormal seasons of heat or rain, but not to such an extent as to produce a marked loss in the quantity of silk. The following table shows the average price of raw silk per maund during the last ten years:—

Year.	Average price.		
	RS.	A.	P.
The price of one maund of raw silk in the year July 1879 to June 1880	130	0	0
The price of one maund of raw silk in the year July 1880 to June 1881	140	0	0
The price of one maund of raw silk in the year July 1881 to June 1882	125	0	0
The price of one maund of raw silk in the year July 1882 to June 1883	120	0	0
The price of one maund of raw silk in the year July 1883 to June 1884	100	0	0
The price of one maund of raw silk in the year July 1884 to June 1885	90	0	0
The price of one maund of raw silk in the year July 1885 to June 1886	110	0	0
The price of one maund of raw silk in the year July 1886 to June 1887	140	0	0
The price of one maund of raw silk in the year July 1887 to February 1888	130	0	0

The price is said to fluctuate according to the increase or decrease in the importations of China or other silk.

LIST of the villages in which silkworms are reared.

	Number of ryots rearing silk-worms.
1. Allalby	100
2. Kunthore	40
3. Chilukanadi	10
4. Thagarapuram	30
5. Hosamalinghi	30
6. Therampalli	15
7. Uttampalli	10
8. Kunakalli	30
9. Meelur	10
10. Mudigundam	20
11. Kongaralli	100
12. Kannur	40
13. Mangalam	50
14. Thondinthuvadi	20
15. Chikkindunadi	5
16. Polliem	30
17. Kariyanapuram	5

List of the villages in which silkworms are reared—cont.

							Number of ryots rearing silk-worms.
18. Kimmellipuram	...	...	...	...	...	...	5
19. Kodipuram	...	...	...	...	...	...	5
20. Chennalinganhalli	...	...	...	...	...	...	5
21. Ikkadalli	...	...	...	...	...	...	10
22. Mathipuram	...	...	...	...	...	...	5
23. Hanur	...	...	...	...	...	...	5
24. Basthipuram	...	...	...	...	...	...	20
25. Honderbalu	...	...	...	...	...	...	5
26. Jakkalli	...	...	...	...	...	...	10
27. Thimmarajapuram	...	...	...	...	...	...	5
28. Manduvanalli	...	...	...	...	...	...	10
29. Aruvanapuram	...	...	...	...	...	...	20
	...	...	...	...	...	...	10
Total	...	...	...	...	...	...	655

Resolution—dated 11th May 1888, No. 211.

Submitted for the information of Government.

2. From the drawings submitted by Mr. Havell, it will be seen that some of the Malabar and Coimbatore jewellery is very beautiful in design and in workmanship. It is suggested that when a sufficient number of specimens of this and other work have been collected and figured, they should be lithographed and published in the form of an album.

(True Copies and Extract.)

(Signed) P. RAJARATNA MUDALIAR,
Secretary.

To the Secretary to Government, Revenue Department,
Copy to the Collector of Coimbatore, with diagrams (?), to be returned.
" to Mr. Havell, of Malabar.

ORDER—dated 20th June 1888, No. 441, Revenue.

Miscellaneous.

His Excellency the Governor in Council has read Mr. Havell's report with interest.

2. The Government are of opinion that the drawings of native jewellery, &c., might with advantage be forwarded, with an explanatory article which Mr. Havell will no doubt be able to draw up, for publication in the *Indian Art Journal*. The album referred to by the Board would then be unnecessary.

3. Proposals for Mr. Havell's next tour should be submitted at an early date. The Government hope that with another tour he will be able to complete the survey of the Presidency, and that he will then be in a position to compile an account of the industries and arts of Madras.

(True Extract.)

(Signed) J. F. PRICE,
Secretary to Government.

To the Commissioner of Revenue Settlement, Land Records and Agriculture,
,, the Educational Department,
,, the Editors' Table,
with diagrams returned.

Exd. W. H. French.

90 Copies.

Original

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G.O., 20th June 1888, No. 441.

JUNE.

Arts and Manufactures of the
Malabar and Coimbatore Districts.

Passing orders on Mr. Havell's report on the

REVENUE DEPARTMENT.

1888.

Board of Revenue

(Revenue Settlement, Land Records
and Agriculture),

MADRAS.

No. 375



Printed June th

Refd -

Proceedings, 11th May 1888, No. 211.

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which has 13 June 14 June

Submitted that this may
be placed on the S.T.

Submitting, with remarks, for information of
Government, Mr. Havell's report on the arts
and manufactures of the Malabar and Coimba-
tore districts.