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ANTHROPOLOGY.

Eurasians of Madras and Malabar ;
Note on Tattooing; Malagasy-Nias-Dravidians;
Toda Petition.

With Ten Plates.

BY
EDGAR THURSTON,
SUPERINTENDENT, MADRAS GOVERNMENT MUSEUM.

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CONTENTS.

	PAGE
EURASIANS OF MADRAS AND MALABAR	69-114
NOTE ON TATTOOING	115-118
MALAGASY-NIAS-DRAVIDIANS	119-127
TODA PETITION	128-130

ANTHROPOLOGY.

EURASIANS OF MADRAS CITY AND MALABAR.

It must be explained, at the outset, that my subjects for measurement and investigation were, with a special object in view, taken from the poorer classes, including the poorest of the poor, who feel more keenly than their more prosperous brethren the struggle for existence and the pinch of poverty, and whose physique I was specially anxious to gauge correctly.

I learn from Sir W. Hunter's 'Brief History of the Indian People' that the first modern Englishman, known to have visited India, was Thomas Stephens, Rector of the Jesuits' College in Salsette, in 1579. The name of the first Eurasian has not, in like manner, been handed down to posterity. The term Eurasian (Eur-asian) may, after the definition in 'Hobson-Jobson,'¹ be summed up as a modern name for persons of mixed European and Native blood, devised as being more euphemistic than half-caste or half-breed, and more precise than East Indian. According to Stocqueler (*Handbk. Brit. India*, 1854) the name Eurasian was invented by the Marquis of Hastings. By 'Ali Baba' the Eurasian is dismissed, with playful satire, in the following terms: "The Native papers say 'deport him'; the white papers say 'make him a soldier'; and the Eurasian himself says 'make me a Commissioner, give me a pension.'" In the 'Cyclopædia of India' Dr. Balfour defines East Indian as "a term which has been adopted by all classes in India to distinguish the descendants of Europeans and Native mothers. Other names, such as half-caste, chatikar, and chi-chi are derogatory designations. Chattikar is from chitta (trousers) and kar (a person who uses them). The Muhammadans equally wear trousers, but concealed by their long outer gowns. The East Indians

¹ Yule and Burnell.

² 'Twenty-one Days in India.'

are also known as Farangi (Franks), a person of Europe. The humbler East Indians, if asked their race, reply that they are Wallandez or Oollanday, which is a modification of Hollandais, the name having been brought down through the seventeenth and eighteenth centuries from the Dutch. East Indians have, in India, all the rights and privileges of Europeans. Races with a mixture of European with Asiatic blood possess a proud and susceptible tone of mind." For the purposes of the Lawrence Asylum, Ootacamund (*q.v.* p. 100), the word "East Indian" is restricted to the children of European fathers by East Indian or Native mothers, or of East Indian fathers and mothers, both of whom are the children of European fathers.

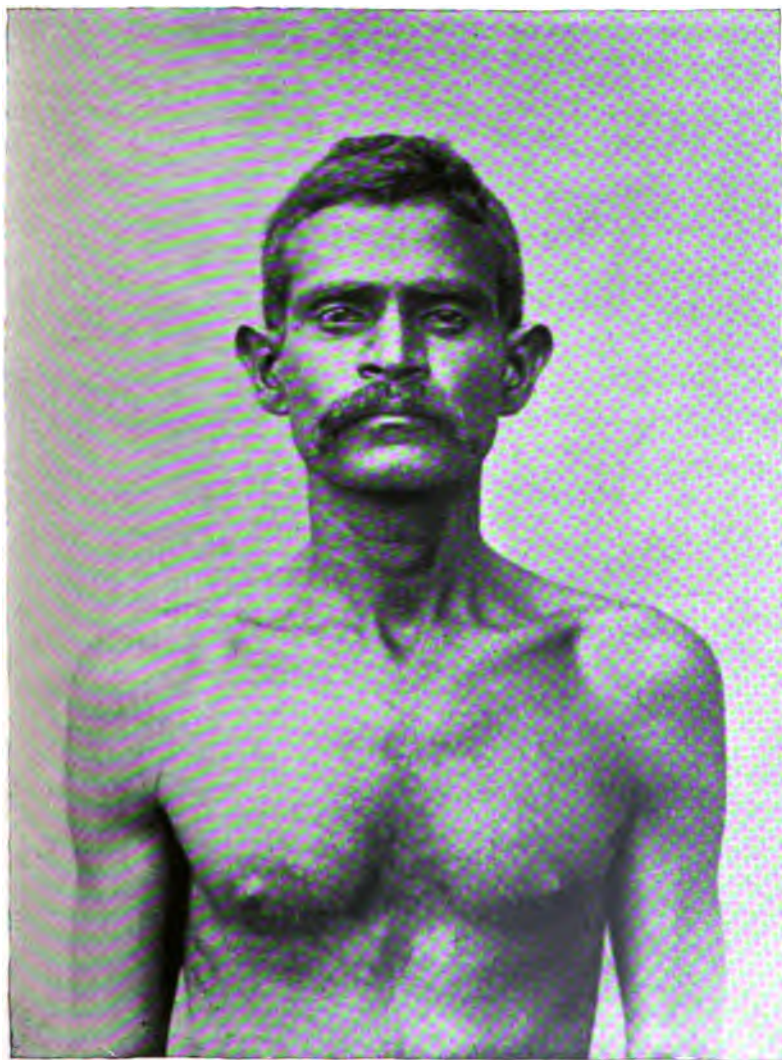
Some Eurasians have, it may be noted, had decorations or knighthood conferred on them, and risen to the highest possible position in, and gained the blue ribbon of Government service. Others have held, or still hold, positions of distinction in the various learned professions, legal, medical, educational, and ecclesiastical.

By a recent ruling of the Government of India it has been decided that Eurasians appointed in England to official posts in India are, if they are not statutory natives, to be treated as Europeans as regards the receipt of "exchange compensation allowance."

The Danes are said (Rush) to have produced, through Hindu women, children of European type and vigour, while such is certainly not the case with other European nations.

It is not generally known that the Anglo-Eurasian owes his origin, in great measure, to the direct influence of pepper. For I learn that "the English East India Company had its origin in the commercial rivalry between London and Amsterdam. In 1599, the Dutch raised the price of pepper against the English from 3s. to 6s. and 8s. per pound. The merchants of London held a meeting on the 22nd September at Founder's Hall, with the Lord Mayor in the chair, and agreed to form an association for the purpose of trading directly with India, and on the 8th October, 1600, the following ships were taken up for the first voyage to the East Indies:—

			Men.	Tons.
"Malice Scourge"	..	..	200	600
"Hector" ..	..	..	100	300
"Ascension" ..	..	..	80	240
"Susan" ..	..	..	80	240
A pinnace ..	..	..	40	100



MADRAS EURASIAN.

" Nearly forty years later, in 1639, Mr. Francis Day, the Chief of the British factory at Armagáon, purchased from the Rája of Chandragiri a site called Maderaspattam or Chinipattam, built Fort St. George, and became the founder of Madras, which was the first territorial possession of the Company in India."

The influence of the various European nations—Portuguese, Dutch, British, Danish, and French—which have at different times acquired territory in peninsular India, is clearly visible in the polyglot medley of Eurasian surnames, *e.g.*, Gomez, Gonsalvez, Pereira, Rozario, Cabral, Da Cruz, Da Costa, Da Silva, Da Souza, Fernandez, Fonseca, Lazaro, Henriquez, Xavier, Mendonza, Rodriguez, Saldana, Almeyda, Luxa, Heldt, Van Spall, Jansen, Augustine, Brisson, Corneille, La Grange, Lavocat, Pascal, Caubo (Corbeau, Mr. Crow?), De Vine, Aubert, Ryan, McKertish, Macpherson, Harris, Johnson, Smith, &c. Little did the early adventurers, in the dawn of the seventeenth century, think that, as the result of their alliances with the Native women, within three centuries banns of marriage would be declared weekly in Madras churches between, for example, Ben Jonson and Alice Almeyda, Emmanuel Henricus and Mary Smith, Augustus Rozario and Minnie Fonseca, John Harris and Clara Corneille, &c. Yet this has come to pass, and the Eurasian holds a recognised place among the half-breed races of the world resulting from modern 'civilization.'

The pedigree of the early Eurasian community is veiled in some obscurity. But the various modes of creation of a half-breed, which were adopted in those early days, when the sturdy European pioneers first came in contact with the Native females, were probably as follows :—

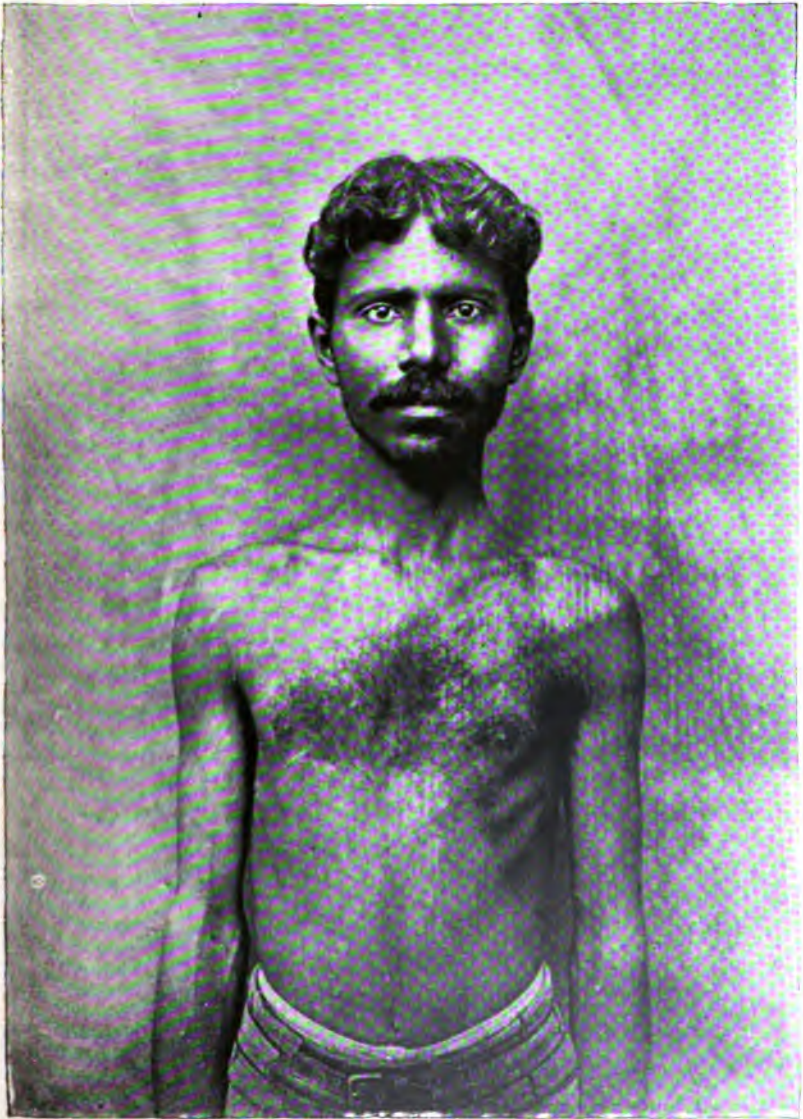
- | | |
|--|--|
| A. European man (pure) | B. Native woman (pure). |
| C. Male offspring of
A + B (first cross). | D. Native woman. |
| E. Female offspring of
A + B (first cross). | F. European man. |
| | G. Native man. |
| H. Male offspring of
C + D. | I. Cross-female offspring of
A + B. |
| | J. Native woman. |
| K. Female offspring of
C + D. | L. Cross-male offspring of
A + B. |
| | M. European. |
| | N. Native man. |

The Eurasian half-breed, thus established, has been perpetuated by a variety of possible combinations:—

European man	..	{ Eurasian woman. Native woman.
Eurasian man	..	{ Native woman. Eurasian woman. European woman.
Native man	..	{ Eurasian woman. European woman.

In the early days of the British occupation of Madras, the traders and soldiers, arriving with an inadequate equipment of females, contracted alliances, regular or irregular, with the women of the country. And in these early days, when our territorial possessions were keenly contested with both European and Native enemies, an attempt was made, under authority from high places, to obtain, through the medium of the British soldier, and in accordance with the creed that crossing is an essential means of improving a race, and rendering it vigorous by the infusion of fresh blood from a different stock, a good cross, which should be available for military purposes. The problem of a Eurasian army is, therefore, no new one, but one which was dealt with long ago in a practical manner, such as is no longer possible in these more advanced times. Later on, as the numbers of the British settlers increased, connexions, either with the Native women, or with the females of the recently founded Eurasian type, were kept up owing to the difficulty of communication with the mother-country, and consequent difficulty in securing English brides by the ordinary rules of sexual selection. Of these barbaric days the detached or semi-detached bungalows in the spacious grounds of the big private houses in Madras remain as a memorial. At the present day the conditions of life in India are, as the result of steamer traffic, very different, and far more wholesome. The Eurasian man seeks a wife as a rule among his own community; and in this manner the race is mainly maintained, though examples of first crosses, and the results of re-crossing between European and Eurasian are frequently met with.

The number of Eurasians within the limits of the Madras Presidency was returned, at the Census, 1891, as 26,643. But on this point I must call Mr. H. A. Stuart, the Census Commissioner, into the witness box. "The number of Eurasians," he writes, "is 26,643, which is 20·76 per cent.



MADRAS EURASIAN.

more than the number returned in 1881." The figures for the last three enumerations are given in the following statement :—

NUMBER OF EURASIANS.

Year.			Total.	Males.	Females.
1871	..	..	26,460	13,091	13,359
1881	..	..	21,892	10,969	10,923
1891	..	..	26,648	13,141	13,502

"It will be seen that, between 1871 and 1881, there was a great decrease, and that the numbers in 1891 are slightly higher than they were twenty years ago. The figures, however, are most untrustworthy. The cause is not far to seek; many persons, who are really Natives, claim to be Eurasians, and some who are Eurasians return themselves as Europeans. It might be thought that the errors due to these circumstances would be fairly constant, but the district figures show that this cannot be the case. Take Malabar, for example, which has the largest number of Eurasians after Madras, and where the division between Native Christians with European names and people of real mixed race is very shadowy. In 1871 there were in this district 5,413 Eurasians; in 1881 the number had apparently fallen to 1,676, while in 1891 it had again risen to 4,193, or, if we include south-east Wynaad, as we should do, to 4,439. It is to be regretted that trustworthy statistics cannot be obtained, for the question whether the true Eurasian community is increasing or decreasing is of considerable scientific and administrative importance.

"The Eurasians form but a very small proportion of the community, for there is only one Eurasian in every 1,337 of the population of the Madras Presidency, and it is more than probable that a considerable proportion of those returned as Eurasians are in reality pure Natives who have embraced the Christian religion, taken an English or Portuguese name, and adopted the European dress and mode of living.

"In the matter of education, or at least elementary education, they are more advanced than any other class of the community, and compare favourably with the population of any country in the world. They live for the most part in towns, nearly one-half of their number being found in the city of Madras."

In connection with the fact that, at times of Census, Native Christians and Pariahs, who masquerade in European clothes, return themselves as Eurasians, and *vice versa*, it may be accepted that some benefit must be derived by the individual in return for the masking of his or her nationality. And it has been pointed out to me that (as newspaper advertisements testify) many ladies will employ a Native ayah rather than a Eurasian nurse, and that some employers will take Eurasian clerks into their service, but not Native Christians. It occasionally happens that pure-bred Natives, with European name and costume, successfully pass themselves off as Eurasians, and are placed on a footing of equality with Eurasians in the matter of diet, when they are in prison, being allowed the luxury of bread, butter, coffee, &c.

Mr. Stuart had at his command no special statistics of the occupations resorted to by Eurasians, but states that the majority of them are clerks, while very few indeed obtain their livelihood by agriculture. In the course of my enquiry, which included a majority of bread-winners and a sprinkling of loafers, the following varied occupations were recorded. It is noteworthy that, of 130 cases, no less than 33 returned their occupation as "fitter":—

Accountant.	Evangelist.
Attendant, Lunatic Asylum.	Filer.
Baker.	Fitter.
Bandsman.	Fireman.
Bill-collector.	Hammerer.
Blacksmith.	Harness-maker.
Boarding-house keeper.	Jewel-smith.
Boatswain.	Jointer.
Boilersmith.	Labourer.
Carpenter.	Livery-stable keeper.
Chemist's assistant.	Mechanic.
Clerk, Government.	Moulder.
Clerk, private.	Painter.
Commission agent.	Petition-writer.
Compositor.	Police inspector.
Compounder.	Porter.
Contractor.	Printer.
Copper-smith.	Proof-reader.
Crane attendant, harbour.	Railway—
Draftsman.	Auditor.
Electric-tram driver.	Chargeman.
Electric-tram inspector.	Engine-driver.
Engine-driver, Ice factory.	Engineer.



MADRAS EURASIANS.

Railway—
 Goods clerk.
 Guard.
 Locomotive inspector.
 Parcel clerk.
 Prosecuting inspector.
 Shunter.
 Signaller.
 Stationmaster.
 Store-keeper.
 Ticket-collector.
 Tool-keeper.
 Block-signaller.

Railway—
 Carriage examiner.
 Reporter.
 Rivetter.
 Saddler.
 Schoolmaster.
 Sexton.
 Spring-smith.
 Stereotyper.
 Steward.
 Telegraph clerk.
 Watch-maker.
 Watchman.

The bandsmen, who appeared before me, were tested with the apparatus for estimating appreciation of difference in musical pitch. All responded well to the test, except the performer on the big drum, who broke down hopelessly at a very early stage.

The Eurasians' fancy turns not lightly, but seriously to thoughts of love at a very early age, with the result that they sometimes marry, with all the pomp of bridal dress, cake and wine, when barely out of leading strings, and become burthened with the cares, anxieties, and responsibilities of paternity and maternity when they are mere boys and girls. One of my subjects, indeed, volunteered the information that he married a child-bride before she reached puberty. Whether they marry because, as with the Hindu, an unmarried man is looked down upon as having no social status, and as being an almost useless member of society, or whether for the "causes for which matrimony was ordained," I am unable to state precisely. But I may hazard a guess that it is because they have not acquired the power to "subordinate animal appetite to reason, forethought, and prudence." Whatever the reason, the results are but too frequently disastrous,—a plethora of children, brought up in poverty, hunger, and dirt; but little to earn and many to keep; domestic unrest; insolvency; and destitution. A virtuous state of celibacy has been recently advocated as a substitute for early marriage, and the argument brought forward that, if a man has sufficient intelligence and unselfishness to abstain from dragging a wife and children into poverty and misery, he will be sufficiently intelligent and unselfish to lead a pure life, and not swell the ranks of the illegitimate.

From the analysis of a hundred male cases, in which enquiries were specially made with reference to the married

state in individuals ranging in age from 21 to 50, with an average age of 33, I learn that 74 were married at the average age of 22-23; that 141 male and 130 female children had been born to them; and that 26, whose average age was 25, were unmarried. The limits of age of the men at the time of marriage were 32 and 16; of the women 25 and 13. The greatest number of children born to a single pair was 10. In only three cases, out of the seventy-four, was there no issue. In fifty cases, which were investigated, of married men with an average age of 34, 207 children had been born, of whom 91 had died, for the most part in very early life, from "fever" and other causes, among which malnutrition, and consequent marasmus, must take a foremost place. Remembering that house-rent should be paid, and that clothes and food have to be acquired, how, I ask myself, can cases such as the following lead other than a miserable existence, void of the pleasure of life?

Pay per mensem.	Age.	Age of marriage.	Children living.
RS.	YRS.	YRS.	NO.
15	26	21	3
10	27	18	5
15	25	21	2
20	39	19	7
6	38	22	2
18	27	18	6
10	25	19	2
30	40	20	8

To appreciate what misery is indicated here, it is only necessary to convert the rupees into annas, and divide them among the number of mouths to be fed, leaving house-rent and clothes out of the question; and, whether the rent be paid or no, clothes must of necessity be forthcoming—no mere dhoti, langūti, or sari, but clothes of European device, if not of the latest fashion.

The practical result of their want of thrift, and the widespread tendency to allow expenditure to exceed income, is that Eurasians in Government service frequently find themselves caught in the meshes of Rule 39, regulating the conduct of Government servants, which lays down that "it is undesirable that a man, who is in a chronic and hopeless condition of indebtedness, should be retained in the Government service. The anxieties attendant upon such a state must necessarily greatly detract from the value of the



MADRAS EURASIAN.

debtor's work, besides exposing him to temptations to dishonesty, which, in such circumstances, it is very difficult to resist." The following figures, gleaned from the statistics of the Insolvent Court during the five last years, bear directly on the condition referred to :—

Year.		Number of petitions filed by Eurasians.	Number of petitions filed during the year.	Eurasian percentage.
1893	..	45	233	19
1894	..	55	255	21
1895	..	35	237	14
1896	..	51	268	19
1897	..	53	297	18
Total	..	239	1,290	18

The percentage is certainly very high, when the Eurasian population is compared with the microscopic minority of Europeans, and the overwhelming majority of the Native community.

As examples of Eurasian improvidence, and a too literal adherence to the old time doctrine of taking no thought for the morrow, for the morrow shall take thought for the things of itself, the following cases may be cited :—

Monthly pay.	Total debt.	Debt in year's pay.
RS.	RS.	
9	3,500	32-33 years.
15	1,400	7-8 "
20	1,450	6-7 "
30	5,800	16 "
40	6,700	13-14 "
50	5,550	9-10 "
60	8,300	13-14 "

The racial position of Eurasians, and the proportion of black blood in their veins, are commonly indicated, not by the terms mulatto, quadroon, octoroon, sambo (or zambo), etc., but, as in the case of cotton, jute, coffee, and other crops, in fractions of a rupee. The European pure breed being represented by Rs. 0-0-0, and the native pure breed by 16 annas (=1 rupee), the resultant cross is, by reference to colour and other tests, gauged as being half an anna in the rupee (faint admixture of black blood; approaching European type); eight annas (half and half);

fifteen annas (predominant admixture of black blood; approaching native type), etc.

The Eurasian body being enveloped in clothes, it was not till they stripped before me, for the purposes of anthropometry, that I became aware how prevalent is the practice of tattooing among the male members of the community. Nearly all the hundred and thirty men, whom I examined in detail, were, in fact, tattooed to a greater or less extent on the breasts, upper arms, fore-arms, wrists, back of the hands, or shoulders. The following varied selection of devices in blue, with occasional red, is recorded in my case-book :—

Anchor.

Ballet girl with flag stars and stripes.

Bracelets round wrists.

Burmese lady carrying umbrella.

Burmese lady playing with parrot.

Bird.

Bugles.

Conventional artistic devices.

Cross and anchor.

Crown and flags.

Crossed swords and pistols.

Dancing girl.

Dancing girl playing with cobras.

Elephant.

Floral devices.

Flowers in pot.

Hands joined in centre of a heart.

Hands joined and clasping a flower.

Heart.

Heart and cross.

Initials of the individual, his friends, relatives, and inamorata, sometimes within a heart or laurel wreath.

Lizard.

Mercy (word on left breast).

Mermaid.

Portraits of youth and his lady-love.

Princess of Wales.

Royal arms and banners.

Sailing boat.

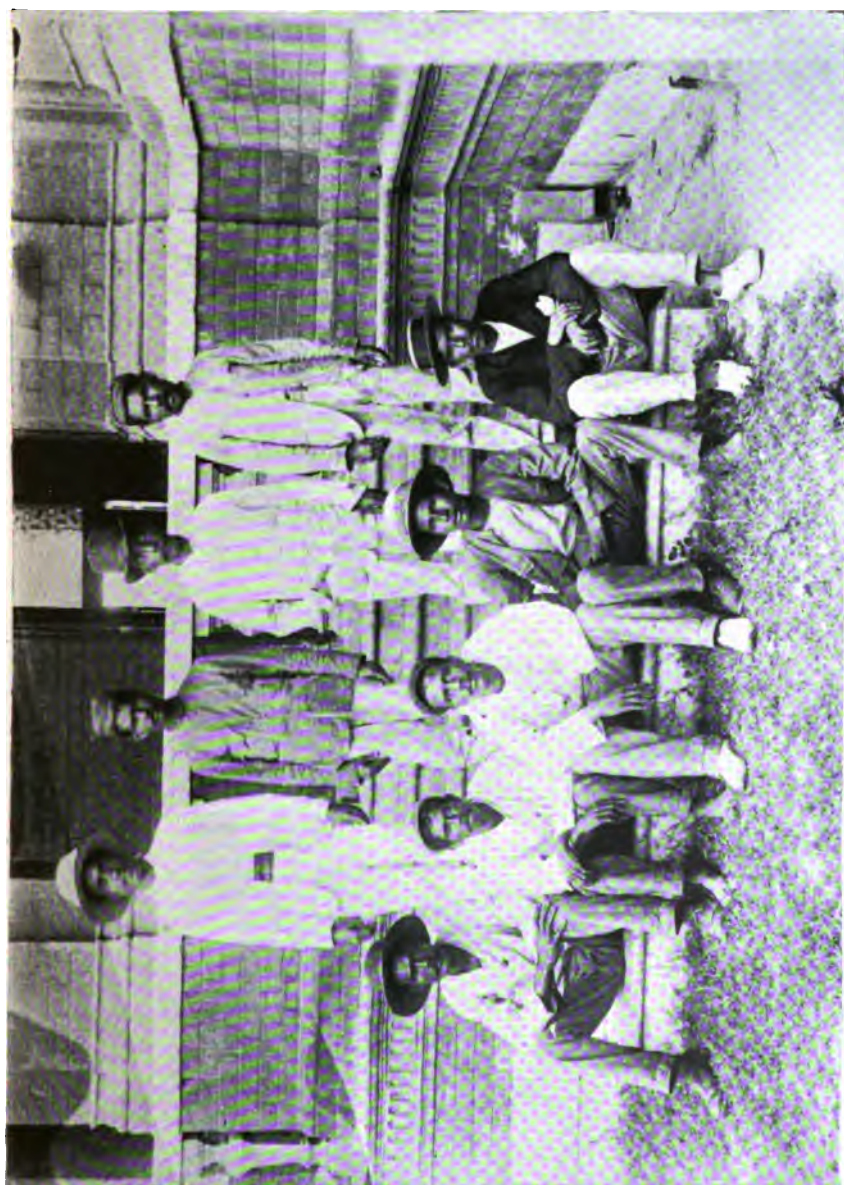
Scorpion.

Solomon's seal.

Steam boat.

Svastika (Buddhist emblem).

Watteau shepherdess.



MADRAS EURASIANS.

The most elaborate patterns were executed by Burmese artists. The initials, which preponderated over other devices, were, as a rule, in Roman, but occasionally in Tamil characters. In many instances the tattooing was barely visible against the dark skin, and the main objects of the operation—beauty and personal adornment—completely lost. A propos of tattooing in the male sex, the legend goes that the goddesses of the tattooers “swam from Fiji, to introduce the craft to Samoa, and, on leaving Fiji, were commissioned to sing all the way ‘Tattoo the women, but not the men’”. But they got muddled over it in the long journey, and arrived at Samoa singing “Tattoo the men, but not the women.”²

In colour the Eurasians afford, as is natural in a mixed race, examples of the entire colour-scale from sooty-black, through sundry shades of brown and yellow, to pale white, and even, as a very rare exception, florid or rosy. The darkening of the skin in Hindu half-breeds with advancing age, and the dark colour of the pudenda, noticed by D’Orbigny and Troyer (*Bull. Soc Ethnol.* May 22nd, 1846), were very conspicuous in many cases which came under observation. So, too, in individuals with otherwise fair skin, was the tell-tale pigment on the neck, knees and elbows, as also in the axillæ, the glands of which, as in the Native, pour out, under the influence of emotion or exercise, a profuse watery secretion. The pilous or hairy system, which was, in the cases recorded, uniformly black, repeatedly conforms as regards its distribution to the native type; and the eyebrows are frequently united across the middle line by bushy hairs. The hair of the head may be straight, and, when clipped, recall to mind a Bengali Babu with his close-cropped hair devoid of parting. Or it may be wavy or curly (woolly never), and dressed, like that of a European, in a variety of ways, according to the fancy of the owner. Premature greyness and baldness, *arcus senilis*, and early senility, were noted in many instances. The colour of the iris, like that of the skin, is liable to great variation, from lustrous-black to light, with a predominance of dark tints. Blue was observed only in a solitary instance.

The Eurasian resists exposure to the sun better than the European, and, while many wear *solah topis* (sun hats), it is by no means uncommon to see a Eurasian walking about

² *Journ. Anth. Inst.*, Vol. XVII, 1888, p. 312.

in the middle of a hot day with his head protected only by a straw hat or cap.

In a heated discussion on the "Anglo-Indian in India," which has recently been carried on in the columns of the 'Pioneer,' a retired Indian Staff Corps Colonel suggested the raising of a division of eight regiments, two of cavalry, six of infantry, four of the latter to consist of specially selected Eurasians only, two of Indo-Europeans only. "If," he says, "treated with fair liberality as regards pay, promotion, and prospects, I feel every confidence that a fine, and in every way reliable force may be thus created for general service anywhere (like the Native grandly efficient army) Such force might be very considerably expanded later on. Three field batteries, one of Indo-Europeans only, and two of Eurasians only, might also be added, rendering the force quite complete in itself." Let us, bearing in mind that the Eurasian community of the Madras Presidency is a limited one on which to draw for military purposes, and that many of those who are physically fitted would be unwilling to enlist, examine the physique of the poorer classes, from the ranks of whom recruits would have to be obtained.

The average height of the Eurasian, according to my measurements of 130 subjects, is 166.6 cm. (5 feet 5½), and compares as follows with that of the English and various Native classes, inhabiting the city of Madras, which have been examined by me :—

						CM.
English	..	..	..	..	..	170.8
Eurasians	..	..	..	..	..	166.6
Muhammadans	..	..	..	..	..	164.5
Brāhmans	..	..	..	..	..	162.5
Pallis	..	..	..	..	..	162.5
Vellalas	..	..	..	..	..	162.4
Pariahs	..	..	..	..	..	161.9

The height, as might be expected, comes between that of the two parent stocks, European and Native, and had, in the cases examined, the wide range of 30.8 cm.—the difference between a maximum of 183.8 cm. (6 feet) and a minimum of 153 cm. (5 feet). The high ranges between maxima and minima (*vide table xvii*), which are specially marked in the case of stature and the measurements dependent thereon, and of the nose, are readily explained

on the general principle that pure races exhibit a more uniform, and mixed races a variegated type, and this variation increases as the intermixture progresses (Waitz).

The story goes that many years ago, during the fighting days in Southern India, a Highland regiment, as the result of concubinage with the Native women of a certain quarter of the city of Madras, left behind them a half-breed offspring, reared up as Natives, whose descendants, are, owing to their stature, still recognised, at the present day, as the Madras Highlanders.

The average weight of my Eurasians, in clothes with boots, was a mere 7 st. 9½ lbs. ; the weight ranging between 12 stone in a flabby individual aged 30 years, and 5 st. 6 lbs. in a man 40 years old. How small this weight is for adults may be emphasised by reference to the fact, based on a series of experiments, that the weight of growing English school boys (in in-door dress with boots on) between the ages of 16 and 17, ranged, in 79·6 per cent. of the cases examined, between 8½ stone and 12 st. 5½ lbs. Only in 3 out of 103 cases was the weight below 7 stone.⁴

The average chest measurement, taken over the nipples with the arms above the head and hands joined, was 79·1 cm. (31 inches). In the following tabular statement this average is compared with the average chest-girth of the classes noted above, and with the average relative to stature = 100 :—

	Average.	Average relative to stature = 100.
English	93·9	54
Brāhmans	81	49·8
Vellālas	79·8	49·1
Pariahs	79·3	48·9
Pallis	79·2	48·7
Muhammadans ..	79	48
Eurasians	79·1	47·5

The chest-girth of the Eurasians is, then, relatively to stature, less than that of any of the classes under review. Of far greater importance than actual chest-girth, as everyone who has had to deal with recruiting knows full well, is the play of the chest, viz., the vital capacity, or extreme

⁴ Fergus and Rodwell. Journ. Anth. Inst., Vol. IV, 1875, p. 128.

differential capacity of the lungs. This is best estimated by means of a modified gasometer, called the spirometer, which registers the total amount of air which can be given out by the most forcible expiration following upon a most forcible inspiration. Tested with such an instrument, the majority of the Eurasians under examination broke down owing, in great measure, to the feeble development of the pectoral and other inspiratory muscles, whose function is to inflate the lungs.

In the following table the Eurasian shoulder-breadth, measured between the external surfaces of the prominences of the shoulders about 5 cm. below the acromion, is compared with that of the same classes as before :—

	Average.	Average relative to stature = 100.
Vellalas	39.7	24.4
Pariahs	39.4	24.3
Brāhmans	39.3	24.2
Muhammadans	39.8	24.2
Pallis	39.4	24.2
Eurasians	39.2	23.6

The shoulder-breadth is thus seen to be less, both actually and relative to stature, in the Eurasians than in the Native classes. The deficiency in breadth must be attributed both to narrow osteological build, and to the feebly developed condition of the deltoid muscles.

As specimens of the all too common weakly Eurasian humanity, whose living was gained with their hands, the cases in the two following tables, taken from a very large number, may be cited :—

Age. YRS.	Weight. ST. LB.	Height. FT. IN.	Chest. INCHES.	Occupation.
28	9.1	6	31.4	Fitter.
26	7.1	5.7½	29.1	Engine driver.
22	7.9	5.6	29.5	Turner.
21	7.6	5.4½	30.3	Hammerer.
29	7.4	5.4½	29.7	Do.
35	6.6	5.2	26.4	Printer.
37	6.1	5.1½	28.6	Fitter.
23	6.4	5.1½	28.5	Printer.
19	5.9	5.1½	27.1	Blacksmith.

Height. FT. IN.	Girth of upper arm.		Hand- breadth. INCHES.	Girth round epigastrium (stomach). INCHES.
	Relaxed. INCHES.	Contracted. INCHES.		
5-7½	..	..	..	23·2
5-1½	7·3	7·9	..	22·8
5-4½	8·4	9·5	..	..
5-8	8·2	9·4	..	..
5-2½	..	..	2·6	..
5-4½	..	..	2·6	..
5-2½	..	..	2·5	..

I have, in the course of the present enquiry, examined many Native women, engaged as coolies in road-repairing, and found arms with good solid muscle, shoulders, and chests, of which some of these feebly developed individuals might well be envious. But the Indian cooly woman is notoriously an excellent beast of burthen, and I recall to mind the legend of the Bhutia woman, who is reputed, in the days before the hill railway was open, to have carried, unaided, a grand piano on her head the whole way from the foot of the hills to Darjiling.

Contrast with the above the following—all the direct result of re-crossing between European man and Eurasian woman. It will be noted that all are, some slightly, others considerably above the average. The physiological significance of this fact, and the possibilities in connection therewith, are obvious, and need not be dilated on at length. Suffice it to state that the product of alliances between British men and Eurasian women show the least signs of physical degeneration, and possess broader shoulders, hips, and hands, greater chest-girth, wider forehead, and more muscle, as the result of re-vivification of the stock by direct British intervention :—

Age.	Weight, average 7 st. 9½ lb.	Height, average 5 ft. 5 in.	Chest, average 31·2 in.	Occupation.
21	9·8	5-7½	31·5	Fitter.
28	9·3	5-7½	33·5	Do.
40	10·9	5·7	34·7	Clerk.
38	9·2	5·7	32·5	Labourer.
22	9·4	5·6	34·3	Boil-r-smith.
26	10	5-7½	33	Railway guard.

As a clear indication of the physique, which the poor Eurasian should aspire to with a view to his becoming a soldier, I publish (table xviii) side by side the averages,

etc., of a series of physical measurements of 50 sepoy^s of the 28th Madras Infantry and of my 130 Eurasians; and, further, in table xix, statistics of the same measurements in 50 sepoy^s and 50 Eurasians between the recruiting ages of 18 and 25.

Leaving hand-grip, as tested by the dynamometer, in which the Eurasians displayed lamentable weakness (an average of only 65 lbs.), out of the question, and considering weight, chest-girth, and shoulder-breadth, the sepoy average was, as shown by the following tabular statement, only reached in four cases out of the 50 examined between the ages of 19 and 25 :—

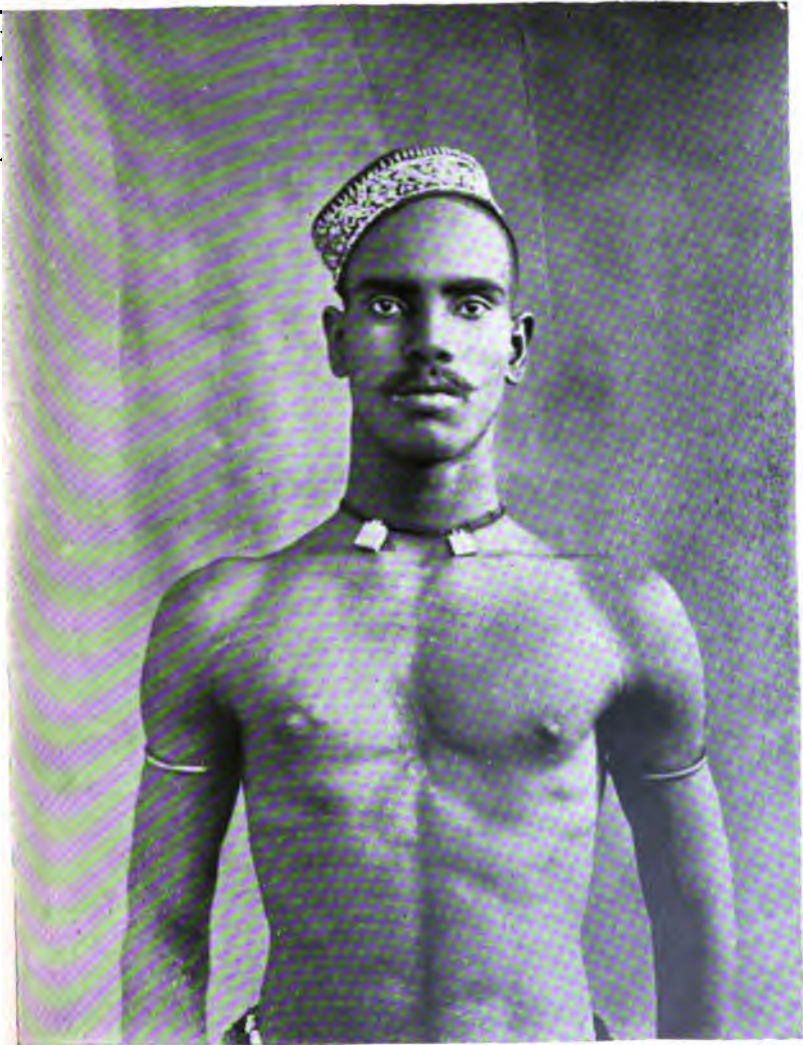
	Weight.	Chest.	Shoulders.
	LB.	CM.	CM.
	127	86·5	41·5
	139	87	42·1
	150	87·5	43·9
	136	84·5	43·3
Sepoy average ...	125	84	41·6

The Eurasian mean above the average, taken as a whole, fell short, as shown below, of the sepoy average :—

			Eurasian mean above the average.	Sepoy average.
Weight	..	..	122 lb.	125 lb.
Chest	..	..	82 cm.	84 cm.
Shoulders	..	..	40·5 "	41·6 "
Dynamometer	..	..	72·4 lb.	80 lb.

The figures in tables xviii to xxi suffice, of themselves, to show that the average physique of the Eurasians is far below that required for military purposes. And this deficiency in physique is accentuated by a study of the following tables of comparison drawn up from the detailed figures in tables xx and xxi :—

* The periodical fanatical outbreaks in the Moplah (or Máppila) community of Malabar are well known to us in Southern India. It is of interest, therefore, that, since 1895, 150 Moplals have enlisted in the 25th Madras Infantry, which is stationed at Cannanore, under conditions similar to those applying to the rest of the Native Army. They have, I am told, become most amenable to discipline; and training and good diet have improved their physique, which was good at the commencement.



MADRAS SEPOY.

WEIGHT, LB.

—	80-90	90-100	100-110	110-120	120-130	130-140	140-150	150-160
Sepoys ... ..	...	1	4	11	19	9	4	2
Eurasians	6	9	12	13	4	5	1	...

CHEST, CM.

—	60-70	70-80	80-90	90-100
Sepoys ... ..	...	5	42	3
Eurasians	3	33	14	...

SHOULDERS, CM.

—	33-37	37-38	38-39	39-40	40-41	41-42	42-43	43-44	44-45	45-46
Sepoys ... ..	...	...	4	5	6	15	12	4	2	2
Eurasians	9	10	8	9	10	2	...	2	...	...

Putting the figures in the last three tables in terms of percentages, we obtain the following results, which speak for themselves :—

WEIGHT.

				Below 120 LB.	Above 120 LB.
Sepoys ..	..	..	..	32	68
Eurasians	..	..	..	80	20

CHEST.

				Below 80 CM.	Above 80 CM.
Sepoys ..	..	..	..	10	90
Eurasians	72	28

SHOULDERS.

				Below 41 CM.	Above 41 CM.
Sepoys	30	70
Eurasians	92	8

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Turning now to head measurements, the average length of the Eurasian head is 18·6 cm. and the breadth 14·1 cm. And it is to be noted that, in 63 per cent. of the cases examined, the breadth exceeded 14 cm. In the length of the head there is nothing distinctive as between the Eurasians and the other classes under review, the difference only amounting to ·1 cm. The breadth of the head, on the contrary, is appreciably greater in Eurasians and Brāhmans (Aryo-Dravidians) than in Muhammadans (some of whom are immigrants with an admixture of Dravidian blood) and the three indigenous classes, Vellālas, Pallis, and Pariahs :—

		Length.	Breadth.	Index.
		CM.	CM.	
Brāhmans	..	18·6	14·2	76·5
Eurasians	..	18·6	14·1	76
Muhammadans	..	18·7	13·9	76·1
Vellālas	..	18·6	13·8	74·1
Pariahs	..	18·6	13·7	73·6
Pallis	..	18·6	13·6	73

The relative breadth of the head is very clearly brought out by the following analysis of forty subjects belonging to each of the six classes, which shows at a glance the preponderance of heads exceeding 14 cm. in breadth in Eurasians, Brāhmans, and (to a less degree) Muhammadans, and of heads below 14 cm. in breadth in the more dolichocephalic Vellālas, Pallis, and Pariahs :—

		12-13	13-14	14-15	15-16
		CM.	CM.	CM.	CM.
Eurasians	..	..	11	27	2
Brāhmans	..	1	9	27	3
Muhammadans	..	2	17	21	..
Vellālas	..	..	24	16	..
Pariahs	..	..	27	13	..
Pallis	..	3	30	7	..

The head of a cross-breed, it has been said, generally takes after the father, and the breadth of the Eurasian head is a persisting result of European male influence. The effect of this influence is clearly demonstrated in the following cases, all the result of re-crossing between British men and Eurasian women :—

		Length.	Breadth.
		CM.	CM.
		19	14.5
		18.4	14.2
		19.2	14.2
		20.2	14.6
		19	14.6
		19.4	14.3
		<hr/>	<hr/>
Average ..	..	19.2	14.4
Eurasian average ..	..	18.6	14.1
		<hr/>	<hr/>

The character of the nose is, as those who have studied ethnology in India well appreciate, a most important factor in the differentiation of race, tribe, and class, and in the determination of pedigree. "No one," Mr. Risley writes,* "can have glanced at the literature of the subject, and in particular at the Védic accounts of the Aryan advance, without being struck by the frequent references to the noses of the people whom the Aryans found in possession of the plains of India. So impressed were the Aryans with the shortcomings of their enemies' noses that they often spoke of them as 'the noseless ones,' and their keen perception of the importance of this feature seems almost to anticipate the opinion of Dr. Collignon that the nasal index ranks higher as a distinctive character than the stature, or even the cephalic index itself." The Eurasian nose, as is natural in a mixed race, exhibits a combination of the long, narrow (leptorhine) type of the higher races, and the broader (mesorhine and platyrhine) type of the lower classes, as shown in the following analysis of the nasal indices of forty Eurasians, Brāhmins, Pallis and Pariahs:—

		Leptorhine. 55-69.9.	Mesorhine. 70-84.9.	Platyrhine. 85-99.9.
Eurasians ..	..	19	19	2
Brāhmins ..	..	6	24	10
Pallis ..	..	3	31	6
Pariahs ..	..	2	25	13

It may be noted, *en passant*, that the Brāhmin nose belongs to the platyrhine type in 25 per cent. of the cases here analysed (*vide* Bull., Vol. II, No. 1).

Speaking in general terms, it may be said that the noses with high nasal index are possessed by Eurasians of short

* Journ. Anth. Inst., Vol. XX, 1891, pp. 249-50; see also Madras Museum Bull., Vol. II, No. 1, pp. 53-58.

stature and dark skin; noses with low index by those of medium stature or tall, and fairer skin. In the following table statistics are given concerning the measurements of the nose and the nasal index in Eurasians and the other classes selected for comparison with them :—

		Length.	Breadth.	Index.
		CM.	CM.	
Eurasians .. ..	..	5.1	3.5	69.5
Muhammadans .. ..	..	4.9	3.4	70
Vellalas .. ..	..	4.7	3.4	73.1
Brāhmans .. ..	..	4.7	3.6	76.7
Pallis .. ..	..	4.6	3.6	77.9
Pariahs .. ..	..	4.5	3.6	80

Examination of this table shows that there is a gradation from the leptorhine type of the Eurasian to the platyrhine type of the Pariah, and that the change of type from leptorhine to platyrhine is due to shortening of the length of the nose rather than to increase in its breadth. For, as the figures show, while there is a difference of .6 cm. between the average lengths of the Eurasian and Pariah noses, there is only a difference of .2 cm. in the average breadths thereof. The difference in the length of the nose is clearly brought out by comparison, in forty members of each of my six classes, of the number of times in which the length reached from 5 to 6 cm. or from 4 to 5 cm.

				Length.	
				5-6 CM.	4-5 CM.
Eurasians .. ..	..	..	..	21	19
Muhammadans .. ..	..	..	..	16	24
Vellalas .. ..	..	..	..	6	34
Brāhmans .. ..	..	..	..	5	35
Pallis .. ..	..	..	..	5	35
Pariahs .. ..	..	..	..	1	39

The results obtained, in like manner, by comparison of the breadth of the nose are not nearly so eloquent, though the greater breadth of the nose in individual Pariahs is en evidence :—

				Breadth.	
				4-5 CM.	3-4 CM.
Eurasians .. ..	..	..	..	1	39
Muhammadans .. ..	..	..	..	2	88
Brāhmans .. ..	..	..	..	0	40
Vellalas .. ..	..	..	..	1	39
Pallis .. ..	..	..	..	3	37
Pariahs .. ..	..	..	..	5	35

In the subjoined table, based on the examination of forty members of each class, who are classified according to their nasal index, the high proportion of Eurasians, Muhammadans and Vellalas with indices ranging between 60 and 70, and of Brāhmans, Pallis, and Pariahs with indices ranging between 80 and 90, is at once manifest, and requires no comment :—

	60-70.	70-80.	80-90.	90-100.
Eurasians	19	17	3	1
Muhammadans ..	17	18	4	1
Vellalas	14	22	3	1
Brāhmans	6	19	14	1
Pallis	3	25	9	3
Pariahs	2	17	19	2

Some final words are necessary on liability to certain diseases, as a differentiating character between Eurasian and European. The Census Commissioner, 1891, states that Eurasians seem to be peculiarly liable to insanity and leprosy. To these should be added elephantiasis (filarial disease), concerning which Surgeon-Major J. Maitland writes as follows : " Almost all the old writers on elephantiasis believed that the dark races were more susceptible to the disease than white people ; but it is extremely doubtful if this is the case. It is true that in those countries where the disease is endemic, the proportion of persons affected is much greater amongst the blacks than amongst the whites ; but it has to be borne in mind that the habits of the former render them much more liable to the disease than the latter. The majority of the white people, being more civilised, are more careful regarding the purity of their drinking-water than the Natives, who are proverbially careless in this respect. In India, although it is comparatively rare to meet with Europeans affected with the disease, yet such cases are from time to time recorded. Eurasians are proportionately more liable to the disease than pure Europeans, but not so much so as Natives. Doctors Patterson and Hall of Bahia ⁷ examined the blood of 309 persons in that place, and found the following proportions affected with filaria ; of whites, 1 in 26 ; of blacks, 1 in 10½ ; of the mixed race, 1 in 9. Doctor Laville⁸ states that in the Society Islands, out of a total of 13 European and American residents,

⁷ 'Elephantiasis and allied disorders.' Madras, 1891.

⁸ 'Veterinarian.' June 1879.

⁹ 'Endemic skin and other diseases of India.'—FOX AND FARQUHAR.

11 were affected with elephantiasis. Taking all these facts into consideration, together with our knowledge of the pathology of the disease, I do not think we are justified in saying that the black races are more *susceptible* to the disease than white people. On the other hand, owing to the nature of their habits, they are much more *liable* to the diseases than are the white races."

During the five years, 1893—97, 98 Eurasians suffering from filarial diseases were admitted into the General Hospital, Madras.

To Surgeon-Colonel W. A. Lee, Superintendent of the Government Leper Asylum, Madras, I am indebted for the following note on leprosy in its relation to the Eurasian and European communities:—

"You ask me for information as to the occurrence of leprosy among Europeans and Eurasians, and for statistics of the numbers which were treated in the Government Leper Asylum during the five years, 1893—97. You also add that you wish to bring out the point that leprosy is a distinguishing character as between Eurasians and Europeans.

"Although the latter may possess greater vigour of constitution, and, therefore, a better capacity of resistance, they are by no means immune to the disease, which, in the majority of instance, is contracted by them through coitus with leprous individuals.

"Leprosy is one of the endemic diseases of tropical and sub-tropical countries, to the risk of contracting which Europeans who settle on the plains in India, and their offspring from unions with the inhabitants of the land, as well as the descendants of the latter, become exposed, since, by the force of circumstances, they are thrown into intimate contact with the Native population.

"A portion of the accommodation of the Government Leper Hospital at Madras, which was founded in 1841, is reserved for European and Eurasian lepers; but little can be gleaned from the records as regards the incidence of the disease on the former class, as scanty attention appears to have been bestowed on accuracy of classification. For instance, of 11 'Europeans' who were under treatment in the years 1890—97 (*vide* table xxii), all save two had their birth-place in India or Burma, so that few of them could have been of pure or unmixed European parentage.

"The Eurasian community furnishes a considerable number of lepers, and the disease, once introduced into a family, has a tendency to attack several of its members, and to re-appear in successive generations, occasionally skipping one—a feature akin to the biological phenomenon known as atavism, but of perhaps doubtful analogy, for the possibility of a fresh infection or inoculation has always to be borne in mind. There are numerous instances of such hereditary transmission among the patients, both Native and Eurasian, in the Government Leper Hospital.

"The spread of the disease by contagion is slow, the most intimate contact even, such as that between parent and child, often failing to effect inoculation. Still there is much evidence in support of its being inoculable by cohabitation, prolonged contact, wearing the same clothing, sharing the dwelling, using the same cooking and eating utensils, and even by arm-to-arm vaccination. Influenced by a belief in the last mentioned cause, vaccination was formerly regarded with much suspicion and dislike by Eurasians in Madras. But their apprehensions on this score have abated since animal vaccine was substituted for the humanised material. It has also for long been a popular belief among the same class that the suckling of their infants by infected Native wet-nurses is a common source of the disease.

"Attempts to reproduce leprosy from supposed pure cultures of the leprosy bacillus have invariably failed; and this strengthens the belief that the disease would die out if sufferers from the tubercular or mixed forms were segregated, and intermarriage with members of known leprosy families interdicted. Experience shows that, where such marriages are freely entered into, a notable prevalence of the disease results, as in Pondicherry for example, where the so-called creole population is said to contain a large proportion of lepers from this cause."

Writing concerning the prevalence of insanity in different castes, the Census Commissioner, 1891, states that "it appears from the statistics that insanity is far more prevalent among the Eurasians than among any other class. The proportion is 1 insane person in every 410. For England and Wales the proportion is 1 in every 307, and it is significant that the section of the population of Madras, which shows the greatest liability to insanity, is that which has an admixture of European blood. I have no

information regarding the prevalence of insanity among Eurasians for any other province or State of India except Mysore, and there the proportion is 1 in 306."

For the statistics relating to insanity given in table xxiv, I am indebted to Surgeon-Captain C. H. Leet Palk, Superintendent of the Government Asylum. It was found impossible to separate Europeans into home-bred and country-bred; and it is very possible that some Eurasians are included among them. The total number of Eurasians, recorded as being admitted into the asylum during the five years 1893—97, was 49, viz., 6·59 per cent. of the total admissions. Leaving out of question the Europeans, in whom, owing to the preponderance of the male sex (including soldiers) in Madras, a greater number of male than female lunatics is to be expected, and considering only Eurasians and Natives, the far higher proportion of female as compared with male lunatics in the Eurasian than in the Native community, is very conspicuous. Taking, for example, the numbers remaining in the asylum in 1894, whereas the proportion of Eurasian males to females was 33:31, that of Natives was 30·6:6·8, and the high proportion of female Eurasian inmates is visible in the remaining years under review. The subject seems to be one well worthy of further study by those competent to deal with it.

The alleged causes of insanity in the 49 Eurasian cases were as follows:—

Hereditary	..	..	..	..	10
Domestic trouble	..	..	..	..	10
Irregular sexual habits	..	..	..	..	6
Disappointment	..	..	..	..	4
Epilepsy	..	..	..	..	4
Nervous shock	..	..	..	..	4
Love and jealousy	..	..	..	..	3
Intemperance	..	..	..	..	2
Sun-stroke	..	..	..	..	2
Congenital	..	..	..	..	1
Senile	..	..	..	..	1
Privation and starvation	..	..	..	..	1
Religion	..	..	..	..	1
Fever	..	..	..	..	1

On the conclusion of my investigation of the Eurasians of the city of Madras, I proceeded to Calicut, the capital of the Malabar district, as being the most convenient centre for comparing the Eurasians of the west, with those of the

east coast. My visit was by chance coincident with the commemoration of the four hundredth anniversary of the arrival of Vasco da Gama at Calicut after his discovery of the sea-route from Europe to India, which I celebrated in a unique manner by recording the physique of the community resulting, in the first instance, from alliances between the Portuguese adventurers and the attractive Native women, and left as a legacy to the later British occupants. Concerning the origin of the Indo-Portuguese half-breed I learn¹⁰ that, on his return from the recapture of Goa, Albuquerque brought with him the women he had carried away when the Portuguese were driven out of the place. As soon as affairs became tolerably settled again at that port, he had them converted to Christianity, and married them to Portuguese men. No less than 450 of his men were thus married in Goa, and others who desired to follow their example were so numerous that Albuquerque had great difficulty in granting their requests. The marriage of Portuguese men to Native women had already been sanctioned by Dom Manoel, but this privilege was only to be conceded to men of proved character, and who had rendered good services. Albuquerque, however, extended the permission to marry far beyond what he was authorised to do, and he took care that the women so married were the daughters of the principal men of the land. This he did in the hope of inducing them to become Christians. To those who were married Albuquerque allotted lands, houses and cattle, so as to give them a start in life, and all the landed property which had been in possession of the Moorish mosques and Hindu pagodas he gave to the principal churches of the city, which he dedicated to "Santa Catherina."

The very names of my subjects recalled to mind Pedro Alvares Cabral, who anchored before Calicut in 1500, and established a factory at Cochin; the first Portuguese Governor, Dom Francisco de Almeida; André Furtado de Mendonca, who concluded a treaty with the king of Calicut; and many others, whose exploits are handed down to posterity in the Indo-Portuguese archives. Subjoined is a comparative statement showing the names of the Eurasians, whom I have personally examined in Madras and Malabar. A cursory glance thereat shows a marked preponderance of Portuguese names in Malabar, which is readily explained

¹⁰ DANVERS—'The Portuguese in India', 1894.

by reference to the history of the Portuguese in India, aided by a map showing how thickly studded with Portuguese settlements the west coast was as compared with the east coast :—

Eurasians, Madras.	Eurasians, Calicut.
Almeida.	Allamo.
Anthony (2).	Ambrose.
Assey.	Augustine.
Aubert.	
Bantleman.	Barbosa (2).
Bartholomew.	Bastian.
Bastian (2).	Benjamin (2).
Bedford.	Benny.
Bello.	
Binny.	
Bird (2).	
Borgonah.	
Brailly.	
Brisson.	
Brown.	
Calderwood.	Cabral (3).
Carless.	Carvalho.
Caubo.	Conceicao (3).
Christian (2).	
Clarke (2).	
Cleary.	
Clegg.	
Collins.	
Corneille.	
Cornelius.	
Da Costa.	Da Cruz (9).
Da Silva (2).	Da Gama.
Daniel.	Da Silva.
David (2).	David.
Dauids.	Davis.
Davy.	De Sousa (4).
De Roza.	De Morias (2).
Devine.	Diaz (3).
Dennis.	
Dimney (2).	
Edwards (2).	Escrador (2).
Fernandes (2).	Fernandes (12).
French.	
Gambler.	Gabriel (2).
Goodman.	Gomes (3).
Gragbisse.	Gonsalves.

Günther.
 Gwynne.
 Hall.
 Harris.
 Hart.
 Heaney.
 Heldt.
 Henricus (2).
 Henriques.
 Hogg.
 Howell.
 Huggins (2).
 Hunter (2).
 Isaac.
 Jansen.
 Jennings.
 Johnson (5).
 Judge.
 Langford.
 Lavocat.
 Lazaro (2).
 Lowe.
 Luxa.
 Mackenzie.
 McKertish.
 Martin (2).
 Morris.
 Murray (2).

 Newman.
 Pascal.
 Paul.
 Peazold.
 Pereira (3).
 Peters.
 Philbert.
 Powell.
 Preston.
 Renshaw.
 Rigley.
 Rivett.
 Roberts.
 Rodgers.
 Rose.
 Rowland (2).
 Rozario (3).
 Rozaro.
 Ryan (2).

Jacobs.
 Joel.
 Joseph.

La Grange.
 Lopez.

Macarthy.
 Macedo.
 Mark.
 Manoel (2).
 Marquise.
 Mendonca (3).
 Mullen.
 Noronha.

Pereira (3).
 Phillips.
 Pinto (2).
 Powell.
 Quental.
 Rodriques (4).
 Rozario (14).

Schooner.
Smith.
Spires.
Stuart (2).
Sturt.
Tanner.
Truss.

Salisbury.
Saldanha.

Wain.
Willer (2).
Wood.
Xavier.

Van Spall (2).
Van Span.
Varid.
Woolger.

Xavier (2).

Though Portuguese names persist at the present day, it does not follow of necessity that their owners have any Portuguese blood in their veins, for some are merely descendants of Native converts to Christianity, or of household slaves of Portuguese officers. "In Malabar," writes the Census Commissioner, 1881, there is a section of Europeanized Native Christians—Goa Roman Catholics—some of whom have adopted European dress and customs; and these may have been returned in 1871 as Eurasians; and in all districts the popular interpretation of the word "Eurasian" is very liberal. There are many Pariahs and Native Christians, who have adopted a travesty of European clothes, and who would return themselves as Eurasians, if allowed to do so." The division between Native Christians and people of mixed race is, as I have already pointed out, very shadowy in Malabar. Considerable care had, therefore, to be taken in accepting or rejecting some of those who, anxious to secure the modest fee which was offered in return for the loan of their bodies, appeared before me in the rôle of Eurasians. All doubtful cases were rejected, and due attention was paid to the various points—colour, character of nose, type of face, breadth of head, manner of speech, baldness and grey hairs at an early age, etc.—by which one accustomed to close observation of Natives and Eurasians can distinguish racial admixture.

Though the terms are, according to my definition (page 69) synonymous and interchangeable, a social distinction is made at Calicut between Eurasians and East Indians. With a view to clearing up the grounds on which this distinction is based, my interpreter was called on to submit a note on the subject, which eventually arrived, couched in

language worthy of "Mark Twain." I, therefore, reproduce it in the original Anglo-Indian.

"Eurasians are classified to those who stand second in the list of Europeans and those born in any part of India, and who are the Pedigree of European descendants, being born of father European and mother East Indian, and notwithstanding those who can prove themselves as really good Indian descendants such as mother and father of the same sex, therefore these are called Eurasians.

"East Indians are those offsprings of Christians of the East, and they atimes gather the offsprings of Eurasians to the entering their marriage to the East Indian females into the East Indian community, thereby they are called East Indians.

"Native Christians are those of Hindu nations converted into Christians by their embracing the poles of Christianity. All Hindus thereby converted and made Christians by a second Baptism are called Native Christians.

"Coaster.—They are alluded to those who belong to the Coast, and who come from a country that has a Sea Coast into that country that has not got a Sea Coast is therefore called a Coaster. A very rude word."

The distinction between Eurasian and East Indian is, as a matter of fact, a very artificial one, and the two types merge imperceptibly one into the other, separated by no sharp line of demarcation. Speaking in general terms, it may be said that the Eurasians are of greater stature, and possess skins of lighter hue than the East Indians, who, as the result of intermarriage with Native Christian women, have reverted in the direction of the Native type.

There are, in North Malabar, many individuals posing as pure-bred Natives, whose fathers were Europeans; but, for caste reasons, their white paternity is lost sight of. Many of them possess very pale skins, and some are in prosperous circumstances. Writing concerning the Tiyan community, Mr. Logan says: ¹¹ "The women are not as a rule excommunicated if they live with Europeans, and the consequence is that there has been among them a large admixture of European blood, and the caste itself has been materially raised in the social scale. In appearance some of the women are almost as fair as Europeans." In recent times the Tiyans of North Malabar have separated into two

¹¹ 'Manual of Malabar'.

factions, which hold different views with reference to the cohabitation of Tiyan women with Europeans, the one being in favour of it, the other against it. On this point the report of the Malabar Marriage Commission, 1894, states "that in the early days of British rule, the Tiyan women incurred no social disgrace by consorting with Europeans, and, up to the last generation, if the Sudra girl could boast of her Brahmin lover, the Tiyan girl could show more substantial benefits from her alliance with a white man of the ruling race. Happily the progress of education, and the growth of a wholesome public opinion, have made shameful the position of a European's concubine; and both races have thus been saved from a mode of life equally demoralizing to each."

The Eurasians examined by me at Calicut, nearly all of whom were Roman Catholics, were earning a modest livelihood, ranging from Rs. 35 to Rs. 12 per mensem, in the following capacities:—

Bandsman.	Municipal inspector.
Boot-maker.	Musician.
Bugler.	Petition-writer.
Carpenter.	Police constable.
Clerk.	Railway guard.
Coffee-estate writer.	Schoolmaster.
Compositor.	Tailor.
Copyist.	Tin-smith.
Mechanic.	Weaver.

No less than 39, out of the 96 cases which came before me for investigation, were tailors. Tailoring is, therefore, to the poor Eurasians of Calicut what "fitting" is to those of Madras.

As in Madras, so in Malabar, tattooing is very prevalent among the male members of the Eurasian community, and the devices are characterised by a predominance of religious emblems and snakes. The following patterns are recorded in my notes:—

Bangle on wrist.	Cross.
Boat.	Cross and crown.
Bird (the Holy Ghost).	Cross and heart.
Chalice.	Cross and I.N.R.I.
Christ crucified.	Crossed swords.
Cobra.	Fish.
Conventional and geomet-	Flags.
rical designs (done by	Flower.
Koravar women).	Flower with leaves.

Initials.
Ladder.
Sacred heart.
Snake encircling forearm.

SNAKE COILING ROUND FOREARM.
Solomon's seal.
Steam boat.

During the course of my visit to Calicut, a resident correspondent of the 'Madras Mail' expressed his fear that, when I came to strike my averages of Calicut "East Indians," I should find the results very poor, as I had measured specimens drawn from the lower section of the community, represented by artisans living on poor food, and amidst surroundings that are not conducive to physical development. This fear was indeed justified, and my remarks on early marriage and physique of the poor Eurasians of Madras apply with equal, if not greater force to those of Malabar. Repetition is unnecessary, and it will suffice to let the figures in table xxv speak for themselves.

Comparing the physique of the younger members of the Calicut "Eurasian and East Indian" community at an age when they would be eligible as recruits, with that of the Eurasians of Madras and sepoy of the same age, the results work out as follows, and demonstrate that a very small proportion of the two former possess the physique necessary to successfully withstand the hardships enforced by active service:—

WEIGHT, LB.

—					70-80	80-90	90-100	100-110	110-120	120-130	130-140	140-150	150-160
Sepoys	...	...	...	...	...	...	1	4	11	19	9	4	2
Eurasians, Madras	...	...	...	...	...	6	9	12	13	4	5	1	...
„ Calicut	...	...	...	...	3	3	9	15	16	3	1	...	...

CHEST, CM.

—					60-70	70-80	80-90	90-100
Sepoys	...	...	...	...	...	5	42	3
Eurasians, Madras	...	...	...	...	3	33	14	...
„ Calicut	...	...	...	...	1	39	10	...

SHOULDERS, CM.

—			33- 37	37- 38	38- 39	39- 40	40- 41	41- 42	42- 43	43- 44	44- 45	45- 46
Sepoys	...	...	...	...	4	5	6	15	12	4	2	2
Eurasians, Madras	...	...	9	10	8	9	10	2	...	2	...	...
„ Calicut	..	..	12	8	8	17	5	...	...	...	...	...

Putting these figures, as before, in terms of percentages we obtain the following results :—

WEIGHT.					Below 120 LB.	Above 120 LB.
Sepoys	..	..	..	..	32	68
Eurasians, Madras	..	..	..	..	80	20
„ Calicut	..	..	..	..	92	8
CHEST.					Below 80 CM.	Above 80 CM.
Sepoys	..	..	..	..	10	90
Eurasians, Madras	..	..	..	..	72	28
Calicut	..	..	..	..	80	20
SHOULDERS.					Below 41 CM.	Above 41 CM.
Sepoys	..	..	..	..	30	70
Eurasians, Madras	..	..	..	..	92	8
„ Calicut	..	..	..	..	100	0

During a recent visit to Ootacamund, I was, through the courtesy of the Principal, the Rev. A. W. Atkinson, enabled to examine the physique of the elder boys at the Lawrence Asylum, the object of which is "to provide for children of European and East Indian (i.e., Eurasian) officers and soldiers of Her Majesty's Army (British and Native), and of Europeans and East Indians in the Medical Service, Military and Civil, who are serving, or have served within the limits of the Presidency of Madras, a refuge from the debilitating effects of a tropical climate, and from the serious drawbacks to the well-being of children incidental to a barrack life; to afford for them a plain, practical, and religious education; and to train them for employment in different trades, pursuits, and industries." In his last two annual reports the Principal has emphasised the fact that application for the admission of the children of British

soldiers, for whom solely this and similar institutions were originally founded, have almost ceased. "There is," he says (6th September, 1897), "not one child of a British soldier eligible for admission on the register to-day-a situation unprecedented in the history of the Asylum. In view then of this lapse of applications for the admission of the kind of children into our Asylum, for whom it primarily exists, ought not the plan to be adopted, as speedily as may be, of drafting such children from Orphanages, and such like Institutions on the enervating plains, and placing them with us here?" In the year 1896-97 four boys enlisted in European regiments, and one boy in a Native regiment. "Compared with the previous year," the Principal reports, "enlistments in European regiments were few, as boys of pure European parentage only can be entertained."

As the result of examination of 32 Eurasian boys at the Lawrence Asylum, between the ages of 13 and 17, whose measurements are given in detail in table xxvi, I am able to testify with very great pleasure to the excellence of their physical condition. A good climate, with a mean annual temperature of 58°, good food, and physical training, have produced, in fact, a set of boys well-nourished and muscular, with good chests, shoulders, and body weight, who afford a striking contrast to the lads belonging to the same class in the plains, brought up amid the unwholesome environment of an enervating climate. More eloquent than the columns of figures in table xxvi, which appeal only to those accustomed to anthropometric methods, was examination of the lads themselves as they stood stripped for investigation. But I may, for the purpose of comparison, cite the physical records of a few cases, both pure European and Eurasian, in evidence that, amid wholesome surroundings, the Eurasian (especially of British paternity) is capable of development into a being of good physique, such as is required for the hardships of Military Service:

		Age.	Weight.	Height.	Chest.	Shoulders.
European	..	16-17	135	169·8	84	35·5
"	..	15-16	110	161·8	79·5	34·7
"	..	15-16	100	153·4	81	36·3
"	..	14-15	135	167·6	84	36·6
Eurasian	..	16-17	105	157·4	81	35·3
"	..	16-17	116	162·6	83	39·7
"	..	15-16	102	149·5	80	36·3
"	..	14-15	108	153·6	80	35·2
"	..	13-14	115	167	79·6	37·1

TABLE XVII.
SUMMARY OF MEASUREMENTS.
EURASIANS.

	Max.	Min.	Average.	Range.
Weight	168	79	111.5	89
Height	183.8	153	166.6	30.8
Height, sitting	95.6	78.6	86.6	17
Height, kneeling	136.6	113	123.7	23.6
Height to gladiolus	136.4	110	122.7	26.4
Span of arms	196.8	153.4	172.7	43.4
Chest	93	67	79.1	26
Middle finger to patella	20.4	6.2	12.5	14.2
Shoulders	44.6	34.3	39.2	10.3
Cubit	52.9	40.3	46.1	12.6
Hand, length	20.2	15.5	17.7	4.7
Hand, breadth	8.7	6.5	7.5	2.2
Hips	30.3	21.4	25.4	8.9
Foot, length	29.5	22.4	25.7	7.1
Foot, breadth	10	7.1	8.3	2.9
Cephalic length	20.2	16.8	18.6	3.4
Cephalic breadth	15.6	12.8	14.1	2.8
Cephalic index	87.2	69.5	76	17.7
Bigoniae	12	9	10.1	3
Biszygomatic	14.4	11.8	13	2.6
Maxillo-zygomatic index	85.3	69.9	77.5	15.4
Nasal height	6.1	4.4	5.1	1.7
Nasal breadth	4.2	2.7	3.5	1.5
Nasal index	91.1	53.7	69.5	37.4

Note.—The results are based on the measurement of 130 subjects.

In this and the following tables, the weight is recorded in pounds; the measurements are in centimetres.

TABLE XVIII.
EURASIANS AND SEPOYS.
AVERAGES.

							Eurasians.	Sepoys.
Age	...	...	...	...	...	...	28-29	24-25
Weight	...	...	...	...	...	...	111·5 lbs.	127·5 lbs.
Height	...	...	...	...	...	...	166·6 cm.	168·2 cm.
Chest	...	...	...	...	...	...	79·1 cm.	84·7 cm.
Shoulders	...	...	...	...	...	...	39·2 cm.	41·5 cm.
Dynamometer	...	...	...	...	...	...	65 lbs.	80 lbs.

TABLE XIX.
SEPOYS AND EURASIANS, AGED 18-25.

	Maximum.		Minimum.		Average.		Mean above.		Mean below.	
	Sepoys.	Eur- asians.	Sepoys.	Eur- asians.	Sepoys.	Eur- asians.	Sepoys.	Eur- asians.	Sepoys.	Eur- asians.
Weight	160	150	98	80	125	108	135	122	115	95
Height	178	181	160.6	153.8	167.9	164.8	172.1	170.8	164.3	159
Chest	94	87.5	75.5	68	84	77.6	87.3	82	81	74
Shoulders	45.5	43.9	37.7	33.8	41.6	38.7	42.8	40.5	40	37.1
Dynamometer	113	90	66	50	80	64	87.6	72.4	73.6	56.6

TABLE XX.
DETAILS OF MEASUREMENTS.
EURASIANS, AGED 19—25.

Age.	Weight.	Height.	Chest.	Shoulders.	Dynamometer.	
24	112	167·4	85	40·4	...	Fitter.
22	105	160·4	83	40	...	Fitter.
24	97	153·8	78	37·5	...	Boiler-smith.
21	127	180	86·5	41·5	...	Blacksmith.
21	189	164·8	87	42·1	...	Ticket-collector.
22	135	181	82	40·9	...	Clerk.
23	116	169·6	78·7	38·6	...	Electric tram driver.
21	119	179	79·7	38·7	...	Fitter.
24	110	162	78	39·4	...	Clerk.
23	108	170	76	39·4	...	Carpenter.
23	94	154·6	74·5	36·8	...	Unemployed.
23	90	156·8	72·5	37·2	...	Carpenter.
23	150	180·6	87·5	43·9	...	Electric tram driver.
24	103	167	75·5	38·6	...	Compositor.
21	107	167·2	77	37·2	...	Hammerer.
22	111	170·6	75	37·3	...	Turner.
21	95	160·8	75·5	36·7	...	Mechanic.
23	111	166·8	77	39·5	...	Fitter.
21	115	168·4	83·5	40	...	Fireman.
23	123	162·2	82	40·9	...	Fitter.
24	106	166·8	75·5	40·2	...	Fitter.
24	116	171	75	38·2	...	Fitter.
22	127	169·2	81	40	...	Fireman.
23	109	165·4	77·5	38·5	...	Turner.
24	115	179·4	82·5	41·2	...	Fitter.

TABLE XX—*continued*.

DETAILS OF MEASUREMENTS.

EURASIANS, AGED 19–25.

Age.	Weight.	Height.	Chest.	Shoulders.	Dynamometer.	
24	83	154·7	72	36·5	...	Chemist's assistant.
22	182	171·2	87	40·1	90	Turner.
22	101	165·8	74·5	39·1	70	Clerk.
22	123	160·2	82	40·7	71	Rivetters.
21	103	169·2	76·5	39·1	68	Joiner.
21	137	175·2	80	39·9	60	Fitter.
21	92	154·5	73	33·8	50	Fitter.
24	101	166	79	37·6	69	Railway guard.
19	106	160	78	38·5	67	Turner.
20	96	163·8	72	38·5	56	Cleaner, railway.
20	113	167·2	76·5	39·6	74	Carpenter.
23	136	171·4	84·5	43·3	90	Cobler.
20	87	159·6	76·5	37·7	57	Fitter.
24	80	154·4	68	35·1	56	Clerk.
20	102	163·8	75·5	38·7	55	Fitter.
22	88	158·8	75·5	36·4	62	Printer.
23	94	155·8	75·5	37·6	64	Printer.
19	100	161·4	74	37·5	63	Fitter.
24	118	169	79	39·5	66	Fitter.
19	98	162·6	72	35·6	50	Fitter.
19	95	159·6	72·5	37·1	60	Fitter.
19	80	157·8	69·5	35·9	54	Fitter.
19	111	161·4	74	37	65	Watch-repairer.
20	118	167	79	39·7	66	Fitter.
19	82	157	69	34·8	46	Blacksmith.

TABLE XXI.
DETAILS OF MEASUREMENTS.
SEPOYS, AGED 18—25.

Age.	Weight.	Height.	Chest.	Shoulders.	Dynamo- meter.
23	131	174	87	45·3	78
24	143	170·4	91·5	42·8	113
20	133	169·2	85	42·3	81
19	126	161·8	80·5	39	71
20	118	160·6	82	41·2	85
19	115	167·1	80	40·7	89
22	131	168·6	82	43·7	81
22	125	167·6	82	41·8	86
19	128	167·4	85	41·7	78
24	122	168·3	84·3	42	69
21	148	171·8	89·5	42·4	81
21	125	165·6	84	42·4	79
18	137	174	88	43·7	83
19	123	173·2	80·5	41·4	73
23	160	175·9	94	41·3	78
23	157	178	90	43·7	88
20	131	175·2	84	42·7	84
23	128	163	85·5	41·3	92
22	139	172·4	89·5	43·4	81
19	124	172	80·5	38·2	80
22	113	161	83	40·2	76
23	129	161·8	84·5	41·8	66
21	141	172·6	88	45·5	97
19	108	162	81	39·5	93
20	123	166	83	40·2	80

TABLE XXI—*continued.*

DETAILS OF MEASUREMENTS.

SEPOYS, AGED 18—25.

Age.	Weight.	Height.	Chest.	Shoulders.	Dynamometer.
21	98	166	76	39·6	67
22	127	169	82	39·1	86
20	116	163·2	80	41·1	69
20	129	166·9	89	42·4	77
20	145	177·8	86·5	42·3	75
18	107	166·8	79·5	38·2	66
22	109	160·7	80·5	38·7	84
21	111	161·3	79·5	40·1	75
24	112	165	80·5	39	82
21	118	162	83	40·7	71
19	114	170·8	81·5	41·6	73
18	122	161·2	86	42·2	78
18	120	163·2	83·5	41·8	72
21	127	167	86	41·8	77
22	116	170·4	83	42	82
20	134	173·2	98	42	86
18	113	163·6	79	41·6	76
18	121	167·4	82·5	41·5	77
22	100	165·4	75·5	37·7	75
23	135	169·4	85	41·9	85
23	128	170	88	44	75
24	122	164·6	85·5	42·9	70
19	128	170·2	86	40·8	86
22	114	169·2	83	41·7	73
22	130	172	88	44·8	102

TABLE XXII.
LIST OF SO-CALLED EUROPEANS TREATED IN THE LEPROS HOSPITAL FROM 1890-97.

Age.	Race.	Occupation.	Place of birth.	How long ill.	Cause.	Date of		
						Admission.	Discharge.	Death.
43	European	Railway Guard.	Australia	15 years	Venereal	Y. M. D. 13 9 84	Y. M. D. ...	Y. M. D. 28 3 90
25	Irish	Nil	Madras	10 years	Unknown	13 9 89	..	12 7 91
23	European	Interpreter	Tanjore	9 months	Do.	12 2 91	13 2 92	...
23	Do.	Fitter	Buxar	6 years	Do.	21 2 91	3 2 92	...
34	Do.	Nil	Nagapatam	15 years	Do.	17 3 92	11 3 93	...
27	Do.	Accountant	Shevaroy Hills.	6 months	Do.	14 6 92	...	30 7 96
31	French	Contractor	Pondicherry	15 years	Do.	9 3 93	16 4 93	...
42	European	Supervisor, P.W.D.	Bangalore	17 years	Venereal	12 10 94	...	...
20	Do.	Nil	Tinnevely	12 years	Unknown	28 3 95	...	14 2 96
27	Do.	Sailor	Cardiff	2½ years	Do.	24 6 97	...	...
32	Do.	Soldier	Burma	6 years	Do.	26 10 97	...	11 12 97

TABLE XXIII.

STATISTICS SHOWING THE NUMBER OF CASES OF LEPROSY TREATED DURING THE FIVE YEARS 1893-97.

	Remained.			Admitted.			Total.			Discharged.			Died.			Remaining.		
	Men.	Women.	Children.	Men.	Women.	Children.	Men.	Women.	Children.	Men.	Women.	Children.	Men.	Women.	Children.	Men.	Women.	Children.
EUROPEANS.																		
1893	1	...	...	1	...	...	2	...	...	1	...	...	...	...	...	1	...	...
1894	1	...	...	1	...	...	2	...	...	...	...	...	...	...	...	2	...	...
1895	2	...	...	1	...	...	3	...	...	...	...	...	...	...	...	3	...	...
1896	3	...	...	...	...	...	3	...	...	...	...	...	2	...	...	1	...	...
1897	1	...	...	2	...	...	3	...	...	...	...	...	1	...	...	2	...	...
EURASIANS.																		
1893	22	11	...	7	3	2	29	14	2	5	6	2	4	2	...	20	6	...
1894	20	6	...	7	8	3	27	14	3	6	6	2	4	1	...	17	9	1
1895	17	9	1	8	3	2	25	12	3	9	5	2	...	...	1	16	7	...
1896	16	7	...	16	6	...	32	13	...	13	7	...	...	1	...	20	5	...
1897	20	5	...	6	4	1	26	9	1	2	3	1	3	1	...	21	5	...

TABLE XXIV.
STATEMENT SHOWING THE NUMBER OF LUNATICS TREATED DURING THE FIVE YEARS 1893-97.

	Remained.		Admitted.		Total.		Discharged.		Died.		Remaining.	
	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.
EURASIANS.												
1893	31	30	6	7	37	37	2	5	2	1	33	31
1894	33	31	8	6	41	37	3	5	1	1	37	31
1895	37	31	10	6	47	37	4	3	3	3	40	31
1896	40	31	2	4	42	35	5	4	...	1	37	30
1897	37	30	3	3	40	33	2	1	1	...	37	32
NATIVES.												
1893	293	76	110	25	392	101	54	19	82	14	306	68
1894	306	68	104	28	410	96	55	13	41	12	314	71
1895	314	71	113	18	427	89	62	12	76	10	290	67
1896	290	67	82	17	372	84	75	13	27	9	270	62
1897	270	62	84	18	354	80	56	6	22	14	276	60
EUROPEANS.												
1893	12	3	15	4	27	9	13	2	1	...	13	7
1894	13	7	19	1	32	8	18	1	...	...	14	7
1895	14	7	11	4	25	11	12	2	1	2	12	7
1896	12	7	5	...	17	7	3	1	1	...	13	6
1897	13	6	14	1	27	7	13	1	...	...	14	6

TABLE XXV.
COMPARISON OF MEASUREMENTS.
EURASIANS, MADRAS AND CALCUT.

	Madras.	Calicut.
Weight	111.5	109
Height	166.6	163.5
Span of arms	172.7	171
Chest	79.1	77.7
Shoulders	39.2	38.7
Hand, breadth	7.5	7.4
Hips	25.4	25.1
Foot, breadth	8.3	8.3
Cephalic length	13.6	18.6
„ breadth	14.1	14
„ index	76	75.4
Bigoniac	10.1	9.9
Bizygomatic	13	12.8
Maxillo-zygomatic index	77.5	77.5
Nasal height	5.1	4.9
„ breadth	3.5	3.4
„ index	69.5	69.3
Dynamometer	65	63

The weights were taken in clothes with boots.

TABLE XXVI.

SUMMARY OF MEASUREMENTS.

EURASIAN BOYS, LAWRENCE ASYLUM.

Age.	Weight.	Height.	Chest.	Shoulders.	Hand, breadth.	Cephalic length.	Cephalic breadth.	Cephalic index.	Dynamometer.
16-17	105	157.4	81	35.3	7.4	18.9	14.2	75.1	50
16-17	116	162.6	83	39.7	7.5	18.2	13.4	73.6	59
16-17	85	145.2	67	33	7.2	18.9	14.2	75.1	43
16-16	118	165.6	79.5	37.4	7.3	17.4	15	86.2	64
15-16	96	155.4	74	33.4	6.8	18	14.8	82.2	49
15-16	97	153.2	73	35	7.3	17.5	14.8	84.6	50
15-16	102	149.5	80	36.3	7.1	17.8	14.6	82	51
15-16	91	149.4	73	35.4	6.8	17.8	14.6	82	42
15-16	104	152.6	76	36	7.4	18.4	13.6	73.9	63
15-16	87	152.4	71.5	35.4	7.1	18.1	14.2	78.5	49
15-16	97	153.6	73.5	35.3	7.2	17.1	14.4	84.2	55
15-16	86	148.7	70.5	32.3	7.4	17.6	13.5	76.4	60
15-16	85	150.2	73.5	32.3	6.9	17.8	13.6	76.4	47
15-16	90	151.2	73.5	32.9	6.4	16.6	14.4	86.7	41
15-16	92	151	70	34.7	7.3	16.9	13.6	80.5	55
15-16	92	144.8	73	33.5	6.9	18	13.4	74.4	44
15-16	97	149.8	72.5	34.1	7	19.5	15.2	76.4	48
15-16	98	150.4	77.5	35.3	7.2	17.2	13.6	79.1	51
15-16	80	140.6	69	30.5	6.7	17.4	13.9	79.9	39
15-16	85	148.9	67.5	33	6.5	17.8	14.2	79.8	38

TABLE XXVI—*continued*.

SUMMARY OF MEASUREMENTS.

EURASIAN BOYS, LAWRENCE ASYLUM.

Age.	Weight.	Height.	Chest.	Shoulders.	Hand, breadth.	Cephalic length.	Cephalic breadth.	Cephalic index.	Dynamometer.
14-15	108	153·6	80	35·2	7·6	16·8	14·2	85·7	67
14-15	93	147·7	76	34·5	7·7	17·6	14	79·5	50
14-15	85	145·6	68·7	32	6·5	18·6	14	75·3	38
14-15	87	150·2	71·5	31·6	6·6	17·8	13·8	77·5	52
14-15	88	148·2	69·5	31·5	6·8	17·6	14	79·5	52
14-15	97	148·7	75	33·2	7·3	18	13·8	76·7	59
14-15	92	148·2	75·3	34·6	6·5	18·2	14·7	80·8	48
14-15	89	146·5	71·5	33·9	7	18·8	13·8	73·4	47
14-15	77	147·6	68	32·8	6·3	18·2	14·2	78	39
14-15	86	143·2	72·5	32·9	6·8	18·5	14·2	76·8	42
14-15	87	146·6	69·5	33·3	7·1	18	14·2	78·9	50
13-14	115	167	79·6	37·1	7·2	18·2	15·8	86·8	57

NOTE ON TATTOOING.

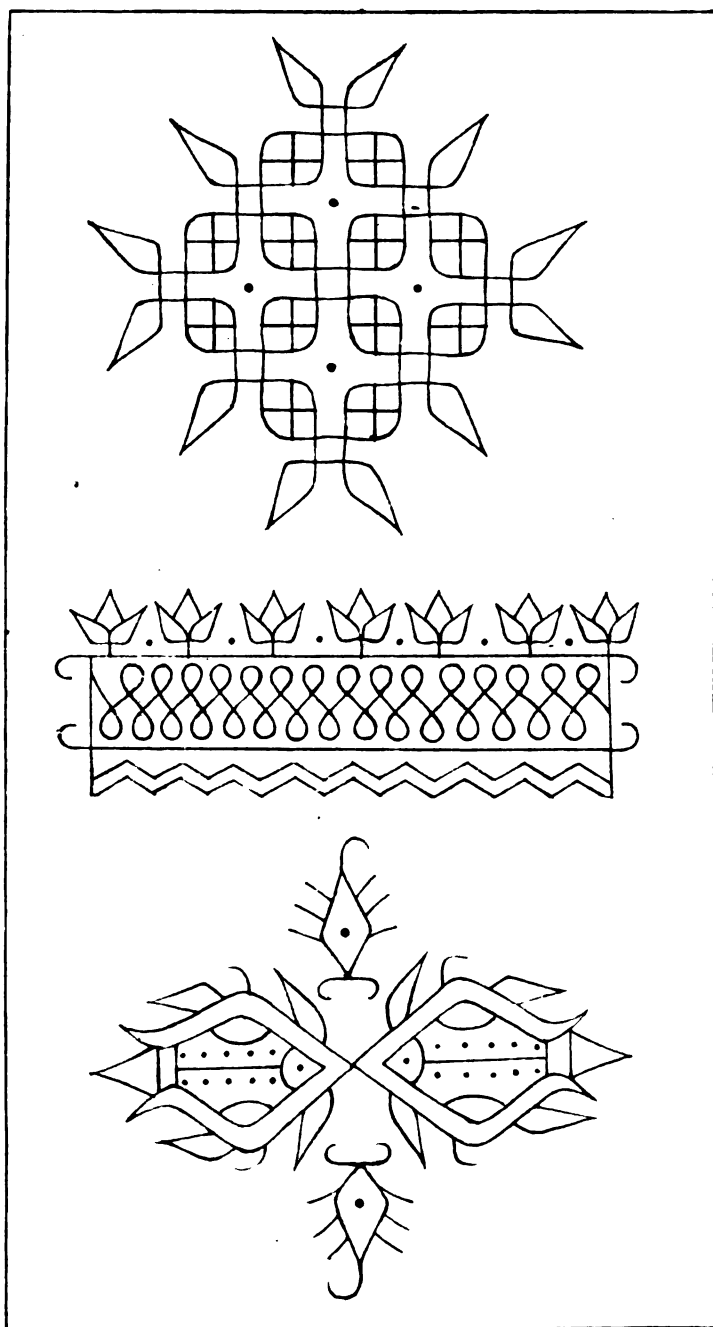
IN a paper on tattooing, read at the Anthropological Institute in January, 1888, Miss Buckland refers to the practice of tattooing among the Nāgas of Assam, and to the tattooing of breeches, reaching from the waist to the knee, with which the male Burman is adorned. But, in the map illustrating the paper, peninsular India, south of 20°, is left a perfect and absolute blank. And, in the discussion which followed the reading of the paper, Lieutenant-Colonel Kincaird, recognising this remarkable hiatus, remarked that "his observation led him to believe that this custom is wide-spread on the arms and legs among the women of the lower castes of the Tamil, etc., races in the south and south-east of the peninsula. Among the ethnically allied so-called aboriginal tribes inhabiting the Vindyan and Sathpura hill slopes it is also prevalent, even among the women of the lower orders of Muhammadans, whose forefathers were probably low-caste Hindus, before being converted by force. He had observed the same tattoo markings on arms and legs. There is very generally a dot on the chin, and similar dots on the cheek or temple very sparingly placed, forming perhaps, in their ideas, beauty spots similar to the patches of our ladies in former years."

The prevalence of tattooing, frequently with very elaborate devices, among the male sex in the Eurasian community has been dealt with in the preceding chapter. And, in Bulletin No. IV, 1896, I have referred to, and illustrated the primitive patterns of dots and circles on the breasts, arms, hands, legs, and feet of the Toda women of the Nilgiris, and the more advanced type of lines, dots, and circles, sometimes combined into a simple ornamental pattern, in vogue among the Kota women of the same hill-range.

The following note on the practice of tattooing, as carried out in the city of Madras, is based on information extracted in the course of interviews with professional female tattooers, of whom the first arrived in a state of maudling

intoxication. These women belong to the class of Koravas or Yerukalas, "a vagrant tribe found throughout the Madras Presidency. They wander about the country in gangs, selling baskets, carrying salt, telling fortunes, and pilfering and robbing whenever an opportunity occurs. As house-breakers they are especially expert, and burglary is their favourite crime." (Census report, 1881.) The men are also employed in hunting, bird-snaring, and as actors of native plays, which they perform on the road side. Sometimes they masquerade as mendicants, and go about, beating a drum, and begging from house to house in the bazár. The female tattooers leave Madras during the harvest season, and pay professional visits to the neighbouring districts, travelling as far as Pondicherry in the south, and Cuddapah in the north. By these women Brāhmans, 'Sudras' of all classes, Pariahs, and Tamil-speaking Muhammadans (Labbais) are operated on. The patterns range from a dot or straight line to complex geometrical or conventional designs (Plates xxiii-xxiv). Figures of wild animals are not met with, but scorpions, birds, fishes, flowers, and the Vaishnava sect mark, are common. So too, as among the Eurasians, are the initials or name (in Tamil characters) upon the fore-arm. Sometimes Hindu males are tattooed, as an amusement, when boys, or, in some cases among the lower classes, *e.g.*, Pariahs, when grown up. But tattooing with elaborate devices is essentially confined to the female sex. The parts of the body selected for the performance of the operation in its ornamental aspect are the fore-arm, fore-leg, fore-head, cheeks, and chin. But, in some instances, in case of muscular pain or other disorder, the operation is performed as a remedial agent over the shoulder-joint, or on the thigh, upper arm, or other parts of the body. A legend runs to the effect that, many years ago, a Pariah woman wished her upper arms and breast to be tattooed in the form of a bodice. The operation was successfully performed until the region of the heart was reached, and then a vulnerable part was punctured by the needles with the result that the woman died. Whence has arisen a superstitious objection to tattooing of the breasts.

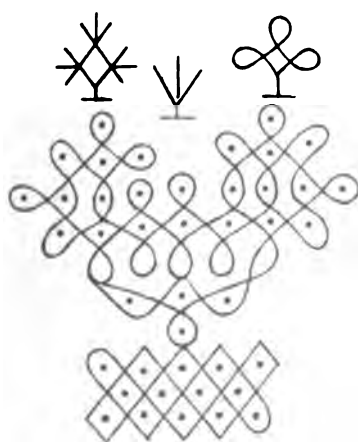
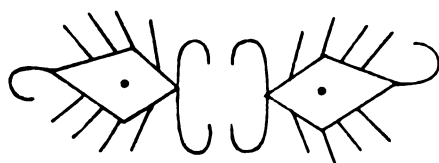
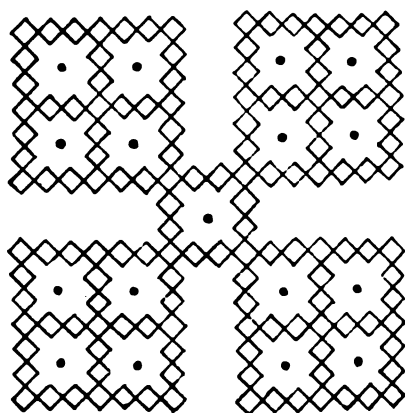
The Tamil equivalent of tattooing is pachai-kuthu-kirathu (= pricking with green). The "marking ink" is prepared in the following manner: Turmeric (kappa manja) powder and agathikeerai (leaves of *Sesbania*



grandiflora) are rubbed together in a mortar, or on a grinding stone. The mixture is spread on a thin cloth, and rolled up in the form of a wick, which is placed in an open lamp charged with castor-oil. The wick is lighted, and the lamp covered with a new earthen pot, on the inside of which the lamp-black is deposited. This is scraped off and mixed with human milk or water. Instead of *agathi-keerai*, *arumpilloo* (green parts of *Cynodon Dactylon*), or *karisinagoni* (green parts of *Eclipta alba*) may be used in the preparation of the wick. As a pricking instrument, three or four sewing needles are fastened together with thread. In the performance of the operation, the selected pattern is first traced on the skin with a thin stick dipped in the prepared ink, which is pricked in with the needles. The part is then washed with cold water, and a coat of ink rubbed over the surface. To allay the pain, oil is applied, and a small quantity of turmeric powder is rubbed in, to brighten the colour and prevent swelling. The Korava women, being illiterate, are unable to tattoo initials or names unless they are first drawn for them. They are able to execute the complicated patterns, with which they are, from long practice, familiar, with considerable dexterity, and will tattoo any pattern which is new to them, provided that it is first drawn. The woman who described the tattooing process to me traced out very elaborate patterns, with great rapidity, with the blunt stick which she was accustomed to use, but could make no way at all with a pencil. The Burmese patterns are far more artistic, varied, and complicated than those executed by the Koravas. With these patterns sepoys, and Tamil coolies who emigrate to Burma, are freely tattooed by highly skilled Burmese tattooers; and some of these patterns are now being copied by the Madras tattooers. The tattooer's fee is said to range from a quarter-anna for a dot or line to twelve-annas for a complex design. And in up-country villages payment appears to be made in kind, and a present of rice to be the usual remuneration.

The following information was supplied by a Tamil Native, with a European ballet girl tattooed on his upper arm, who was engaged in varnishing cases in one of the Museum galleries: "Some years ago I went to Ceylon with a Native Theatrical Company. While in Colombo I made the acquaintance of a Sinhalese who was a professional tattooer. He had an album of pictures for tattooing. I

was attracted by their beauty, and subjected myself to the operation. It was an easy and painless operation as compared with that of the Madras tattooer. The Sinhalese man had the needles tied together in different ways, *e.g.*, for pricking straight lines five or six needles are tied together in a row; for pricking curves the needles are arranged in a curve. The Madras tattooer has the needles tied together in a bundle, and the operation, as performed with them, is painful, and sometimes followed by swelling and ulceration." Asked whether he was glad he had been tattooed, the man said, "I am very sorry I had it done, for, when I got married, I was ashamed of it, and kept it hidden by my cloth."



MALAGASY-NIAS-DRAVIDIANS.

IN the course of an article entitled 'Malgaches-Nias-Dravidians,'* M. Zaborowski makes copious reference to the results of my researches among the Irulas, Paniyans, and Kurumbas.† Quoting Modigliani, he says: "I have seen in India, on the Malabar Coast, and especially at Beypur, Calicut, and the surrounding country, various natives of *Malaisoid* type, whose features struck me owing to their close resemblance to those of the Nias. Among the Tiyans, of low caste, this resemblance is great (twisted legs, lobes of the ears widely dilated, the shape of the female breasts, and long arms); but those, in whom the resemblance struck me most, were a Kakkai (crow-eating) Kurumba man and woman, mendicants met in the vicinity of Calicut. It was on my return from Nias, and the impression which they produced was a lively one. . . . I do not wish to affirm that the Nias are descended from the Tiyans, or from the Kurumbas; but, from the description of their physical characters, their customs, and their legends, results the possibility of a common origin between Nias and Kurumbas.

Continuing the line of argument, M. Zaborowski writes as follows: "A very important work, which 'M. Edouard' Thurston has just published, allows me to bring this assimilation still closer. The portraits of Irulas, Paniyans, Kurumbas, and a Tamil man, which this author gives with his notes, are sufficient by themselves to clear up many doubts. Mr. Thurston has measured only Dravidians, so that he furnishes us with terms of comparison taken in India itself. A hierarchic classification of all these Indian people is made by the consideration of the nasal index alone. The Irulas, Paniyans, and Kurumbas are shown, by the table of nasal indices, to be specially worthy of attention from the point of view which concerns us. Their extreme platyrhiny is due, as in the Moïs, to shortness of height rather than to excessive breadth."

* Bull. Soc. d' Anthropol., Fasc., 2, 1897.

† Madras Museum Bull., Vol. II, No. 1, 1897.

After drawing attention to the profusion of copper rings, and other ornaments which the Irula and Paniyan women wear, and the resemblance between the clothing of Irulas and Malagasy of Madagascar, M. Zaborowski continues : " In studying the customs of our Indo-Chinese wild tribes, I have naturally been struck with the similarity of their taste for interminable rolls of copper, which they wear on the fore-arm, the profusion of bracelets, and especially with the habit of dilating the lobes of the ears, and suspending therein rings of copper, with the tastes and practices of the Dayaks of Borneo. Now I find the same tastes, and almost the same practices among the Dravidian tribes of Southern India. Irulas, Paniyans, and doubtless the Kurumbas, cover themselves with bracelets and rings of copper, and insert in the lobes of the ears light discs, rolls of cajan, doubtless to suspend therein ear-rings, and even rings of copper, which stretch them. This last custom is very widespread at Nias, and it is met with in Madagascar. Its point of departure, its origin, is then not in Borneo, but in Southern India. In addition to their striking physical characters, Irulas, Kurumbas, and Paniyans offer to the careful observer peculiarities of customs which, if not absolutely identical with those of the Moïs, recall no less forcibly their mode of existence, customs, level of culture, moral and social individuality. Close bonds have united them. I do not say that the Nias are Kurumbas, or that the Moïs are Paniyans or Irulas. They are like so much *débris* of groups disaggregated long ago. They have lived, without communicating one with the other, for perhaps more than a thousand years. And it is undoubtedly more than two thousand years since they were separated, and became subject to the influences of difference in climate and environment. Their separation may even date back to a more remote period. It is, then, marvellous that they present to-day such evident affinities. Traits of custom and character may separate them even under the head of physique. Thus Irulas, Kurumbas, and Paniyans have, as a general rule, the skin of a darker hue than Nias and Moïs, a greater hairy development, and a more Australian type. But the colour of the skin is universally very variable; light skins are met with even among Dravidians. And it must not be forgotten that Malay blood has, for a long time, had a very great influence in Indo-China. So that secondary distinctions cannot make us misinterpret the identity of the primary characters which are preserved in all these groups with remarkable persistence.

It is from India that have proceeded the principal constituent elements of the Nias and Moïs, not to speak of other less well-known groups of Sonda.

As a supplement to my notes on the ornaments worn by Irulas and Paniyans, and as bearing on the subject of dilatation of the ear-lobes referred to by Mr. Zaborowski, I reproduce my notes on the ornaments worn by Cherumans of both sexes at Calicut on the Malabar Coast. The Cherumans are, as I have pointed out elsewhere, a large community of low stature, very dark skinned, with wide nasal index, inhabiting Malabar, where they were formerly agrestic slaves, and now work for the most part as field labourers, and, in the town of Calicut, as grass cutters, &c. With a view to rising in the social scale, many Cherumans are converted to Muhammadanism, and throw in their lot with the Moplahs or Mápillas.

Man, æt. 30. One steel, two brass ear-rings right ear; two brass rings left ear.

Boy, æt. 14-15. Brass ring in each ear.

Man, æt. 30. Three brass rings in each ear; two steel rings and one brass ring left middle finger.

Man, æt. 25. Two brass rings left ear; one brass ring right ear. Three brass rings, and one iron ring right ring finger.

Man, æt. 28. Two brass rings in each ear. One brass, one copper, and five iron rings right little finger. One brass ring with glass ornament left little finger.

Woman, æt. 25. Lobes of both ears widely dilated by rolled leaden ornaments. Brass, and two glass bead necklets. String necklet with flat brass ornaments, the size of a Venetian sequin, with device as in old Travancore gold coins, with two brass cylinders pendent behind, and tassels of red cotton.

Three brass rings on right little finger; two brass rings on left ring finger. One brass, and two steel bangles on left wrist.

Woman, æt. 25. Several bead necklets, and a single necklet of many rows of beads. Brass necklet like preceding, with steel prong and scoop, for removing wax from the ears and picking teeth, tied to one of the necklets. Attached to, and pendent from one necklet, three cajan rolls with symbols and Malayalam inscription to act as a charm to drive away devils.

Three ornamental brass bangles on right fore-arm; two on left fore-arm. Iron bangle on left wrist. Thin brass ring in helix of each ear. Mass (seventy) of thin brass rings (alondôti), with heavy brass ornament (adikyâ) in dilated lobe of each ear.

Woman, æt. 30. Neck and ear-ornaments of same type as preceding, but two brass rings in each helix, and one cajan roll, to drive away cough and fever.

Right hand—

Four brass rings, thumb and middle finger.

Four brass and two copper rings, ring finger.

Left hand—

One copper ring, thumb.

One steel ring, middle finger.

Three copper, and five brass rings, ring finger.

Girl, æt. 12. Ears dilated by small cajan ornaments (gradual dilatation). Necklet with brass ornament with Travancore coin device. Brass ring on right ring finger.

Girl, æt. 13. String round neck to act as a charm in warding off fever. Neck ornament with brass imitation Venetian sequin. Brass bead necklets and ear scoop. Brass and steel bangles on right wrist; brass bangles on left wrist. Three copper, three brass, and two steel rings on right ring finger. Long slit in lobe of each ear for ear ornaments.

Woman, æt. 30. Mass of brass rings and solid brass ornament in lobe of each ear. Thin brass rings in each helix. Neck heavily decorated with glass bead necklets, and necklet with heavy heart-shaped ornaments. Five brass bangles on right fore-arm; steel bangle on left fore-arm. One copper and two brass rings, left ring finger; five copper rings, left little finger.

Woman, æt. 25. Ear ornaments same as preceding. Neck heavily decorated with brass and glass bead necklets, one with ear scoop and tooth-pick pendent from a string. Brass necklet of ornaments with Travancore coin device. String necklet with 5 brass cylinders pendent, 5 brass bangles on right wrist; 6 brass, 2 iron bangles left wrist.

Right hand.

1 copper, 5 brass rings, middle finger.

1 iron, 3 brass rings, little finger.

Left hand.

1 copper, 5 brass rings, middle finger.

8 brass, 2 copper rings, ring finger.

1 brass ring, little finger.

Woman, æt. 25. Cajan roll in lobe of right ear. Rolled leaf in lobe of left ear.

The subject of artificial enlargement of the ear-lobe, and the geographical distribution of this artificial mutilation, by which the lobes are sometimes torn asunder, are treated of in an admirable paper by Mr. J. Park Harrison (*Journ. Anth. Inst.*, Vol. II, 1873). The practice of enlarging the ear-lobe is there recorded from Easter Island, India and Ceylon, Assam, Arakan, Burma and Laos, the Asiatic Islands (Nias, Nicobar, Borneo, etc.), South Pacific, America, and Africa. In his reference to India, Mr. Harrison says: "In the district of Madura, Dr. Shortt mentions that among the Maravars, who form the greater part of the population, the practice of piercing the ear-lobes, and 'so distending them as to touch the shoulders,' is still kept up among the women. The operation is here, as in other countries where the custom prevails, carried out during infancy, and the aperture in the ear-lobe is very gradually enlarged. Salt and water is applied during the first day or two; and at the end of a month weights, each slightly heavier than the last, are attached to the lobe until it is brought to the requisite length. Though ear ornaments of considerable size are common in other parts of India, I have not been able to learn that the lobe of the ear is now distorted in the manner above described in any other districts except Madura and Malabar."

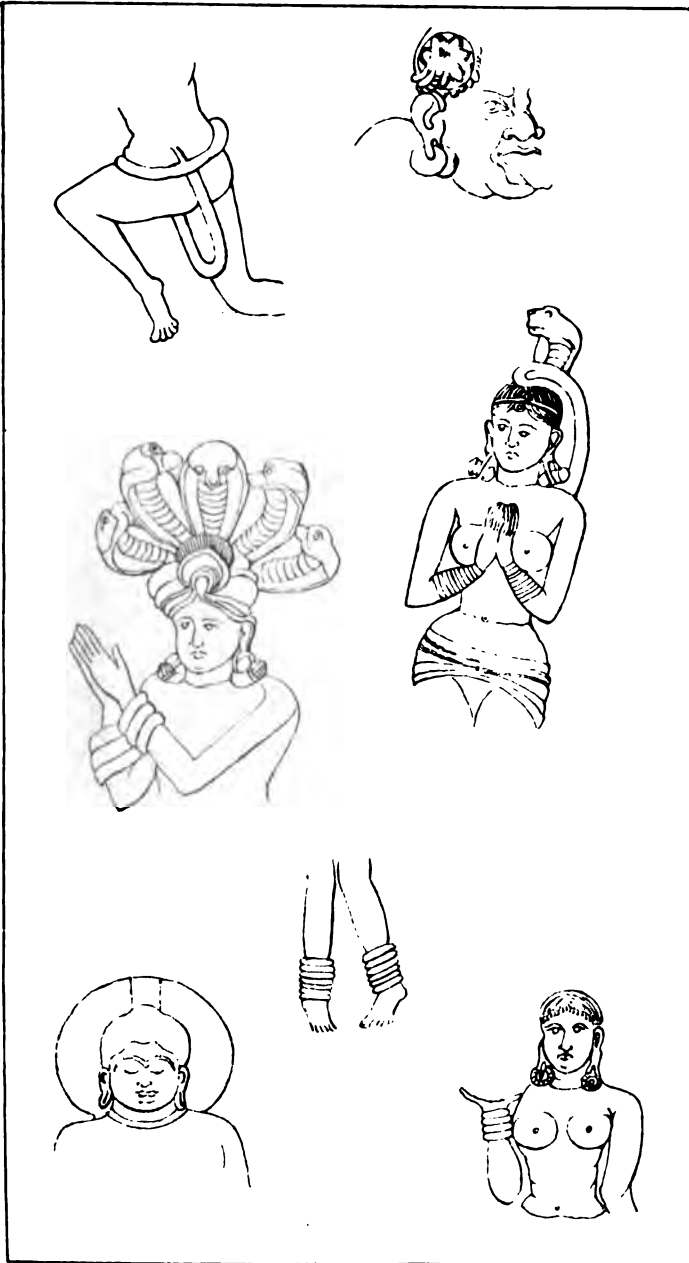
Mr. Harrison further refers to the fact that in one of the earliest fragments of sculpture in India, viz., the frieze of a temple at Bhitari near Benares, the Indian Bacchus, or the sun, has a disc of considerable size in the lobe of the right ear. And he points out that artificial enlargement of the lobe appears originally to have been adopted for the purpose of receiving a solar disc; and that the Ceylon Buddha, when he renounced idolatry, removed the emblem from his ear-lobes, which necessarily hung down in the manner shown in his images.

In the sculptures exhibited in the Madras Museum from the magnificent ruined stûpa at Amarâvati on the Kistna river, which dates back to the first centuries of the Christian

Era, not only is Buddha himself represented with the lobes of his ears dilated (without ornaments), but many of the figures, both male and female, have the lobes dilated, and ornamented with heavy rings with pendants, discs, and spiral rolls, and the upper arms, fore-arms and ankles are adorned either with series of light bangles, or with fewer heavy bangles, after the manner which still prevails at the present day among the females of some of the native tribes of Southern India. Moreover, the 'T' band round the loins (the "bande en T of the Moïs," of M. Zaborowski) is, in the Amarāvati sculptures, everywhere in evidence. It is then possible by a study of these sculptures to trace back the form of jewelry and rude attire which are still in vogue, to the second century A.D. (*vide* Plate xxii).

While the present chapter was being written, I learned that my friend, the Rev. A. Margöschis, of the S.P.G. Mission, Tinnevely, was an authority on the subject of ear-lobe dilatation. To him I am indebted for the following note on "the long ears of certain classes of women in Southern India." "To produce this artificial deformity," he writes, "is the work of men of the Koravar caste, whose occupations are bird-catching and basket-making. On or about the third day after birth, the troubles of a female infant begin, for the child's ears must be operated on, and for this purpose a knife with a triangular blade is used. Sometimes the ceremony is postponed until the child is sixteen days old. Among the Hindus a "good day" is selected, and Christians choose Sundays. The point of the knife is run through the lobe of the ear until the blade has penetrated for half an inch of its length. Both ears are cut, and a piece of cotton-wool is placed in the wounds, to keep the cut portions dilated. Every other day the Koravan must change the wool, and increase the quantity introduced. If the sores fester, a dressing is used of castor-oil and human milk* in equal parts, and, if there is much suppuration, an astringent, such as tamarind juice lotion, is used. The cut lobes will take not less than one month to heal, and for the whole of that time the process of dilatation is continued by passing through the lobes pledgets of cotton-wool, increasing gradually in size. After the wounds have healed, pieces of cotton cloth are rolled up, and placed in the lobes instead of the cotton-wool, and this is done for a few days only, when

* Human milk, *vide* 'Tattooing,' p. 117.



FIGURES FROM AMARAVATI

leaden rings are substituted, which are added to in number until as many as six or eight rings are in each ear. These drag the lobes down more and more, and by the time the infant is one year old, the process of elongating the lobes is complete in so far as the acute stage is concerned, and all that is necessary afterwards is to leave the leaden rings in the lobes, and to let the elongated ears grow as the child grows. Instead of keeping a large number of rings in the ears, they are melted down into two heavy, thick rings, which are kept in the ears until the girl is twelve or thirteen years of age, and by that time the acme of beauty will have been attained so far as the ears are concerned, because the lobes will reach down to the shoulders on each side. This is perfection. The fees for the operation in the first instance are from 3 fanams to $5\frac{1}{2}$ fanams (10 annas to R. 1-1-6). The custom described prevails among the following castes:—Vellālas, Shānars, Maravars, Paravars, shepherds, dyers, tailors, oilmongers, Pallars, and Pariahs. No people of the Telugu castes observe the custom, nor do any Brāhmans. The females of the Paravar caste (Roman Catholic fisher caste) are famous for the longest ears, and for wearing the heaviest and most expensive golden ear jewels made of sovereigns. Ordinary ear jewels cost Rs. 200, but heavy jewels are worth Rs. 1,000, and even more. It is said that the longer the ears the more jewels can be used, and this appears to be the rationale of elongated ears.

“In former days men also had long ears, but it is now reserved for the man who plays the bow and bells at demon dances. With regard to the prevalence of this custom of mangling the human body, and the possibility of its gradual removal, the Missionaries, especially in Tinnevely, have all along been the sternest foes of the barbarity. In one boarding school alone, consisting of 224 girls, there are 165 with short ears, so that only 59 have them elongated. This is the result of the advice and teaching of the European Missionaries. But, stranger still to relate, of the 165 girls mentioned above, no less than 51 have had their long ears operated on and cut short at the Mission hospital, and this they have consented to as a voluntary act. As it was once the fashion to have long ears, and a mark of respectability, so now the converse is true. Until the last twenty years, if a woman had short ears, she was asked if she was a dancing girl (*devadasi*), because that class kept their ears natural. Now, with the change of customs all round, even dancing girls are found with long ears. Muhammadan women have

their ears pierced all round the outer edges, and as many as twenty or twenty-five wire rings, made of iron or gold, are inserted in the holes; but the lobes are not elongated.

"The artificial deforming of the body assumes various phases in different parts of the world, and we have but to refer to the small feet of the Chinese, the flattening of the skull of infants amongst the North American Indians, and the piercing and elongation of the upper lip amongst certain tribes in Central Africa. In all cases these are attempts to improve upon nature, and the results are as revolting as they are often ghastly and wickedly cruel. The torture inflicted upon helpless Tamil babes is so great that it would be humane and righteous for Government to interfere, and to abolish long ears. The number of persons suffering from deafness, and from chronic discharges from the ear, is very considerably increased in consequence of the barbarity described above." Barbaric practices may be regarded from two points of view, humanitarian and ethnographic. And, while sympathising as a human being with the suppression of cruel rites such as the meriah sacrifice, female infanticide, and hook-swinging, as an ethnologist I regard with sorrow the fast approaching extinction of less brutal customs, which afford endless 'oopy.' If long ears were to be abolished by legislation, so too should be the painful process of squeezing bangles over the hand on to the wrist, and other mild ordeals which native custom requires, or demands.

In connection with the practice of dilating the lobes of the ears among the Kallans of the Madura district, Mr. J. H. Nelson writes * that, "both males and females are accustomed to stretch to the utmost possible limit the lobes of their ears. The unpleasant disfigurement is effected by the mother boring the ears of her baby, and inserting heavy pieces of metal, generally lead, into the apertures. The effect so produced is very wonderful, and it is not at all uncommon to see the ears of a Kallan hanging on his shoulders. When violently angry, a Kallan will sometimes tear in two the attenuated strips of flesh, which constitute his ears, expecting thereby to compel his adversary to do likewise as a sort of *amende honorable*: and altercations between women constantly lead to one or both parties having the ears violently pulled asunder. And formerly, where a

* 'Manual of the Madura District,' 1868.



TIYAR WOMAN, MALABAR.

Kalla girl was deputed, as frequently happened, to guide a stranger in safety through a Kalla tract, if any of her caste-people attempted to offer violence to her charge in spite of her protestations, she would immediately tear open one of her ears, and run off at full speed to her home to complain of what had been done. And the result of her complaint was invariably a sentence to the effect, among other things, that the culprits should have both their ears torn in expiation of their breach of the by-laws of the forest."

Mr. H. G. Nicholson, who was some years ago Head Assistant Collector at Ramnád in the Madura district, tells me that the young Maravan princesses used to come and play in his garden, and that, as they ran races, they used to hang on to their ears, lest the heavy ornaments should rend asunder the filamentous ear-lobes.

Among the female Tiyaṇs of Malabar, whom I have recently studied, the practice of dilating the lobes of ears prevails, though the deformity is not carried to such an extreme length as among the Kallans and Maravans. The operation is performed, when the child is a few months or a few years old, either by goldsmiths or by astrologers called Pannikar in South, and Kanisan in North Malabar. The lobe is pierced with a gold pin or thorn, and a thread inserted to prevent the wound from closing up. The ear is dressed daily with butter. After a week or two the thread is replaced by a thin plug of wood, and subsequently gradual dilatation is effected by means of pith soaked in water to make it swell. Further dilatation is effected by means of solid wooden ornaments, or rolls of lead or cajan.

A TODA PETITION.

IN my account of the Todas (Bull : No. 4, 1896) reference was made to the fact that the quondam simple-minded and milk-drinking Toda is thoroughly up to date in submitting petitions written in the bazaar by professional petition-writers, appealing to your honour's seat of mercy, &c. In this connection the following petition relating to the slaughter of buffaloes at the Toda funerals (kédus), which was recently submitted to Government through delegates of the Toda community, is not without interest. I therefore reproduce it in its entirety.

TO THE HONOURABLE BOARD OF REVENUE.

The humble petition of one hundred and twenty members of the Toda Community of and near Ootacamund, Nilgiris, through their counsel sheweth—

1. That from time immemorial your petitioners' community have, on the death of one of their number, held a kedu, at which they practise certain religious rites peculiar to their tribe.

2. That one of their rites is the sacrifice of buffaloes, so that the dead may not enter the abode of the shades without at least some of the appearance of the respectability he was accustomed to in his lifetime.

3. That the sacrifice of buffaloes at the kedu is the most important of all the rites and ceremonies of the religion which the community of Todas, your petitioners, practise; and that, without its due and proper observance, they believe that they are prejudiced in the next world, while the reputation of the surviving relatives of the dead are lowered in the eyes of the community from the same cause.

4. That, unfortunately for your petitioners' community, it has of late years become the fashion for Europeans to attend their kédus as a kind of theatrical display got up for their benefit; and it is from this fact that an impression has got abroad that unnecessary cruelty is practised on the buffaloes before they receive the "coup de grâce," as in a bull-fight in Spain: an impression that your petitioners maintain is entirely unjustified.

5. That the complaints and allegations of cruelty that have been made from time to time after a kédú have proceeded, not from those who had been present at, and witnessed the ceremony, but by those who have only heard that kédú did take place, buffaloes were killed thereat, and that certain Europeans were present and witnessed the ceremony.

That, if any further proof were needed of this statement, your petitioners would recall to your Honourable Board's recollection that probably the fullest account yet written of what transpires at these kédús came from the pen of the Honourable Mr. J. D. Rees, C.I.E., Collector of the Nilgiri and was published in such a well-known and widely read magazine as the 'Nineteenth Century'; and that this full and descriptive article appeared some ten years ago; that many kédús have taken place since, at which it has been the fashion for Europeans to attend in increasing numbers; and that until quite lately no allegation of cruelties practised at the kédús has been made, or, if made, seriously entertained by the authorities.

6. That the order passed on 30th March 1886 (No. 834, Judicial) restricted the sacrifice of buffaloes to two animals, and that your petitioners have always understood this to mean two buffaloes for each dead person; but that, in the view of the acting Collector of the Nilgiris, Mr. H. Tremenhoe, it was by that order intended to restrict the number of the buffaloes sacrificed at any one kédú to two, irrespective of the number of dead Todas for whom such kédú was being held: a view that no previous Collector of Nilgiris adopted; and that, in consequence, the proper holding and observance of a kédú is impossible.

7. That your petitioners desire to draw the Honourable Board's attention to the fact that, according to the custom of their community, unless a certain number of buffaloes are killed (two at least for each Toda), the members of the deceased's family, who, as a rule, subscribe one buffalo apiece for the purposes of the kédú, will no longer make such gifts; and that, if such gifts are not made, the kédú, which involves an outlay of a very considerable number of buffaloes in addition to those sacrificed (as many are always killed for entertaining the Todas present), must altogether cease to exist.

8. That your petitioners crave that your Honourable Board will clear up this point, and lay down, in explicit terms, whether the order was ever intended to impose such a restriction as interpreted by Mr. H. Tremenhoe, the acting Collector of Nilgiris.

9. That, in the event of this restriction being found to be the intention of the order, your petitioners beg that your Honourable Board will give the matter their earnest attention, with a view to advising His Excellency the Governor in Council to rescind it, and remove such disabilities as your petitioners suffer from under it.

And your petitioners will ever pray.

On behalf of the 120 Toda petitioners.

* * * *

Petitioners' Counsel.

OOTACAMUND,
20th February, 1897.

In passing orders on the petition, the Government ruled that the interpretation put upon the existing orders in the matter by the District Magistrate (Collector) was correct; and that the number of animals killed at any one kedu should be restricted to two, whatever may be the number of Todas, in connection with whose decease the kedu is held.
