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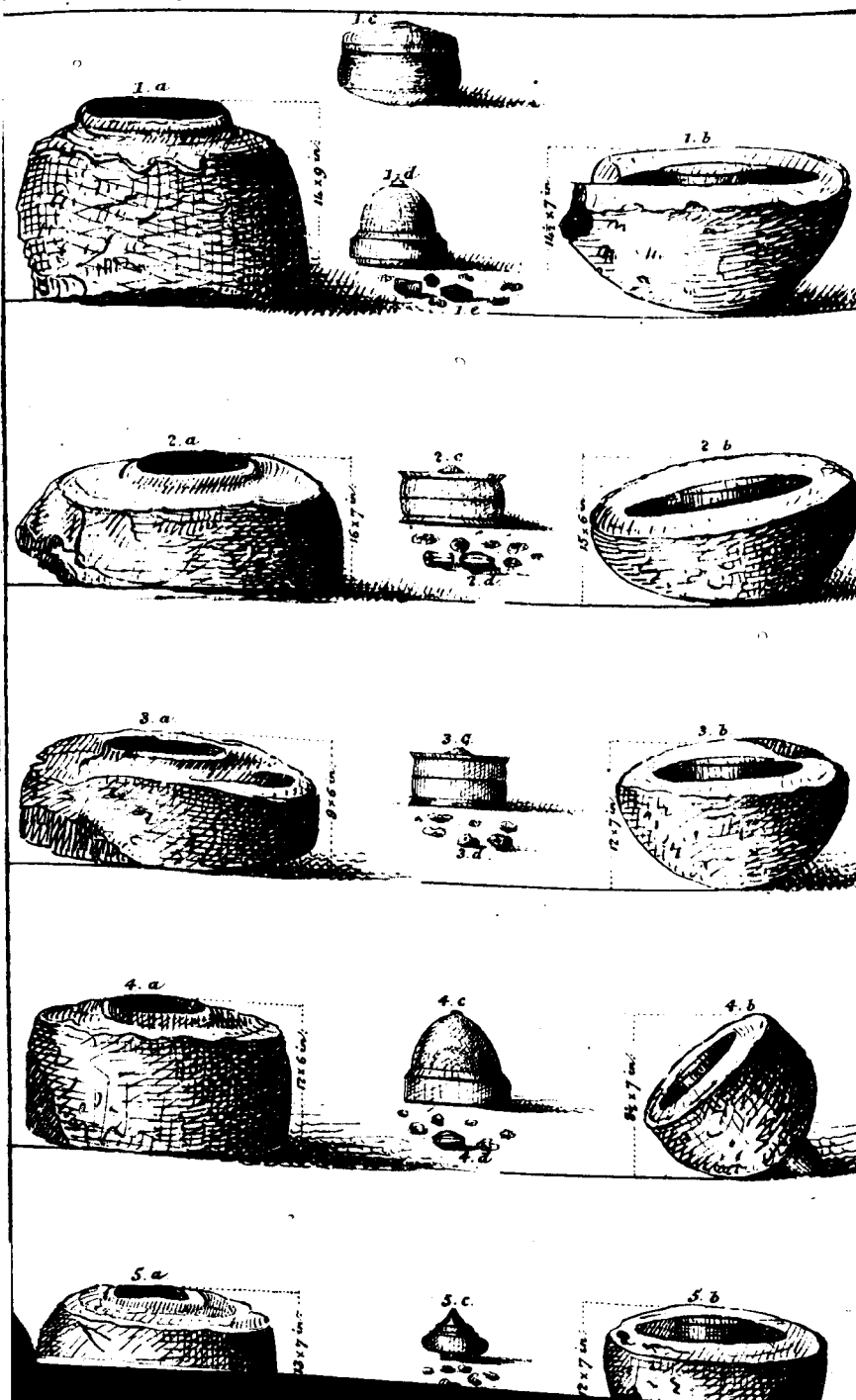
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No. 35. January—June, 1849.

I. *Statistical Report on the Circar of Warungul.* By A. WALKER, Esq., M. D., Bombay Establishment, Nizam's Service. Communicated by Major General FRASER.

THE Circar of Warungul, as it is called by the Mahomedans, but by the Hindoos Warunkal—a name derived from two Canarese words signifying the place of the touchstone, or, more literally, of the black stone—is situated between $17^{\circ} 24'$ and $18^{\circ} 24'$ north latitude, and $79^{\circ} 11'$ and $80^{\circ} 22'$ east longitude; its boundary comprising an area (including enclaves of adjacent areas) of 3,266 square miles. Its extreme length from east to west is about 80 miles, and its breadth from west to south 70 miles. The Ramgheer, Mullangore, and Elgundel Circars bound it to the north. On the east it has the Ramgheer and Kummemet Circars. On the west Bowngheer, and on the south Kummemet and Nulgoondah.

So dove-tailed is this Circar with others, that without a very accurate map it would be impossible to state its area with exactness. The southern portion has been surveyed, and mapped, and the results published, but the map of the northern portion, though surveyed, has not yet been given to the world.

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Though the name *Circar* would seem to imply that the division is of Mahometan creation, it is doubtful if it is so. On the contrary, from the existence of one family of Surdeshmookhs and of Surdeshpundyahts it is more probably a division derived from the times of Hindoo rule and supremacy—and adopted by the Mussulmans (who contented themselves by changing the name) for the mere purposes of convenience. The substitution of the Norman name of county for the Saxon shire, without disturbing its boundaries, offers a parallel to this.

The *Circar* is divided into *Pergunnas*, which, when large, are again subdivided in *Talookas*—the division of *Turufs*, though acknowledged, is only spoken of in one or two of the more wealthy and populous *pergunnas*—very often the divisions of *talookas* and *pergunnas* are confounded together by the natives, and the number of the latter is sometimes stated at fourteen, while, by including some of the former, it is raised as high as eighteen at others. The map annexed will afford a tolerable idea of these purely artificial divisions, and the table in the Appendix, No. 1, contains the names of the *pergunnas* and *talookas* and the number of villages, according to an assessment called the *koolkamil*.

Geological Features.

The chief geological formation of the *Circar* is sienitic granite composed of quartz, felspar, and hornblende. The next is gneiss passing occasionally, by a very natural transition, into hornblende schist. The third is sandstone. Although the minerals noted above constitute the prevailing sienitic rock, it by no means follows that no other mineral components occur—of these the chief are:

1st. The pegmatite of French writers, from which hornblende is excluded, and the rock consists of quartz and felspar alone. The first mineral sometimes so predominates, that, appearing in pieces from the size of a hazel nut to that of an egg, it gives the rock the look of a conglomerate. The felspar in this variety is very commonly flesh coloured—this is a frequent form occurring in the neighbourhood of Warungul and at Dogundah in the road between Pakhall and Mahdapore.

2d. Felspar and hornblende, this is a loose crumbling variety which wears, and is finally decomposed, by the weather. Common.

3d. Quartz, felspar and actinolite. The latter mineral taking the place of the hornblende and giving to the rock a greenish

colour. This variety may be seen in the bed of the tank at Nagwarum.

4th. Quartz, felspar, hornblende, and mica—sought by the natives to make their hand-mills—lime crushers, on account of its toughness. These constitute the chief varieties.

Gneiss.

It is often difficult to distinguish this from the preceding, but its stratification, when it occupies a position in the gorges of hills, cannot be mistaken—this happens at the Iron Hill, twelve miles to the west of Warungul, where it passes into hornblende schist—and, from its broken and dislocated appearance, must have been subjected to some disturbing cause—it is usually of hornblende and felspar, with some quartz. The oxygenated iron ore occurs in this formation—the hornblende first gives place to the iron ore—gradually the other minerals disappear, leaving the iron stone a nearly homogeneous mineral but still preserving the layer-like form of the parent rock.

The sandstone occupies the extreme east and north-east of the *Circar* meeting with the granite a half mile on the Warungul side of the Pakhall lake, of which it forms the basin. At Bagartepett, on the road from Hunnumcondah to Mahdapore, there is a band of argillaceous limestone, of the breadth of three miles, intervening between the granite and the sandstone, much disturbed at its contact with the former, and probably underlying the latter, to a wide extent, as it appears again in that position in the Godavery river to the north; and it would seem to be a process sent down from the sandstone of that locality, possessing the lithologic characters of that formation as described by Voysey. The Coorwah talooka of the Pakhall *pergunnah* is a congeries of sandstone hills covered with wood. The low undulating hills of this formation contrast strongly with the abrupt peaks and rugged summits of the neighbouring granite.

The greenstone veins penetrating the sienite are found in this district, but not of the breadth or extent of those in the neighbourhood of Hyderabad—so much so, that there is reason for believing, on the testimony of the natives, that the stone used for the ornamented pillars and cornices scattered so profusely over the ruins of Warungul, was not quarried in the neighbourhood but brought from some distance. The only mineral I observed in the greenstone was a greenish felspar—crystallized. Mortars are

constructed of this stone, in great use among the native druggists.

Quartz veins also occur, varying in thickness from a rupee to several feet—the superior hardness and durability of the quartz causes it to appear as a ridge in the sienite.

Hard as the sienite and gneiss are, there are few rocks more subject to disintegration and decay, and to consequent change; of these three are particularly well marked.

1st. The ochreous degeneration—where the hornblende becomes decomposed, and a red, or more generally, a yellow ochre is produced. The appearance put on by these rocks while undergoing this change so nearly approximates to that of sandstone, that from a hand specimen an experienced observer even might be deceived regarding the real characters of the rock—but from this error he would be freed by breaking it, when a nucleus of the original rock would be discovered, surrounded by decomposing layers of ochreous matter.

2d. The steatitic degeneration—for such it is according to the opinion of some German mineralogists, who regard it as a change analogous to the adipocere of animal matter—happens at a village called Dummnapilly in the Vizianuggur pergunnah, where it is mined and shaped into pots and cups by the blacksmiths. The rock at the surface is gneiss with hornblende and mica for two of its ingredients, and much less steatitic than what is found at some depth—so much so as to render it unfit for being cut into vessels—(can the pot stone of Mysore mentioned by Buchanan be this rock?) but it differs in its lithologic character from that mineral. Pencils for school boys are manufactured from it, and also lings for the use of the Lingayets around Warungul.

3d. The *mohrum*, in which felspar would seem to be originally the predominant rock—it is frequently cut by veins of disintegrated limestone, and nodules of hard limestone are also found in it: may not the lime have acted as a powerful agent in forwarding the decomposition by the formation of neutral salts?

Minerals. Oxygenated iron ore, sp. gravity 4.8 to 4.8, giving an average of 4.5, extensively found and worked.

2d. Titaniferous iron ore, sparingly found and not worked—a specimen in my possession was dug up in sinking a well at Hunnumcondah in the soft *mohrum*.

3d. Titaniferous iron sand, found abundantly in nullahs, where its weight prevents its being swept down with the sand—not worked.

4th. Hæmatite, found near Warungul, scattered on the surface of the ground—not worked.

5th. Pisiform iron ore, universally diffused throughout the granite—not smelted.

6th. Yellow and red ochre—the last found embedding the oxygenated iron ore—it is used by the common people for daubing their houses with.

7th. Milk quartz and, occasionally, rose quartz, is met with—the last is sometimes cut for ring stones, but it is reckoned of little value. I have not observed any of the amethystine quartz, so common elsewhere, about Warungul.

Limestone has been already mentioned—it is burned by *dhobees* and other low castes, and sold for one rupee a maund. The subcarbonate of soda mixed with deliquescent salts is every where abundant over the Circar, efflorescing on the soil—it is used in its rough state by the *dhobees*, but is never refined for exportation.

Besides these minerals others were brought to me from the hills, which do not belong to the sienitic rock—jaspers, cornelians, and agates. On inspecting them, very distinct evidences of their having been cut into the form of cutting instruments and knives showed themselves. Those shaped as cutting instruments seem to have been thrown aside on being found to be useless, as they had invariably a jagged uneven edge, and appeared as if broken off short. The arrow heads, though rude, are pretty distinct. The same fragments were discovered by Doctor Primrose of the Nizam's Service at Lingsoogoor, to the south of the Kistnah, where the rock is of the same description as at Warungul—and their analogy to the obsidian knives of Mexico, where he had been resident, was noted by him.

It is useless to conjecture respecting the people who employed these instruments; especially in India, where the use of iron has long preceded every authentic or even conjectural history.

It has been stated that the sienite is the prevailing rock, and the country takes its prominent features from the oft described and familiar characters of that well known rock.

1st. The solitary herbless dome shaped hill. Drg. 1.

2d. The feather bed appearance of Macculloch. Drg. II.

3d. The prismatical fractured summit. Drg. III.

4th. The *tors* and logging stones, which give a wild and fantastic appearance to a country, and which have been lately mistaken for real boulders, but to which they have no geological relation whatever.

This singular structure has seized on the native imagination, and the monkey god Hanumaun is said to have piled up these stones, as spare ammunition in the great war of the Ramayana.

Drawing IV., marks on single block.—Drawing V., one block piled on another.—Drawing VI., four and five tiers of blocks—the last two may be deemed rare, two or three being the most common.

Drawing VII.—Shows a cave in the sienite extending inwards for fifty or sixty feet and about two and half feet in height—this is not common—fragmentary portions of rock sometimes form pseudo caves. The natural aspect of the Circar is certainly hilly, and the country about Warungul, though little elevated beyond the usual seventeen hundred feet above the level of the Sea which marks the eastern portion of the Deccan, is the watershed—the ‘divortio aquarum’ from whence both the Godavery and Kistna are supplied with the sources of tributary streams. At the southern extremity, a group of hills run east and west, and communicate with the hills of the Vizianuggur talooka.

Ten miles to the N. W. of Warungul another group, the Chandragiri hills, spring from the plains with pinnacled summits. The Iron hills, as they are called, fourteen miles due west of Warungul, and of which a representation is given in Drawing VIII.—form a double range, varying north and south, with a gorge between. The ridge towards the east (the one represented) terminates abruptly after a course of four or five miles, but the western doubles in itself and throws out a spur to the north-west. There are besides smaller groups as at Hunnemcondah—but these, as elsewhere the isolated hill, is the prominent feature of the landscape. On the other side of the Chandragiri group, and towards the Pakhall lake, the country gets flatter and uninterrupted by hills, whether single or clustered.

Soils.

These may be divided into the black, red, and sandy.

The black is the *regur* of other parts of India, its productive properties being chiefly affected by the quantity of lime it may contain.

1st. The *cutia regurree*—a stiff loam with little soluble matter and not much lime—in very rainy seasons this is found a good soil for jowaree.

2d. The *regur*—the well known soil of all India.

3d. *Paurah*—good garden soil with about seven per cent. of lime, too pulverized and not in fragments as in the two last.

4th. *Pawtee zumeen*, also a garden soil, with about the same proportion of lime as the last, but that mineral not so much in powder.

5th. *Sota zumeen*—a whitish coloured soil, differing little from the last—it is cultivated in the rains for the abee crop of rice.

6th. *Choona ka putur ka regurree*—a rough soil very rich in lime—nearly twelve per cent.—good for jowaree, gram, &c.

7th. *Chonka regurree*—a transition from the black to the red soil—not much lime.

8th. *Cuttay sonda*—a black soil, with quartz, pebbles and a small proportion of lime, not above one per cent.

9th. *Rewa zumeen*—a finely pulverized red soil well qualified for poonass crops—it has a dash of lime in it.

10. *Yerrah chukkoo*—also a red soil but not so fine as the last—parts easily with its moisture—contains a small proportion of lime—good soil for some of the poonass crops, yellow jowaree, bajree tillee, hurra mong.

11th. *Gheroo boomi*—a strong red soil—fitted also for poonass crops.

12th. *Pala sauroo*.

13th. *Sallee doobboo*—mere sands, scarcely ever cropped—the latter, it is said, may produce cooltee.

The waters of the Circar. 1st. *Kara panee*.—This water contains a proportion of sub-carbonate of soda and of muriates chiefly magnesian. On the evaporation of six ounces there were eight grains of the sub-carbonate of soda and four of deliquescent salts—which yielded a thick precipitate to the phosphate of soda and ammonia—and but slightly became dim on the addi-

tion of oxalic acid: compared with distilled water it was as 1,000 to 996, from which it may be inferred that it consisted of

996 parts of water.

2.5 of sub-carb. of soda.

1.5 of muriate of magnesia, with a trace of lime.

This water is preferred for most garden produce; for fenugreek, tobacco, and vegetables generally, save the *Arum nypheefolium*; also for decocting the *mahwa* previous to fermentation—it acts on the brass lota—it is also used in preference for Indian corn.

2d. *Meeta panee*.—This left on 996½ grains scarcely any residuum—it is the common drinking water, and reckoned good for irrigating rice—sp. gr. to distilled water as 997 to 996.

3d. *Sowta panee*.—This water is excessively sweet, but said not to slake the thirst—its taste depends on about two grains and a half to the ounce of water of sub-carbonate of soda that exists in it; its sp. gr. to distilled water was as 997½ to 996.

4th. *Sowka panee*.—Neither very sweet nor bitter; its sp. gr. 996½ to 996 of distilled water, which may be accounted for by its having got putrid and becoming impregnated with sulphuretted hydrogen to the expulsion of atmospheric air. This water, good for the irrigation of ginger, radishes, cresses, and garlic—and also for wheat and rice—never used for tobacco; wholesome too for drinking, as it is said by *hakeems* to be more warm than cold. It contains a very small proportion of sub-carbonate of soda, and its medical properties may be traced to a portion of combined sulphur it may contain.

Considering the shortness of the time that has occurred since my undertaking this duty, I need not offer any apology for forbearing to enter into any detail respecting the climatology of the Circar—suffice it to say, the climate would appear to differ little from that of Hyderabad, a bad season in the one being universally a bad season in the other. The hot season of last year was unusually cool at Hyderabad; the same thing happened at Warungul, and the heavy rains of September, which have since filled the tanks, set in at both places on the same day. The divisions of the year deemed natural by the agriculturist, and which in the rains he watches with intense interest, are in number twenty-seven, consisting of from fourteen to fifteen days each. It is a puzzling question to the Brahmin astrologer how he can make

twenty-seven *cartees* of that duration out of the solar year—but he evades it by saying this duration is shortened in the hot months—they are well known to be the lunar changes of the sidereal year. Although the real commencement of the year is two months before—to please the cultivator the first cartee is made the one which has the greatest interest for him.

1st. *Margasirra*.—If this *cartee* is ushered in by a full moon a good augury is derived from the circumstance—a new moon is not so favourable—if rain falls there will be a good fall for the next five cartees.

2d. *Ahredrah*.—Tillage and sowing the *poonass* begins; insects appear in great numbers.

3d. *Pedda-poosheala*.—Insects commence to attack the young *poonass* crops—rain less.

4th. *Chinna-poosheala*.—*Abee* crops of rice sown.

5th. *Asaleshoo*.—Rice sowing continues.

6th. *Mugha*.—Crops of abee rice sown, if it thunders in this cartee rain will fall for the next five cartees.

7th. *Phoobha*.

8th. *Ooturhah*.—Much rain to be looked for, *oord* and *cooltee* sown.

9th. *Husturhee rubbee*.—Crop sown—*poonass* crop ripening.

10th. *Chitthee rubbee*.—Crops continue to be sown, yellow *jo-waree* and the millets reaped.

11th. *Soathee*.—When rain falls in this *cartee* it is considered favourable, if there be lightning the sign deemed good.

12th. *Vishaka*.—if rain falls now it is looked on as unfavourable to the crops and fruit of all kinds.

13th. *Anuradha*.—*Tabee* crops of rice sown.

14th. *Jestha*.—Continue to sow *tabee*.

15th. *Moolha*.—If it blows in this month rain falls.

16th. *Poorwashadah*.—Sow melons, gourds.

17th. *Ooterashadha*.—Hot weather begins.

18th. *Srewannam*.—Hot weather fairly set in.

19th. *Danistha*.—Rice ripening.

20th. *Shitaveshum*.—Rice ripens and becomes fit for the sickle.

21st. *Poornabadrah*.

22d. *Ootrabadrah*.

23d. *Revuttee*.

24th. *Ashwinnee*.

25th. *Burnhee*.

26th. *Krootika*—black soil cracks.

27th. *Rohinee*.

The grain chiefly cultivated in this Circar is rice and of this there are many varieties of which the chief are as follows:

1. *Batee-ka-dhan*—a middling sized grain with a reddish husk—it is considered of light and easy digestion, and is given to invalids.

2. *Gunta moola kulloo*—a large grain with a whitish husk—thought wholesome and to be good for rheumatic pains.

3. *Gurka sunnaloo*—a small grain ready in three months after sowing.

4. *Putcha gunnerloo*—grows in the neighbourhood of Pakhall lake—esteemed a good grain.

5. *Soopuaraynaloo*—an *abee* rice—sprouted seed used and great care taken in transplanting; it is productive and is a good rice.

6. *Bungaroo tigualoo*—of a golden colour—hence its Telingee name—a small grain.

7. *Koonkaowapoophloo*—called the small almond rice from its red colour and form.

8. *Moodgootomelloo*—a small red grain.

9. *Kakalapuchelloo*—this grain in husk has a winged appearance.

10. *Yeepawudloo*—a large rice.

11. *Mussoora nudloo*—a middling sized grain with a darkish husk—compared to the hide of a donkey in colour.

12. *Puly musaloo*—tiger's beard rice.

13. *Goodares ooskiloo*—a sweet-smelling small rice.

14. *Chitteemootsalloo*—pearl rice—sweet-smelling.

15. *Goombofooloo*—a large rice, colour compared to the flower of the tamarind, with this sort Mahdev sprinkled his wife's head.

16. *Kutta keemuraloo*—a productive variety.

17. *Booleemachelloo*—sown on saltish soil, reddish, a coarse rice.

18. *Tellamachelloo*—a cheap coarse rice.

19. *Tateepelloo*—like sago, small, husk of a dark colour—sweet-smelling—a dear rice.

20. *Kakerekalloo*—an *abee* rice, dearest of all—a small quantity sown in this Circar—husk darkish.

21. *Chumakooraloo*—a flavourless rice—large, cheapest of all.

22. *Chundramunkaloo*—husk silvery—a good rice.

23. *Kongagoorloo*—husk whitish.

24. *Patee moolkaloo*—small white not common.

25. *Adengaloo*—a coarse rice used by the poorer classes—grows in land much flooded.

26. *Booravedloo*—coarse.

27. *Reddy sawmee kat killoo*—antimony rice, small, sweet-scented.

28. *Donrasenkeuloo*—odourless, large and coarse.

29. *Mylasamaloo*—a small coarse grain.

30. *Dodasamaloo*—large whitish.

31. *Gareederoudloo*—reddish husk, and even when unhusked the grain retains the colour—used by the poor.

32. *Boonjaloo*—also coarse, chiefly sown in the dry bed of the Pakhall lake by the *Surmoonsewar*.

Most of these varieties remain in the ground from three to four months; the transplanted kinds require a few weeks more to ripen, but transplanting amply repays the additional trouble and expense. The fifth variety the *Soopuadynaloo*, an *abee* crop which is transplanted, requires five months and a half to ripen—and the 19th *Tateepelloo*, and the 20th *Kakerekulloo*, both fine varieties, five and six months respectively.

Andropogon Sorghum—three varieties, the Dry Grains Cultivated. yellow red and white—*Jonaloo* (Telingee).

Andropogon bicolor—black *jowaree*.

Zea Mays—Indian Corn—*Muckkae*.

Panicum Spicatum—*Bajree*—*Sudgaloo* (T.)

Panicum Italicum—*Kunghne*—*Kooraloo*.

Panicum hispidulum—*Boora sama*.

Another variety—*Pota sama*.

Panicum frumentaceum—*Shama*.

Panicum miliaceum—*Worgloo*.

Paspalum scrobiculatum—*Aruga*.

Triticum aestivum—Wheat.—Of these the yellow, white, and red *jowarees* are in common cultivation, and also the *shama*. The cul-

tivation of the Indian corn is becoming more frequent every year, and bread and other articles of diet are made from its meal.

The *boora* and *pota sama* are coarse grains, used when husked like rice by the poorer classes.

The *aruga* is also a coarse grain said to produce rheumatism, but it is well tasted. The black *jowaree*, of which a small quantity only is sown, has the reputation of being a heating grain.

Pulses Cultivated. *Phaseolus radiatus*—Hurrah moongh—
Pusa paysaloo.

Phaseolus Mungo—Kala Moongh—Nulla paysaloo.

Phaseolus—Bubberloo.

Dolichos lablab—Anamooloo.

Glycine tomentosa—Coollee Woolaraloo.

Cytisus cajan—Toor—Candaloo.

Cicer arietinum—Chenna—Shamgheloo.

Oil Plants. *Ricinus communis*—Arendee—Amcedea-
loo—two varieties—one with a small, the
other with a large seed.

Sesamum orientale—Tillee—Nooloo.

Cordage Plants Cultivated. *Hibiscus Cannabinus*—Umbarreh.
Crotalaria juncea—Sunn.

Garden Produce. Tobacco, red-pepper, brinjal, bendy, onions
and garlic—sweet potatoe, raddish, *dolichos*
fabiformis, &c.

Of the cucumbers, a very important article of diet, there are cultivated or in use the following:

Momordica charantia—Korella.

Momordica diacia—fruit and root both eaten.

Luffa pentandra.

Luffa acutangula.

Luffa amara—grows wild, used in diet and medicine.

Cucurbita lagenaria.

Cucurbita pepo.

Cucurbita citrullus.

Cucumis melo.

Cucumis sativus.

Cucumis momordica.

Cucumis utilissimus.

Tricosanthes anguina.

There are two varieties of cotton cultivated—one a nankeen cotton, and the other white, solely for home use. There is also a small quantity of sugar grown in the Pergunna of Bellecondah.

The greens used in this Circar are so very numerous, that though some be cultivated the whole will be given in the list of useful plants, according to the natural arrangement which are produced in this Circar.

Plants used in the arts, and for food and medicine, which grow in the Circar of Warungul.

ANONACEÆ, *Anona Squamosa*—grows wild throughout the district—its fruit is seldom allowed to perfect itself, being generally plucked before maturity—in seasons of scarcity and famine its seeds are ground and the meal eaten by the natives.

MENISPERMACEÆ, *Cocculus Cordifolius*—a good bitter used in medicine.

NYPHÆACEÆ—the tuberous roots of all the plants of this family are eaten by the poorer classes.

PAPAVERACEÆ—no opium grown—the *Argemone Mexicana* grows abundantly but neither seeds nor plant are turned to use.

CAPPARIDÆ—*Cynandropsis pentaphylla*—wild mustard seeds collected by the lower classes and exchanged for equal quantities of coarse millet.

Cleome viscosa, common—besides other *cleomes*—two or three species of *Capparis*, of which the fruit is boiled and eaten by the natives. The leaves and bark of several of the species are used medicinally. Antiscorbutic.

OLACINEÆ, *Ximenia Aegyptiaca*—a very common stunted shrub growing on poor soil of which it is an indication; its hard capsules are used in fireworks.

CARYOPHYLLACEÆ—two species of *Mollugo*, an infusion of which is used as a fever drink.

MALVACEÆ—this natural order, yields plants for poultices, fomentations, &c.; there are many species growing in this Circar, mostly all of which are turned to some account in diet or medicine.

BOMBACEÆ—the wood of the *Helicteres Isora* is used for making some agricultural instruments. The *Bombax Malabaricum* affords a timber for the construction of the *garim*, an instrument for raising water.

BYTTNERIACEÆ—the *Sterculia urens* yields a gum-like tragacanth, and a wood used for scabbards.

TILIACEÆ—two species of *Corchorus*, common, the tenacity of their fibres is sometimes taken advantage of for the construction of cords.

Two species of *Grewia* are in common use. One arboreous for agricultural instruments—the other a shrub, is employed by the *Dhungurs* for making cages for their lambs and kids, and by others for wattle. The fruit of several species are eaten by the common people and the leaves by animals.

AURANTIACEÆ—the lime is common, the citron rare—*Feronia elephantum* and *Egle Marmelos*—the capsules of the latter used as snuff boxes by the brahmins—the *Bergera Koenigii* in gardens.

SAPINDACEÆ—*Sapindus detergens*—Soap nut tree and another *Sapindus*.

MELIACEÆ—*Azadirachta Indica*—the tree sought after for its leaves and timber.

CEDRELACEÆ—*Swietenia febrifuga* and *Chloroxylon Swietenia*—the first common, its bark used by the carpet weavers to dye their cotton thread a dingy red. On the sandstone the latter grows to be a pretty large tree.

RHAMNEÆ—several species of *Zizyphus*—the *Zizyphus microphylla* is a very troublesome plant to the agriculturist, being very difficult to eradicate.

TEREBINTHACEÆ—some varieties of the mango yield tolerable fruit—the *Buchanania latifolia*, *Boswellia thurifera* and *Garuga pinnata* are all met with, also *Anacardium occidentale* and *Semecarpus Anacardium*.

LEGUMINOSÆ.—Besides the cultivated species there is the tamarind growing to a large size, and yielding an important article of diet—*Butea frondosa* commonest of all, along with its congener—the *Butea superba*, it yields the East India kino—not one ounce of which is collected—the bark of both is used as a cordage—the leaves rolled up are used in smoking tobacco. Two species of *Dalbergia*, *Latifolia* and *Sissoo*, furnish hard wood—from the seed of the *latifolia* there is expressed an oil. Five or six species of *Acacia* growing in the Circar yield timber, *Caesalpinia Bonduc*, *Cassia fistula* and the *Cassia absus* from the seeds of which is pre-

pared the valuable eye-snuff called *Chucksoo*. Two species of *Bauhinia*—timber useful for house building and to the cultivators—and their bark, a cordage. The *Trigonella fœnumgræcum*, seeds of the *Cassia abovata*, used in the preparation of Indigo, and the leaves as greens. The seeds of many of the species eaten in famine—particularly of the *Indigofera*—the *Indigofera* from which a coarse Indigo is made and the *Abrus precatorius*.

COMBRETACEÆ.—*Terminalia Catapa*, in gardens, *Terminalia Bilirica*, *Terminalia Chebula*—the last two common on the eastern part of the Circar—*Pentaptera tomentosa*, a timber tree; *Combretum ovalifolium*; of this extensive climber use is made in basket weaving, &c.

MYRTACEÆ.—*Punica Granatum*, common in village gardens; *Jambosa vulgaris*—bark useful in the preparation of Indigo, &c., and *Barringtonia acutangula* is one of the most beautiful of the forest trees of the Circar.

CUCURBITACEÆ.—Besides the cultivated species the colocynth is very abundant.

PORTULACEÆ—leaves of the *Trianthema decandra*, and two species of *Portulaca* eaten as greens.

RUBIACEÆ—two species of *Nauclea* yield timber; some *Gardenias*, three at least, *deccamulle* or *cumbi* gum, so much used in Native medicine, and one or two species afford a fruit edible on being boiled—*Randia dumetorum*, *Ixora parvifolia*—timber of the last useful.

The *Morinda citrifolia* is cultivated extensively on the black soil for its dye and the *Oldenlandia umbellata*, the root of which yields the *Cherwil* dye, is the most common of the wild plants.

COMPOSITE—several plants of this family grow, to some of which medicinal virtues are ascribed—more fanciful than real; of these are the *Cæsalia axillaris*, *Eclipta prostrata*, *Xanthium indicum*, &c.

SAPOTACEÆ—two *Mimusops*,—*Sideroxylon tomentosum* and the *Bassia latifolia* which grows in the sandstone districts—both seed and fruit turned to account.

EBENACEÆ—*Diospyros melanoxylon*, wood of little value, fruit eaten.

JASMINEACEÆ—*Jasminum sambac*, in gardens—*Jasminum ternerve* very common—flowers of all species of Jasmine looked on as

an external cooling application—*Schrebera swietenoides* in the Pak-hall and Chelwae Pergunnas, a hard wood.

STRYCHNEACEÆ.—*Strychnos nux vomica*—common on the granite hills—*Strychnos potatorum*, rarer.

APOCYNÆ.—*Wrightia tomentosa*—leaves added to Indigo in the preparation of the dye; very common wood used for making boxes; two species of *Carissa* yield edible berries; *Monetia tetra-cantha*, one of the most common jungle shrubs.

ASCLEPIADEÆ.—two species of *Ceropegia* yield tuberous roots which are eaten by the Natives.

The two *Calotropis* common—also the *Hemedismus Indicus* and the *Sarcostemma viminalis*.

GENTIANÆ.—*Gentiana verticillata*—a common plant gathered by the Natives as a bitter.

BIGNONIACEÆ.—*Bignonia spathacea*, wood used in house building.

PEDALINEÆ.—*Pedaliu murex*—very common.

CONVOLVULACEÆ.—The leaves of two or three species of this family are eaten as greens and reckoned very wholesome—*Ipomœa cerulea*—country jalap—common.

SOLANACEÆ.—The Potatoe has been no where introduced, although the red soil would suit it well—leaves of *Solanum rubrum* used as greens.—*Solanum Indica* and *Jacquinii* used medicinally—*Datura alba* and *fastuosa*, common.

LABIATÆ.—*Ocymum Sanctum* and one or two other species of the *Phlomis*, two or three species yield greens under the name of *Tomi*; *Premna latifolia*—leaves eaten in curries; *Premna tomentosa*—the wood of which is useful; *Grewia Asiatica*, sought for in house building as the white ants do not attack it; *Tectona grandis*, but it does not grow to be a large or valuable timber tree.

ACANTHACEÆ.—*Lepidagathis cristatu*, used in veterinary medicine, and as a charm, especially by the weavers, to keep off the evil-eye.

Barleria prionitis, leaves yield a blue dye, and are in consequence mixed with the indigo leaves in the preparation of the dye; *Justicia paniculata*, the well known *creyat*, is very common.

PLUMBAGINEÆ.—*Plumbago Zeylanica*—bark used as a blister.

NYCTAGINEÆ.—Leaves of the *Boerhaavia prostrata* eaten as greens.

AMARANTHACEÆ.—Almost every plant of this family affords edible greens. The *Celosia argentea*—*Achyranthes aspera* and *lanata* *Amaranthus polygamus*, *oleraceus*, *tristis*, *spinosus*; some of the *Amaranthes* are cultivated.

CHENOPODEÆ.—Much the same may be said of this family—the *Basella alba* is in great estimation as a pot herb.

SANTALACEÆ.—*Santalum album*—valueless.

ARISTOLOCHIEÆ.—*Aristolochia Indica* and *bracteata*, both bitter and medicinal plants.

EUPHORBIACEÆ.—A species of *Phyllanthus* with white fruit which is eaten by the natives, and one of red, of which the branches are used for tooth brushes—*Phyllanthus emblica* very common—*Croton plicatum* yields a violet dye.—*Jatropha Curcas* also the *Cluytea collina*, the wood of which is used for building.

URTICEÆ.—*Cannabis sativa* in gardens.

ULMACEÆ.—*Ulmus integrifolia*—durable wood. *Celtis Orientalis*. Cordage sometimes made of its bark.

ARTOCARPEÆ.—*Ficus Indica*—bark produces cordage.—*Ficus religiosa*.—*Ficus glomerata*—there are others.

PIPERACEÆ.—*Piper betel*—cultivated in small quantity about Comlapoor.

ALISMACEÆ.—Both *Sagittarias* occur—leaves of *sagittifolia* eaten as greens.

PISTIACEÆ.—*Pistia stratiotes* very common in tanks.

SCITAMINEÆ.—Ginger cultivated but not to a great extent and also Turmeric—*Zingiber Casumunar* grows in the eastern part of the Circar.

MUSACEÆ.—A coarse kind of plantain is grown in gardens.

HEMEROCALLIDEÆ.—*Sansevieria Zeylainca*—very common—a cordage plant used by the *Coonbees*, &c.

DIOSCORINEÆ.—Tubers of the *Dioscorea pentaphylla* are dug up throughout the Circar where it is very common.

PALMEÆ.—The date palm is very common, it is tapped at a very early period of its growth and seldom yields much juice after the age of twenty-five years. Mats and cordage are very extensively made from its fronds. The *Tar*, *Borassus flabelliformis*, is the palm that from its frequent occurrence gives a character to the country. The young plants are defended from cattle by thorns

and the more industrious loosen the ground about them once or twice a year by the plough, but in very many cases this is neglected. The *Tar* is said to yield sap for three generations, and to be ready for tapping in ten or a dozen years. The toddy varies with the season and age of the plant. A bad grain year is said to be a good year for the *Kullals*. The trees are sometimes tapped thrice a day. The *Caryota urens* grows to the eastward but it is not a very common palm, it yields a great quantity of sap. Cordage, baskets and fans, are made from the fronds of this palm, as well as from those of the *Tar*—*Calamus Rotang*—the rattan is found in Sumtamunnum and the Chelwae Pergunnas.

PANDANEÆ—*Pandanus odoratissimus*, leaves made into mats.

TYPHINÆ—*Typha elephantina*, culms formed into hoods by the *Coonbees* to protect them from the rain.

AROIDEÆ—Roots of several species eaten.

GRAMINÆ—Besides the cultivated grains several species of panicum and clensine yield food to the poorer classes—the seeds are swept off the ground by an instrument called *Woorapilly sapa*, the form and manner of which will be better understood by the drawing. A species of *arundo* yields pipes for the shrill music of the religious mendicants. The *Saccharum cylindricum* yields a strong cord in great use among the *Coonbees*—with this their cots are usually corded. A *saccharum* that grows to the eastward furnishes reeds for writing. The *Ischæmum pilosum* grows where there is a black soil—also the useful *hariales* (*Panicum Dactylon*) the sacred *Poa*—the *doorb* grass and other species of *Poa*—the *Rottbællias*, grown in the Circar, are much used for thatch.

It may here be mentioned that the Circar produces no timber valuable enough for exportation. The teak, ebony, sandal wood, satin wood tree, and the blackwood are of short and stunted growth in the granite—and do not attain to any great size in the sandstone.

The *Pentaptera tomentosa* and the *Schrebera Swietinoides* might be found to produce good serviceable timber, but with the teak of the Nagpore forests so near at hand they could never enter into competition.

Agriculture.

The agriculture of this Circar, more especially as shown in the cultivation of rice, is

exceedingly backward; not only when compared with Indian agriculture generally, but with that of the neighbouring country under His Highness the Nizam's dominions.

The rice crops are divided into two. 1.—The *dbes* or rain crop sown at the commencement of the rains, and reaped at their close at the beginning of the cold weather. These crops are either watered from wells, or advantage is taken of the early rains that fall on the low grounds. 2.—The *labee*, sown in the cold weather and reaped in the hot—almost universally a tank crop.

The dry grain crops are the *poonass* or rain crop answering to the *khureef* of Hindoostan and the *rubbee*. The grains, pulses, and seeds of the ponass are yellow, red, and black *jowaree* which ripen in four months. Indian corn—all the millets and the *Paspalum scrobiculatum*, green *moongh*, *bubberloo*, *anamooloo*, *umbertah* and some gourds, sown among the *jowaree*, also the *sun*. The *rubbee* includes white *jowaree*, wheat, gram, black *moong*, *toor*, *cooltee*, castor oil; such seeds as ripen with the *rubbee* crops, although sown in the rains, are reckoned *rubbee*.

The cultivators usually content themselves with three ploughings of the rice grounds under a tank—they at first plough the ground twice, and, after the compartments of the field have been prepared by women labourers, the water is let in. When the weeds are sufficiently rotted they plough again—then harrow—and the soil is finally prepared for the reception of the seed by being rendered smooth, and all earthy lumps that it may contain being mingled with the mass. The day after sowing, the water is let off—but on the fourth day after, a little water is again let in—and from the sixth day, they continue watering every second day. The manure used is the droppings of sheep and goats: more care is bestowed when the water is procured from moats—for they then plough five times and use any kind of dung they can procure from the village, and often transplant. Sprouted seed is sown in Vizianugger and Bellecondah Pergunnas and generally in the southern division of the Circar for the rain crop. One rice crop is the rule—two the exception. At Merecondah and in some parts of the Yelgoor pergunna, where the lands are leased for several years at a quit rent, there is some encouragement to cultivate carefully, and make the most of their allotment—and here we find double cropping. When rice is attacked with in-

sects, bats-dung is thrown over the field, and sometimes *assafœtida*—but more frequently *decamulle* is enclosed in a gourd and buried in the stream that irrigates the rice. An earthen pot whitened, or the skull of a bullock, is set up in the field to avert the all dreaded evil eye. Hunnumaun's protection from evil spirits is invited by offerings of sugar, rice, and flowers—and the wrath of the *Saktis* they endeavour to avert by the promise of a goat. Rather more attention is paid to the cultivation of the dry grains, especially the *jowaree*—for on them the *Coonbee* depends for his subsistence, while the rice goes to pay his rent, satisfy other land dues, and above all his Bunnya creditor. The *jowaree* is sown broad cast, or with the drill plough, after the ground has been carefully ploughed at least twice—but in the stiffer soils, and where there is much grass, sometimes five times. They give the soil a light top dressing with the dust of bones and offal burnt, procured for them by the Choomars. On rare occasions it is manured with cow-dung, and with much anxiety do they watch the growth of a crop which is their sole resource against starvation, and sundry are the appliances, which their ignorance and superstition suggest to render it productive. When the stalks are too red they sacrifice a goat and sprinkle the blood on the field. When too black, bats-dung, and when too white, milk and *dhya*, are thrown on the crop—when worms attack the stem two or three of the insects are rolled up in a cotton wick which when dipped in a mixture of ghee, sesamum, and castor oil is placed on a human skull raised on a stick, and then set fire to—if a skull be not procurable the shell of a land tortoise (the *Testudo geometrica*) is substituted—this last ceremony smacks of the human sacrifice of the Khonds—but the following can be typical only of such a rite now happily exploded. When a very serious blight threatens his *jowaree*, the *Coonbee* gets up at dead of night, collects five handfuls of earth from a *Coomar's* workshop, five from the *dhobe's* ghat, and five from the place where a corpse has been consumed; these he mixes together and forms, as well as he can, a human figure on the ground, the earth of which is then thrown on the field. The charm will have no effect if any one should be cognizant of it.

For the Indian corn the ground is prepared much in the same way as for the *jowaree*—but it is more frequently manured with cow-dung, and the seed is planted by the women in the drills form-

ed by the drill plough, though not dropped through that machine.

This mode of sowing is also adopted in putting down cotton and horse gram. With the Indian corn, as with the *jowaree*, castor oil and some of the pulses is sown. The Indian corn is reaped in three months. For the pulses, particularly for *moongh*, there are several ploughings.

Wheat, of which a small quantity is cultivated in the Circar, is grown in gardens and irrigated.

Little care is bestowed on the cultivation of the millets—they are not manured, and two ploughings are deemed sufficient. For *boora* and *pota sama* a mere clearing away the surface weeds is all that is thought of. The *paspalum* to have a good crop must be sown on a virgin soil. All kinds of *jowaree*, with the exception of the black, are sown with the drill plough, if the *Coonbee* can command one—the millets, *sesamum*, *moongh*, &c. are scattered.

The *jowaree*, castor oil and Indian corn are weeded at least once during their growth. White *jowaree*, *moongh*, gram and *toor* are taken up by the roots—the other grains and pulses are cut down. When the plant is young and tender—both of grains and pulses it is subject to be attacked by grasshoppers, for which no remedy is known: destruction by locusts is rare. When threshed and housed, *neem* leaves are mixed with the seed to protect it from the weevil; when attacked by that insect there is no other remedy than exposing it to the sun's rays. The grain is usually stored up in wicker baskets made of the *Vitex Negundo*, *Grewia Asiatica* cow-dunged, but when intended for seed it is kept in large earthen vessels. A certain rotation of crops is observed in the dry grain cultivation.

On the Red Soils. 1st year yellow *jowaree*. 2nd year castor oil, *moongh*, sometimes cotton. 3rd year yellow *jowaree*, or some of the millets. 4th year fallow. 5th year fallow.

On the Black Soils. 1st year—a *rubbee* crop, white *jowaree* or black *moongh*. 2nd year a *poonass* crop, a millet or yellow *jowaree*. 3rd year a *rubbee* crop, castor oil, *moongh* or cotton. 4th year *poonass* yellow, red, &c. *jowaree* and

toor. 5th *rubbee*, and so on for ten years, when the ground is allowed to fallow for two or three years.

The fallow ground is neglected, which is not of much consequence in the black soil—but the red gets speedily covered with low growing shrubs and bushes—the *Cassia auriculata* and *Zyzyphus microphylla* shrubs, that both exhaust the soil and cost much labour to eradicate on the ground being again cultivated—but this, to tell the truth, the *Coonbees* seldom do, contenting themselves with burning them down and leaving the roots. Although perfectly aware of the benefits of a dash of lime in the soil they never think of loosening the stiff loams, or fertilizing the red soils by that application. The garden cultivation presents no remarkable feature save its slovenliness; even from tobacco they occasionally withhold manure—although both for it and red pepper cow-dung is generally used—but the employment of this substance for fuel materially interferes with its use as a means of enriching the ground. A small quantity of *pawn* is cultivated at Camlapoor.

The size of farms is estimated by the number of ploughs. A *Coonbee* with four ploughs is reckoned well conditioned—two ploughs is the ordinary number belonging to one cultivator—but he is deemed very poor if he can only muster one—eight ploughs are looked on as a large farm, seldom the tillage of the mere *Coonbee*, but of the Zemindar, *Putwarree*, rich Brahmins, &c. who may possess double the number or more. The cost of setting up a couple of ploughs is estimated at a hundred rupees. Rupees 50 for two pairs of bullocks with their harness, and rupees 50 for the price of implements, seed, and for his subsistence till his crop be mature. Twenty returns of rice is looked on as a fair crop, and no more striking fact can show what unskilful agriculturists they are. Much more, however, is looked for from their dry grains, when, if the season be very favorable, 80 returns are expected, but more commonly from sixty to forty is as much as they reap. The yellow *jowaree* is very productive, but the Indian corn, if the land has been properly tilled, exceeds all in productiveness—a quarter of a *maund* sowing producing two to one and a half *kundees*. A *kundee* of yellow *jowaree* from a quarter of a *maund* of seed is regarded in the *poonass* as a very good crop—and in the *rubbee* the same quantity of white *jowaree*,

from double the quantity of seed, is esteemed a fair return. In the *rubbee* the seed is sown more thickly and *toor* usually is grown with it.

Expenses of the Tabee Rice Crop and its return to the Coonbee.

Seed one Maund.		Produce one Kundee.	
Price of seed,	Rs. 2 0 0	To the Balowbek,	6 Consoos.
Women's labour,	0 14 0	„ Government,	9 M. 1
For watering,	0 8 0	„ Putwarrees,	2
Price of labour ploughing, hired labour,	2 8 0	„ Dorwa, Havildar, Patell, &c.	1
Other expenses, poojas, &c.,	0 2 0	8½ Maunds remain to the Ryot, at rupee 1 a Maund, Rs.	8 8 0
	Rupees...6 0 0	Deduct Rs.	6 0 0
		Remainder Rs.	2 8 0

It will be observed that he has to pay double the price for his seed that he gets for his produce, but this is owing to the care necessary to be taken of seed corn, which is always presumed to be of the best quality: besides, the *Coonbee* is usually in debt to the *Bunnyah*, who affords him the seed. ●

Tenures.

The first and most common tenure is the *buttae* or *adhenath*, where the government and cultivator divide the produce equally after the deduction of six consoos on the kundy (7½ per cent.) for the Balowbek, with the exception of the *Putwarree* who receives two consoos from the ryot's share, and the zemindar, havildar, dorwa or patell one consoo; when the land is manured and irrigated from a well, the government demand is one-third, two-thirds going to the ryot with the usual deductions. In the *poonas* when lands are tilled under this tenure eleven parts go to the ryot and nine to government; and in the *rubbee* eight parts to the ryot and twelve to government with deductions as before. In sowing grain if the seed is advanced by the *Bunnyah* the produce is divided into three parts—one for the ryot, one for the *Bunnyah*, and one for government.

2d Muchta cowl.—This is simply paying an annual quit rent for an allotment of land to be held for a certain period, seldom under ten years. It is on this tenure that garden lands are cultivated, the rent of which per beegah varies from four to seventeen rupees; but the common rent for red soil is rupees 2 a beegah, and for the black rupees 2½ to rupees 3 and 4, all depending on the quality of the soil.

Istawa cowl.—For taking in waste lands an increasing rent for the first three to five years when it becomes fixed red soil is on this ground rented.

1st Year	$\frac{1}{2}$	rupee per beegah, a shorter period is allowed for the black soil.
2d Year	1	" "
3d Year	$1\frac{1}{2}$	" " 1st Year 1 rupee per beegah.
4th Year	$8\frac{1}{2}$	" " 2d Year 2 " "
5th Year	2	" " 3d Year 3 " "

Ijara cowl.—This is when a native of substance rents a whole village from government and sublets it, settling himself with the government, when the middle man is any one but a zemindar, the cowl is called *ijaree*, when a zemindar is such then it is called *surbusta*.

Bykarree cowl.—When the inhabitants of one village rent a portion of the land of another, this is a tenure for a year and is given on favourable terms, as the Pykarrees are supposed to lose time and incur fatigue by the distance they have to come. It is a tenure liable to be abused, as frequently the inhabitants of a village leave the lands of their own village untilld if they think they can rent the lands of another on more favourable terms.

Nagur coml.—Plough tenure usually from three to four years and granted only for the cultivation of dry grains, as much as Rs. 15 a plough is occasionally paid for this tenure. It is also liable to objection as the ryot is apt to cultivate in a slovenly manner that he may break up as much surface as he can, and it is disadvantageous to government, as the ryot may keep three pairs of bullocks for his single plough.

Koolharee.—The hatchet tenure; this exists among the Coorwars of the Pakhall, &c. purgunnahs. It is as much as one man can clear with his hatchet; from 4 to 8 annas is the rent for each hatchet.

The quantity sown is the ancient Hindoo measure of land, and in the *buttae* tenure it is still in force. Yet the word beegah is constantly made use of in enams, to temples in meeras lands, and in some of the tenures; and that a fixed beegah was established throughout the country is placed beyond all doubt, by a linear measure cut in a rock adjoining a temple in the neighbourhood of Camlapoor, with an inscription in Teloogoo, set-

ting forth that this measure is the length of sixteen cubits, and that of this ten go to measure the side of a beegah—in other words the beegah consists of twenty-five thousand six hundred square cubits, or six thousand and four hundred square yards, which is just the Madras cawney, or one acre, one rood, eleven poles and seventeen and a quarter yards; one plough, it is said, is capable of tilling two beegahs at a time. That is, two beegahs in the *poonas*, and two in the *rubbee*, or two in the *abee* and two in the *tabee*; but this is rather a rough estimate, as much must depend on the quality of the bullocks, and also their number. Six coonscoos of rice are looked on as one beega's sowing, and another measure more rude is applied to land producing dry grains. As much land as a man seated on a bench can scare the birds from, is said to be the labour of a plough, or two beegahs, but this would seem to be very much over-rated.

Jagheers.

Jagheers. Enam lands are constantly classed with jagheers. In this circar there are three killadaries, those of Warungul, Zuffergur, and Thatconda, with two villages in the first, one in the second, and one in the third, nominally for the support of the forts, but in reality for the subsistence of the killadar. The killadar of Warungul is a man of family, connected with the Nizam by marriage; he has a very indifferent reputation; his revenue is said to be Rupees 5,000 and upwards a year.

The killadarship of Zuffergur yields about half that sum to the killadar Kyunt Yar-jung, and Thatcondah Rupees 5,000 to Kajan Allikhan.

The Nuwab Soorajool Moolk holds pendant with four adjacent villages as his personal jagheer for subsistence.

Balapursad, and Rajah Naunack Buksh, sons of the late minister Chundoolall, held jagheers, as they are called, but without being subject to the entertainment of troops—in fact enams, the first to the extent of Rupees 38,820, from sixteen villages in the talook Kowlapoor, pergunna Hussenabad, and from twelve in the talook Merrecondah, a few miles south of Warungul. The second Rupees 15,203, from forty-one in the pergunna of Yelpcondah. Both these enams were considered forfeited soon after the resignation of their fathers in 1843, and their revenues have been since collected by government.

To Jawwoodood Dowla, a nobleman in the city, there has been

assigned a small personal jagheer of Rupees 4,000 in the pergunna Yelpcondah, and to another man of family Meer Ashuck Hoossain Alle, a village called Woolundee in the same pergunna, yielding Rupees 2,410. Two peerjadas have enam villages—the one, Idutshah Durwesh, has four in the Havellee pergunna, which yields him Rupees 3,618, and another Hoossain Badshah has five villages in the united pergunnas of Kotaguttoo, Katachpoor, yielding Rupees 4,812. The kazeehirky has two villages assigned him yielding Rupees 1,505, and a lady Luteef Begum, a small village called Luteef Begum, in pergunna Yelpcondah. All these sums are according to the koolkamil assessment, and their accuracy is not to be relied on.

Throughout this part of Telingana the village system prevails, but there does not seem to be that staunch adherence to the chief village officer and his family, the Patell, which exists elsewhere, as in Malwa, where a Patell to a village is as necessary as a queen bee to the hive. The simple usurpation by force or fraud of the Patell's rights by the Deshmooks and Deshpundyas does not thoroughly explain this, for at one period Malwa was the most lawless country in India, where such rights would have been usurped without scruple if they could have been maintained. A concurrent cause must therefore be sought for, which will explain how the ryots acceded to the spoliation of their chief, and it may be found in the necessity that exists in Telingana, on the occurrence of a bad season, of the population abandoning their villages to seek sustenance elsewhere. Owing to this the tie to their patell would necessarily be relaxed, and the Deshmookh or Deshpundya would be regarded as the village, as well as the district head, and would be tacitly permitted to assume the rights of the patell on performing his duties.

Zemindars. Surdeshmookh and Surdeshpundya. It has been already mentioned that one family of Surdeshmookhs and one of Surdeshpundyas existed in the circar of Warungul.

Their supremacy however is nominal, as neither the one or the other exert any controul over the class of Deshmookhs or Deshpundyahs, or derive any pecuniary advantage from their position. It may be presumed however that such claims once existed, not so much from the present Surdeshmookh's attempting to revive the

dormant rights—as from the Surdeshmookh of Elgundel deriving a certain pecuniary grant from his position independent of his dues as a simple Deshmookh.

The present Surdeshmookh is of the Coonbee caste—a turbulent unscrupulous man, and likely enough to give trouble to a weak Government. His name is Venkut Narsinhá, and he shares with a brother, Yermojee, the rights of Surdeshmookh—he resides at Atmacoor.

The Surdeshpundyah, Mulliya by name, is a Brahmin, and has the unenviable fame of being the worst Zemindar in the circar. He lives at Mutwarrah, but the other members of the family live elsewhere.

Deshmookh and Deshpundyah.—These are named indiscriminately zemindars—the former are usually Coonbees or Yelmas, the latter Brahmins, but the Zemindars of the Hussenabad and Cotacundah pergunnas are Brahmins, and exercise the rights and receive the fees of both Deshmookh and Deshpundyah. One of their ancestors being Peshcar to Tannah Shah, the uncle and Dewan of one of the last of the Affghan race of Golcondah kings, had this grant accorded to him in consideration of his services—but in fact the concession is now of little use, as, by mutual agreement, the Deshmookhs and Deshpundyahs have yielded up their rights to each other, on condition of being allowed to hold each his own villages, independent of the interference of the other either for profit or control, thus obliterating all traces of their original connection. The fees received by them are five per cent. on the revenue with two beegas of land at each village, which may be reckoned five per cent. more; they have also the care of the Sadar Khurch, an allowance to each village from Government of five per cent. on its revenue, for the repair of tanks, cutcherry expenses, alms to beggars, and allowance to dancing women called Doombarnees. They have besides claims on the produce of the date and palmyra trees, a share in the town, transit duties and local duties; they are the head of the police, and being accountable to Government for all murders, robberies, and other violences perpetrated in their several domains, must proceed posse comitatus to the apprehension of the criminal. They enforce the decision of punchayets, collect the revenue of their district—in short, exercise the functions of justice of the peace, sheriff, and land steward to Government.

The character of these functionaries in this *circar* does not stand high, and with some exceptions they are, especially the Brahmins, the objects of much merited odium. To quarrel among themselves, to squeeze as much out of the ryots as they can, and to defraud Government, are the great end and aim of their existence, which they pursue without much shame or remorse. Since the time of Sir Charles Metcalfe they have been restrained by European superintendence till within the last four years. On their emancipation from which, that they have at least relapsed into their old habits of lawlessness, the following incident will show, while it will illustrate fully to what a crime an ignorant Government like the Nizam's may be unintentionally privy. A feud of some standing existed between the Surdeshmookh Venkah Narsinhá, and the Deshmookh of Pakhall, Dhurm Rao, a Yelwar. The character of the latter was that of a bold fearless man, not certainly tormented with a very tender conscience, who had been outlawed, proscribed, and driven to seek refuge at Bustar in the very heart of Gondwanah, but rather for the crime of his father than for any misdeeds of his own, his acts being retaliatory rather than aggressive. He had however returned, made his peace with the Government, had been reinstated in his patrimonial rights, and had for several years effaced, by correct conduct, all suspicions of disloyalty. At the end of the hot season of 1844, not one year after European control had ceased, the Surdeshmookh obtained a warrant from the Hyderabad Government to the Naib at Hunnumcondah, (procured, it is said and believed all over the country, by a bribe of rupees 10,000 to a wretched parasite of the court, of the name of Balmoocond,) setting forth that if Dhurm Rao appeared in open rebellion he might be put to death. Armed with this he prevailed on this officer, no very unwilling instrument, to aid him in accomplishing the slaughter he meditated. To avert suspicion a *nautch* was given at Hunnumcondah from which the parties chiefly concerned withdrew at an early hour of the night—they had already laid their plans, and before day had dawned the village of Dhurm Rao in the vicinity of the Pakhall lake was surrounded by Government troops under the Naib, and the police of the Surdeshmookh under Venkat Narsinhá himself. Their victim, who was sick at the time, and thinking of anything but treason or rebellion, attempted to escape, but in vain. He was run through

with a spear, and the murder was speedily accomplished. To give as legal a colouring to the atrocity as possible his head was fixed on a spear and paraded through the streets of Hunnumcondah.

Surmoonewar, Boputtee, the chief of the Corewars, a race of savages inhabiting the jungles about Pakhall. To this office were attached certain rights exactly similar to black mail over certain districts estimated at one per cent. on the revenue—but through the misconduct of the Boputtee and his people and the resistance of the Zemindars, have caused these to be forfeited in a great measure. He derives however some revenue from rents, and in a bad year when the Pakhall lake shrinks, he is entitled to crop the dry margins—and it is on such occasions that the Government officers manage to make him pay up his arrears of tribute, but he has a very decided repugnance to fulfil such claims, and evades them in every way he can. Some of the wretched hamlets of his country send in as their contributions speaking mynas, red squirrels, and jungle produce of all kinds. Although looked on as a bad subject his rights are probably more ancient and certainly as well guaranteed as many of his brother Zemindars of the plains. He affects caste, and does not eat beef as other Corewars do.

Besides the claims accorded by government the Zemindars levy on their own account certain *puttees* of the nature of aids in the feudal times.

1st. *Shadee puttee*—On the occasion of a marriage in any of their families.

2nd. *Boordee puttee*—for a death, and one for a birth in the family.

3d. *Suffer puttee*—for defraying the expenses of a progress through their own domains. These taxes fall exclusively on the cultivators and artisans, they are not raised by a particular assessment on each individual, but the village is arbitrarily assessed, and the heads of the village who are exempted from any payment have the care of raising it. These are seldom paid with good will, and when exacted by an unpopular Zemindar are hateful. A story current among them will illustrate this. A wicked Rajah who ruled over a part of the country and whose capital was at Chandragiri devised a *puttee* of a new kind. The breasts of the women were to be measured, and the measure was to be filled up with coins. The

tax-gatherers came to the house of a dhobee who was absent, and proceeded to execute their orders on his wife who had remained at home. The woman, indignant at the treatment she met with, dashed out her infant's brain against the washing stone, and then slew herself, after she had cursed the Rajah and imprecated desolation on his house. The city became a wilderness, and the wicked Rajah's family was destroyed, and to this day may be seen the blood and brains of the child on the margin of a tank.

Patell.—In very many villages of this circar this office has become extinct, yet in the Surdeshmookh's districts they are still to be found; their rights are mostly in the hands of the Zemindars and Dorwa (the Telooogo word for Mugadum) and their functions performed by them.

The nature of the office of *Dorwa* or *Mugadum* and his rights will be fully understood by the sunnud in the Appendix.

Putwarree.—This functionary has withstood all vicissitudes—and he, not the patell, may be regarded as the real key-stone of the village community. He is invariably a Brahmin, and must be capable of reading and writing. His grain hug has been noted, his meeras land varies much in extent, but may be taken at two beegas of rice ground and two beegas for dry grain, but he is commonly the richest man in the village—tilling much more land than his original gift, which he, being of the Khooshbash, obtains at a more favorable rate than the mere ryot. In Kusbas he gets a portion of the garden produce called *poorjee*, also a small fee from each shop when fairs take place. He has a share too of the produce of fruit and palm trees. A very good understanding usually exists between him and the Zemindar who favors him in all disputes, and if differences between them spring up, they are of the nature of lovers' quarrels; indeed the cunning of both leads them to affect animosities to give them facilities for cheating the revenue officer.

It may be here mentioned that the meeras lands of this and of the other district and village functionaries may, through misconduct, or from incapacity of their possessor, be taken from them by Government, which in this case bestows them on a member of the family more loyal or more capable. Meeras lands are seldom sold, indeed it is questionable if any such sale is legal, but they may

be mortgaged for debt, in case of the proprietor going on a pilgrimage, or where a widow with a young family has the right to them, but is incapable of exercising it satisfactorily.

The other hugdars, among whom the six coonsoos of grain are distributed, are numerous, and the proportion of grain to each is by no means constant. In most cases Government or its agent comes in for a tolerable remainder after the share of the rightful owners have been adjusted, but the hugdars also get lands on favorable terms, Government exacting less rent from them whether of money or grain than from the ryot.

Burhae, (carpenter,) seems an essential member of the village community, but even his hugs vary: two pylees of grain in the cundy would seem to be the proportion he usually receives. He gets also presents of grain from the Coonbees for doing extra work. The *Putwarree* is sometimes liberal enough to present him with a cow, and the Government with a piece of land or a well, with the right to cultivate around it.

Lohar.—Receives two pylees and has gifts like the carpenter. The other three of the *Paunchbae*—the tin-man, stone-cutter, and goldsmith have dropped out of the village hugdars—and the last is even reckoned among the rent-payers in kusbas when only they are found, but he gets a certain per centage for shroffage. The *Sungtrass* may be looked on as extinct, for the miserable hut builder can surely not be the descendant of the gigantic race who, in the days of old, were so strong as to be able to squeeze oil from the sesamum by the mere force of their clenched fists.

The *Paunch-bae* wear the sacred cord, and have particular marriage ceremonies, which are gone through with a privacy unknown to other castes. It is likewise considered unlucky to meet a member of the brotherhood in the morning, as they are the manufacturers of deadly weapons.

Yellamar.—He is often a low caste man but not necessarily so, indeed he may be of any caste except a Brahmin, a *Yelwar* is a Coonbee. At Hoosain-purty he is a carpenter. In the smaller villages he is at once boundary marker guide, and water distributor, for which he receives four pylees of the *Balowteh* allowance, but in the larger villages his functions are divided between two or three or even more, in which case so much as six pylees, or even more, are allowed, the scout receiving the largest share.

The *Dhobee* gets one pylee besides presents, on the birth of a child, from the cultivator. In the Kusbas he is reckoned among the rent-payers, he cowdungs the cutcherry and sweeps the inside, the Tullarewar or Dher sweeping outside.

The *Hujjam* gets one pylee and small presents on the occasions of weddings.

The Coomar.—An important member of the village, all castes, save Brahmins, eat from his hands; besides his occupation of pot-making he makes the *lares* and *penates* of the lower castes, and performs poojah, &c. to the *Saktis*, which are not acknowledged by the Brahmins, for which he receives two annas each time. His allowance is one pylee. In the larger villages he is a rent-payer.

Chumar.—Receives two pylees. The several priests, the Brahmin astrologer, the *Jungum*, the *Byudlewar*, the Poojarree of the lowest castes, the *Ayawar*, the priest of Vishnoo, the tom-tom beaters or *Tumbree*, each receives a pylee, and also the fakor where there are Mahometans. The *Dhers* and low castes who act as Pyadas receive a proportion varying according to their number, and the *Dhungurs* a portion for the dung of their cattle and sheep. The *Doombarnees*, dancing women, also come in occasionally for a share.

Brahmins.—They are chiefly Sunkaracharrys, followers of Siva and the Saktis, there is little learning among them; the astrologers are reckoned weather-wise, although their prognostications often fail—they also cast nativities and calculate eclipses with some accuracy, there exists two sects of Vaishnava Brahmins. Ramanuj and Madwacherry, the last are Hunnuman's priests, and are said to live luxuriously. In the Appendix is given an account of some of the enams of the temples, but these, particularly the money payments, are often evaded by the Mahometan Naibs.

The Brahmins employed in secular pursuits are of the two sects, Ramanuj and Sunkaracharry; no Brahmin, whether secular or of the priesthood, tastes fish or flesh, but for this they make up by drinking ghee, milk, and using highly azotized spices in their food—they drink toddy but not openly; the majority snuff, but some smoke tobacco; very few Brahmins are actually tillers of the soil.

Yelmees.—The Rajpoots of Telingana, although their pretensions to fill the place of the Shatryas are sneered at and denied by the Brahmins, are a manly race, fond of the chase, and, from veiling their women, are reckoned among the Khooshbash. Some Deshmookhs are of this caste, the Sumtamunyum and Pakhall Deshmookhs being both Yelmees. They are cultivators and soldiers, but few enlist into the service of the Company or the Nizam. As to their origin, they were in all probability the fighting class of Telingana before that country became Brahminical, and they need care little for the Brahmins denying them the rank they covet, as the similar claims of the Rajpoots are rejected by the same authority. They are all followers of Vishnoo. There are a few Rajpoots about towns, usually in the military service of Government.

Muqsulmauns.—Most of these are Government employes, but the carpet weavers of Mutwarrah are all Mahometans, and very bad specimens of the faithful they are, being drunken, turbulent, and lazy. Some cultivate the lands of the Peerzada, and a few are farmers on their own account, and *dorwas*, and some are tradesmen. The butcher being universally a Mahometan. Brahmins, Yelmas, and Mahometans are of the Khooshbash, and have certain remittances of rent from Government allowed them, as from the circumstance of keeping their women behind the purdah, they are denied their aid in their labour; this allowance, or *moosaf* as it is called, varies in the grain rent from one and half maund to two maunds in the cundy. As before stated they are not subject to puttees.

Coonbee: (*Capulloo*—in Teloogoo.)—Of these there are no less than seven different sub-castes, who neither eat together nor intermarry, existing in this Circar alone. But there is said to be in Telingana as many as twelve.

1st. *Mootat*, 2d. *Goreewar*, 3d. *Luckamurry*, 4th. *Pakenat*, 5th. *Cordiewar*, 6th. *Gonewar*, and 7th. *Chutteeppoowar*; the first four are reckoned the superior classes, from the circumstance of some Deshmookhs belonging to them. The three last are the more temperate, and are said to deny themselves flesh and toddy. The Chutteeppoowar are Lingayets.

The Coonbees are very industrious, although social evils have rendered their labour of little avail in elevating themselves to a condition superior to that in which they were born. The sowing

and reaping seasons are their busy times, but the hot weather is by no means spent in sloth, they then cut down wood for the repair or renewal of their implements, burn for charcoal, make straw ropes and collect thorns. The women are truly their husbands' help-mates, they prepare his food, weed, plant grain, clean cotton, grind corn, and, in the absence of other employment, ply busily the wheel and spindle. Old age is respected among them and carefully tended, and if we have to blame that inveterate practice of uttering without remorse the most unblushing falsehoods respecting their condition, there is much to laud in their industry, patience, and good nature. They are not so active or physically strong as the Mahrattas, but in intelligence they are much on a par with them, and in politeness superior to that rude and unmannerly people. The principal item of their extraordinary expenses is their marriages, seldom defrayed for less than a hundred rupees, though it is possible to be got over for half the sum. At births a rupee, or its equivalent in grain, is given to the dhobee, the same to the midwife, and from two to four annas to the Brahmin who casts the nativity. The purification feast cost them a couple of rupees. The Deshmookhs of this caste veil their women.

Beljewars.—Also cultivators, especially about Purcull, where they are to be found in the greatest numbers. But they are also shopkeepers, sell drugs and tobacco, have property in cattle, and practise medicine. They are all Lingayets; Jungums are very frequently from this caste.

Dhungurs.—Of these are twelve sub-castes—1st. *Yerrah Walle-roo*, 2d. *Pakenat*, 3d. *Putra*, 4th. *Pooja*, 5th. *Paddameeta*, 6th. *Paya*, 7th. *Gumpa*, 8th. *Carne*, 9th. *Mittee*, 10th. *Moodeta*, 11th. *Mooda*. There is yet another; they are distinguished by the difference of the ornaments of their women and by their dress, and, like the different sub-castes of Coonbees, do not eat or intermarry with each other. The Yerrah looks on himself as the best caste Dhungur. The Dhungurs are reckoned among the rent-payers in the larger villages. Their contribution to Government varies much according to season and locality. When hired by Zemindars to tend their cattle the Dhungur gets ten rupees a season, a cumlee, some tobacco, a pair of sandals, and the milk of a cow.

The breed of cattle of this part of Telingana is peculiar. They

are a small hardy race of a white colour, the tips of the tail being black. The cows calve at the beginning of the rains; if the calf be male it is allowed the whole of its mother's milk, but if female the parent cow is milked to about half a seer, or about the half—a seer a day being the average quantity given by a single cow, although a seer and a half may sometimes be obtained. In the hot season herds of this breed of cattle collect from this and the neighbouring Circars at the Pakhall lake on account of the abundance of grass there. Several of the instincts and dispositions of the wild animal, dormant rather than extinct in the domesticated state, show themselves; they keep together for mutual defence, rush from pasture to pasture in a body, and at night time each herd forms itself into a square, to keep off tigers, which seldom venture to assail the body when so prepared, but are obliged to content themselves with the waif and stray. The proprietors of the several herds, chiefly zemindars, pay a rent of ten rupees a season to the deshmookh of Pakhall for each.

At two years of age the males are gelt by breaking down the testicle or destroying the cord by a sharp piece of bamboo run through and through. This cruel operation seldom proves fatal. From twenty to twenty-four rupees is esteemed a fair price for a pair of these bullocks. The cows after giving four or five calves are sold to butchers, who come from Hyderabad or reside in the larger villages, for three or four rupees. One draught bullock of this kind measured in height 4 feet 2 inches, length of back from between the horns to the root of the tail 6 feet; another measured in height 3 feet 9 inches, length of back 5½.

At Muncherla, in the *Havalee* pergunna, Feraputty, and at Yelunda, a village in the jagheer of the killadar of Warungul, there is a breed of bullocks very much resembling the Berar. The Telingana bullocks are used chiefly by the cultivators, the Benjarees buy them occasionally, but prefer the Berar bullocks as stronger.

The goat and sheep present no very striking peculiarity, their price varies from twelve annas to a rupee; two kids are common, but lambs come usually single.

The buffalo is of a very inferior kind, yielding two or three seers of milk a day only, price varying from 5 to 10 rupees; they are sometimes used for draught; the buffalo calves in autumn.

A disease similar to cholera in some of its symptoms attacks

stock—cows attacked with it occasionally recover, but buffaloes never; little or no medicine is used, as the disease is reckoned the direct chastening of the *Saktis*.

The cow-pox also prevails in October; excessive fat too is regarded as a disease.

Stock is also subject to be attacked by worms and by a disease of the liver—the liver fluke? Although rather out of place it may here be mentioned that the ponies of this Circar are miserable little animals, and the donkies the usual degenerate race of the Deccan.

There is a head Dhungur who settles with government, mediates in caste disputes, and carries out the decision of punchayets under the Zemindar. Telingees, called also Munnoowars from a degrading tradition of their origin; that this low class should give name to the country is paralleled by the same thing occurring in Gondwanah; they are cultivators, and labourers; they are protected by the Yelmas.

Coolies.—This caste hangs loose on society; they employ themselves in bringing in jungle produce, fruits, roots for food, and medicine and honey, assist in the manufacture of iron, act as Pyadas; in troubled times they are robbers, and at all times thieves and drunkards. The Telingana bearer, who is also a fisherman, is of this caste. The coolies rent from year to year the tamarind and mango trees from the heads of villages at half their produce, or a money rent.

Dhers.—Are similar to their brethren in other parts of India; they are pyadas.

Yellawars.—As Oopurwars they cultivate land—and as Beldars dig wells and clear out tanks.

Yerkullwars.—This is a nomade tribe who live in huts made of reeds, or of the leaves of the palmyra tree, and subsist on the flesh of swine, game, and carrion, and a little grain they may get in barter for the mats and baskets they construct. They snare birds with bird-lime, and they have a small breed of dogs, with which they kill hares. They kill most of the dogs when young but retain the bitches, to which, when they are intended for hunting, they give a certain root that renders them barren; they are a slender bodied animal, of an active make, but with an ugly heavy head. Brahmins will not approach them, but the Jungum is more pliant, and on the occasion of a death, for a present of some grain, he attends

and blows his conch. Their marriage ceremonies consist in a head-man whom they elect for the occasion and place on a throne of turf, putting rice on the heads of the young couple and uttering some mystic words; a pig is then killed, the flesh is cooked and eaten, and ample as their experience must be of the qualities of every kind of flesh, they are unanimous in declaring that pork is superior to all. They then jump about, beat their bellmetal vessels, and the whole concludes by the whole party male and female getting drunk. One of their customs is very peculiar. On the occasion of a birth the husband is looked on as the object of compassion, and is carefully tended by the neighbours as if he and not the wife had been the sufferer. Like all vagabonds they are regarded with suspicion, and with some reason, as they affect to possess a divining rod in the shape of the frond of the wild date, by which they may discover on the outside of a house where property is placed within. Instructed by this, and perhaps by some more certain information, they have been known to dig under the wall of a hut with their long curved knives, and abstract what they found inside. Although despised as a low carrion eating caste, the ryots do not hesitate in cases of sickness to consult them. Then the divining rod is produced, a Yerkullwar woman holding one end while the other is given to the person seeking advice, a long string of words is rattled over, the result of the disease foretold, and the particular shrine is indicated where an offering is to be placed, or the offended *Sakti* named, whose wrath is to be appeased by sacrifice, their peripatetic life giving them an extensive local knowledge of temples and holy places. They pretend too to a knowledge of medicine, and a composition of the bark of some tree, the name of which they will not reveal, powdered and formed into cakes, is in the pouch of every Yerkullwar as a remedy against snake bites. They speak a corrupt Tamool.

Wooddeanwars.—They differ little in their customs from the Yerkullwars, and live in the same kind of dwelling, but they wander less, and sometimes acquire some little property in cows and buffaloes. They are employed in carting stones, making mats, digging wells, and clearing out tanks along with Beldars; they receive for clearing out sixty kolas of length and one kola of height and breadth of mud, about 120 cubic yards, two kundes of rice and two rupees, but a portion of the grain is claim-

by the Putwarree. Their curse is dreaded by the Coonbees who sometimes earn it by cheating them of their dues. They entertain a deep animosity towards the Dhungurs. The shriek of the jackall, when at their evening meals, startles and alarms them as a bad omen, and they even cast away their food on hearing it. They speak Teloo goo.

Corewars.—This is a savage tribe inhabiting the sand-stone hills about Pakhall and the country towards the Godavery; they are the subjects of the Boputtee, but eat beef and are not acknowledged as Hindoos; they are capable of great fatigue. Save a few balls made up of the flour of the *mallwa*, and tobacco, they go long journeys without any other sustenance.

Mahrattas.—Mahratta emigrants are numerous in the western part of the Circar, to which they came some thirty or forty years ago. They have introduced into Telingana white *jowar-ree*, black *moongh*, and the sweet cucumber. Their lands are rented on the *Istara* cowl, which after a few years becomes a fixed rent. They live in huts of wattle and dab which they can easily move to another spot, when, from caprice of their own, or breach of faith on the part of the Zemindar, they choose to do so. Their Putwarree is a Teloo goo Brahmin and their artizans are Teloo goo, but their head man is invariably a Mahratta, and he gets for his trouble a certain portion of land rent free. They are considered good agriculturists, and are sober and temperate, but being strangers, without any feelings of local attachment, they frequently, without much cause of offence, shift their quarters. They eat more bread than the Telinghee Coonbees, and the fruit of the palmyra tree is particularly relished by them.

Shopkeepers and other Tradesmen.—These are all regarded as on the Mooturfa, and pay a money rent to government in the large villages where they usually congregate, with the exception of the Bunnyahs and Kullals who are found in most. The chief of these is the Bunnyah, who, besides being engaged in the retail of goods of every description, lends money to the ryots on the guarantee of the Putwarree. The interest to be paid is $1\frac{1}{2}$ per cent. per month, but they are more frequently paid in kind than in money. Thus the Coonbee, of his crop, reserves exclusively for them, *sesamum*, castor oil seed, gram and *moongh*; the Dhungurs always repay in kind; and the Kullal, for fifteen gundhas lent, such is the mode of

their calculation, pays nineteen at the end of the year, very nearly eighteen per cent. The Telingana Bunnyahs are not, it is said, so greedy of gain as the Marwarree, or so merciless in exacting the capital and interest at the appointed time, whatever may have been the mishaps of the debtor; but sufferance with a debtor's delay is not the badge of the tribe, and they unscrupulously seize and sell the whole property of the wretched Coonbee, to his wife's ornaments and his last cooking pot; the poor creature being reduced to misery, and compelled to content himself with rags, earthen pots, and a precarious subsistence as a day labourer, and it is a common saying among the people that of all classes it is most difficult for a Coonbee to regain his position. There are Marwarrees in the Circar on their own account, and agents from parties at Hyderabad. The Bunnyahs are of three classes, followers of Vishnu and Siva and Lingayets.

Kullals.—The toddy drawers. The rent of toddy trees is included in their contribution. But a better idea will be given of the several trades and of their payments, by a table showing the moturfa payments as they exist in the town of Hunnumcondah.

Moturfa or rent payers in the Kusba of Hunnumcondah.

	No. of Houses.	Rent paid.
Kullals, toddy drawers,	33	Rs. 900
Bukhalls, shopkeepers,	33	" 250
Sonar, goldsmiths,	8	" 65
Butchers,	1	" 43
Beef-butchers,	1	" 22
Tobacco-sellers,	4	" 22
Tailors,	6	" 22
Cotton-cleaners,	1	" 3
Dyers,	1	" 1½
Dhungurs,	-	" 66
Dhobeas,	9	" 45½
Confectioners,	5	" 34
Potters,	8	" 20
Weavers,	8	" 21
Pawn-seller,	1	" 28
Oil-men,	3	" 35
Saddlers,	3	" 14
Saltpetre manufacturers,	2	" 12

Most castes and trades, even some of the very lowest, have a set of beggars attached to them, who by importunity, flattery, and some

times threats, extort alms and food from its members; they go about showing pictures, toys, &c., beating tomtoms, recounting the deeds of their ancestors to each caste, and by every means administering to that most prevalent of Indian weaknesses—vanity. They are to be found at births and marriages; Coolies, Dhers, and Choomars have respectively their *mungneewallahs*, as they are called. Yet some of these clients are of use or comfort to their patrons—thus the Correwars, *mungneewallahs* of the Dhungurs, assist them in looking after their flocks and make cumlies, and the Byudlewars are priests of the Dhers.

There are besides the usual number of religious mendicants who beg indiscriminately from all castes; strange to say there are few or no gossaeens, possibly the country is too poor for them. A few of them, it is true, came up to Warungul on a treasure hunt some years ago, and it is said found wealth, which may be doubted; they sought for it in the old temples, and did not hesitate to pull up the floors in their search. There are some Byraghees who are held in a certain degree of repute for piety and asceticism; they are often to be found in the false caves of the granite rock.

Slaves.—The slavery existing in India, it is well known, is a different thing from the slavery of North America or Brazil, not that the slaves are less bondsmen in the one country than in the other, but the treatment is widely dissimilar. The African is worked like a beast of burthen, the Indian is cared for as a valuable servant. Slaves are employed in various ways, they cultivate the ground, act as a kind of body guard to the wealthier zemindars and are then called *khitmutgars*; they are even made havildars of villages, and are allowed to possess property. Slaves are commonly purchased during famine times when all castes and classes, save Brahmins, are compelled, for the very existence of themselves and their offspring, to resort to this mode of relief; they are never resold, not even when their masters have, through misfortune, been reduced in circumstances. On which occasions their services are lent to the wealthy who feed and clothe them, but offer no other remuneration to their owners; male slaves are allowed to contract marriages, but the females are not permitted to do so. At the Dussera clothing is dealt out to them, the women get a saree and a chowlee, and the men an *angreka*, *dotie*, *doputta*, and a *pugree*, and on occasions of marriages they may get a dress more. The

caste of slaves is unaffected by their condition, save in the case of their being sold to Mahometans, when they become of that faith. The price varies much, a rupee or two in seasons of extreme scarcity is sometimes all that is given, but in time of plenty their price rises, for then the market is but scantily supplied.

They are generally treated with kindness, the female slaves address their mistresses as *umma*, and they are themselves called *ayah*. Instances of extreme fidelity on the part of *khitmutgars* to their master are recorded, but the curse of slavery, all mitigated though it be, clings to the institution. Slaves of zemindars who are the class usually possessing them, are often spies and informers, the objects of terror to the ryot and tradesman, who dread their approach as a pestilence.

The sects of some of the castes has already been noted—besides those already noted, the oilman, weavers, some carpenters and goldsmiths are Lingayets, and the number of this sect may in some degree be estimated by their having a gooroo living near Warungul, who fashions lings from the steatitic granite for the poorer classes, and consecrates for the richer the symbol formed of materials more costly; the ling boxes are made by the goldsmiths. But the religion of the Brahmins, as set forth in the sacred books, deformed though it be by polytheism, does not satisfy that insatiable craving for idol worship which seems so inveterately to exist in the minds of the natives of India. Hunnumaun, it is true, the representative of the good principle, has his honors undivided, but the evil principle, the ever active agent to afflict and torment, is propitiated under numerous forms. Not to mention the terrible incarnations of Devi, there is the feticism of the snake and the Saktis Yellumma, Peddumma, Poshumma, Mysumma, and Sowdalumma.

Yellumma is worshipped by all sects save the Brahmins, the Coomars are her priests; Poshumma is the goddess of the small pox; Mysumma, of tanks, to whom a buffalo calf is sacrificed; and Sowdalumma is the *Sakti* of the Coorwars, and is represented by a black stone. The Dhungurs have a god of their own, *Molunna*, who is said to be the Kundoba of the Mahrattas. Before him, when the season has been favorable, they are swung with a hook fixed in their backs, at a village called Ainool. They also worship a deity called *Poolraj*; he is not represented by an idol, but an altar of white stones is raised to him, flowers placed on it and pooja per-

formed by his worshippers with their backs turned to the altar. In the houses too of the poorer classes are two lares, *Balumma* and *Danumma*. The first is invoked to protect their children, the second to increase their wealth—images of both their godships may be purchased at any potters for a few pice.

The belief in witchcraft pervades all ranks, and in times of pestilence its professors are oftentimes rudely handled and sometimes put to death. In the hot season of 1845 there was a severe visitation of cholera and five reputed wizards were put to death; at Oorus under the eye of the Peerzada a weaver was hanged, at Purkall a dho-bee, and at Cumlapoor a low caste man, a *kullal*; there were two others. They are tried judged and condemned by lynch-law, and though the authorities did not approve of the murders, they did not exert themselves to punish the perpetrators of them.

Food. The food of the higher classes is not peculiar. The Ooonbees and Yelmas who can afford it, eat flesh, and fish is a common article of diet among the lower castes, such as bearers, &c., but a vast proportion of the ryots and low castes rarely taste animal food, and that solely on the occasions of festivals and weddings; ghee with them is a luxury, and curds most desirable food. Bread is made from *jowaree* and latterly from Indian corn which is now coming into use as a bread corn. Rice is occasionally used, and the produce of the millets which are eaten as rice and not made into bread, is mostly consumed in the country. The *jowaree* or Indian corn is bruised, the finer meal is separated from the coarser which is cooked into a kind of pottage called *duleya* and seasoned with tamarind, a very common condiment in Telingana, red pepper and salt. The finer meal is boiled into a kind of gruel called *umbelly*, which is much used in the hot weather when bread is sparingly eaten on account of the thirst it is apt to engender. The cucumbers too are allowed to grow till their seeds ripen, the soft parts are dried and the seeds bruised and made into a kind of chutney, which is eaten with the other part after it has been boiled with some condiment.

The poorer classes are sometimes in great straits for want of food, especially before the *jowaree* has ripened. With the exception of Bunnyahs, the toddy drawers themselves, three castes of Ooonbees and some of the Lingayets as the Belgewars, all classes in Telingana drink toddy very frequently to intoxication; nor can this be wonder-

ed at in a country where a man can get drunk for a pice and a half; the women also drink.

Languages.

Of the languages spoken in the Circar the most prevalent is the Teloo-goo, but it is said to be a corrupt dialect, not to be compared in purity with the language of the coast. All Putwarrees' and Bunnyahs' accounts are kept in it, and it is the general language of communication. Hindoostani is spoken by the Government employés, by the Yellawars, and often, not always, by the Putwarrees. Persian is used in written communications by the higher functionaries.

Mahratta is spoken by the Mahrattas, and Canarese by the Mudwacherry Brahmins and the Correwars, the clients of the Dhungurs. A very corrupt Tamool is spoken by the Yerkulwars.

Health and Diseases.

The granitic country is salubrious, but the sandstone has a very indifferent reputation. Fevers, spleen, &c. are there very common. The corps and squadron of cavalry stationed in the neighbourhood of Warungul has enjoyed excellent health since being cantoned there. Cholera is said to visit the country epidemically every four or five years. The last time it raged with great severity was in 1845, when it numbered a large proportion of Mahometans among its victims, a fact observed in other and distant parts of the country. A patient attacked with cholera trusts little to the power of remedies, the chastising *Sakti* is sought to be propitiated, and gifts are promised on condition of his being spared. Abstinence is greatly relied on in fevers, frequently no other means are taken to cure it. The Hakeems destroy the effects of many valuable drugs within their reach by subjecting them to the action of heat, fancying that the *caput mortuum* of charcoal that remains after combustion contains all the properties of the remedies they put into the pot.

Education.

In most large villages there is a schoolmaster wholly dependent on fees and gifts, who professes to teach reading, writing, and arithmetic. All castes without distinction are admitted to the school from the Brahmin to the *Zeengar* (saddler). Religion is not inculcated, that task being left to the priests of the different sects. The schoolmaster is usually a Brahmin. He may derive a couple of annas a month from each pupil, with a gift of grain as can be afforded. The pupil is first

taught to write in sand, and then he furnishes himself with a black board and a pencil of steatite. The punishment for the remiss and negligent are flogging and a species of picketting. Their tasks in reading consist of exercises in some parts of the adventures of Rama and Krishna, subjects on which all Hindoos can meet with unanimity, nor are Mahometans so shocked with these legends as to prevent their children from being instructed.

**State of litigation and
Crime—Police.**

The inefficiency and the mal-administration of justice renders it very difficult to estimate precisely the state of litigation and crime. The resort to the Panchayet is the usual mode of terminating disputes of a civil nature, but even this, in itself a very excellent mode of settling disagreements if left to work independently of all influence, is rendered unsatisfactory by the superior authorities often claiming the right to name the *Surpunch*. There is a cazee who has a village in enam near Warungul, but from his ignorance and want of education, being unable to read or write, he is incapable of performing the duties of his office, there has been in consequence a paid functionary appointed; his salary is 70 or 80 rupees.

There are two divisions of police, the village police—who under the name of *muskorees* receive in large villages a rupee a month and some grain; they are offsets from the Dhers, and the government police, who assist in collecting revenue, &c. for which they get three rupees a month. There are a few Arabs in the Circar who receive large pay, varying from rupees 12 to rupees 15 a month.

Streams.

There are no streams of any importance in the Circar. On the north they feed the Godavery or its confluent: on the south the Moosy and Kishna; they are all without names, and, saving the rivulet issuing from the Pakhall tank, are dry nullah beds a few weeks after the rains have subsided. But though of insignificant body, these streams are abundant, and supply the numerous tanks, which are the great and characteristic feature of this portion of Telanganah.

Lakes.

The Pakhall lake has been frequently mentioned—it is sometimes called a Tank, but from examining the bund I conceive that its bed must have contained water previous to the erection of any artificial embankment. There is a myth regarding it—that the hills about it which contain the water were raised

ed by magic by Brahmin agency to please one of the Warungul kings. There is a *chubootra* about the middle of the bund called the *chubootra* of Sitab-khan, a lieutenant of one of the first of the Golcondah princes who finally expelled the Hindoo dynasty. It is a magnificent sheet of water from thirty to forty miles in circumference. Its shores are well wooded and stored with wild animals—but for six or seven months of the year its neighbourhood is very unhealthy. In its immediate vicinity not much more than fifteen hundred beegahs, owing probably to this circumstance, are under cultivation, but it sends off several streams which are turned to account at a greater distance, and it yields a tributary to the Kishnah river.

Tanks.

Besides the Pakhall tank or lake—the most conspicuous sheet of water between the Kishnah and Godavery—there are large tanks at Hunnumcondah, the *kusba* of the Kotacondah, Hussanabad Pergunnah, at Durmasagram, Nagarum, Woodapilly in the vicinity of Hunnumcondah. At Gunpore, Chelnaee, and Ramapah in the Suntamonium Pergunnah, in the *havalee* at Atmacore, at Yelgoor, in the Pergunnahs Vizianuggur Wordanapet, at Ryapurty, Wordanapet and Mytapilly. There are large tanks also at Purcull, at Poosapilly in the Hussanabad Pergunnah, and at Camlapore & jaghire village. All these tanks, besides many others in the Circar, are furnished with strong bunds of the most solid masonry. The smaller tanks have bunds of earth and stone intermixed, or simply of earth.

The tanks are very old, far beyond the memory of man,—most of them dating from Hindoo times. Some circumstances relating to them have already been mentioned. The embankments are of great strength, and if ordinary care be taken of them are sufficient to contain whatever water may be poured into them—but the Zemindars often allow them to fall into disrepair through shortsighted folly.

There are frequently large natural basins on the summits of the granite rock; these are seldom turned to account for agricultural purposes, but are regarded as sacred pools to bathe in, by which are cured severe and obstinate diseases.

It was the remark of a great statesman that tanks were the national banks of the Carnatic—and previous to the discovery of America with its maize they were doubtless the great prop of Indian ex-

istence in furnishing rice—a grain wholesome in itself but not to be compared as a food grain with maize or wheat. Tanks therefore, in a certain degree, may be looked on as a great national lottery—for in ordinary seasons, once every three years they are but half filled—and once every twelve years they are completely filled—but being regarded as the great source of revenue, every foot of land which is irrigated by their waters is cultivated, while thousands and thousands of acres of the finest black soil are allowed to remain uncropped by grains far better fitted to support life than rice.

Wells.

There are four kinds of wells—the stone well, the pot well, the basket well, and the mere hole dug in the ground for the purposes of irrigation.

There are but few stone wells now constructed, and those that remain are, in a majority of instances, ruinous or in a state approaching to it.

The pot well, *worrah* by name, is built up with cylinders of pottery, each one of the depth of half a foot, which are sold from eight to twelve annas a piece. These wells may last for thirty years, but much depends on the care that is taken of them, and the goodness of the material with which they are originally constructed. Drinking water is most commonly furnished by these wells. Basket wells are constructed by digging in the bed of a nullah, and placing in the cavity a cylinder of wicker work to prevent the sand from choking the well—they are common in the southern pergunnas.

Wells in the *mohrum* are dug at the following rates—for the first cubic *kola* 6 annas, for the 2d 8 annas, for the 3d 12 annas, for the 4th 1 rupee 4 annas, for the 5th 2 rupees and so on—but water is in many places found at the depth of thirty feet. When granite is to be blasted rupees 4 a square *kola* is charged. The moat consists of an iron *dhole* which may contain four or five pukka maunds of water—but it seldom delivers more than two-thirds of its contents—the iron of the moat costs rupees 7—the leather 8 annas, and the wood work rupees 2½, in all ten rupees—but the Coonbee may have the wood work much cheaper if they supply the material and employ the village carpenter. To work a good moat six bullocks are required,—for the labor is very severe—two men are employed in working it. The assistant is the Choomar, if he can be procured, and a very necessary one he is as the tackle is always needing repairs. The moat may be drawn thrice in a couple of minutes—but this is too much

for an average, as the stoppages and delays in its working are so frequent. For raising water the *garim* and *yatam* are used, and for transferring it from field to field the *goora*.

The Telingana village presents a much more cheerful appearance than the Mahratta *gaoms*. Instead of the dingy wall encompassing the flat roofed houses of mud huts huddled closely together, we have a detached fort, and the cottages white washed and tricked out with red ochre surrounding it or in its vicinity. The condition of the houses and the form of the fort can be much better judged of from the drawings than from any description. There are seldom money payments for hut building, the ryots mutually assisting each other in their construction. The houses are with very few exceptions kutcha throughout the Circar. When money is paid 8 annas is charged for the square *kola*.

The vast proportion of houses are built of mud, and so adherent is it, that bricks are seldom employed for building; inasmuch as what is called a *pukka* house is rarely met with, and where it is generally the property and domicile of the Zemindar of the district, and consists of two stories. In the more wealthy and populous *kusbas* a proportion of the houses are tiled; few are flat roofed, thatched houses predominating greatly. Where the sandstone exists the soil is less adapted to house building, in consequence of which timber, which is plentiful, is preferred for the construction of the better class of habitations, and bamboo for the meaner huts.

With the exception of gardens, which are surrounded with a milk bush hedge (*Euphorbia tirucalli*), the fields are not enclosed. The rudeness of the agriculture has been already pointed out. The commons are rented by *Dungers** who are ranked among the moturpha.

Towns and Villages. HAVALKE AND PURKULL PERGUNNAHS.—The most extensive joint pergunnah in the Circar. The villages are chiefly rented by the Surdeshmookh Venkut Narsingha, and his brother Gurmajee, and by the Surdeshpundya Muleya. The chief towns are Muttawadda, Ramanapett, Girmajepet, and Hoosumpurty, all open villages. In the pergunnah tables I have affixed an asterisk to the villages which have more than 1000 inhabitants. Purkul, the kusba of the pergunnah of the same name,

* In the village returns they are so ranked.

is a straggling village with a ruined mud *gurree* in its *enceinte*, after the fashion of Telinganah.

Warungul, the ancient capital of Telinganah, situated north latitude $17^{\circ} 57\frac{1}{2}'$ and east longitude $79^{\circ} 39\frac{1}{2}'$, possesses an interest separate from its present condition of a ruinous village. With the exception of four gateways, which led to the great temple of Siva, and which still remain in a tolerable state of preservation, there is nothing but ruins to denote its former grandeur. Sculptured as these remains are out of a hard greenstone, admitting of a fine polish, the figures cut in the stone retain their outline unimpaired as if they had just come from the chisel. It is impossible to trace the exact form or dimensions of the original temple, so utter has been the desolation, not from time but the violence of the Mahometan conquerors, who, not content with razing the whole structure to the ground, have carried their work of destruction a step further, by using the beautifully sculptured fragments of cornices and capitals as materials for building the inner stone wall of the fort, which is thus clearly the work of the Musselmén. But the persevering piety of the Hindoos has rescued some relics of their great temple; and one whole pillar, attesting what their temple was, is yet preserved, although not on its original site.

The history of the Andra kings of Telinganah, is about as well known as that of any other Hindoo dynasty previous to the Mahometan invasion; and the inscriptions in an old Teloo-goo character found at Warungul have, most of them, been copied and commented on by the learned in Indian antiquities. They chiefly relate to the power, wealth, and extent of dominion of the Andra kings, with the usual bombast and inflation of such productions. Tradition has, as usual, been busy in falsifying what was true, and forging what is impossible. The glories of Pertab Rudrah, the splendour of his temple, the hidden treasures that lie concealed, are, to this day, among the Hindoo population, constant themes of admiration, regret, and curiosity. But in viewing the ruins some consolation may be derived by the Hindoo in seeing the mosque and palace built by the leader of the Musselmén, Shitab-khan, mingling their ruins with those of his own fallen fanes and palaces.

The inner wall of the fort is about three-quarters of a mile in diameter, with bastions, and four gates. Five hundred yards external to it there is a mud wall seventy feet in height, with a

ditch; and external to that another mud wall of the circumference of twenty-four miles. The labor of constructing such enormous mounds, must have been great, and we are justified in believing that the population of the Indian Gibeonites, such as the Woodewars, must have been greater in those days than it is now. Was the government of the Andra kings a paternal rule like that of the Incas, or was it the unmitigated tyranny of the Pharaohs? The scanty remains of the outcast population, and the huge works tradition assigns to their labor, incline us to the last conjecture.

PERGUNNAH OOPAL—CHENDAGHERRY. These two pergunnahs are usually classed together—in the first there is no considerable village—the most populous not containing more than eight hundred inhabitants. In the second there is but one town that rises above a thousand inhabitants—Wungapilly. In both these pergunnahs money rents are included in the *sevae jumma*; the grain rents under the head of land revenue.

KOTAGUTTA KATAJPOOR—as the pergunnah is called—Katajpoor being at one time a place of some importance. It is now a wretched village consisting of mud huts thatched. The chief towns are Hutmakore, or Atmacore, the residence of the Surdeshmookh, who has his house there surrounded with a substantial brick wall—Dogundee, and Kalapurthee.

PAUKAL HUSSANABAD, KOTACONDAH HUSSANABAD.—Hussanabad is a pergunnah, the villages of which are scattered over the whole Circar, but chiefly are associated with those of the Kotacondah and Paukal pergunnahs, Hunnumcondah the residence of the Naib Taloo-gdar, adjoining to which is the British cantonment, is a large village with many tiled houses. It is situated under a black granite hill, and from the remains in its neighbourhood must formerly have been a place of some consequence. These remains consist of an ancient Hindoo fortification, a temple dedicated to Siva and Jain, figures cut out of the granite hill in *alto-relievo*. Its town duties and taxes are shared by six zemindars. The Koorwah talookha is attached to Pakhall, a wild tract inhabited by Koorwars—an indigenous race who speak Teloo-goo, but are not Hindoos. The nature of their country may be conceived from a saying of the natives, that a red squirrel can reach Bundrachellum on the Godavery, by leaping from tree to tree. Their villages are the merest hamlets, with a small patch of cultivation adjoining them, having to

till them some Telinghee cultivators from the plains. The Talookha is assessed at Rs. 9,000, but it is with difficulty that a regular payment of that sum is procurable; and, strange to say, it is only in seasons where the monsoon has been scanty that it can be fully realized, or its arrears paid up. This happens from the shrinking of the waters of the Pakhall lake affording the cultivators an opportunity of rearing a coarse description of rice.

PERGUNNAH SUMTHAMONYAM—CHILLAVOY. The latter is sometimes dignified with the name of pergunnah. The greater part of this pergunnah is covered with wood, and the villages are the worst conditioned of any in the Circar. Raycondah, the *kusba*, is a wretched place composed of a few huts. At Chelpore the *tusser* insect is bred, but to no great extent: it is the most considerable village in the pergunnah, but its inhabitants do not reach a thousand. Gopal Rao, a Yelmah, is the chief Deshmookh, but his villages are now in *amanes*.

VYZIANUGGUR and VELPECONDAN.—This joint pergunnah has few large villages, but it is in good condition. Vyzianuggur is deserted, and nought remains of it save a mosque in ruins. Vurdanapett is a tolerably sized village. Conee Reddy, a Coonbee, is the chief Zemindar; last year he abandoned his district from discontent, leaving the government agent to collect and settle the revenues.

PERGUNNAH BALICONDAH.—The hill fort and *kusba* of Balicondah are now deserted, Ingoorthy being now the principal village. The pergunnah is in good order: the principal Zemindar is a Coonbee Deshmookh of the name of Nynwara. He has also had his differences lately with the government.

YELGORE and GOOTHEFURTHER pergunnahs.—These two small pergunnahs demand little notice. Yelgore was formerly a place of some consideration as its ruined fort testifies.

These with the exception of Warungul, already mentioned as belonging to the Havalee pergunnah, and Zufferghur in the Velpecondah pergunnah are chiefly situated in the Kotacondah Hussanabad pergunnah. A good many villages formerly belonging to Jaghiredars are now *khalsah*. Surajool-moolkh, the present minister, holds the greater number in the Kotacondah Hussanabad pergunnah. The Killadars of Warungul and Zufferghur remain unchanged. Zufferghur is a well built fort,

having been erected seventy or eighty years ago, by a very powerful noble Zuffur-ood Dowlah, to overawe the refractory zemindars. It has a stone wall, a ditch, and bastions surmounted by pieces of cannon, some of them of great size. It has a garrison, nominally of three hundred men, but their place is supplied by about fifty ill armed and coarsely dressed *pyaders*.

Population. The population returns, allowing fifty inhabitants for each Corwa village, and an addition of two thousand for the Woodewars, Yerkulwars, &c. give 41 inhabitants to the square mile, a low average which is accounted for by the vast wastes of the Pakhall and Sumthamonyam pergunnahs, which occupy nearly half the area of the Circar. Rejecting the Corwa villages, there are in the Circar 501 inhabited villages, with an average of 257 inhabitants to each village, and 4.71 for each house.

There are 5030 Musselmen in the Circar, giving an average of about four per cent. to the Hindoo population. The cotton cleaners and carpet weavers are Mahometans.

There are no registers kept of births or deaths in this Circar. It is thus impossible to furnish any statistics of the rate of increase of population or of mortality.

I need not here repeat other particulars that may be found in the general summary, which gives, I believe, a true picture of the present condition of the Circar.

It was my intention to have endeavoured to have given a rough estimate of the land presently assessed in beegahs, or acres, using for data the quantity of seed sown, and the amount of money rent collected, but the conflicting statements I received of the proportion of seed required for sowing a given space, and the constantly varying rent according to the quality of the ground, have induced me to abandon the attempt, which I do with little regret, seeing how profitless and without value, in the absence of an accurate revenue survey, any such estimate would be.

The gross revenue may be thus summed up:

	Rs.	A.	P.
Revenue derived from Land, Shop, and House Rent,			
Kullalee, &c.	2,70,959	8	2
Sahyer,	14,251	0	0
Zemindars, &c. allowances, 15 per cent. deductions from the Government collections,	30,643	11	2
Total Rupees	3,25,853	3	4

A discrepancy will be observed between this statement of the revenue and the one I previously gave in my report of last year; but in calculating them I had only data partly conjectural, and partly what the Circar yielded when under European superintendence, to go on. Two bad years, 1845 and 1846, with a change of Talookdars have contributed to lower the revenue.

Manufactures.

The chief of the manufactures and the only one for which Warungul is famed is that of Persian carpets which are made of all sizes and of worsted cotton, or even of silk.

The weavers are all Mahometans and are congregated principally at Mutwarrah, although there are a few looms within the Warungul fort. The method of weaving these carpets has been often described, and will at once be seen by a reference to the Plate.

The weavers are a set of drunken, turbulent, ignorant Mussulmauns, possessing no capital, but dissipating in excess the little money they may procure on accomplishing a piece of work. Carpets, chiefly of a small size about two yards long and a little more than a yard in breadth, are made for the Hyderabad market—money being advanced to the weavers by the dealers there. A worsted carpet of this size and shape costs at Warungul from rupees $2\frac{1}{4}$ to rupees $2\frac{1}{2}$. A cotton carpet is twice the expense of a worsted. A silk one is very highly priced—a common trick among the weavers is to substitute *sums* for worsted.

There is a coarse cotton cloth manufactured, called *cadee*, in pieces of nine and twelve yards in length and a yard in breadth, of the price of two or three annas a yard, according to its texture, also cotton *sarees* of the length of ten yards, and a yard and a half in width from 2 to 3 rupees. When colored they are valued at rupees 4 and rupees 5, according to the color with which they are dyed—the madder and *chervil* being deemed the fastest and most expensive dyes. When the border is ornamented with embroidery, or woven with silk, the piece is seven rupees. Silk cloth, of the width of the curtailed *guz*, is manufactured and sold for 12 annas a yard, but the quality is very inferior. It is dyed red with lac, green with indigo and turmeric, or yellow with turmeric alone. The *tusser* cloth manufactured is one half the value of the silk. *Chomloes*, (women's breast cloths) are manufactured but not in sufficient

quantity to supply the district, as they are imported. Cotton *pagrees* dyed with *koosum*, indigo, or the bark of the mango tree, which communicates to the cloth a dingy yellow, are made and sold for 2 and $2\frac{1}{2}$ rupees, and are 15 yards in length. An undyed cotton *pagree* of the same size may be had for 1 to $1\frac{1}{2}$ rupee. *Dhotees* too are manufactured for 2 to $2\frac{1}{2}$ Rs., and chintz *rosaces* for 2 Rs. *Sarces* for young females are stamped and sold for 12 annas. *Tutputtees* of different qualities and strength, from 12 to 6 annas per piece of seven yards, is likewise manufactured, and from it, when old and unserviceable, a coarse paper is made. A bounty on the preparation of which is granted, by the manufacturer being ranked among the Khooshbash.

The other manufactures in the Circar are *tusser* cloths at Hoosainpurty—and Chilpore silks at Mutwarrah. Cotton cloths of all descriptions at Mutwarrah, Hunnumconda, Girmajeept, Chintaguttoo, Goodoor, Ramnahpett, Siampett, and Oopul. At Umballa cotton *shutrungees* are manufactured and also at Mutwarrah—from 10 to 12 annas is paid. With the exception of the Warungul carpets almost all these manufactures are exclusively for home consumption—and this very fact will explain how they are mostly of an inferior description. The *tusser* cloth—although the cocoons are the produce of the same insect as those of Bengal—bears no comparison in fineness or durability with the *tusser* cloth manufactured there. The silks are dearer, and the cottons of the same price as those produced nearer Hyderabad.

There is no large village, and but few middle sized throughout the Circar, that has not some looms for the manufacture of the coarser cloths.

Particulars of the expenses of a piece of *cadee* (coarse cloth) 18 cubits long and 2 cubits in width—sale price from 14 annas to 1 rupee 2 annas.

	Rs.	A.	P.
90 pice weight of cotton ($2\frac{1}{4}$ lb.)	-	-	0 10 $\frac{1}{2}$
Cleaning the cotton (Sathab's wages,)	-	-	0 0 1
Spinning the thread,	-	-	0 0 $7\frac{1}{2}$
Weavers' wages,	-	-	0 2 4
			0 3 11 $\frac{1}{2}$

Of such cloth the weaver can manage to weave five cubits a day, so that his wages are a little more than seven pice a day.

A small quantity of saltpetre is made at Hunnumcondah and the gunpowder required by the government is made by the saltpetre manufacturers, the charcoal and sulphur being supplied to them.

Indigo of a very coarse description is manufactured at Hunnumconda—a specimen forwarded to Calcutta some years ago was pronounced by competent authority to be very inferior. Buchanan's account of the manufacture in Mysore tallies with that of the process here—except that the leaves of the *Barleria prionitis*, and the *Wrightia antidysenterica* are occasionally added to those of the *Indigofera cœrulea*. The manufacturers are Derzees and other low castes. Sesamum and other oils are expressed by the Tillees—but castor oil is obtained by pounding the seeds and boiling. A coarse kind of wrapping paper is prepared at Mutwarrah, and coarse soap and leather for home use are manufactured. There are a few calico printers at Mutwarrah, who print *sarees* and handkerchiefs—their dyes are confined to the dingy red of the Indian madder—and the black of the myrobalan; green and black bangles are also made in the Vizianuggur pergunna.

The dyes chiefly used in dyeing *tusser* and cotton are *cherwil* and *cherrongee* roots of the *Oldenlandia umbellata* and the *Morinda tinctoria* ground. The dyeing is a very tedious process, occupying from 40 to 50 days—the result is a durable though a dingy red.—but the *cherwil* gives a brighter colour than the *cherronges*. In dyeing linseed oil is commonly employed, but the oil from the seeds of the cucumber is preferred.

Iron is manufactured from the oxydulous iron ore already spoken of; the process is the same as that which obtains in other parts of India and has been often described. It is made at Koomarapilly, Erapilly, and Mulkanoor where the ore is found, and in other parts of the Circar at some distance from the iron mine. Two pieces of iron are prepared by each furnace every twenty-four hours of one and a half maunds each, from ten maunds of the ore. A rupee is charged by the miner for five kundies of the ore.

The privilege of mining being purchased at rupees 12 a year to Government, and rupees 4 to the Zemindar.

Bell metal is cast into vessels at Mutwarrah for home use.

In my next report I shall mention any circumstances that appear to me worthy of noting respecting this branch of the subject, but it must be confessed that it is an uninviting one. The manufacture

of India are doomed, and in a short period of time we may see Manchester *sarees* as we now see British long cloth in every bazar. The imports and exports are given in the Appendix. Transit and communication are kept up chiefly by bullocks and carts—the first estimated to carry a pullah—the second from two and a half to three pullahs. The Circar having no running streams there is little interruption to communication throughout the year. There is not a made road or a bridge throughout the Circar.

There is no regular post. The government despatches are forwarded by peons every third or fourth day. There is a singular want of choultries in the Circar, and the only place of resort approaching to an inn is the shop of the *kullal*, who distributes highly spiced food to Mahometans and the low castes who can afford it. In expresses the usual method of employing the village *dher* is had recourse to.

Taxation.

The mode of assessment in this part of the Hyderabad territory consists in the government letting to the principal zemindars a certain number of villages for a limited period, to be renewed if the parties perform their contract satisfactorily, which is termed the *surbastu come*, or tenure. The sum to be paid annually is fixed without any reference to favorable or unfavorable seasons; remission of revenue under native government not being practised.

In case of the Zemindar failing in his contract the villages become amancee, and the Putwarees settle direct with the talookdar or his assistants.

It is understood that the Government officers on all occasions mediate between the Zemindar and ryot, protecting the latter from extortion and oppression, and seeing that the former meets with his dues.

The vices of this system are less inherent in its nature than in its general working. A good talookdar who faithfully performs his duty, and sees justice executed between the farmers-general and his tenants, may make his districts flourishing, and render the people prosperous and happy; but under a needy, indolent, and unprincipled talookdar, the defects of the system stand glaringly out; nor is it necessary to show how his wilful negligence and remissness press more heavily on the helpless ryot, than on the more powerful and wealthy Zemindar, who has always means at hand to coerce and silence the cultivators, and not unfrequently the power and disposi-

tion to set the Government authority at defiance. Under such circumstances the sole mode of redress left to the ryot, is to abandon his village and leave his fields unreaped, a proceeding by which he punishes nearly as much as he avenges himself, and which he will not have recourse to, save under grievous oppression and exaction.

When the Zemindar deems himself aggrieved, he either quits his district, and leaves the Government to settle with the Putwarees, who are usually in his interest, and whose study it is to perplex the talookdars with forged documents, or false returns, or he takes to his *gurrees*, and openly resists; but at other times when he sees that he cannot help himself, he makes a virtue of necessity; quietly suffers his villages to become "*amanee*," till his debts and arrears are paid off; subsisting in the mean time on the allowances to which his hereditary office of Deshmook or Deshpundya entitles him.

The Putwarees are the real heads of the villages, even when the Patells exist, they are set aside by the Zemindar, and receive their allowance rather as a matter of favor than right. The revenue is classed under the heads of 1st, land; 2d, *moturpha*, shop, and house tax; 3d, *kullalee*, spirit, and toddy; and 4th, *sevae* or *sevoy*. This last tax in its original signification should yield a very small sum, being made up of petty village taxes, fines, &c. Yet in some pergunnahs it is found to yield as much as the land tax! This arises from all lands let for a money rent being included in the *sevoy jumma*; it is difficult to account for the origin of this perversion. Where there is much dry grain cultivation the *sevoy* thus predominates.

An assessment called the *koolkamil* exists—but no one can tell any thing approaching to truth respecting its date, its author, or how it was drawn up. Regarding the two first there is in fact no account whatever, and as to the third some say the whole circar was surveyed and assessed by the beegah—others that a rough estimate was taken of the surface—and the whole rock, jungle and cultivated land assessed at a low and equal rate.

It is in all probability a rack rent drawn up by some of the first Mahometan ministers—to please his fancy or that of his prince,—and it is doubtful if ever it was put in practice—at all events it is quite inapplicable now. The collection of the moturfa or house and shop tax is mixed up with the land revenue—but there is a separate establishment for the land customs and transit duties under the Sahyer naib.

The officers employed in the collection are, a Circar naib under the Talookdar Sumbho Persaud, who has under him eight inferior naibs—who, assisted by a peshcar, superintend the collection of one or two pergunnahs each, and render their reports and collections to the Circar naib who resides at Hunnumcondah.

The grain rents are stored in granaries in the forts of villages, and sales are effected according to circumstances to Bunnyas of the country or to the same class, residents of Hyderabad, or agents sent from thence. The exchange on Hyderabad is usually one per cent. against the Circar, although the halee sicca be more valuable than any of the rupees current there. The sowcars giving as a reason that they have the expense of transporting the halee sicca rupee to Hyderabad, which is very seldom the case. The hoondees are commonly at nine days' sight.

The present minister proposes giving the Talookdars or Zillahdars a fixed salary, but the practice that has hitherto prevailed throughout the Nizam's country has been to give an allowance of two annas on the rupee to the Talookdar on whatever collections he may make, but from this sum he is expected to support the whole of the civil expenses including peons. The inferior officers employed in the collection are sheristadars, usually Brahmins, who are accountants and attached to the lesser naibs—and havildars who collect the revenue of one or more villages. The salary of the Circar naib is rupees 200 a month—of the deputy naib rupees 40 to rupees 50. Of the peshcar rupees 20 to rupees 25—and of the havildars and sheristadars rupees 10 to rupees 12.

There is also a head peshcar or surduftur with a salary of rupees 60 per month, and a sursheristadar with rupees 60 who receives his accounts from the lesser sheristadar as the surduftur, who resides at Hunnumcondah attached to the Circar naib, receives the accounts from the inferior peshcars.

The havildars are paid in the amanee villages—that is the villages under the immediate superintendence of Government by the talookdar—but in villages where there is a middle man they often receive the share of the extinct Patell whose place they occupy. The sheristadar is paid by a small contribution from each village.

The Circar naib is a Mussulman, the deputy naibs Mussulmen and Hindoos, mostly all the other inferior functionaries engaged in collecting the revenue are Hindoos. Such are the officers and the mode of collection of the revenue. A vamping up of the old Hindoo

system,—the functions of the Talookdar, naib, deputy naib and havildar being those formerly exercised by the Surdeshmookh, Deshmookh, and Patell. The surduftur, peshcar, &c. answering to the Surdeshpundya and Deshpundya—yet in name and in possession of certain rights the old Hindoo officers remain. The whole is a ruin with the parts standing ill-patched—having for a parallel what we see in the desolate city of Warungul—gates that give entrance to no temple, and pillars that support no roof, meet representatives of Hindoo Zemindars who exist for self aggrandizement alone—while the mosque formed from the desecrated and ruined temple, with here and there a pillar of a different stone and of far inferior execution to what it is designed to imitate—and Hindoo shrines built up hastily and without taste or order, are no unfit emblems of the modern functionalities as they now exist.

The land customs and transit duties are under the *sahyer naib* who receives 40 rupees a month, with inferior collectors at each *masool chokee*.

Chokees.

The number of these in the Circar is no less than forty-four, and the sum carried to government on account of land and transit duties only rupees 14,251. The accounts of the *sahyer* are very complicated—and it is with some difficulty that they have been reduced to the form in the Appendix. A revision of the land and transit duties is now in progress and some of them have been abolished or modified. Nothing can be more vexatious than the manner in which they have been exacted.

For the carriage of salt to Hyderabad certain parties receive permits at different rates. Some of the more deserving and respectable, if such terms be applicable, of the *brinjaries* are permitted to pass their goods at a more favorable rate than others, on condition that they take certain roads to avoid collision with others of a different caste, for bloody quarrels have often been the result of such meetings.

Fairs.

There are no fairs of any great importance in the Circar, but still considerable gatherings, when the season has been favorable, take place.

1st. Ainool, in the Vizianuggur pergunna, where the Dhungeers swing with a hook fixed in their backs before their god Molenna—the Kundooba of the Mahrattas—and for the privilege of torturing themselves they pay a fine to government according to their means.

This fair lasts five or six days and is held in January. Cloths, coconuts, sugar, metals, silk and *tusser* are brought to this fair.

2nd. At Chelwace. There is a fair in the cold season where there is a famous *sakti* of the Coorware.

Sowdalumma. This fair is chiefly for jungle produce. There is a black stone to which the richer votaries of the goddess tie a young bull which becomes the property of the Zemindar.

At Ramapatalao. There is a fair for jungle produce in the beginning of the hot weather at Catacondah for cloths, &c. about Christmas; and at Ohundragiri in the hot season, which being a holy place no *kullals* nor butchers are permitted to attend. There is also a fair for *tusser* cloths, &c. at Yerraguttoo near Hoosainpurty at the Hooley; and at Meerecondah in the hot weather a fair for cloths, groceries and drugs.

At Molunna's fair in good years so much as rupees 500 are raised from the rents of booths and from the Dhungeers, three-fourths of which goes to government, and one-fourth to the zemindar. At Meerecondah the small sum raised is equally divided between the Zemindar and village officers.

At the other fairs 2 pice a shop is levied for the zemindar. One for the Putwarree, one for the havildar, *dorwa*, or patell. The *Yellwar* gets a *dhumree* on each shop and the other village officers small presents.

In my report I have omitted to state that a tappal and banghy dak from Nakricul to the cantonment of Warungul has been established since March last.

Annexed are drawings* of arms and musical instruments. A specimen of native drawing and painting, the figure of the Dhungeers' god Molunna, accompanies the report.

History.

In the possession of the family of the Surdeshpundyas there is a chronicle of the kings of Warungul. Like all such Indian histories it bears the stamp of being a compilation from popular traditions at a period not very remote. The miracles it gravely records, the length of reigns assigned to each king, deprive it of every claim to being esteemed authentic history, but as a specimen of brahmin pretence and brahmin lying, minister-

* The drawings here referred to, as well as at pages 223, 224 and 270 have not yet been received, but we hope to present them to our readers in a future number, as soon as the promised copies arrive.—EDS.

ing to the childish vanity of the Hindoo, it is perfect in its way; yet some threads of truth may run through the web of misrepresentation, such as Kundhur, a fortress twenty miles south of the Godaveri not far from Nandair, being the first seat of the monarchy; Hunnumcondah where there are remains of extensive fortifications, being the capital before Warungul. For this reason a brief account of the history will be given, illustrating too as it does what monstrous deviations from all truth are eagerly seized on by the Indian mind.

The rajahs of Warungul drew their origin from Narrain himself and counted Brahma and a host of *rishees* as their ancestors. It appears that one of these heaven-descended mortals came—from whence or for what reason the chronicle is silent—to the Deccan, and settled at Dhurmapoor a village on the south bank of the Godaveri: that he subdued many rajahs, took four hundred and sixty fortresses, and built the town of Nandair, on the Godaveri. By constant fasting and sacrifices he gained so much heavenly wisdom, that he was deemed a meet companion of the gods, and admitted into their abode; such was his courage that while in the celestial company he stood undaunted before the awful form of Nursing Deo. This so pleased his protecting divinity that she conferred on him a sword, a shield, and a pair of slippers, all of miraculous power, especially the last, for no sooner had he placed his feet in them, than he was whirled through the air, and straightway rested in his own capital of Nandair. Armed with his god-given weapons he waged a successful war against the rajah of Ohola, whose daughter he married; and on threatening the king of Ceylon with invasion was only diverted from his purpose by submission and promise of tribute. Fortunate in all his wars he wearied of the world, and for a life of contemplation resigned his sceptre to his son. This son cursed by a wild beast while out hunting, went mad, but being cured by a *gooroo* he had a son born to him. Meanwhile his sister also had a son, and between the two children the *gooroo* divided the kingdom. Then came famine, pestilence, and civil wars, and the next rajah we find reigning at Khandhar where he waxed great and wealthy, but his munificence was equal to his riches, for on the Brahmins he conferred many thousand villages, and dying he left his throne to his son who rivalled his father in generosity but not in fortune; for waging war with the king of Kuttack who was envious of his prosperity, and coveted the possession of his flocks and herds, he lost his life in battle, and his capital of Khandhar was plundered and destroyed. His wife who was pregnant fled to Hunnum-

condah, whither she was followed by her enemy, but the rajah there took pity on her, and by a stratagem rescued her from the wrath and vengeance of the rajah of Kuttack. The son was born in due course, and grew up a fine manly boy, forward in his learning, for every day he repaired to be instructed at the temple of Pudmatchee amah Devikee, protectress of his fathers. One day he forgot to bring home his writing board and book; ashamed of his negligence and anxious to retrieve it he got up in the middle of the night, and proceeded to the temple. At that dread hour the *devi* and her train were preparing for their horrible revels, but the boy shrunk not from the sight of terror, but boldly demanded his board and book from the goddess, who to try his courage had possessed herself of them; nay, he even endeavoured to snatch them from her grasp, whereat the divinity felt pleased and asked the boy what was the wish of his heart, and he at once replied, "the rajah of Kuttack slew my father and I wish to be revenged on him," on which the *devi* changed his book into a sword, and his board into a shield, and giving them to the boy told him he would be the father of a race of kings, who would reign for a thousand years. When he grew up he placed himself on the throne of his ancestors in Hunnumcondah, and began to reign in Shalivahan, 236; but he rested not till he raised a large force, with which he went up against the rajah of Kuttack whom he slew. But placing the rajah's son on the throne of Kuttack he received three crores of pagodas of tribute from him, and returned in triumph to Hunnumcondah. In all his enterprises of war and peace, fortune attended him; his liberality to brahmins was unbounded, and after a reign of one hundred and sixty years, he left his throne to his son, and went to gather lilies with the deities who pluck these flowers in the *pudmagoondum*. His name was Madawaramah; his son Pudma sain rajah was successful in war with the rajah of Kuttack. His only trouble arose from his want of offspring, but by assiduously sacrificing to the protecting deity of his house, and the constant offering of pumpkins, he had a son born to him. He died in 474 Shalivahan.

Devenamaraj, his son reigned till	-	-	-	557 Shalivahan.
Wermamaraj,	-	-	-	633 "
Goondamaraj,	-	-	-	705 "
Gerkodeveraj,	-	-	-	784 "
Bowanyakamul,	-	-	-	874 "
Taoteenamah,	-	-	-	948 "

All these rajahs were mighty men of war, fighting and conquering the rajahs of Kuttack, Guzerat, and Maharashtra, and generally returning with three crores of pagodas to their capital Hunnumcondah.

The next rajah bore the name of Poolraj, he was left a minor by his father. The rajah of Kuttack took advantage of this and besieged Hunnumcondah, which for twelve years successfully resisted his attacks; in the end the siege was raised by Poolraj invading Kuttack with the usual success of his race. Poolraj was a prince of great piety, continually building or repairing temples, kissing the feet of *monees* and feeding brahmins; no wonder that such piety should be rewarded by a signal discovery. As some carts were bringing in grain to Hunnumcondah one of them without any apparent cause got upset. As it was at night the cartman did not think of raising it till day had dawned, but lay down and slept; in the morning when they were about to proceed to their task, they saw that the iron rings of the cart wheels had become gold. On this they flew to Hunnumcondah, and told the rajah the news, who with his wise men repaired to the spot where the cart had upset, and on beholding the gold were struck with wonder and joy. So they took counsel together and dug on the place, where the miracle was done, and in digging they came upon Mahdeo Persabede Shembolingum which in splendour rivalled the purest gold, and the rajah wished to transport the precious gift of the gods to Hunnumcondah, but the sacred stone refused to stir, whereat the king was cast down, and sought more counsel, calling *monees* from afar to give him advice, and the holy men performed poojah to the ling and counselled the king to leave the stone where he had found it and then to build a city. So these *monees* founded a city which they called Akshalinuggur, two coss south of Hunnumcondah in Shal. 909, and a road was constructed between the city and the town, and shrines were raised to Mahdeo, to Verabuddroo, to Vishnu and the Saktis, but Mahdeo's shrines in number outstripped them all. As for the expenses of the temples they had only to place a piece of iron beside the lingum when straightway it became the purest gold. Now the king had a son born to him, and on the day of his birth he was told that he would fall by his hand, but instead of destroying the infant as he was advised, the king had him left in the temple of the lingum during the night, whereon the morrow the *Poojarrces* found him, who informed the king, by whom they were advised to cherish the infant that heaven had sent

them, and the son grew up strong and active, and the king made him a havildar and gave him command of the guard stationed to protect the temple. One night the rajah repaired to the temple to perform his devotions and coming in unattended, and as it were by stealth, was mortally wounded by his son, who took him for a thief, but before he died, he recounted the story of his son's birth and pointed out that in falling by his hand, he had but fulfilled his destiny, and he recommended to the chiefs his son, who unwittingly had stabbed him, to be his successor. Poolraj was slain in Shal. 1020, after a reign of 72 years. In expiation for his crime of parricide, which weighed heavily on his mind, Roodrah-devi-ky made many pilgrimages, weighed himself eight times against gold which he conferred on the brahmins, and built temples without number; but in the midst of these pious acts he was called away to combat the rajah of Kuttack, whom he conquered. He reigned 68 years, died in Shal. 1088. His son Gunnaputty rajah succeeded, he waged war against the rajah of Deoger, with little success at first, but eventually he was victorious, and compelled the rajah to pay tribute and confer on him the hand of his daughter. He warred as usual with most of his neighbours and with the wonted success of his ancestors, but the great affliction of his house clung to him, the want of offspring, yet by incessant poojahs he so propitiated the deities that a daughter was vouchsafed to him. He died after constructing a hundred villages, which were all called Gunnah-poor, and many tanks, in Shal. 1149. His widow, during the minority of her daughter, administered the affairs of state. She completed the stone wall of Warungul, begun by her husband, and surrounded the city with an outer wall of mud called Boomi Cottah, and an inner wall Pedda Cottah, which remain until this day. This princess rendered herself conspicuous by planting trees, conferring gifts to brahmins, and in sacrificing to Pudma Devi; for her piety she was rewarded by success over all her enemies, foreign and domestic, and her fortune and happiness were crowned by her daughter giving birth to a son, and her people all called her mother; and in commemoration of her exploits she erected eight pillars in different parts of her kingdom to show that none was so great or powerful as she.

On the birth of her grandson she placed the infant on the throne, and called on all classes of her subjects to salute him as their king, and the hearts of all were rejoiced, and every temple and house were painted and the streets cleared of all filth and encumbrance, to tes-

tify their joy, and a cradle was made for the child, of pure gold, richly ornamented with precious stones. She died in Shal. 1187, after a reign of 38 years.

She was succeeded by her grandson Pertab Rudra, the Arthur of Warungul, to whose glory and exploits, albeit he succumbed to the Mussulman power at last, the people still refer with pride. The Mussulmans certainly were foiled in their first attempt to possess themselves of the capital, and hence the admiration that still clings to his name. As to his exploits they are even more extravagant than those of his ancestors. He is said to have had a mercantile navy, which is probable enough, as the people of Telinganah were certainly at one time a maritime nation. His fall, which they cannot conceal, is attributed to treachery and destiny: a sirdar of Warungul, Boochoo Reddy, proved traitor and offered, for eighteen lacs of rupees, to betray his sovereign into the hands of the Mahomedan chief Poolookhan; yet before his treachery was consummated, the poojarrees came to the king to complain that the lingum had become powerless to convert the iron placed near it into gold, and the king rising in affright and tribulation went to pay his devotion to the lingum from whence he repaired to the shrine of Pudma Devi, and placed the sword and shield, she had given to his ancestor a thousand years before, at her feet; but in the midst of his devotions the goddess swallowed the sword, and the shield springing up clung fast to her chest. When his ministers and sirdars heard this they all agreed that Pudma Devi had abandoned him, and that he had only to trust to the god of battles. He went out and fought against Pooloo and Shitab Khan who, by the aid of the traitor Boochoo Reddy, defeated the king and made him prisoner, and sent him to Delhi. Thus far, saving the miracles, there may be truth, although defeat often happens without treachery.

But the finale of this veracious history is quite consistent with its tenor throughout. Pertub Rudra was received with great respect by the sovereign of Delhi, who was not a little surprised at discovering three eyes in the forehead of the captive sovereign; on seeing which his regard for him was much enhanced, so he asked pardon of him, and desired to call him brother, entreating him at the same time to return to Warungul and resume his sceptre; but Pertab Rudra declined doing so, being wearied of the toils of government, and requested permission to return to Benares, which the

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emperor assented to with reluctance. He gave his daughter in marriage to the king of Beejanuggur, divided his treasure among his faithful sirdars, to all of whom he gave portions of his country, and to his brother he left the throne of Warungul. When he had done this, he clothed himself in his best apparel, and along with his wife proceeded into the midst of the stream of the holy Ganges and his soul was carried up to heaven in a chariot, to the wonder and joy of all his subjects in Shalivan 1263.

Assessment of the Circar of Warungul, according to the Koolkamil, and the land revenue and rents that it now yields.

	No. of Villages.	Assessment according to the Koolkamil.			Revenue now realised.		
		Rups.	A.	P.	Rups.	A.	P.
Pergunna Havalee Chinthalputty.							
Talook Mocherla, - - - -	14	11,575	13	0			
Do. Naggawarrum, - - - -	7	6,156	12	0			
Do. Muttawarrum, - - - -	16	15,355	5	9			
Do. Rungsoypett, - - - -	134	10,877	6	0			
Do. Gheescondah, - - - -	20	15,029	0	0			
Do. Chellapurthee, - - - -	6	2,659	0	0			
Total..	763	61,653	4	9	51,001	0	0
Pergunna Oopul, - - - -							
	30	46,702	5	3	26,001	0	0
Pergunna Chendergherrie, - - - -							
	21	23,929	9	9	17,901	0	0
Pergunna Sumthamunnium.							
Talook Raycondah, - - - -	10	11,625	5	6			
Do. Kodavutty Vuncha, - - - -	4	2,206	6	0			
Do. Deshpundya, - - - -	4	2,265	15	6			
Do. Venkuttapoorum, - - - -	11	8,976	2	6			
Do. Yerecherla, - - - -	7	7,597	4	6			
Do. Wodthala, - - - -	14	16,821	6	9			
Other Taxes, - - - -	0	1,785	5	0			
Total..	50	54,281	12	9	22,501	0	0
Pergunna Hussanabad.							
Talook Unnuth Sagram, - - - -	18	20,816	2	9			
Do. Dhurma Sagram, - - - -	11	20,618	15	9			
Do. Deshpundya, - - - -	20	24,660	15	1			
Do. Deshpundya, - - - -	4	1,551	7	0			
Do. Mathanapett, - - - -	22	34,715	2	6			
Do. Summuth Reddial, - - - -	16	25,251	9	6	23,001	0	0
Kusba Hunnumcondah, - - - -	1	1,881	4	0	7,192	0	0
Total..	92	1,29,535	6	7	26,001	0	0

	No. of Villages.	Assessment according to the Kootkamit.			Revenue now realised.		
		Rups.	A.	P.	Rups.	A.	P.
Pergunna Kothaguttoo,	19	21,644	0	0	13,001	0	0
Pergunna Kuttachpoorum,	14	13,699	14	0			
Pergunna Purkhul,	14	24,680	4	0	12,587	0	0
Pergunna Vizianagram.							
Talook Khypurthee,	44	64,540	15	3			
Do. Verdanhpett,	41	58,816	15	9			
Total..	85	1,23,357	15	0	51,502	0	0
Pergunna Bolleecondah,	20	25,624	13	0			
Talook Nagawarrum,	15	14,833	6	6			
Total..	35	40,458	3	6	17,001	0	0
Pergunna Paukal.							
Talook Chellavoy,	15	9,245	8	0	5,001	0	0
Do. Koorvah,	23	10,668	11	6	3,501	0	0
Do. Paukal,	28	53,293	0	9			
Total..	66	73,207	4	3	8,856	0	0
Pergunna Hippagoodum,	17	19,053	1	6	8,251	0	0
Pergunna Yellgoor,	9	14,489	3	6	2,251	0	0
Pergunna Goteepurthee,	11	7,507	8	0	2,701	0	0
Total Rupees..		6,55,187	14	4	2,93,250	0	0
Jagheers,		1,11,193	4	6	70,000	0	0
Sahyer Revenue,					14,251	0	0
Grand Total Rs. .		7,66,381	2	10	3,82,501	0	0

Estimate of the Expenses of a Cultivator, in Clothes, Furniture and Ornaments.

	Rs.	A.	P.
Two sarees a year for his wife, which he gets for	2	8	0
When he gives the cotton-thread to the weaver 4 chowlees,	0	8	0
Clothing for three children,	3	0	0
Clothing for himself,			
Dhotee,	1	0	0
Doputta,	1	0	0
Roomal,	0	8	0
Cummul,	0	8	0
Angreka,	0	4	0
Rupees..	9	4	0

a year for clothes if the material be furnished to the weaver.

Utensils.

Tallu—the women's dish of bell-metal,	4	0	0
The man's dish of brass,	1	4	0
Children's dish,	1	0	0
Three lotas holding respectively a half seer, a seer, and two seers,	3	8	0
A tinned tupella for sour food,	1	0	0
A tray for carrying food,	3	0	0
Rupees..	13	12	0

Woman's Ornaments.

Marriage ornament for the neck representing the lingpoosta of gold and lac,	22	0	0
Another neck ornament,	11	0	0
Another neck ornament,	12	0	0
Two ornaments for the hair and ears,	15	8	0
A silver bracelet,	4	8	0
Rupees..	65	0	5

Dhormvaghiri Sunnud in favor of Mahomed Ryan, and his Father Fakerr Mahomed.

Given in the name of the Surdeshmook and Surdeshpundya in our own talook situated in the havalee Chintapilly Pergunnahs. There is a village called Singavarum which has for a long time been deserted, we therefore appoint you to restore it—fear nothing on any account but place your reliance on us. You are to try to bring in the ryots and make the village flourishing—by repairing tanks, ponds, and wells, and whatever may be the yearly rent of the village you are to make over to the Circar and take a receipt for the same. You must be punctual in paying us our dues, presents to Brahmins, temples, &c. according to custom and to every one in the village his due. You will receive your due as follows: 2½ maunds sowing in the poonass and 1½ maunds sowing of rice in the tabee near the Chintal Charroo—besides 4 pylees in the kundy from the produce of the village, and in cash one anna in the rupee from the rents paid by toddy drawers, Bunnyahs, &c.; also the gift of two beegahs of land fitted for dry crops in the rear of a mosque in a field called Guneshpumpoo for marriage according to the circumstances of the parties, and from every field one bundle of common straw and a coonsoo of unhusked grain, one quarter of a pice for every bullock load of grain passing

through the village. We allow you all this and trust you will keep the village in good order.

Signed by the Putwaree.

Countersigned by two of the family of Surdespundyas and by the Sheristadar. Another copy signed as before and countersigned by the Surdeshmookh.

Enams to Temples about Hunnumcondah and Warungul.

To a temple of Lutchmee, Nursing Swamy—1 seer rice a day—2 pice a day—3 pukka seers oil—rupees 4½ a month, rupees 9 a year to the Brahmins—one rupee at the Ramzan and Buckreed—one when a new naib is appointed, also rupees 3 from the sayher, - - a month, Rs.	18	8	0
To the Hunnumaun, &c. two beegahs of rice land under the tank of Hunnumcondah, oil rupees 45 a month, rupees 2 Buckreed and Ramzan, and one rupee from a new naib, - - - - - yearly,	15	2	0
To a temple of Mahdet in the town of Honnumcondah one beegah of land—from the Circar rupees 90 a year, from the local taxes rupees 90 a year, and from the general salt tax rupees 180—rupees 9 for oil, - - - yearly,	369	0	0
To another temple of Madeo outside the town—5 beegahs of ground and for other expenses, - - - yearly,	68	0	0
To the temple of Pudmachmee Amah 9½ beegahs from the Circar—sayher and village taxes, - - - yearly,	159	8	0
To the temple of Sneerungah Naik Sawmy 4 beegahs of ground—other expenses, - - - - - yearly,	96	0	0
To a temple of Ramah, - - - - - „	153	0	0
To a temple of Nursinga Swamy, - - - - - „	63	0	0
To a temple Seetaram a beegah of ground—other expenses allowed by government, - - - - - yearly,	90	0	0
To another Hunnumaun on the tank bund, - - - „	228	0	0
To the Mahdeo of Rungumpett 4 beegahs of land—other expenses, - - - - - yearly,	123	0	0
To Narsing Swamey, (another,) - - - - - „	48	0	0
To a third Hunnumaun, - - - - - „	24	0	0
To a Poojawary of Mahdavy, - - - - - „	48	0	0

Tables of Money Weights and Measures.

4 Cowries	- - - - -	1 gundah,
2½ Gundahs	- - - - -	1 tola,
2 Tolahs	- - - - -	1 dumree,
2 Dumrees	- - - - -	1 adhela,

2 Adhelas	- - - - -	1 pice,
4 Pice	- - - - -	1 copper gundha,
15 Gundahs	- - - - -	1 rupee.

The Halee-sicca rupee is current—it has not been assayed, at least it does not appear in the money tables of Prinsep, where are to be found other coins of this name, but not the Halee-sicca of this Circar of Hyderabad. In exchange an anna of batta is demanded on the Bagh-Chulnee with which the Subsidiary force is paid; no gold coin is in circulation. I made inquiries for old coin but was not able to procure any—with the exception of the cowries and pice and rupees these coins are imaginary. There is a large double pice in circulation.

Gold and Metal Weights.

3 Grains of Wheat	- - -	1 Gr. of the Abrus Precatorius,
4 Seeds of the Ab. P.	- - -	1 Chinnun,
2 Chinnuns	- - -	1 Masha,
12 Mashas	- - -	1 Tola,
24 Tolas	- - -	1 Kutcha Seer,
5 Kutcha Seers	- - -	1 Tukree,
8 Tukrees	- - -	1 Maund,
20 Maunds	- - -	1 Kunder.

Of the weights brought to me twelve seeds of the Abrus Precatorius weighed thirty-two grains of red wheat, but the white wheat said to be lighter. The Masha, a broken piece of porcelain, weighed fifteen grains, and the quarter tola, a weight of iron, forty-five grains. Silk and tusser cocoons are sold by this weight.

Another weight for Iron, also for Ghee, Tamarinds:

5½ Halee-Sicca Rupees	- - - - -	1 Chuttack,
16 Chuttacks	- - - - -	1 Seer,
1½ Pucka Seers	- - - - -	1 Tukree,
8 Tukrees	- - - - -	1 Maund,
20 Maunds	- - - - -	1 Kunder.

The ½ Chuttack brought to me weighed 7 drachms and five grains—the half tukree 1 lb. 8 oz. and 5 drachms, the tukree 3 lbs. and 12 drachms. These weights were all of quartz pebbles. The Halee-Sicca Rupee weighs 173 grains.

Weights for Grain.

82 Halee-Sicca Rupees	- - - - -	1 Seer,
40 Seers	- - - - -	1 Pucka Maund,
3 Pucka Maunds	- - - - -	1 Pullah.

This is the common weight throughout the Pergunnas save in the Havalee where there are 56 seers in the maund.

Grain Measure.

2 Solgas	-	-	-	-	-	1 Towas,
2 Towas	-	-	-	-	-	1 Pylee,
2 Pylees	-	-	-	-	-	1 Udhas,
2 Udhas	-	-	-	-	-	1 Coonsoo,
2 Coonsoos	-	-	-	-	-	1 Yeersah,
2 Yeersahs	-	-	-	-	-	1 Maund,
20 Maunds	-	-	-	-	-	1 Kunder.

The solga of teak-wood contained exactly thirty-four liquid ounces, and the solga measure of red wheat weighed 1lb. 12 oz. 4 drms.

Another Grain Measure.

3½ Seers	-	-	-	-	-	1 Pylee,
4 Pylees	-	-	-	-	-	1 Coonsoo,
4 Coonsoos	-	-	-	-	-	1 Maund,
20 Maunds	-	-	-	-	-	1 Kunder.

The Pylee and Coonsoo measures are earthen gurrals, a *soop* is as much as can be carried on a winnowing basket, and passes for a Coonsoo.

The Seer Measure contained exactly one imperial quart.

Long Measure.

4 Tus	-	-	-	-	-	1 Peeree,
3 Peerees	-	-	-	-	-	1 Guz or Cubit,
4 Guz	-	-	-	-	-	1 Kola.

The Tus varies sometimes as in the above table, it measures an inch and a half, at others 2½ inches. The Peeree is the measure of a hand with the thumb extended, this is the cloth measure—but the silk and tussar Guz is reduced to fifteen inches—by this measure too all buildings are estimated. The Telingana Coss is short, about a mile and a half.

Superficial Measure.

16 Guz	-	-	-	-	-	1 Putta,
10 Puttas	-	-	-	-	-	1 side of a Beega,

• which is thus 6,400 sq. yards—or 1 acre—1 rood—11 poles and 17½ yards.

Average Price of Articles and Produce sold at Hunnumcondah, &c., for six years.

	F. 1251	1252	1253	1254	1255	1256
	A. D. 1841	1842	1843	1844	1845	1846
Gold,.....per tolah,	22 4 0	22 8 0	22 12 0	23 0 0	22 12 0	23 0 0
Silver,.....	1 3 0	1 3 3	1 3 0	1 3 3	1 3 6	1 3 6
Brass,.....per maund,	14 0 0	13 12 0	13 8 0	13 4 0	13 0 0	13 6 0
Copper,.....	16 0 0	16 8 0	17 0 0	17 8 0	16 8 0	16 0 0
Kathel,.....	17 0 0	17 8 0	17 12 0	18 0 0	19 0 0	19 8 0
Pewter,.....	6 0 0	5 12 0	5 12 0	5 4 0	7 0 0	7 8 0
Pinchbeck,.....	12 0 0	12 0 0	12 0 0	12 0 0	12 0 0	12 0 0
Tin,.....	13 6 0	14 8 0	14 0 0	16 0 0	16 0 0	15 0 0
Iron,.....	1 2 0	1 2 0	1 4 0	1 4 0	1 2 0	1 4 0
Lead,.....	4 4 0	4 6 0	5 0 0	4 4 0	5 0 0	4 8 0
Average rate of Paddy for the year,.....per candy,	18 8 0	19 8 0	19 8 0	23 8 0	32 0 0	26 12 0
Do. of Jawaree, ..	19 8 0	21 0 0	20 0 0	28 0 0	38 0 0	41 8 0
Do. of Chenna, ..	36 0 0	40 0 0	53 0 0	35 0 0	53 0 0	60 0 0
Do. of Moong, ..	31 0 0	30 0 0	30 0 0	0 0 0	29 0 0	48 0 0
Do. of Toor, ..	20 4 0	19 0 0	18 0 0	20 8 0	28 0 0	38 0 0
Do. of Wheat, ..	0 0 0	0 0 0	42 0 0	43 12 0	50 8 0	25 0 0
Do. of Oord, ..	0 0 0	0 0 0	38 0 0	36 0 0	0 0 0	0 0 0
Do. of Samah, ..	10 0 0	10 0 0	9 0 0	15 0 0	15 0 0	16 0 0
Do. of Rajah, ..	12 0 0	12 0 0	13 0 0	14 0 0	16 0 0	16 0 0
Do. of Indian Corn ..	9 0 0	10 0 0	10 0 0	13 0 0	0 0 0	0 0 0
Do. of Castor Oil	10 0 0	10 0 0	9 0 0	9 0 0	0 0 0	0 0 0
Seeds,.....	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	55 0 0
Do. of Bajree,.....	2 2 0	1 2 0	1 3 0	1 6 0	1 15 0	2 0 0
Do. of Gour, per maund,	0 0 0	0 0 0	0 0 0	6 0 0	5 8 0	0 0 0
Do. of Sargacandy, ..	0 0 0	0 0 0	0 0 0	3 0 0	28 0 0	0 0 0
Do. of Sugar,.....	3 12 0	3 8 0	3 6 0	3 4 0	5 2 0	4 4 0
Do. of Ghee,.....	0 8 6	4 8 0	3 8 0	3 8 0	4 0 0	4 8 0
Do. of Sweet Oil, ..	0 8 6	1 9 0	0 9 0	0 12 0	0 11 0	0 12 0
Do. of Salt,.....	1 2 0	1 2 0	1 14 0	1 2 0	1 8 0	1 9 0
Do. of Chillies,.....	1 0 0	1 0 0	0 6 0	0 14 0	0 6 0	0 8 0
Do. of Tamarind,.....	1 4 6	0 14 0	1 11 0	1 0 3	1 12 0	1 12 6
Do. of Saffron,.....	0 0 0	0 0 0	0 0 0	0 0 0	5 0 0	5 0 0
Do. of Coconut,.....	0 0 0	0 0 0	0 0 0	0 0 0	5 0 0	5 0 0
Average rate of Betel-nuts for the year,.....per maund,	0 0 0	0 0 0	0 0 0	0 0 0	5 0 0	5 0 0
Do. of Dried Dates, ..	0 0 0	0 0 0	0 0 0	4 0 0	2 14 0	0 0 0
Do. of Cardamom, ..	0 0 0	0 0 0	0 0 0	48 0 0	60 0 0	0 0 0
Do. of Cloves,.....	20 0 0	20 0 0	12 0 0	14 0 0	13 8 0	13 0 0
Do. of Jeerah,.....	5 0 0	4 0 0	5 0 0	5 0 0	4 4 0	5 0 0
Do. of Mauty,.....	1 8 0	1 12 0	1 4 0	1 12 0	2 0 0	2 4 0
Do. of Sajeerah,.....	0 0 0	0 0 0	0 0 0	28 0 0	36 0 0	0 0 0
Do. of Almonds,.....	0 0 0	0 0 0	0 0 0	8 0 0	6 0 0	0 0 0
Do. of Mace,.....	0 0 0	0 0 0	0 0 0	72 0 0	60 0 0	92 0 0
Do. of Nutmeg,.....	0 0 0	0 0 0	0 0 0	60 0 0	48 0 0	0 0 0
Do. of Pepper,.....	12 0 0	12 8 0	7 0 0	7 0 0	8 0 0	6 0 0
Do. of Alum,.....	5 0 0	2 4 0	2 8 0	3 4 0	3 0 0	2 8 0
Do. of Camphor,.....	96 0 0	96 0 0	120 0 0	138 0 0	108 0 0	108 0 0
Do. of Ginger,.....	3 12 0	3 8 0	4 0 0	5 12 0	4 8 0	5 8 0
Do. of Opium,.....per lb.	0 0 0	0 0 0	0 0 0	10 0 0	10 0 0	0 0 0
Do. of Incense, (Ood) ..	0 0 0	0 0 0	0 0 0	18 0 0	21 0 0	0 0 0
Do. of Catechu,.....	0 0 0	0 0 0	0 0 0	9 0 0	10 0 0	0 0 0
Do. of Tobacco,.....per maund	0 0 0	1 12 0	1 14 0	1 12 0	2 0 0	2 0 0
Do. of Lac,.....	6 6 0	6 4 0	0 0 0	0 0 0	0 0 0	0 0 0
Do. of Bees Wax,.....	0 0 0	12 0 0	10 12 0	11 14 0	10 9 0	11 12 0
Do. of Modree,.....	8 8 0	0 0 0	9 0 0	7 0 0	6 4 0	5 8 0
Do. of Honey,.....	4 8 0	5 0 0	5 0 0	5 0 0	5 0 0	5 0 0
Do. of Madder,.....	1 8 0	1 8 0	2 0 0	2 0 0	2 0 0	2 0 0
Do. of Cotton,.....	4 0 0	0 0 0	0 0 0	0 0 0	4 0 0	4 8 0
Do. of Silk, Raw, seer 1½	18 0 0	0 0 0	0 0 0	0 0 0	18 0 0	18 0 0
Do. of Tusser,.....	6 0 0	5 0 0	0 0 0	0 0 0	6 0 0	6 0 0
Do. of Mohah, per candy,	8 0 0	10 0 0	12 0 0	15 0 0	8 0 0	8 0 0
Bullock's Hide,.....each....	0 8 0	0 0 0	0 0 0	0 0 0	0 8 0	0 8 0
Cow's Hide,.....	0 8 0	0 0 0	0 0 0	0 0 0	0 6 0	0 8 0
Buffaloe's Hide,.....	1 0 0	0 0 0	0 0 0	0 0 0	1 0 0	1 0 0
Sheep Skin,.....	0 2 0	0 0 0	0 0 0	0 0 0	0 2 0	0 2 0
Cumbles,.....from	0 6 to	0 0 0	0 0 0	0 0 0	0 10 0	0 0 0

Imports into Warungul, with the Taxes levied on each article, from the Accounts of the Sahyer Naik.

Land custom levied on jaggery coming from Masulipatam through the Pergunna of Hussnabad, if brought by the ryots of Hunnumcondah and Muttawarra, charge at the rate of 2½ bullock loads, equal to 20 maunds on a cart,

Deetchcontah,	0	14	3
Havalee,	0	11	0
Elgoor,	0	2	6
Hunnumcondah,	0	3	0

If brought by the ryots of other Pergunnas not belonging to the Circar of Warungul, charge at the rate of three bullock loads, equal to 24 maunds on a cart,

Deetchcontah,	1	8	0
Havalee,	1	11	0
Elgoor,	0	3	3
Hunnumcondah,	0	7	0

From Juggiahpet through Paukhal, Hussnabad, Paukhal

Hussnabad,	1	3	9
Havalee,	0	11	0
Elgoor,	0	2	9
Hunnumcondah,	0	3	0

If brought by other ryots,

Havalee,	1	15	0
Paukhal Hussnabad,	1	11	3
Elgoor,	0	3	3
Hunnumcondah,	0	7	0

Land custom levied on tobacco coming from Masulipatam to Muttawarra and Ramnahpet Pergunna Havalee, if brought by the ryots of Ramnahpet and Muttawarra, charge at the rate of three bullock loads, equal to 24 maunds on a cart,

4 15 6

Land custom levied on tobacco coming from Juggiahpet to Muttawarra, if brought by the ryots of Juggiahpet who reside at Ramnahpet if shopkeepers, charge at the rate of 3½ bullock loads, equal to 30 maunds on a cart, - - -

12 11 0

If brought by the ryots of Juggiahpet not shopkeepers, charge at the rate of 3½ bullock loads, equal to 30 maunds on a cart, - - -

15 9 0

If brought by the ryots of Hunnumcondah, Muttawarra and Ramnahpet from Juggiahpet, charge at the rate of 3 bullock loads, equal to 24 maunds on a cart, - - -

8 12 0

If brought by the ryots of Juggiahpet to Hunnumcondah and Muttawarra, charge at the rate of three bullock loads, equal to 24 maunds, - - -

7 15 0

Land custom levied on wheat and grain coming from Chanda

Dhunda Madapoor, if brought by the ryots of Hunnumcondah, charge at the rate of 2½ bullock loads, equal to 2½ pul-
las on a cart,

Paukhal,	0	10	0
Chendragiri,	0	9	0
Havalee,	0	6	0
Hunnumcondah,	0	1	6

If brought by the ryots of other Pergunnas not belonging to the Circar of Warungul, charge at the rate of three bullock loads, equal to 3 pul-
las on a cart,

Paukhal,	0	15	3
Chendragiri,	0	12	9
Havalee,	0	13	6
Hunnumcondah,	0	3	6

Land customs levied on steel, lac, bees-wax and coosumba, Carthamus Tinctorius, coming from Chanda, Babapett and Madapoor, if brought by the ryots of Hunnumcondah, charge at the rate of 2½ bullock loads, equal to 20 maunds on a cart,

Paukhal,	1	8	9
Chendragiri,	1	3	9
Havalee,	1	3	3
Hunnumcondah,	0	3	9

If brought by other ryots, charge at the rate of three bullock loads, equal to 24 maunds on a cart,

Paukhal,	1	13	6
Chendragiri,	1	3	9
Havalee,	1	3	3
Hunnumcondah,	0	7	0

Land customs levied on cotton coming from Babapett, for 1 bullock load. Land customs levied on the following articles coming from Juggiahpet—Cocoanuts, Tin, Brass, Copper, Lead, Katheel, Bellmetal, Pewter, Dry Ginger, Pepper, Cubebs, Long Pepper, Brimstone, Blue Vitriol, Mercury, Camphor, Salammoniac, Alum, Borax, Vermilion, Sulphur, Cloves, Cardamoms, Mace, Nutmeg, Cinnamon, Poppy-seeds, Aloes, Opium, Raisins, Corianderseeds, Turmeric, Soap, &c., if brought by the ryots of Hunnumcondah, charge at the rate of 2½ bullock loads, equal to 20 maunds on a cart,

Kothaguttoo,	1	8	9
Vizianagrum,	1	3	9
Havalee,	1	3	3
Hunnumcondah,	0	3	0

If brought by other ryots, charge at the rate of three bullock loads, equal to 24 maunds on a cart,

Kothaguttoo,	2	2	9
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Vizianagrum, - - - - -	1 13 6
Havalee, - - - - -	1 15 0
Hunnumcondah, - - - - -	0 7 0
Land custom levied on Ghee coming from Mungapett, if brought by the ryots of Hunnumcondah, charge at the rate of 2½ bullock loads, or 20 maunds on a cart,	
Kothaguttoo, - - - - -	1 8 9
Havalee, - - - - -	1 3 3
Hunnumcondah, - - - - -	0 3 0
If brought by other ryots, charge at the rate of three bullock loads, equal to 24 maunds on a cart,	
Kothaguttoo, - - - - -	2 2 9
Havalee, - - - - -	1 15 0
Hunnumcondah, - - - - -	0 7 0
Land custom levied on Tusser, if brought by the ryots of Hunnumcondah, charge per piece,	0 1 0
Silk-thread, by the ryots of Hunnumcondah, charge at 1½ seer,	0 3 0
Raw Silk, charge per maund, -	2 0 0
Land custom levied on the following articles coming from Shumabhabad to Hunnumcondah—Assafetida, Coffee, Sugar, Almonds, Plums, Dates, Cocoanuts, Mace, Cloves, Cardamom, Nutmeg, Brass, Copper, Tin, Pewter, Lead, Katheel, and Cloths, if brought by the ryots of Hunnumcondah, charge at the rate of 2½ bullock loads, equal to 20 maunds on a cart,	
Vizianagrum, - - - - -	1 3 9
Havalee, - - - - -	1 3 3
Hunnumcondah, - - - - -	0 3 0
If brought by other ryots, charge at the rate of 3 bullock loads, equal to 24 maunds on a cart,	
Vizianagrum, - - - - -	1 13 6
Havalee, - - - - -	1 15 0
Hunnumcondah, - - - - -	0 7 0
Land custom levied on the following articles coming from Masulipatam to Hunnumcondah—Cocoanut, Clove, Cinnamon, Cardamom, Mace, Nutmeg, Almonds, Indigo, Chillies, if brought by the ryots of Hunnumcondah, charge at the rate of 2½ bullock loads, equal to 20 maunds on a cart,	
Kothaguttoo, - - - - -	1 8 9
Vizianagrum, - - - - -	1 3 9
Havalee, - - - - -	1 3 3
Hunnumcondah, - - - - -	0 3 0
If brought by other ryots, charge at the rate of 3 bullock loads, equal to 24 maunds on a cart,	
Kothaguttoo, - - - - -	2 2 9
Vizianagrum, - - - - -	1 13 6

Havalee, - - - - -	1 15 0
Hunnumcondah, - - - - -	0 7 0
Land custom levied on salt coming from Masulipatam to Hunnumcondah by Bunnyahs, 100 bullock loads, - - - - -	18 0 0
If brought by Pareka ryots, 100 bullock loads, - - - - -	30 0 0
Land custom levied on cloths coming from Hyderabad to Hunnumcondah, 1 bullock load, - - - - -	4 3 0
Land custom levied on the following cloths at Hunnumcondah coming from Masulipatam, Juggiahpet and Shumabhabad :	
Long cloth, per piece, - - - - -	0 2 0
Barchop, do. - - - - -	0 2 0
Red cloth, do. - - - - -	0 6 0
White handkerchieves, each, - - - - -	0 0 3
Mushroo, (Calcutta,) - - - - -	0 1 0
Mushroo, (Aurangabad,) per piece, - - - - -	0 2 0
Tusser, - - - - -	0 1 0
Europe chintz, per piece, - - - - -	0 1 0
Blue saree, each, - - - - -	0 1 0
Soormaie, do. - - - - -	0 2 0
Jaconet, per piece, - - - - -	0 2 0
Madapalum, - - - - -	0 1 0
Silk cloth, per piece, - - - - -	0 1 0
Goomty, do. - - - - -	0 1 0
Doria, do. - - - - -	0 1 0
Carwa, do. - - - - -	0 0 6
Woollen cloths, per yard, - - - - -	0 1 0
Mullmull, per piece, - - - - -	0 0 6
Cadee, do. - - - - -	0 1 0
Agabane, do. - - - - -	0 1 0
Soosee, do. - - - - -	0 2 0
Soosee Davaraconda, - - - - -	
Land custom levied at Ramnabpet and Muttawarra.	
Long cloth, per piece, - - - - -	0 4 0
Barchop, do. - - - - -	0 2 0
Red cloth, do. - - - - -	0 6 0
Juggiahpet handkerchieves, - - - - -	0 0 3
Murryalagherry do. - - - - -	0 1 0
Muslin, per piece, - - - - -	0 1 0
Mushroo, (Calcutta,) - - - - -	0 1 0
Mushroo, (Aurangabad,) - - - - -	0 2 0
Tusser, - - - - -	0 1 0
Europe chintz, each, - - - - -	0 1 0
Meelamber saru, - - - - -	0 1 0
Jaconet, per piece, - - - - -	0 2 0
Madapalum, do. - - - - -	0 4 0

Cadee,	per piece,	- - - -	0 0 6
Agabanees,	do.	- - - -	0 1 6
Silk cloths,	do.	- - - -	0 1 0
Goomty,	do.	- - - -	0 1 0
Doria,	do.	- - - -	0 1 0
Carwa,	do.	- - - -	0 1 0
Soosee,	do.	- - - -	0 0 6
Soosee Davaraconda,	do.	- - - -	0 2 0
Woollen cloths, per yard,	- - - -	- - - -	0 0 6

No. 2.

List of articles produced and consumed in the Circar of Warungul, with the taxes levied on them.

Land custom levied on paddy, if brought by the ryots of Hunnumcondah, charge at the rate of $2\frac{1}{2}$ bullock loads, equal to $2\frac{1}{2}$ pullas on a cart,

Kothaguttoo,	- - - -	0 4 9
Vizianagrum,	- - - -	0 6 3
Havalee,	- - - -	0 3 0
Hunnumcondah,	- - - -	0 0 9

If brought by other ryots not belonging to the Circar, charge at the rate of 3 bullock loads, equal to 3 pullas on a cart,

Kothaguttoo,	- - - -	0 6 3
Vizianagrum,	- - - -	0 7 6
Havalee,	- - - -	0 6 9
Hunnumcondah,	- - - -	0 1 9

Land custom levied on rice, wheat, grain, jowaree, moong, toor, cotton-thread, &c., if brought by the ryots of Hunnumcondah, charge at the rate of $2\frac{1}{2}$ bullock loads, equal to $2\frac{1}{2}$ pullas on a cart,

Havalee,	- - - -	0 6 0
Vizianagrum,	- - - -	0 6 6
Kothaguttoo,	- - - -	0 4 3
Hunnumcondah,	- - - -	0 1 6

If brought by other ryots not belonging to the Circar, charge at the rate of 3 bullock loads, equal to 3 pullas on a cart,

Havalee,	- - - -	0 13 9
Vizianagrum,	- - - -	0 15 3
Kothaguttoo,	- - - -	0 12 9
Hunnumcondah,	- - - -	0 3 6

Land custom levied on tamarind, if brought by the ryots of Hunnumcondah, charge at the rate of $2\frac{1}{2}$ bullock loads, equal to $2\frac{1}{2}$ pullas on a cart,

Havalee,	- - - -	0 6 0
Vizianagrum,	- - - -	0 10 0

Kothaguttoo,	- - - -	0 9 0
Hunnumcondah,	- - - -	0 1 6

If brought by other ryots not belonging to the Circar, charge at the rate of 3 bullock loads, equal to 3 pullas on a cart,

Havalee,	- - - -	0 13 8
Vizianagrum,	- - - -	0 15 3
Kothaguttoo,	- - - -	0 12 9
Hunnumcondah,	- - - -	0 3 6

Land custom levied on ghee, oil, honey, &c., if brought by the ryots of Hunnumcondah, charge at the rate of $2\frac{1}{2}$ bullock loads, equal to 20 maunds on a cart,

Havalee,	- - - -	1 3 3
Vizianagrum,	- - - -	1 3 9
Kothaguttoo,	- - - -	1 8 9
Hunnumcondah,	- - - -	0 3 0

If brought by the ryots not belonging to the Circar, charge at the rate of 3 bullock loads, equal to 24 maunds on a cart,

Havalee,	- - - -	1 15 0
Vizianagrum,	- - - -	1 13 6
Kothaguttoo,	- - - -	2 2 9
Hunnumcondah,	- - - -	0 7 0

Indian madder, per maund, - - - - 0 1 0
Country coarse paper, 1 bullock load, - - - - 0 4 0

Land custom levied on Movah coming from Cooroova, if brought by the ryots of Hunnumcondah, charge at $2\frac{1}{2}$ bullock loads, equal to 20 maunds on a cart, - - - - 3 9 3

If brought by other ryots not belonging to the Circar, charge at the rate of 3 bullock loads, equal to 24 maunds on a cart, 4 4 6

Land custom levied on iron coming from Tateecondah and Mulkanoor, charge at the rate of $2\frac{1}{2}$ bullock loads, equal to 20 maunds on a cart, - - - - 4 14 6

Land custom levied on Jaggery, if brought by the ryots of Hunnumcondah, charge at the rate of $2\frac{1}{2}$ bullock loads, equal to 20 maunds on a cart,

Havalee,	- - - -	0 11 0
Deetchcontah,	- - - -	0 5 9
Elgoor,	- - - -	0 2 6
Hunnumcondah,	- - - -	0 3 0

If brought by other ryots not belonging to the Circar, charge at the rate of 3 bullock loads, equal to 24 maunds on a cart,

Deetchcontah,	- - - -	1 8 0
Havalee,	- - - -	1 11 0
Elgoor,	- - - -	0 3 3
Hunnumcondah,	- - - -	0 7 0

Land custom levied on the following articles coming from
Hussunpurty, Camalapoor, Rungapoor, Goodoor,

Saree, per piece, - - - - -	0 4 0
Saree, Silk, per piece, - - - - -	0 6 0
Cadee, do. - - - - -	0 0 6
Cumblie, coarse, - - - - -	0 0 3
Dhovaitee, - - - - -	0 1 0

Land custom levied at Hunnumcondah and Muttawarra on
Cattle sold to any of the ryots,

Bullock or Cow, - - - - -	0 4 0
Buffaloe, - - - - -	0 4 0
Horse, - - - - -	0 1 0

Land custom levied on saltpetre, if brought by the ryots of
Hunnumcondah, charge at the rate of $2\frac{1}{2}$ bullock loads, equal
to 20 maunds on a cart,

Havalee, - - - - -	1 3 3
Vizianagrum, - - - - -	1 3 9
Hunnumcondah, - - - - -	0 3 0

If brought by other ryots,

Havalee, - - - - -	1 15 0
Vizianagrum, - - - - -	1 3 9
Hunnumcondah, - - - - -	0 7 0

No. 3.

List of articles produced in the Circar of Warungul that are
exported, with the duties levied on them.

Land custom levied on carpets passing through Nussacal to Hyderabad, at 40 in each bundle, - - - - -	1 8 0
Land custom levied on carpets passing through Cothacondah Husnabad to Hyderabad, at 40 in each bundle, - - - - -	2 0 0
Land custom levied on rice, jaggery, moong, toor, oil-seeds, &c., if carried by the ryots of Hunnumcondah, charge at the rate of $2\frac{1}{2}$ bullock loads, equal to $2\frac{1}{2}$ pullas on a cart,	
Hunnumcondah, - - - - -	0 1 6
Havalee, - - - - -	0 6 0
Vizianagrum, - - - - -	0 10 0
If carried by other ryots not belonging to the Circar, charge at the rate of 3 bullock loads, equal to 3 pullas on a cart,	
Hunnumcondah, - - - - -	0 3 6
Havalee, - - - - -	0 13 6
Vizianagrum, - - - - -	0 15 3

No. 4.

Articles passing through the Circar that pay land duty.

Land custom levied on Salt coming from Masulipatam to Hy-
derabad passing through Hunnumcondah and Vizianagrum, if

carried by Ajmeera Brinjaries for Roopa Naik, 100 bullock loads, - - - - -	11 8 0
For others—100 bullock loads, - - - - -	13 0 0
If carried by the Bhoja Konoosode, 100 bullock loads, - - - - -	14 8 0
Do. do. Roopa Cavedey, 100 bullock loads, - - - - -	14 8 0
Do. do. Bavasing, 100 bullock loads, - - - - -	11 8 0
Do. do. Lutchma Istode, 100 bullock loads, - - - - -	12 8 0
If passing through Outapoor, carried by the Budavut Boda Brinjaries, 100 bullock loads, - - - - -	8 14 0
If carried by the Koka Naik, 100 bullock loads, - - - - -	8 2 0
Do. do. Mall lote Vallo Sunke, 100 bullock loads, - - - - -	8 14 0
Sunker Chowka Baunote, 100 bullock loads, - - - - -	0 10 0
Land custom levied on Salt coming from Masulipatam to El- gondalah and Moolungoor passing through the Circar, 100 bullock loads, - - - - -	39 11 0

Wages.—In towns wages are paid in money and in grain, in the
country in grain, or in grain and money combined. Coarse paddy
and *jowaree* are used for payment. In certain dear years, two seers
of *jowaree* go for three seers of paddy, but in seasons of plenty they
are reckoned of equal value. Since the force belonging to the con-
tingent moved to Warungul, the wages of mechanics have risen from
50 to 100 per cent. while employed in cantonment, but this is no fair
criterion of the rate throughout the Circar.

Wages per Month.

A man working in the field as a labourer receives two maunds of paddy or two to one and a half of <i>jowaree</i> per month with one rupee, if he chooses he may receive the whole in grain, and if he agrees for a money payment he gets rupees 2—8—0, from 3—0 to - - - - -	2 8 0
A woman or a boy working in the field receives three pice a day or a maund and a half of grain per month, - - - - -	1 8 0
The Chuckler who assists at the Moat gets a pylee of grain a day and a bundle of unthreshed straw, - - - - -	0 0 0
All tradesmen as blacksmiths, carpenters, weavers, &c. get from 2 annas to 3 annas a day, from rupees 3—12 to - - - - -	5 0 0
Children who are much employed in carpet weaving at Mut- warrah owing to their fingers being more pliable than those of adults receive 3 pice a day.	
Persons engaged in very hard work, such as the bellows-men in the manufacture of Iron, receive a pylee of grain and five pice a day. The woman who pounds the ore gets a pice a day in addition to the usual allowance of rice.	
For weaving twelve yards of tusser the weaver gets rupees 4.	
For dyeing three pounds of cotton or tusser the dyer receives one rupee.	

Statistical Table of the Circar

	Villages and Hamlets.			Tanks and Wells.			Ploughs.			Cattle. *			
	Inhabited.	Deserted.	Total.	In Repair.	Out of Repair.	Total.	Moots.	Rice. *	Dry Grains.	Total.	Ploughing and Draught Cattle.	Other Cattle.	Total.
1. Havalee and Purkall.....	94	16	110	709	752	1454	382	1035	979	2014	5409	36857	42066
2. Oopul.....	37	13	50	262	323	585	918	466	997	1463	3344	15792	19066
3. Chendragherry.....	32	1	33	229	130	359	215	380	690	1070	2325	13172	15497
4. Kothagutta Kotajpoor.....	39	11	40	91	120	211	10	325	574	899	1672	12944	14616
5. Paukul and Husnabad.....	43	25	68	272	450	722	174	400	362	771	1723	10366	12089
6. Kothakondah Husnabad..	72	29	101	617	695	1312	683	1044	865	1909	5386	35995	41281
7. Vizianuggur and Valpecondah.....	70	10	80	696	1047	1743	700	853	968	1821	4151	40264	44515
8. Bolicondah.....	31	11	42	408	296	704	493	630	385	1015	2034	18966	21000
9. Sumthamanium and Chelavoy.....	45	19	64	97	63	160	9	619	225	841	1700	5928	7628
10. Gotipurthy.....	4	4	8	37	176	213	36	62	28	90	180	2593	2773
11. Yellgoor.....	5	4	9	24	92	116	9	45	19	64	128	459	587
12. Koorva.....	64	0	64	0	0	0	0	0	0	0	0	0	0
JAGHEER VILLAGES.													
Wurrungul Fort and Illintha.....	2	0	2	41	47	88	47	37	70	107	292	2444	2736
Purgunnahs Husnabad, Valpecondah, and Oors Khajepet.....	37	14	51	235	183	418	299	423	332	765	2034	17096	20130
Total..	565	157	722	3711	4374	8085	3265	6338	6494	12639	30378	312504	343682

Warungul, Soubah Hyderabad.

Carts.	INHABITANTS.																	
	Meerasdars.							Cultivators or Ryots.					Moturpha.					
Soucars.	For Hire.	Total.	Houses.	Men.	Women.	Children.	Total.	Houses.	Men.	Women.	Children.	Total.	Houses.	Men.	Women.	Children.	Total.	
345	221	566	1201	1949	2005	1881	5835	1056	1975	2051	1591	5617	1941	3118	3393	3280	9791	
153	38	191	565	996	1021	853	2870	915	1523	1557	1211	4291	803	1389	1442	1181	4012	
112	73	185	450	844	816	833	2493	444	919	881	789	2589	500	887	843	841	2571	
45	91	136	995	513	519	407	1439	477	916	912	682	2510	427	107	769	621	2097	
39	20	59	863	540	575	571	1687	424	693	687	626	2006	616	879	990	986	2855	
167	85	252	988	1622	1690	1576	4888	935	1898	1892	1482	4382	1545	2462	2495	2113	7070	
40	13	53	1090	1623	1676	1526	4825	1051	1743	1849	1431	5023	1430	2284	2352	2204	6840	
0	0	0	408	647	628	609	1884	418	703	755	682	2140	380	538	574	623	1735	
0	50	50	244	362	373	301	1036	313	489	523	371	1383	765	1038	1145	854	3037	
0	0	0	61	109	96	125	330	64	111	111	135	357	42	71	62	91	224	
0	0	0	41	57	64	62	183	41	67	62	50	179	20	27	25	17	69	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
18	9	27	86	148	133	92	375	31	55	67	50	172	127	192	209	167	568	
42	39	81	491	838	915	681	2372	307	480	469	349	1298	658	1115	1137	875	3127	
961	639	1600	8377	10248	10512	9457	30917	6476	11372	11723	9452	32547	9259	14707	15436	13853	43996	

Statistical Table of

	INHABITANTS.					Grand Total.					Amount of Produce, &c.	
	Khooshbash.					Houses.	Men.	Women.	Children.	Total.	Land Revenue.	
	Houses.	Men.	Women.	Children.	Total.							
1. Havalee and Purkall,....	1041	1544	1660	1546	1750	5239	8566	9109	8208	25993	29990	19 6
2. Oopul,.....	400	569	608	465	1642	2683	4477	4628	3710	12815	8234	12 9
3. Chendragherry,.....	343	522	481	468	1471	1737	3172	3021	2931	9124	4753	14 3
4. Kothagutta Kotajpoor,...	288	431	433	264	1130	1487	2567	2633	1976	7176	15420	13 0
5. Paukul and Husnabad,...	424	529	587	626	1742	1827	2641	2837	2812	8290	19288	7 3
6. Kothakondah/Husnabad,...	864	1327	1473	1067	3867	4332	7109	7460	6238	20807	29500	2 3
7. Vizianuggur and Valpecondah,.....	559	795	818	669	2289	4123	6445	6695	5830	18970	33682	6 0
8. Bolicondah,.....	612	641	777	701	2119	1893	3259	2734	2615	7878	14351	14 0
9. Sumthamanium and Chellavoy,.....	218	399	304	273	899	1540	2211	2345	1799	6355	17689	7 9
10. Gotipurthy,.....	19	30	26	32	90	186	321	297	383	1001	2098	2 0
11. Yellgoor,.....	18	22	21	13	56	120	173	172	142	487	2076	15 9
12. Koorva,.....	0	0	0	0	0	0	0	0	0	0	0	0 0
JAGHEER VILLAGES.												
Warungul Fort and Il-lintha,.....	152	197	233	147	577	390	592	642	456	1690	770	8 8
Purgunnahs Husnabad Valpecondah and Oors Khajeepet,.....	833	432	473	361	1266	1789	2863	2994	2106	8065	10840	4 0
Total..	5964	7361	7896	6634	21891	27276	43688	45567	39396	128651	187778	8 2

a Hindoos—Men, Women, and Children,.....123621
 Musselmen— Do. do. do. 5030 } 128651 Total.

the Circar, &c. (continued.)

Amount of Produce, &c.				Gentoo Scholars.	English Scholars.	REMARKS.
Moturpha.	Arrack & Toddy.	Town duty and Sevoy Jummah.	Grand Total.			
2349 4 6	5976 0 0	4222 3 6	43541 4 6	2	3	In the village returns two kinds of carts are noted—Soucars carts and carts for hire.
626 13 0	3016 9 3	8636 12 6	90514 15 6	0	0	Soucars carts—meaning the conveyances belonging to money-lenders, and the wealthier classes generally, who employ them in carting in produce from the fields, and for purposes of traffic.
484 0 0	2632 8 0	8477 0 0	16347 14 6	0	0	Meerasdars—The same meaning is attached to this term, as in other parts of India, but certain tradesmen, particularly goldsmiths, are sometimes reckoned Meerasdars, and sometimes are rent-payers.
561 4 0	1154 6 0	78 0 0	17914 7 0	0	0	Khooshbash includes Brahmins, certain privileged classes of Coonbees, Yellamas, Mahometans, &c. They have their lands at a lighter rent than the common Coonbees.
624 9 3	1816 2 0	4007 2 0	24686 4 6	0	0	Moturpha includes shopkeepers generally, and all those not engaged in agriculture, who pay a house or shop-tax to Government; it answers to the Pandru of other parts of India.
2656 8 6	5924 8 3	2764 3 0	40148 1 0	1	1	Kullalee is the revenue derived from the drawing, preparation, and sale of intoxicating liquors.
1405 10 0	6808 4 0	506 2 0	42402 6 0	2	2	Town duty is levied in some of the larger villages, it is a certain duty on grain, tobacco, goor, &c. introduced into the village.
270 8 0	2065 0 0	357 0 0	17044 1 0	2	0	Sevoy or Sevice Jummah is made up of a number of small taxes levied by the village authorities, as taxes on tamarind trees, mangoes and custard apples, fines on marriages, processions, payment from fishermen, &c.
811 2 0	1233 6 0	2008 3 3	21942 3 0	1	0	* Such is the general meaning of the term, but in some Pergunnahs the money rents are mixed up with the tax.
95 8 0	306 0 0	46 0 0	2545 10 0	0	0	
9 0 0	72 0 0	2 13 3	2161 1 0	0	0	
0 0 0	0 0 0	0 0 0	3000 0 0	0	0	
100 0 0	214 0 0	700 0 0	1784 8 8	0	0	
1194 12 0	2955 4 0	3855 7 6	17695 11 6	3	0	
12364 5 3	32774 3 6	35141 7 0	270938 8 2	11	6	

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II.—On the Fresh Water Fishes of Southern India. By
T. C. JERDON, ESQ., Assistant Surgeon, Madras Estab-
lishment. (Continued from p. 149.)

[I beg to observe that in my measurements of the relative proportions of head and depth of fish to the length, I take the length only as far as the base of the caudal fin. I believe that Cuvier and McLelland measure to the end of the caudal fin, but as this is apt to vary somewhat, and moreover very liable to injury, I think the other mode is preferable.]

ORD. MALACOPTERYGII.

Fam. Cyprinidae.

Dorsal fin single, of few rays; maxillary teeth minute, or wanting; mouth (typically) small.

In this numerous family I shall follow nearly the arrangement given by McLelland in his most valuable Monograph of the group, (Asiatic Researches, vol. 19th,) which I consider infinitely superior to that of Valenciennes.

Gen. *Cyprinus*.

Body elevated; dorsal fin usually long, preceded by spinous rays; no cirri; lower jaw short.

Cyprinus kontius. (New Species.)

Muzzle blunt, truncated; snout with mucous pores, head small; profile rising abruptly to front of dorsal, thence gradually drooping; dorsal fin high in front, low behind, with spines, the third strong, broad, simple. D. 3-12, A. 2-6. Colour dusky greenish, brighter beneath; fins dashed with reddish—38 or 39 scales along the lateral line in 13 rows.

I have found this fish (which is the only one appertaining to true *Cyprinus* in S. India) in the Cavery and its tributaries, growing, it is said, to a considerable size; my specimens were only a foot long.

* *C. potail*. Sykes.

"Deep and fleshy, slightly compressed, dorsal fin of 13 rays, pectoral of 14, and anal of 9—scales large and silvery, length 10 or more inches, height $3\frac{1}{4}$ inches."

This fish, judging from the above brief description, appears to me to be a true *Cyprinus*—I have great doubts where to place the next.

* *C? nukta*. Sykes.

"Two tendrils on under jaw, and two short horns on the space between the eyes, which, together with the deflected upper lip, are tuberculated; large scales. Found in the Inderanee river 18 miles north of Poona."

Gen. *Cirrhinus*.

Dorsal fin usually long, without spinous rays; lips with 4 cirri (generally.)

This genus, as above defined, includes the *Kohita* and *Dangila* of Valenciennes; the *Cirrхина* of the same author appears to belong partly to this genus, and partly to *Gobio*.

Cirrhinus rubro-punctatus. (New Species.)

Cirri minute; head is to the body as 1 to $4\frac{1}{4}$; the height is to the total length as 1 to 3; 40 scales along the lateral line in 15 rows.

D. 15, A. 8, greenish above, dusky silvery beneath, many of the scales in the centre of the body red spotted; fins red tipped.

I procured this handsome fish in the upper portion of the Cavery river, and in several of its tributaries. My specimens are about a foot long. It is said to grow to a larger size however.

Cirrhinus Belangeri?

Rohita Belangeri, Val., olim *Cirrхина micropogon*.

Cirri rather small; head is to the body as 1 to $4\frac{1}{4}$; its height is to its total length as 1 to $3\frac{1}{4}$; 45 or 46 scales along the body in 15 or 16 rows; D. 2-15, A. 2-5, &c. Color dusky green throughout, many of the scales red spotted; fins dark.

I have found this fish in most of the rivers and large tanks of the Carnatic; my specimens are about 14 inches long, but it is said to grow much larger. It answers so nearly to the description of Valenciennes' fish that I have for the present retained it under that name, though his fish was said to be procured from Bengal. If so it can hardly have escaped Buchanan and McLelland, yet I can find none in the latter author that answer to it, so the locality given is probably erroneous.

Cirrhinus affinis. (New Species?)

Nearly allied to the last; cirri long; 39 scales along the body in 12 rows; snout very warty; D. 17, A. 7. Dusky green through-

out. I procured a single specimen of this fish in the Cavery at Seringapatam, but do not now possess it. It is called *Kum-min* by the fishermen there.

† *Cirrhinus Cuvierii*.

Dangila Leschenaultii. Val.

Labial cirrus fine, maxillary one fleshy; both short; body elongated; head short, one-sixth of total length of body; height $5\frac{1}{2}$ times in length; eye large; 40 scales along the body; greenish above, silvery beneath; D. 3-13, A. 3-5—fins yellowish.

I procured what I imagine to be this fish from the neighbourhood of Madras. Valenciennes' specimens were from Pondicherry. He places it as a *Dangila*, a genus he characterizes as having an edging of conic papillæ on the upper lip.

* *Cirrhinus Dussumierii*.

Rohita Dussumierii. Val.

Body elongated, its height being $4\frac{1}{2}$ in its total length; head one-sixth of length; muzzle rounded, with a few large pores; cirri small; lips fringed; 60 scales along the body. D. 3-13, A. 3-5—greenish yellow above, silvery beneath, fins with a greenish tinge, $10\frac{1}{2}$ inches long.

I have not yet seen this fish, which is said to have been brought from the neighbourhood of Alipey in Travancore. It has smaller scales than most of the genus.

* *Cirrhinus Roulei*. Val. *Rohita*. Val.

Cirri very short; caudal much forked, 46 scales along the body; D. 3-12, A. 3-5. Steel blue on the back; silvery iron grey beneath, fins dusky—6 inches long. Said to have been brought from Bombay. I have not seen it.

* *Cirrhinus fimbriatus*. Bloch.

Rohita. Val.

Cirri very minute; head short, broad, five times and one-third in the total length; many mucous pores on the snout, which is rounded; height of body one quarter its length; 45 scales along the body. D. 3-16, A. 2-8, from Pondicherry.

I do not know this fish.

+ Name changed in consequence of there being also a *Rohita Leschenaultii*, which is a *Cirrhinus* apud nos.

I imagine that the following fish of Sykes' list should be placed in this genus.

* *Cyprinus Abramoides*. Sykes.

20 rays in dorsal, 8 in anal, 18 in pectoral fins, without tendrils, with tuberculated nose, red edged fins and a red lunule on each scale; attains the length of 21 inches and height of 7—excellent eating; called *Tambra* by the natives, from the general prevalence of a copper colour.

* *Cirrhinus Blochii*. C. V.

Cyp. cirrhosus, Bloch. 411.

Cirri rather long; dorsal pointed; scales rather large; lateral line straight; of a dark violet colour above, silvery beneath, fins transparent. D. 18, A. 13, up to $1\frac{1}{2}$ feet long.

From the rivers and lakes of the Malabar Coast.

There is another fish, which is described by Valenciennes, whose locality is not mentioned, but as it was procured by Leschenault, who collected much in the South of India, it may be from Pondicherry, or the Malabar Coast.

* *Cirrhinus Leschenaultii*.

Rohita Leschenaultii. Val.

Cirri very short; height one-third of length; head $5\frac{1}{2}$ times in total length; end of muzzle round, thick, covered with mucous pores; dorsal fin low; 45 scales on body—7 inches long D. 3-16, A. 3-5.

The next species to be mentioned is one of Sykes', which may either belong to this genus or be a *Gobio*. Colonel Sykes places it as *Varicorhinus Bobree*. "Nose tuberculated; no tendrils—D. 17, A. 8, form of a tench; lips thick, fleshy, frequently crenated, 6 inches long, $1\frac{1}{2}$ high."

The last of this genus, if indeed it belong here, is a small fish that appears somewhat allied to *C. joalius*, *C. morala*, *C. dero*, &c. &c. by its dark bands. It, with some of these, will probably form a subdivision.

Cirrhinus fasciatus. (New Species.)

Snout covered with mucous pores; cirri very long and thin, head large, being to the body as 1 to $4\frac{1}{2}$; height $2\frac{1}{2}$ of total length; scales 20 along the sides, in 6 rows. D. 11, A. 6 or 7— $2\frac{1}{2}$ to 3

inches long. Color reddish yellow, with 4 black bands, sometimes interrupted, on the sides; viz., one behind eye, one beneath the dorsal fin, another between the dorsal and caudal fins, and the fourth close to the tail.

This is an active little fish found in small shoals in all the streams of Malabar beyond the reach of the tides, and in the higher branches of the streams that run into the Cavery. It lives chiefly on vegetable matter, but will also take worms, &c. I have kept it alive for some months, and I observed it to be extremely active and pugnacious.

Gen. *Gobio*.

Dorsal fin short, placed opposite the ventral, without spines; lips thin; lower jaw shortest; some have 2 cirri, others entirely without them.

Gobio curmuca. (Buch.)

Head very long, being one-fourth of the length of the whole body, furnished with some mucous pores on its snout; 2 long cirri; eye distant from muzzle; 40 scales along its body, with 12 rows in its depth, D. 11, A. 8. Color green above, silvery beneath. Dorsal and pectoral fins, reddish white; ventral colourless, with the two first rays reddish; anal colourless; tail greenish, lips bright orange, ended and margined with black.

My specimens correspond so exactly with Buchanan's figure that I cannot doubt their identity; but I imagine that he has either made some error about its locality, or has confounded two allied species. My specimens are from the rivers of Palghat, and Ariacode in South Malabar, where it is very common, and I have as yet seen it in no other locality, and certainly it is not a common fish in Mysore or I must have seen it. Buchanan I may mention passed over the very locality whence my specimens were obtained in his journey through Mysore, &c. and might probably have had his drawing taken there, and made his description from some other species. The orange and black tipped caudal seems to be a permanent mark, as I have seen it in fish 2 inches long, and in all up to a foot and more.

Gobio Canarensis. (New Species.)

Very closely allied to the last; appears to differ in its shorter head, which is to the whole length as 1 to $4\frac{1}{4}$; its depth is as 1 to $3\frac{1}{4}$. The distance of eye from muzzle is less. Color green above, golden

on the sides, silvery beneath; dorsal, ventral and anal fins yellow orange; tail yellow, margined with orange above and below, and with a broad fringe of black on its posterior margin; pectoral pale yellowish.

D. 12, A. 7.—My specimen was destroyed before I counted the number of its scales, but the points noted above, and the difference in the colours have induced me to consider it distinct from the last. I found it in rivers in Canara, and my specimen was about 8 inches long.

Gobio Hamiltonii. (New Species?)

Head to whole length of body as 1 to $4\frac{1}{4}$, D. 11, A. 7, 40 scales along the body and 10 or 11 in its depth. Green above, silvery beneath; snout concave between eye and muzzle. Dorsal and anal fins colorless; pectoral and ventrals, orange margined; caudal pale yellow.

This fish, of which I procured some small specimens, 5 or 6 inches long, in the Cavery and its tributaries, is also very closely allied to *G. curmuca*, and may have been mistaken for the Malabar fish by Buchanan, and the description taken from it. I did not notice any cirri in this or the last, but they may exist notwithstanding, as my only specimen of the first was destroyed, and my present one is in such bad order that I cannot make them out. I am strengthened in the supposition of my present species not having cirri by having lately obtained in the Bhowany, a tributary of the Cavery, a large *Gobio* which may be identical with it, but of which unfortunately I lost my only specimen. It was of large size 20 inches long, head small, being to the rest of the body as 1 to 5; height to length as 1 to $3\frac{1}{4}$; 39 or 40 scales along the body in 11 rows D. 11, two first rays quite simple. A 7, green above, silvery on the sides and beneath; all the fins dusky, edged with red. Should, on a further comparison, this be found a distinct one I propose the name of *Gobio Bovanius*—either this or the last however are possibly *Gobio ariza*, Buch., described as having snout and under lip smooth, 12 rays in dorsal, in other respects like the last, (*G. pargusia*). Another allied form is one I shall provisionally call,

Gobio angraoides. (New Species.)

Head small, no cirri; length of head to body as 1 to $5\frac{1}{4}$ —depth to total length as 1 to 3; 44 scales along the body and 12 across;
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D. 13, A. 7. Colors dark blueish above, golden on the sides, with a dark streak from eye to tail; all the fins dark; pectoral, ventral, and anal, tinged reddish yellow; profile rising rapidly to the dorsal; eye near the snout; mouth quite inferior. Its mode of colouring reminds one of *Gobio augra* of Buchanan, and also of *G. bicolor* of McLelland, but it is very distinct.

Gobio bangon. Buch. ?

Head is to the body as 1 to $4\frac{1}{2}$; height to total length as 1 to 4; 38 scales along the body and 11 or 12 across; D. 10, A. 7. Yellowish green above, with greenish longitudinal lines; silvery beneath; fins greyish yellow, sometimes tinged reddish, snout porous. This is undoubtedly the *arja* or *arifa* of the Mysore fishermen, from which Buchanan must have taken the name *ariza*, but the species he has called by that name is very evidently distinct from this form. Whether my fish be identical with *C. bangon* or not, must be determined hereafter. It is very abundant in the Cavery and its tributaries, and becomes more so as the river becomes more sluggish.

Gobio limnophilus. McLelland.

Very closely allied to the last, and perhaps indeed identical, as McLelland has hinted. 36 scales along the sides and 12 across; 2 small cirri; D. 10, A. 6; reddish yellow above, silvery beneath; fins dusky greenish yellow—head little more than a sixth of total length of body; depth to length as 1 to $4\frac{1}{2}$ or 5. From tanks and rivers near Madras, and other parts of the Carnatic. I am not very certain about the cirri, but I think that they exist.

Gobio Dussumierii.

Cirrhinus Dussumierii. C. V.

Head small, 6 times in the total length, height of body 4 times; muzzle thick truncated, 2 short cirri; line of back almost straight; abdomen much rounded; eye 4 times in the head—D. 8-8, A. 2-4—39 scales along the sides in 15 rows—from Mysore. This is perhaps the same as my *G. bangon*, or very closely allied to it.

I cannot help imagining that the following fishes of Colonel Sykes' list belong to the present genus.

* *Chondrastoma kaverus*. Sykes.

No lateral line, no tubercles no cirri—sub-cylindrical—D. 12, A. 8,—up to 1 foot in length—Beema river.

* *Ch. fulungec*.

Elongated, not much compressed, D. 10, A. 6, length 1 foot, height 4 inches.

* *Ch. boggut*.

No tendrils, nor tubercles, body elongated, D. 12, A. 8, length 11 inches.

* *Ch. mullya*.

Short obtuse head, sub-cylindric body, and a red process on snout. D. 11, A. 8, length 6.

* *Ch. rattanah*.

Body elongated, dorsal high, form sub-cylindric. D. 11, A. 8, length $4\frac{1}{2}$ inches.

Gen. *Oreinus*. McLelland.

Head fleshy, mouth vertical, lower jaw shorter than the upper; snout muscular and projecting, furnished with cirri; dorsal preceded by a serrated spinous ray; scales small.

I have not seen any fish in Southern India that appertains to this genus, but I apprehend that one of Colonel Sykes' list may belong to it, viz., *Rohtee paugut*—Sykes, of which the following are the characteristics—compressed, deep, angular-backed,—D. 12, A. 8; first 3 or 4 rays of dorsal black tipped; length 5 inches, height $1\frac{1}{2}$. In Baum and Beema rivers. Colonel Sykes' genus *Rohtee* is described as having longish dorsal and anal fins, the 1st complete ray serrated posteriorly, scales minute, &c. but includes two fish that I think must be breams, and one *Opsarius* apparently.

Gen. *Gonorrhynchus*.

Mouth beneath; head covered with thick integuments; snout perforated by numerous mucous pores; body sub-cylindrical; dorsal and anal short, no spines.

G. Gotyla, Gray.

4 small cirri; snout thick, divided by a deep transverse fissure, covered with prominent mucous pores; head is to the whole body as 1 to $5\frac{1}{2}$; the height of the body is $4\frac{1}{2}$ times in its length; 34 scales along the body in 7 rows; colour dark olive green above, yellowish beneath, some of the scales red edged; fins yellowish green, tipped with orange. D. 2-8, A. 7—length about 8 or 9 inches.

I cannot of course be certain that my fish is the same as the one figured in Gray and Hardwicke's Illustrations, said to be from the mountains of India, but which McLelland does not appear to have met with. Should the fish figured by Gray be from the North of India, mine is probably distinct, but it is possible that Buchanan may have obtained it, and had a drawing taken, from the same locality as I did, whence Mr. Gray might have obtained his copy. The only point of difference of any note is the fleshy pendulous point said to exist at each corner of the mouth, which I do not observe in mine, and which may be an exaggerated defect of the original drawing. My fish was obtained in the Bhowany river, at the foot of the Neilgherries, and also in the Manantoddy river, both tributaries of the Cavery. It is only found where the bed of the river is stony, and keeps always close to the bottom, living apparently on the vegetable matter adhering to the stones. This and the other species are called *Kul korave* by the Telingas.

Gonorrhynchus McLellandi. (New Species.)

Snout covered with numerous pores; profile rising to the dorsal, slightly concave from that to the tail,—head is to the whole body as 1 to $4\frac{1}{2}$, height is $3\frac{1}{4}$ in its total length; 2 longish cirri, head depressed in front, dorsal fin rather high. D. 10, A. 7, &c.—colour dusky green above, golden on sides, and greenish white beneath; caudal fin green in the centre, reddish above and below; other fins yellow, edged with red; cheeks golden, 36 scales along the body in 9 rows. Length 10 inches.

Found in the same localities as the last.

Gonorrh. stenorrhynchus. (New Species.)

Muzzle more acute than in the last, ending in a blunt rounded projection studded with large and prominent mucous pores; 4 longish cirri; head is to the whole body as 1 to $4\frac{1}{2}$, height is 4 times in the length; 34 scales along the body in 7 rows; D. 10, A. 9, &c. About 10 inches long. Colours much as in the last.

I have only found this well marked species in the Bhowany river at the foot of the Neilgherry hills.

I have got some small specimen of a species of this group from the streams of Malabar, which I cannot at present separate from *G.*

McLellandi by sufficiently specific characters, but of the distinctness of which I entertain little doubt, and hope to settle the question shortly.

Gen. *Barbus.*

Dorsal short, preceded by a strong spine; 4 cirri.

Barbus (Labeobarbus) Hamiltonii. (Gray.)

Barbus progeneius. McLell.

Head to the whole body as 1 to $3\frac{1}{2}$; cirri long; a fleshy projection on both upper and lower lips; body compressed; its height is to total length as 1 to $3\frac{1}{4}$ —26 scales along the lateral line, in 6 rows; green above, cheeks golden, silvery beneath; fins tinged with orange red; D. 3-9, 3d spine simple, very strong; A. 2-5, &c.

This fine fish is one which in the South of India most nearly resembles the *Mahseers* of Bengal, but I am not aware of its having been taken by fly here. It is found in the Cavery and all its tributaries, and grows to a size I am told, of 2 to 3 feet. It is a very handsome fish. I am not certain of its being McLelland's fish, which appears to differ somewhat in colouring, in the size of the head, and in wanting the projection on the upper lip. The drawing in Gray and Hardwicke gives a very fair representation of our southern fish.

Barbus Megalepis. McLell. ?

Cyprinus mosal. Ham.

Head is to the body as 1 to 3; 25 scales along the side in 6 rows; D. 12, A. 7.

I obtained a single small specimen of what I consider may be this fish in the Cavery at Seringapatam. It was only a few inches long, but the fishermen, who call it *kilche*, said that it grew to an enormous size.

Barbus Carnaticus. (New Species.)

Head small, being rather more than one-fifth of whole body; obtuse; body not much compressed, eye about one-fourth the length of the head. It has about 32 scales along the sides in 8 rows, cirri of moderate length; profile of back ascending to the dorsal; dark glassy olive green above, silvery beneath; fins yellowish dusky; D. 4-8, A. 7, spine stout, simple.

I cannot find the description of this fish among those of McLell-

land or Hamilton, and accordingly have named it as new. It is found in the Cavery and all its tributaries, frequenting the streams, and rising to the fly.

I have heard of some fine fish of this species having been taken in the Bhowany at the foot of the Neilgherries, and in other parts of the country. It is called *gendé* by the Seringapatam fishermen. It grows to 3 feet and more in length, and is then a very heavy fish.

Barbus sprana. C. and V.

Head is to the whole body as 1 to $4\frac{1}{2}$; height is to the length as 1 to 3; head blunt, cirri slender; 28 scales along the sides in 8 or 9 rows; D. 2-8, A. 7; 2d dorsal fin finely serrated behind, and ending in a soft point; blueish above, rest of the body yellowish; cheeks golden, fins yellowish.

I have very little doubt but that this fish is Russell's *kutamoo* as Buchanan suggests, but which McLelland appears to doubt. It is extensively distributed over Southern India, being found in all the rivers, and most of the larger tanks of South India. It grows to the length of about 2 feet, and is called *panjiri* by the fishermen of Seringapatam. I have not seen it from the rivers of the West coast. It appears not to have been seen by McLelland.

Barbus Malabaricus. (New Species.)

Head to whole body as 1 to 4; height $3\frac{1}{2}$ times in its length; 4 long cirri; 23 scales along the body in 6 rows. D. 3-8, A. 2-8; pale brownish olive above, silvery beneath; fins tinged with red.

I would have considered this fish without doubt as *B. roseipinnis* of C. V., but that is said to have the dorsal spine serrated, &c. I have taken this handsome barbel only in mountain streams in Malabar. It rises to the fly sometimes, and will also take a bait of boiled rice. I have not seen it more than 10 inches long, but from the rapid growth of one I have kept alive for some months I imagine it attains a much larger size.

Barbus Mysorensis. (New Species.)

Head is one-fourth the length of the whole body, height is $3\frac{1}{2}$ times in its length; snout prominent, raised, covered with mucous pores; 4 long cirri, 38 scales along the lateral line and 9 rows; D. 4-9, A. 7, &c.; dark dusky greenish above, golden on the cheeks and sides,

and the fins stained with red. I have found this barbel in the Cavery and its tributaries, and it is said to grow to a large size.

Barbus gracilis. (New Species.)

Head one-fourth of body; height $4\frac{1}{2}$ times in its length; snout smooth, very protractile, 4 long cirri, 42 scales along the sides in 12 rows; D. 4-9, A. 7, &c.; 4th dorsal spine very ending in a soft point; pale greenish yellow above, silvery on the sides and beneath; fins yellowish.

This is a very well defined species found in the same localities as the last, it is said not to grow larger than 12 or 15 inches.

Colonel Sykes has 2 barbels which may be identical with some of the foregoing supposed new species, but in the absence of more detailed information, I must place them as distinct.

**Barbus massalah*. Sykes.

4 short cirri, nose tuberculated; D. 12, A. 8, up to 3 feet long and 1 foot high. In the Goreh river.

**Barbus khudree*. Sykes.

4 cirri, large hexagonal scales, body elongated, D. 14, A. 7, fins blood stained. In Mota Mola river.

If Colonel Sykes had not given 14 rays to the dorsal fin I might have considered it the same as *B. Hamiltonii*.

**Barbus subnasutus*. C. V.

Head one-fifth of total length; eyes small; muzzle smooth; height three times and a third on the total length; 29 scales along the side in 12 rows; D. 3-8, spine serrated; A. 8, &c.; said to be from Pondicherry, nearly 6 inches long.

**B. gibbosus*. C. V.

Head small, one-sixth of total length; height three and a half times in its length, eye one-fourth of head; 29 scales along the body in 12 rows; D. 4-8, A. 3-5, spine serrated; from Alipey, brought by M. Dussumier.

**Barbus gardonides*. Val.

Head five and a half times in total length; height not quite three and a half times in the same; eye $3\frac{1}{2}$ times in length of head; cirri

small; 31 scales along the sides in 12 rows; D. 4-8, A. 8, &c.; dorsal ray serrated—from Bombay and Calcutta, &c.

The three preceding fish appear to be somewhat similar to one another, and most probably belong to the genus *Systemus* of McLelland.

I cannot identify them however with any of mine.

**Barbus roseipinnis.* C. V.

Cirri long, thin; toothed dorsal ray slightly bent, of moderate size; eye large; 22 scales along the side; D. 3-8, A. 2-5, &c.; caudal, anal, and ventral fins strongly tinged with red— $4\frac{1}{2}$ inches long—from Pondicherry.

**Barbus Polydori.* C. V.

Dorsal spine very finely serrated, slender; 27 scales along the sides. D. 3-9, A. 2-5. Steel blue on the back, silvery beneath, fins greyish; $4\frac{1}{2}$ inches long, from Bombay.

It is probable that these two belong also to the *Systemi*.

Genus *Systemus*. McLelland.

Dorsal and anal fins short, the former usually preceded by a spinous ray; intermaxillaries protractile; spots on body, or fins.

Systemus chrysopoma. Val.

Head $4\frac{1}{2}$ times in total length; height $3\frac{1}{2}$ times in the same; 4 cirri; 27 scales along the sides in 10 or 11 rows; D. 10, A. 8. Green above silvery beneath, cheeks golden, a black spot on each side of the tail—up to 1 foot long.

This fish, placed as a *Barbus* by Valenciennes, is probably nearly allied to the *S. immaculatus* of McLelland. It sometimes wants the black spot on the tail. It is very abundant in most of the rivers of Malabar, entering the ditches and paddy fields during the monsoon in great numbers, and is caught by the boys with a hook baited with worm. It is more nearly allied to the Barbels perhaps than most of the *Systemi*. I have kept it in confinement for many months and it grows very rapidly.

Systemus dorsalis. New Species.

Head is $3\frac{1}{2}$ times in total length; height is 3 times in the same; snout irregular, 26 scales along the sides in 8 rows; 2 labial cirri; profile rising to dorsal and descending rapidly to the end of that fin,

thence nearly straight; blueish above, yellowish on the sides, silvery beneath, a black spot on each side of the tail occasionally; fins with a yellowish tinge; D. 3-8, A. 7, &c. Dorsal fin with a black spot on its base behind; 4 to 5 inches long.

This fish is common in all the tanks and rivers in the neighbourhood of Madras, and I have not seen it elsewhere. It is probably a *Capoeta* of Valenciennes.

Systemus amphibius. Val. ?

Height one quarter of total length; a pair of very small labial cirri; 25 scales along the sides. D. 3-8, A. 7, &c.; $4\frac{1}{2}$ inches long; color green above, silvery beneath, with a fine rosy streak from eye to the tail along the centre of the body over the lateral line; fins with a yellowish tinge; sometimes has a black spot on each side of the tail.

This fish, or what I take to be it, has been placed by Valenciennes in his genus *Capoeta*, which he separates from the Barbels on account of having only 2 cirri. They form in Southern India a group of very nearly allied fish, difficult to distinguish *inter se*, and too closely joined to other species of *Systemus* without cirri, to permit us to retain them distinct. Our present fish I have procured in the Cavery, and also in tanks in Mysore and the Carnatic.

In some tanks it is found in great numbers. Cuvier's figure is defective, inasmuch as it shows the spine serrated, which, however, in the letter press is said to be entire. As to its being said to inhabit the sea at Bombay, only coming into the paddy fields during the inundations, I cannot help thinking there must be some mistake. It is mentioned by Valenciennes as being found even one foot long. If this is the case I imagine our southern fish will prove distinct. I have seldom seen it above 3 or 4 inches.

Systemus Carnaticus. (New Species.)

Very closely allied to the last. Differs in having much longer cirri, in its dorsal fin being lower, and having only 2 instead of 3 entire rays; lateral line more curved, scales 24 along the sides in 7 rows; blueish green above, yellowish on the cheeks and sides, and reddish beneath, a large black spot on each side of the tail; dorsal fin reddish, stained with black; other fins pale yellow. Length about $3\frac{1}{2}$ to 4 inches.

I obtained specimens of this fish in the Bhowany river at the foot of the Neilgherries and also in the Cavery.

Systomus sophon. (Buch.?)

No cirri; dorsal spine smooth; head is 4 times in body and its height is 2 times and two-thirds its total length—D. 10, A. 7—dusky green above, cheeks orange, silvery beneath; a streak of fine red along the sides; dorsal fin sometimes stained with black; usually a black spot on the tail; ventral and anal fins often tinged with red; dorsal spine smooth; 23 scales along the sides in 9 rows.

Common in tanks and rivers in the Carnatic not exceeding usually $3\frac{1}{2}$ or 4 inches.

Systomus chola. (Buch.?)

2 cirri; 24 scales in 9 rows—D. 10, A. 7—dorsal spine smooth, green above, silvery beneath. Dorsal fin reddish, stained and spotted with black; other fins yellowish; a large black spot on the root of the tail; cheeks golden; height about $2\frac{1}{2}$ times in the length; head $3\frac{1}{2}$ times in body, length about $3\frac{1}{2}$ to 4 inches.

Although my fish, which is from tanks in the Carnatic, has some points of resemblance to *C. chola*, I have little doubt that it is distinct, and in that case propose the name of *Hamiltonii*. Its chief points of difference are the less depth, large head, &c. It differs from *sophon* chiefly in having cirri; I possess notes of another allied species which differs from *S. sophon* in its more elongated body. 24 scales in 7 or 8 rows; and usually no spot on the tail; but as I have lost my specimen, I shall only allude to it here. It was from Madras.

Systomus tristis. (New Species.)

2 cirri; 24 scales along the sides in 7 rows; D. 4-8, A. 7, &c.; body compressed; plain olive green above, silvery beneath; fins plain, 3 inches long.

I procured a single specimen of this fish in the Cavery, which I at first took to be a *Barbus*, and indeed it resembles one so much in habit, dorsal spines, plain colours, &c., that I may yet be mistaken, but I could only detect 2 cirri.

Systomus tripunctatus. (New Species.)

No cirri, head about $3\frac{1}{2}$ times in length of body; height about $3\frac{1}{2}$ times in the length; 23 scales along the sides in 7 rows. Green

above, golden beneath; 2 black spots under end of dorsal, and another at base of tail; length about 2 inches. D. 10, A. 7, &c.

I procured specimens of this little species in a small stream near the coast in Canara, and have seen it nowhere else.

Systomus conchoni. (Buch.?)

Body rather arched beneath, its depth $2\frac{1}{2}$ times in the length; head 5 times in total length; 2nd dorsal spine strongly serrated, not so long as the next soft ray; green above, silvery beneath, fins yellowish; 25 scales along the body in 8 or 9 rows. D. 2-8, A. 7, 2 inches long.

This little fish from tanks near Madras answers so nearly to the description of *C. conchoni*, that I have retained it under that name, although that species is from the Northern parts of Bengal.

Systomus arulius. (New Species.)

Head $3\frac{1}{2}$ times in length; depth $2\frac{1}{2}$ times in the same; eye large; 20 scales along the sides in 6 rows—D. 10, A. 7—green above, silvery beneath; a large diffused black spot on side beneath the commencement of the dorsal, another over the anal, and another at base of caudal; dorsal, caudal and anal fins red; P. and V. colourless; in the older subjects the spots extend more over the sides, length 4 inches.

Found in the Cavery, called *arulii* at Seringapatam.

Systomus rubro-tinctus. (New Species.)

No cirri; head about 4 times in total length; depth about $2\frac{1}{2}$ times; scales 20 along the sides in 7 rows—D. 2-8, A. 7—green above, cheeks golden, silvery beneath; 3 small black spots on sides, one under dorsal, the 2nd over the anal and the 3rd near base of caudal, between the 1st and 2nd spots a series of bright red spots; dorsal, anal, and caudal fins red, the latter edged externally with yellow.

About 5 inches long, I procured this fish in the Manantoddy river, a tributary of the Cavery.

Systomus stigma. (Val.?)

Head about 4 times in length; height $3\frac{1}{2}$ times in the same. 23 scales along the sides in 5 rows—D. 10, A. 7—green, with a yellow

streak along the sides; belly, as far as vent, bright silvery; 2 black spots on the dorsal, and another at base of caudal, 2 inches long.

From tanks in Mysore.

It appears to me very probable that this is the *Leuciscus stigma* of Valenciennes. Should it prove distinct I would propose the name of *S. asiaticus*.

* *Systomus ticto*. (Buch.)

Rohtee ticto. Sykes.

"A Rohtee 1½ inch long, with 4 to 6 black spots on the body; 2nd ray of the dorsal toothed behind, with sharp incurved teeth, with 10 rays in the dorsal, 8 in the anal; pectoral fin narrow, acuminate.

Found in the Mota Mola near Poona."

This may be an *Opsarius*.

* *Systomus sulphureus*. (Val.)?

Profile of back and abdomen regular, very slightly arched; height one-third of length; spinous ray of dorsal not toothed; eye nearly one-third of length of head—D. 10, A. 7—pale sulphur colored with silvery reflections. From Mysore. 4 inches long. I have not identified this species, which, placed by Valenciennes among his *Leucisci* near *L. stigma*, appears certainly to be a *Systomus*.

Systomus filamentosus. (Val.)

Head 4½ times in body; height about 2½ times; eye 3½ times in the length of the head; 2nd dorsal spine simple, strong; 1st, 2nd, 3rd and 4th soft rays prolonged to nearly double the height of the others; 5th not quite so long—D. 2-8, A. 2-5—21 scales along the sides in 8 or 9 rows; greenish above, reddish silvery beneath; large black spot on the tail, on the lateral line, over the end of the anal fin; fins tinged with rosy yellow; tail with a fine light red spot at the tip, ended with black. Length about 4 to 5 inches.

The fish described by Valenciennes was from Alipey. I have procured specimens in the river running past Canote in Malabar, which appear to be identical with those from Alipey. It frequents streams in small shoals, and is a very handsome fish. I have taken it with the fly, though not readily.

Systomus assimilis. (New Species.)

Very closely allied to the last, the same general proportions, number of scales, &c.; 1st, 2nd, 3rd and 4th soft rays of the dorsal prolonged, the 3rd the longest, the 4th the shortest, and the rest rapidly diminishing to the 7th; 2nd dorsal spine short, not more than half the length of the membrane; green above, reddish silvery beneath; black spot on the tail more diffuse than in the last. Cheeks golden orange; dorsal fin with the membrane yellow; 2nd dorsal spines red, other rays blueish. Caudal pale reddish yellow, with a bright red spot at each tip, and black at the base and sides. Pectoral rosy, ventral and anal transparent, tinged black at the base—D. 10, A. 7, &c. I procured this fish in a river in Canara. It appears to differ from *S. filamentosus* in the formation of the dorsal fin, colors, &c.

Systomus Maderaspensis. (New Species.)

Also very closely allied. Differs in its colors chiefly, and in wanting (occasionally) the prolongation of the dorsal rays.

Dorsal fin reddish, stained with black; caudal edged broadly with fine red, and a black tip to each lobe; anal red; other fins reddish; I procured this fish from tanks near Madras; its usual length about 4 inches. I lately procured one specimen in the tank at Streepermatoor, not far from Madras, which had the dorsal rays prolonged, but which appeared to belong to this species. D. 3-8, A. 3-5, &c.

Genus *Abramis*.

Body short, elevated; a short dorsal; and long anal.

* *Abramis Vigorsii*. (Sykes.)

I think it very probable that Sykes' *Rohtee Vigorsii* must belong to this genus. He describes it as D. 11, A. 28, body compressed; high in the middle, sloping to each end; head slightly recurved, eyes very large, 6 to 8 inches long. From the Beema river.

* *Abramis Ogilbyi*. (Sykes.)

"A Rohtee with 12 rays in the dorsal, 17 in the anal fins; body very compressed, and very high, with the back sloping to each end from the centre; head sharpish; pectoral fins narrow, acuminate; 1st complete dorsal ray a strong bone, serrated behind. 4½ inches long, height 1½. From the Beema river." This, if it be a true

bream, is certainly not a typical one, and may perhaps be a *Perilampus* of McLelland.

Gen. *Leuciscus*.

Dorsal and anal small, without spinous rays; head horizontal; mouth moderate.

Leuciscus Malabaricus. New Species.

Head one-fourth of the length; height much the same; body somewhat cylindric; dorsal medial—D. 10, A. 7—green above, silvery beneath; a leaden blue stripe from the eye to the tail, with a yellow line above it; length $3\frac{1}{2}$ inches. 32 scales along the sides in 6 or 7 rows.

This fish is one of a small group in Southern India which appears allied in form and colouring to *C. mola*, and *C. daniconius* of Buchanan, though these species have smaller scales. My fish abounds in Malabar, in all the rivers and small streams, and even in ditches and tanks; takes both fly and worm greedily; it does not exceed 4 inches in length.

I have reason to believe that a distinct species exists in the Canarese streams, having a shorter body and larger head than the Malabar one; and also another in the streams that run into the Cavery, characterized by its smaller head, and lengthened body; but not having authentic specimens from the different localities at hand, I shall not at present attempt to characterize them.

Leuciscus Caverii. New Species.

Head about one-fourth length of body; height one-fifth of length; eye nearly one-fifth of length of head; dorsal placed a little behind the middle of back, nearly opposite the anal; 30 scales along the sides in 7 rows—D. 9, A. 6—green above, silvery beneath; cheeks golden; a blue stripe from opercle to tail, with a narrow yellow one above it; lateral line concave—usually about 3 inches long.

Very common in the Cavery and all its branches. Called *Neddooba* by the Seringapatam fishermen.

Leuciscus flavus. New Species.

Head equal to the height of the body, one-fourth of the total length; eye rather large, about $3\frac{1}{2}$ times in the head; dorsal medial; scales about 30, very caducous, greenish yellow above, silvery

beneath; a yellow streak along the sides, fins yellowish; caudal tipped with black; lateral line straight—D. 9, A. 6.

From tanks in the Carnatic, about 3 inches long.

Leuciscus xanthogramme.

Head rather smaller than the last, being about $4\frac{1}{2}$ times in the length of body; height $4\frac{1}{2}$ times in the length; dorsal a very little behind the middle of the body; lateral line curved; about 30 scales along the sides in 11 or 12 rows—D. 8, A. 6—lower lobe of caudal longer than the upper one; eye rather small, about 5 times in head; green above, silvery beneath; a yellow stripe on the side from opercle to tail.

From tanks and rivers in Mysore and the Carnatic 3 to 4 inches long.

I possess a sketch of another *Leuciscus* from the Oavery of which I have lost my specimen, which appears to differ from any of these. It is nearly allied to *L. Caverii* in form, but has a much larger eye, and the depression in the crown more marked, muzzle in front of the depression continuing straight, parallel with the back; profile of abdomen a good deal arched; lateral line much curved. I am unable to give the number of fin rays or scales.

Leuciscus microcephalus. New Species.

Head small, one-fifth of length of body; eye close to muzzle; opercle large, pointed; profile of back rising from the crown, and gently arching to the dorsal, thence concave to the tail; abdomen much curved to the anal, nearly straight thence; height is $3\frac{1}{2}$ times in the length; dorsal fin behind the middle, over the interval of ventral and anal; 30 scales along the body in 7 rows, lateral line curved; yellow green above, silvery beneath with a bright burnished silver streak along the sides, fins pale yellowish.

From tanks and rivers near Madras. Rare.

* *Leuciscus presbyter*. (Val.)

Head $4\frac{1}{2}$ times in total length of body, height the same; profile of back straight; that of abdomen slightly curved; dorsal fin advanced; anal small; 26 scales along the body in 8 rows—D. 11, A. 7—back greenish, silvery beneath; dorsal edged with blackish, $3\frac{1}{2}$ inches long—from Bombay, allied to my *L. flavus*.

I am at a loss whereabouts to place the following fish.

* *Leuciscus molettina*. (Val.)

Head equal to the depth, and one-fifth of total length of body; eye one-fourth of head; lower jaw with a small tubercle on its symphysis; 50 and more scales along its body; lateral line concave; cheeks burnished silver, which extends along the sides of the body in a line distinct from the silver of the abdomen—D. 11, A. 8, &c.— $3\frac{1}{2}$ inches long. From Bombay.

* *Leuciscus Mahecola*. (Val.)

Head shorter than the height of the body which is 4 times in total length; muzzle somewhat pointed, eye rather large, profile of back, and that of abdomen, similar and regular; scales large, 22 along the sides; lateral line slightly concave, on the 5th range, and two scales lower are observable, a series of small depressions, which are probably pores; greenish above, silvery beneath; dorsal reddish, pectoral and caudal greenish, the latter with a little black at the point of the lobes; ventral and anal colourless—D. 11, A. 7, &c.—3 inches long. From Mahi on the Malabar coast; appears allied in form to my *L. flavus*.

Leuciscus barbatus. New Species.

2 cirri on each side of its mouth, the posterior long, reaching to the ventral fin; head four times and two-thirds in its total length; profile nearly straight to the dorsal fin, which is placed well behind, slightly concave thence to tail; abdomen arching regularly to the anal; height is about 4 times in its length, lateral line near the abdomen and parallel with it; 32 scales along the body in 7 rows; dorsal fin small, not so long as anal; caudal fin large; green above, silvery beneath; a yellow stripe along the body— $2\frac{1}{2}$ to 3 inches long. Found in rivers and tanks all over Mysore and the Carnatic, rather common.

This fish very closely resembles the one described by Valenciennes as *Nuria thermoicos*, but appears to differ in some particulars of form, color, and remarkably so in its habit, the latter being found in hot springs of the temperature of above 100° Fahr. Buchanan has also an allied species, his *C. dourna*. Valenciennes places his *Nuria* between his genera *Dangila* and *Kohita*; a most unfortunate position, and one which shows how little idea of natural affinities he possesses. Were it not for its cirri it would barely differ from some of the *Leuciscus* just described. McLelland places another very

nearly allied species in his genus *Perilampus*. It also inhabits hot-springs at Pooree of 112 Fahr. I prefer however keeping those with short anal fins in the genus *Leuciscus*, especially when combined with an elongated body.

My next fish belongs to a very distinct form from any of the *Leuciscus* previously mentioned. It is however closely allied to *L. dysotomus*, and *L. branchiatus*, McL., which are considered by McLelland to be true *Leuciscus*.

Leuciscus rubripes. New Species.

2 cirri; head equal to the depth of body, and $4\frac{1}{2}$ times in total length; eye about $3\frac{1}{4}$ times in length of head; profile of back slightly convex; dorsal fin nearly medial; lateral line descending at first, then nearly parallel to the abdomen which is nearly straight; mouth very slightly oblique; green above, golden on the sides, silvery beneath; dorsal fin yellow, edged with black; pectoral yellow; ventral and anal white, tipped with vermilion; caudal pink in the centre, yellow externally; 45 scales along the body in 12 rows—6 inches long.

I procured a single specimen of this pretty fish in the Bhowany river near Matyopolliam.

I shall now give such of Sykes' fishes as appear to me to belong to this genus.

* *Leuciscus morar*. Buch.

Dorsal a little behind the centre of the back; with 10 rays, and 12 in the anal, edge of the belly smooth. Length $4\frac{1}{2}$.

Leuciscus landkol. Sykes.

Body nearly cylindrical, head gibbous; D. 12, a little before the centre of the back; eyes with narrow whitish sides, 10 inches long. In the Goreh river, at Kullumb.

Leuciscus chitul. Sykes.

D. 14, A. 8. Head rounded, body sub-cylindrical; reddish grey color; 5 inches long, height $1\frac{1}{4}$ inches.

In the Inderanee river near Chakur.

Leuciscus jorah. (Sykes.)

A *chela* with straight back, convex belly, dorsal far behind; size of a large minnow; with 10 rays in the dorsal, and 8 in the anal

fin. About 4 inches long; height $\frac{5}{16}$ of an inch. In the Beema river.

* *Leuciscus alkootee*. (Sykes.)

An elongated silver white, slightly compressed, minute *chela*, with the dorsal fin of 8 rays, very far back; anal about 10 rays; with burnished silver gill covers, and black orbits; rarely more than an inch long, and not much thicker than a good sized crow quill.

Gen. *Rhodeus*. Agassiz.

Body somewhat broad, compressed; dorsal medial.

Rhodeus Indicus. New Species.

Muzzle pointed, head 4 times in the length of body; profile of back angular, rising to the dorsal, falling thence to the caudal; abdomen arched; height $3\frac{1}{2}$ times in length; lateral line curving downwards; continuing only for about one-third of the body, as in the European *R. amarus*; about 50 scales along the sides in 16 rows, eye large, near the muzzle; green above, silvery beneath, a yellow streak along the sides, fins colourless; length about 3 inches, D. 2-7, A. 7.

I have found this curious species only in the Palghat river, in sandy bottom.

Rhodeus macrocephalus. New Species.

Nearly allied to the last; differs in its larger head, more fusiform body, gradually thinning from the pectoral fin backwards; head about $3\frac{1}{2}$ times in length of body; height the same; scales minute, lateral line interrupted, as in the last; eye large—D. 9, A. 7—green above, silvery beneath; length about 2 inches. Common in the Cavery and its tributaries, and in the Carnatic in tanks.

It is possible that this may be the *Leuciscus sulphureus* of Valenciennes which I have previously given as a *Systomus*, as he places it close to the *C. amarus*, but without giving the number of its scales, or any thing about the interrupted lateral line, and as he places near it another fish with large scales, it is impossible to be certain to what subdivision his fish belongs.

Gen. *Perilampus*. McLelland.

Body deep, compressed, dorsal behind, placed opposite a long anal; apices of jaws raised nearly to a line with the dorsum; ventral margin much arched.

Perilampus Malabaricus. New Species.

Head is nearly 5 times in total length; height of body is 3 times in the same; about 35 scales along the sides in 10 rows; lateral line parallel to the abdomen—D. 15, A. 17—green above, silvery beneath, sides blue with 2 or 3 longitudinal streaks, and several vertical streaks and spots of yellow; dorsal, anal and caudal, pink; the latter with the central rays blackish; pectoral and ventral fins colourless; length about 4 inches; common in all the streams of Malabar out of reach of the tides, taking both fly and bait readily. It is a very pretty fish, and appears closely allied to the *P. asteographus*, *P. perseus*, &c. of McLelland.

Perilampus Canarensis. New Species.

Very closely allied to the last, head larger, being about $4\frac{1}{2}$ times in length of body; height rather more than $2\frac{1}{2}$ times in the same; D. 15, A. 20. Color similar, to the last, but with the vertical streaks of yellow less developed, and the horizontal ones more so; dorsal fin greenish, tipped orange; anal and caudal yellowish orange, the former with a greenish mark on the base of central rays; pectoral and ventral fins greenish; about 3 inches long.

Found in the streams of Canara.

Perilampus Mysoricus. New Species.

Head $4\frac{1}{2}$ times in total length of body; height $3\frac{1}{2}$ times; lateral line bending down rapidly from top of opercule till on a line with the base of the pectoral fin; thence parallel with the abdomen—D. 11, A. 15—green above, silvery beneath; yellow and blue stripes on the sides. Dorsal, anal, and caudal fins yellow, tipped with orange; the caudal with the central rays yellow; pectoral and ventral fins colourless; usual length about $2\frac{1}{2}$ inches.

Found in the Cavery, and all its tributaries; most abundant, like the two last species, in the rapid mountain streams.

Perilampus macropodus. New Species.

Head small, recurved, $4\frac{1}{2}$ times in total length of body; height $3\frac{1}{2}$ times in the same; profile of back rising gently to the dorsal, falling thence to the tail; abdomen regularly arched—D. 9, A. 21. Pectoral fin long; ventral fin with the 1st ray larger than pectoral; green above, silvery beneath, fins yellowish; 2 inches long. I have only seen this little fish from the Cavery near its source in Coorg.

* *Perilampus teekasee*. (Sykes.)

A small *ohela* with nearly straight back, snout in continuation of line of back; belly arched—D. 10, A. 14. Length $2\frac{1}{2}$ inches, height $\frac{1}{2}$. In the Beema river.

Gen. *Pelecus*. Agassiz.

Body much compressed, elongated, belly cutting; dorsal opposite anal, which is longish; gape wide.

McLelland has placed the fishes of this genus among his *Opsarii*, but they are very distinct in general habit, structure, and mode of coloration, and are I think worthy of forming a distinct genus, which Agassiz assigns to them.

Pelecus cutellus. (Val.)

Head $5\frac{1}{2}$ times in total length of body, equal to the height of the body; eye one-fifth of head; profile slightly rising from the nape to the middle of the body, thence gently concave; abdomen slightly curved; lateral line very little bent, dorsal small, placed slightly in front of anal; pectoral large; ventral and caudal small—D. 9, A. 17—above 100 scales along the sides; greenish with a tinge of red above, silvery beneath; fins yellowish; 6 to 7 inches long.

Common in tanks and rivers in the Carnatic.

* *Pelecus clupeoides*. (Val.)

Head one-fifth of total length of body, equal to the height; eye rather large; dorsal with the 1st ray inserted, not far behind the middle of the back; lateral line concave; 70 scales along the body. $4\frac{1}{2}$ inches long.—D. 9, A. 14—from Mysore.

I am not acquainted with this fish, unless the following be identified with it.

Pelecus affinis. New Species.

Head about $4\frac{1}{2}$ times in the total length of body; height about $4\frac{1}{2}$ times in the same; eye one-fourth of length of head; profile of back slightly curved, similar to that of abdomen—D. 9, A. 15—scales small (apparently about 90 along the sides, but my specimens are nearly denuded); pectoral fin long, lateral line slightly concave; coppery green color above, silvery beneath; fins yellowish. Length about 5 to 6 inches. Found in tanks and rivers in Mysore and part of the Carna-

tic. Very similar in form and coloration to *P. cutellus*. It appears very similar to McLelland's *Opsarius leucurus*.

Pelecus flavipinnis. New Species.

Head $5\frac{1}{2}$ times in total length of body; height about $4\frac{1}{2}$ times in the same; eye nearly one-fourth of length of head; profile of back rising very gently from the nape, nearly straight afterwards; abdomen much arched; lateral line descending rapidly to near the ventrals, thence parallel to the abdomen, rising again when close to the caudal; hook on the apex of the lower jaw very prominent; from 60 to 65 scales along the sides—D. 9, A. 17—greenish above, silvery beneath, dorsal, anal and caudal fins white, edged with orange yellow; 6 to 8 inches long.

I have hitherto taken this fish in the Cavary only. It is very closely allied to Valenciennes' *Leuciscus novacula*, which however is from the north of India.

Pelecus diffusus. New Species?

Head $5\frac{1}{2}$ times in total length of body; height the same; eye large, barely one-third of length of head, profile of back perfectly straight, that of abdomen regularly arched; lateral line descending at first, afterwards parallel to the abdomen, but more distant than in the last species; about 50 scales along the sides, in 9 or 10 rows; green above, silvery beneath, with a bright yellow line intervening; dorsal, anal and caudal fins yellow, with black edging; other fins pale yellowish, pectoral fin not quite so long as in last; length 4 to 6 inches—D. 9, A. 17—found in the Cavary and all its tributaries, very abundant. Takes fly readily. Is somewhat allied to *Leuciscus* of Valenciennes, and also to *Opsarius pholicephalus* of McLelland, but appears to differ from both.

* *Pelecus acinaces*. (Val.)

Allied to *L. soapellus*; height of body one-fifth of total length; profile of back perfectly straight; eye $2\frac{1}{2}$ times in the length of the head which is 4 times in total length; scales very caducous—D. 9, A. 13—a silvery band separates the green of the back from the brilliant silver of the belly,—3 inches long. From Mysore.

This is very nearly allied apparently to the last, but appears to differ in its larger head, number of rays of anal fin, &c., and the number of its scales are not mentioned.

**Pelecus balookes*. (Sykes.)

A *chela* the size of a minnow; back straight; body elongated; dorsal fin situated far back, and having 8 rays, 14 in the anal, &c. length 3 inches. Common in all the rivers. Similar to the last.

**Pelecus Oweni*. (Sykes.)

"A *chela* with straight back, elongated and vertically compressed body; dorsal fin situated far back, with 11 rays, and 19 in the anal fins, with minute scales, 5 to 7 inches long. In most of the rivers." Is this *P. cultellus*?

Gen. *Opsarius*. McLell.

Mouth widely cleft; dorsal moderate, usually placed behind the middle; anal generally longer than the dorsal; lower margin of body more arched than the upper; usually marked with streaks or spots.

Opsarius bendelisis. (Buch.)

No cirri; head is three times and two-thirds in the total length of body; height 3 times; dorsal D. 10, A. 16; color green above, silvery beneath with 10 to 12 vertical blue streaks on the sides of the body; in old subjects the cheeks and abdomen become fine red; dorsal fin blackish, with a border of crimson, edged with white; anal the same, P. and V. with a reddish tinge; caudal black with a white margin; 40 scales along the body in 10 rows; up to 6 inches long. Found in the Caverry and all its tributaries; most abundant towards their sources in rapid streams. Takes fly very readily. In small specimens the stripes are green, and the dorsal (and sometimes the anal) are without any red. It is the *aguskitti* of the Seringapatam fishermen.

**Opsarius gatensis*. (Val.)

Body compressed, rather broad, abdomen much arched, height one quarter of total length, head 4 times and $\frac{1}{2}$ in the same; eye large, mouth much cleft; dorsal not very much thrown back, anal long—D. 10, A. 17—38 scales along the sides; lateral line bent; dark above, silvery beneath; sides traversed by 9 small vertical bands—3 inches long. From the streams of the western ghauts.

This fish is evidently an *opsarius*, and I cannot help thinking may be identical with *O. bendelisis*. The chief points of difference are the larger head of my species, 2 scales more along the side, and one ray

less in the anal. If distinct, it is probably from some of the streams of South Malabar, and I remember taking a fish in a stream at the foot of the Khoondah ghaut which appeared to be at first sight identical with *O. bendelisis*, and which circumstance surprised me not a little, as I had never seen that fish except in the tributaries of the Caverry: unfortunately my fish was destroyed by ants before I had thoroughly examined it.

Opsarius Malabaricus. New Species.

Head one-fourth of total length, height $3\frac{1}{2}$ times in length, profile of back similar to that of abdomen, gently arched; lateral line not much bent, dorsal with 1st ray inserted exactly in the middle of the body—D. 14, A. 16—40 scales along the sides in 13 rows; l. l. in the 9th. Dusky green above with crimson reflections, sides golden, with a row of 10 beautiful blue round spots; silvery on the cheeks and beneath; dorsal fin blackish, edged with bright orange, rays glittering small blue; caudal blackish, edged with white; anal as dorsal but with some white mixed with the orange; pectoral and ventral nearly colourless, with blue rays, and sometimes tipped with orange; 5 or 6 inches long, usually smaller.

This very beautiful fish is found in most of the streams that run from the western ghauts into North Malabar, not descending far from the base of the hills, and keeping chiefly to the streams. It takes fly very readily.

Opsarius Canarensis. New Species.

Head is about one-fourth of the total length, and the depth is two times and two-thirds in the same, eye large; lateral line gently bent; dorsal fin nearly medial; 36 scales along the sides in 10 rows—D. 12, A. 14—green above with purple reflections, golden on sides and beneath, with a double row of green spots on the sides; dorsal, anal, and caudal fins black at the base, white externally; pectoral orange tipped; ventral colourless—about 5 inches long. Found in all the streams that run from the ghauts into Canara. Takes the fly readily.

The two last *Opsarii*, and *O. bendelisis*, form a peculiar group marked, among other points, by the black stained fins. My next species differs much in form and habit.

Opsarius dualis. New Species.

Head $4\frac{1}{2}$ times in the length of body and height $3\frac{1}{2}$ in the same; eye small; profile of back barely arched to the dorsal; thence concave; that of abdomen regularly arching; dorsal fin behind the middle; 42 scales along the sides in 11 rows—D. 9, A. 10—green above, golden on the sides with transverse bars; silvery beneath; fins white, tipped with orange; all the scales with a small black spot on the middle—about 4 to 5 inches long. I have found this fish in tanks and the rivers at Coimbatour, and also in the river at Palghat. This is one of the few fish which I have found in rivers running both to the east and west coast, and it occurs just in that part of the country where the two districts are most nearly connected without the intervention of hills, viz., in the gap of Coimbatour. This is an interesting subject on which much speculation might be advanced, but it would be out of place here.

It is by no means a typical *Opsarius*, though its mode of coloration allies it to them, its mouth being much more horizontal; and it appears very closely allied to the *Leuciscus cocea*, (Buch.) which however is said to have 4 cirri, and moreover is from the north of India.

I procured some small specimens, about $1\frac{1}{2}$ inches long, of what I imagine is the young of this species, in a river in the Salem district.

Gen. *Aplocheilus*. McLelland.

Head flattened at the top, broad obtuse; intermaxillaries fixed; mouth large oblique; teeth large; dorsal fin behind, small; anal fin large; ventrals small.

Aplocheilus vittatus. New Species.

Head large, opercula somewhat scaly; profile of back straight; dorsal with a black spot at base, another on the opercula; olive brown above, silvery beneath; a series of vertical indigo blue bands on the posterior half of the body, 7, 8 or 9 in number; dorsal, anal and caudal fins blue spotted, and red edged; pectoral and ventral fins colourless; a silver spot on the occiput—D. 8, A. 17—up to $2\frac{1}{2}$ inches long. Found in ditches, ponds and rivers in Malabar. This and the other species of the genus are insectivorous, keeping almost entirely to the very surface of the water, and darting with great rapidity on any insects that drop into the water.

Aplocheilus rubrostigma. New Species.

A silver spot on the occiput; body rather more compressed than in the last, not much less in depth towards the tail than in front, dorsal with a black spot at its base; it, the anal, and caudal fins, pale sulphur yellow, red spotted; body olive green above, yellowish on the sides, and silvery beneath, with a series of longitudinal lines of red dots along the sides—D. 7, A. 14—ventral with the first very elongated, small. Length barely 2 inches. Still more common and abundant than the last in the same localities.

Aplocheilus affinis. New Species.

Very similar to the last; differs in the dorsal and caudal being nearly colourless unspotted, and the anal being unspotted orange, and having 16 rays instead of 14, being at the same time of less extent, body also not spotted. About $1\frac{1}{2}$ inch in length. Found in the same localities as the last.

Aplocheilus Carnaticus. New Species.

Abdomen more arched than in the three last species; body much narrowed behind; dorsal small, anal long; head small; yellowish green above, silvery on the sides and beneath; caudal edged with orange; dorsal and anal pale yellowish, with dark edges. Ventral minute—D. 8, A. 22— $1\frac{1}{2}$ inch long. I procured specimens of this minute fish in the river that passes by Waniambaddy in the Carnatic. It is very nearly allied in form, number of fin rays, &c. to *A. melastigma* McL., but that is said not to exceed an inch in length, and, being from Calcutta, is probably distinct.

Gen. *Cobitis*.

Body elongated, cylindrical, head conical, with a thick fleshy covering; snout fleshy with small cirri; mouth small; caudal entire, or slightly lobed.

Cobitis Carnaticus. New Species.

Caudal with small pointed lobes; head depressed, equal to the depth, and $5\frac{1}{2}$ times in total length; 6 longish cirri; dorsal rather in front of the middle; body olive green above, with dark blotches; dorsal and caudal spotted, the former yellowish, the latter reddish—D. 9, A. 6.

Found in sandy rivers in the Carnatic up to 3 inches in length.

Cobitis Mysorensis. New Species.

Muzzle rounded, head less depressed; 6 short cirri; greenish above with a few irregular dark spots—D. 8, A. 6—caudal, nearly square, barred, with a black spot at its base above. About 3 inches long. Found in the tanks and rivers throughout Mysore.

Cobitis rubripinnis. New Species.

Dorsal with 2 rows of spots, the lower ones red; caudal unspotted; of a reddish yellow colour, with olive green back, descending in pointed bars to middle of body—D. 9, A. 6—a black stripe on tail just before the caudal fin. Found in sluggish streams in Malabar. Caudal fin nearly square.

Cobitis montanus. New Species.

Head short muzzle raised rounded; dorsal long, with two rows of black spots, a streak of black at insertion of caudal; body reddish pink with 6 large greenish bands descending to the belly; caudal with two rounded lobes; about 2½ inches long. Found in a small stream in Coorg.

I believe that several other species of Loach exist in the South of India, but I have not materials at present for their description.

Colonel Sykes has several which I shall here give.

Cobitis Rüppellii. Sykes.

Nearly cylindrical, 2 to 3 inches long; lateral line marked with short brown bars, and rays of dorsal and anal fins similarly barred; D. 13.

From the Beema and Mota Mola rivers.

**Cobitis mooreh*. Sykes.

Smaller than the last, head more obtusely pointed; bars differently arranged—D. 12, A. 7.

**Cobitis maya*. Sykes.

"Differs from the first in having a spine under each eye, and in having a blunter head—D. 9. &c."

My species appear to belong to McLelland's subgenus *Schistusa* which has the caudal lobed.

Gen. *Platycaea*. McLelland.

Head flat with the eyes above; ventral fins large, rounded; body not compressed; caudal bifid, mouth beneath, (with short cirri,) small, without teeth.

Platycaea Australis. New Species.

Muzzle depressed, snout somewhat pointed; eyes approximated; body greenish with irregular spots and blotches of brown and red, and a series of white spots along the sides; fins greenish, tinged with sienna red and spotted; caudal with the lobes pointed, lower one much the longest; 4 minute cirri at end of snout, and 2 somewhat fleshy short cirri, one in front of and the other behind the mouth. Length about 2½ inches—D. 7, A. 6.

I procured a single specimen of this interesting addition to Indian Ichthyology in the small mountain stream that passes close by the bungalow in the Walliar jungle.

This concludes the numerous family of carps. Some of my supposed new species of *Aplocheilus* and *Cobitis* may have been described by Valenciennes in the 18th volume of the great work on Fish by Cuvier and Valenciennes which I have not myself yet seen.

Fam. *Siluridae*.

No true scales; body sometimes mailed; strong spines frequently on the dorsal and pectoral fins; 2nd dorsal (often) adipose.

Gen. *Silurus*.

One dorsal fin, small, advanced, not spiny; anal fin very long; cirri usually long; teeth fine, crowded.

Silurus ruallagoo.

Head about 5 times in total length; eye one-seventh of length of head, and with 5 diameters between them; muzzle depressed, parabolic; maxillary cirri reach nearly to the anal fin; lower cirri minute—D. 5, A. 92, to 93—caudal lobed deeply; the upper the lowest; of a leaden color throughout, darkest above; dorsal and caudal fins greenish dusky; pectoral, ventral and anal reddish yellow, the latter edged with dusky; up to 3 feet and upwards.

Found in the rivers and tanks throughout all the south of India. It is the *télé* of the Tamools.

It is much esteemed by the Natives and is by no means a bad fish. It is very voracious, and is often taken with a fish or frog for a bait. It is a sluggish fish in its habits, and when taken does not afford much sport to the angler. It may be considered as the pike of Indian fishing. If it is identical, as Valenciennes asserts, with Buchanan's *S. coalis*, that name will have the preference.

Silurus Mysoricus. Val.

Head about 6 times in total length of body; eye about $5\frac{1}{2}$ times in the length of head; height at the pectorals 5 times in its total length; caudal lobed, the lobes nearly of equal length, but the upper one the most rounded of the two; dorsal very narrow; pectoral spine moderate, smooth; maxillary cirrus reaches little beyond the pectoral; muzzle very obtuse—D. 4, A. 75.

Greenish above, iridescent on the sides and beneath; fins glossy. Length up to 12 or 14 inches.

Found in the Cavery and most of its tributaries; also in tanks throughout Mysore. It is most excellent eating. It is called *Godla* by the Canarese fishermen of Mysore.

Silurus Malabaricus. C. V.

Lower jaw much longer than the upper; pectoral spine of moderate strength, toothed—D. 4, A. 62-64—ending very near the caudal, which is deeply lobed; of a yellowish colour throughout, except on the abdomen which is white; fins edged with black; up to 12 or 14 inches long. I have only seen this *Silurus* from rivers in Malabar.

* *Silurus bimaculatus.* Bl., C. V.

Head equal to the depth at the vent, and $5\frac{1}{2}$ times in the total length of the fish; breadth of head two-thirds of its length; maxillary cirrus nearly $\frac{1}{2}$ the length of the body; inferior cirri short and slender; pectoral fin rounded—D. 4, A. 62-65—lateral line straight, 6 to 8 inches long.

The specimens whence Valenciennes' full description of this species is taken, were brought from Java. M. Valenciennes is inclined to identify it with the fish sent from Tranquebar and described under this name by Bloch. This is however, I think, very improbable, as so very few fresh water fish, common to the Peninsula and the isles, are at present known, and I should be inclined to imagine it either to

be *L. Malabaricus*, or an allied species peculiar to the Carnatic, if it was procured from that side of India.

* *Silurus pabo.* Ham. ? Sykes.

"Tail with two unequal lobes, both pointing downwards; 4 cirri shorter than the head, and 68 to 70 rays in the anal fin. Length 12-15 inches, height $2\frac{1}{2}$ to 3. Found in most of the rivers, differs slightly from Hamilton's *S. pabo*."

* *Silurus boalis.* Ham. ? Sykes.

"Fin of the tail with two unequal lobes; with 4 cirri, of which 2 extend to the middle of the fish; all the fins unarmed—D. 5, P. 15, V. 9, A. 84. Attains the length of 3 feet and the weight of 8 lbs. Found in the Mota Mola at Poona. Differs slightly from the *S. boalis* of Hamilton."

Gen. *Schillee.* Cuvier.

One dorsal fin, with the spine strong and toothed; body much compressed; anal fin rather long; teeth large.

Schillee Sykesii. New Species.

Head one-fifth of whole length of body; much compressed, its width being about half its length; eye large, being $3\frac{1}{2}$ times in the head; maxillary cirri reach the ventral fin, all the other (6) cirri longer than the head; dorsal and pectoral spines serrated, the latter strongly so; anal fin about one-third of length of body—D. 1-6, A. 36—colour greenish above, silvery on the sides and beneath.

I obtained some small specimens about 6 inches long in the Cavery, and I do not know to what size the species attains.

There is hitherto but one species of *Schillee* recorded from India, viz., *S. Garua* of Buchanan, from which my species differs in many particulars, more especially in the compression of the head, larger eyes, serrated dorsal spine, &c. &c.

Gen. *Bagrus.*

2d dorsal fin adipose; a double row of intermaxillary teeth; cirri, and relative size of adipose and anal fins, variable.

A. with 8 cirri.

* Adipose short and anal fin long.

Bagrus atherinoides. Bloch.

Head $6\frac{1}{2}$ times in total length; depth $4\frac{1}{2}$ times in the same; maxillary cirri reach beyond the ventrals; the others all longer than the head; eye small; dorsal spine finely serrated; pectoral spine with 10 or 11 strong teeth—D. 1-5, A. 36—reddish yellow above; white abdomen, and a broad silver streak from head to the tail; dorsal, pectoral, and ventral fins colour of back; caudal and anal pale yellow, the former with a black spot at its base—length about 4 inches.

I have obtained this pretty little fish from tanks in the neighbourhood of Madras. It does not appear to have been sent home by the French collectors.

**Bagrus goonguaree*. (Sykes.)

"An *Hypophthalmus* with 8 cirri, all longer than the head, but not extending to the middle of the fish; with 7 rays on the dorsal, and 52 in the anal fin; with an extremely minute second dorsal; first ray in the pectoral, and first in the dorsal, spinose, and serrated behind; greatest length 28 inches, body vertically compressed. Found in the Mota Mola near Poona."

I have not seen this fish which appears nearly allied to *Bagrus vacha* of Buch.

Bagrus taakree. (Sykes.)

"An *Hypophthalmus* with 8 cirri, 2 of which reach to the ventral fins, 2 very minute near the nostrils, and 4 in the chin, nearly as long as the head; with the first dorsal and pectoral rays serrated on the posterior edge, with 8 rays in the dorsal and 50 in the anal fin; length 9 inches, height 2 inches.

* * Adipose fin long, anal fin short.

Bagrus aorides. New Species.

Head is $3\frac{1}{2}$ times in the body, flat, depressed, narrow, its width being $3\frac{1}{2}$ times in its length, eye $4\frac{1}{2}$ times in the length of head, so situated that its posterior edge is more than half the length of the head from the muzzle; not quite one diameter between the two eyes; maxillary cirri long, reaching to the tail; posterior, lower cirri equal to the head; 2d dorsal spine with very fine serræ posteriorly, and 2 or 3 in front; pectoral spine strongly serrated posteriorly; adipose fin reaching from rear the 1st dorsal to beyond the posterior edge of the anal—D. 2-7, A. 12—length about 1 foot. Colour greenish, iridescent

above, silvery iridescent beneath; upper fins greenish, with a black spot on the posterior edge of the adipose fin (as in *B. aor.*); lower fins glossy.

I procured some specimens of this remarkable looking fish in the Caverry river at Errode. It is nearly allied to *B. aor.*; whence my name, but differs both from it and one or two allied species.

**Bagrus seenghala*. (Sykes.)

"A *Platystoma* with the tail fin crescent shaped, lobes unequal; with 8 cirri, 2 of which only are longer than the head, reaching to two-thirds of the length of the fish; the first ray of the pectoral fins serrated behind; head long, flat, spatulate, covered with a granulated long plate. Dorsal fin of 8 rays; high; ventral fins far back, of 6 rays. Grows to a great size; flesh heating and soft." I have very little doubt that this fish of Sykes is also closely allied to *B. aor.*, no Indian *Platystoma* being known at present.

* *Bagrus Cavasius*. (Ham. Buch.) C. V.

Head about one-fourth of length of body, dorsal spine one-third shorter than next soft ray, without teeth; pectoral spine strongly toothed, adipose fin reaching from the dorsal close to the caudal; upper lobe of caudal somewhat longer than the lower; maxillary cirri as long as body—D. 1-7, A. 11—from 4 to 6 inches long; light plumbaceous above; whitish or yellowish beneath; fins leaden; about 6 inches long. This fish is spread throughout all India from the north of Bengal to the south of the Carnatic, being found in rivers and tanks. I have not however as yet procured it from Malabar.

Bagrus keletius. C. V.

Nearly allied to the last; differs in the point of its occipital crest being longer and not so sharp, in its 1st dorsal fin being rounder, the trunk of the tail being higher; and its maxillary cirri only reaching to the middle of the anal—D. 1-7, A. 1-12, &c. I have procured this fish from Mysore.

Bagrus montanus. New Species.

Head about 4 times and one-eighth in the length of body; height 5 times in the same; eye about 4 times in the length of head and with $1\frac{1}{2}$ diameter, between them; maxillary cirrus reaches to the anal fin; 2nd dorsal about one fourth of total length; dorsal spine very slightly

toothed; pectoral spine with 7 or 8 strongish teeth on its terminal half; occipital spine very short, almost linear. Colour greenish above and on the fins; yellow on the cheeks and beneath; length about 6 inches.

I have only found it in the river at Manantoddy in Wynaad.

Bagrus Malabaricus. New Species.

Very closely allied to the last; differs in its head being slightly shorter, being nearly $4\frac{1}{2}$ times in the length of body, height much the same; pectoral spine with 15 teeth, maxillary cirri reach beyond the ventrals only—D. 1-7, A. 11—colours blueish leaden above, silvery beneath; fins yellowish. Habitat. Mountain streams in Malabar.

Bagrus vittatus. (Bloch.) C. V.

Head about 4 times in the length of body; height not quite so much; eye $4\frac{1}{2}$ times in the head, and with two diameters between them, occipital spine moderate, approaching to the dorsal, dorsal spine with 2 or 3 fine teeth in front and 7 or 8 very fine ones behind; pectoral spine, strong, flat with about 13 strong teeth; maxillary cirri reach to end of ventrals; adipose fin about $\frac{1}{2}$ of total length—D. 1-7, A. 10—colour coppery brown above, yellowish beneath, with two longitudinal whitish stripes on the sides of the body. Length about 4 inches.

I have only found this *Bagrus* in the neighbourhood of Madras where it is tolerably common. I think that it is most probably the species so named by Bloch, who received it from Tranquebar.

Bagrus affinis. New Species.

Very nearly allied to the last; differs in its more depressed head; eye if any thing, smaller; occipital spine more triangular; dorsal spine barely toothed; pectoral spine less strongly toothed, and only 12 teeth; broader; head, about $3\frac{1}{2}$ times in the body; maxillary cirri reach to the ventrals; colour pale blueish above, yellowish on the sides, whitish beneath; fins yellowish—D. 1-7, A. 9—length about 4 inches. I procured this fish from the neighbourhood of Madras. It may perhaps be Bloch's *vittatus*.

* * * With short adipose, and short anal fins.

Bagrus albilabris. C. V.

Head $4\frac{1}{2}$ times in length of body; height 5 times in the same; eye one-sixth of length of head, and 3 diameters distance between the two; dorsal spine moderately strong, short, toothed; first and se-

cond soft rays much longer, pectoral spine strongly toothed; adipose fin opposite the anal—D. 1-7, A. 14—maxillary cirri reach somewhat beyond the ventrals; olive brown above; yellowish beneath; lower fins tinged red—length about 5 inches.

I have procured this fish at Madras from the rivers and backwaters, living both in fresh and brackish waters. I do not think that Valenciennes' *B. fuscus* differs specifically from this. It is common in the rivers and backwaters of Malabar.

Bagrus punctatus. New Species.

Head one-fourth of body; height $4\frac{1}{2}$ times in the same; eye 7 times in the length of head, and with 4 diameters between the two eyes; occipital spine ends in a narrow line; dorsal spine, weak, not toothed; pectoral spine serrated, of no great strength; maxillary cirri reach to end of ventrals, other cirri all shorter than head; adipose fin nearly two-thirds of length of 1st dorsal—D. 1-7, A. 12—colours pale olive above, yellowish on the sides, and white beneath; a row of black spots along the sides; lower fins yellow. Length up to 18 inches and more.

This fish, which is considered good eating, is found in the Cavery and its principal tributaries, not descending however to any great distance.

Bagrus oculatus. C. V.

Eye one-third of length of head, and with only one diameter between the two, maxillary cirri beyond anal, adipose fin about equal in length to the anal; green above, whitish beneath, fins edged with black; 3 inches long—D. 1-7, A. 12.

I have only procured this *Bagrus* in the river that runs near Palghat in South Malabar.

Bagrus agricola. New Species.

Head 4 times in length of body; eye 4 times in head and with two diameters between the two; dorsal spine short, very finely toothed; pectoral spine strong with large teeth—D. 2-7, A. 10—maxillary cirri reach the ventrals. Length 2 inches; colour greenish leaden above, whitish beneath.

I found this small *Bagrus* in ditches and inundated paddy fields in the Wynaad.

B. with 6 cirri. •

Bagrus? kuturnee. (Sykes.)

"A *Phractocephalus* with 6 cirri, 2 of which only are longer than the head; the first pectoral spine serrated on both edges; the 1st dorsal spine on the posterior edge only; these two spines ending in a filament; the shoulder bone elongated into a point behind; greatest length 6 inches; dorsal fin of 7 rays, pectoral of 9; ventral fin small, of 7 rays; second dorsal replaced by a small adipose fin."

I have placed this fish, described by Col. Sykes as a *Phractocephalus*, among the *Bagri*, but with great doubt, as I do not find any *Bagri* with 6 cirri to be true fresh water fishes.

Gen. *Pangasia*.

4 short cirri; 10 branchial rays; anal fin rather long; adipose small; head depressed.

* *Pangasia? gogra.* (Sykes.)

"A *Phractocephalus* with 4 shortish cirri, the plates of the shoulder elongated into acute, angular, broad spines, with a dorsal fin of 8 rays, first ray a bone, serrated behind; pectoral fin of 10 rays, the first ray a broad compressed bone, serrated on both edges; head flat and broad; second dorsal small fleshy, size 6 inches, but grows larger."

I have placed this fish of Col. Sykes' list as a *Pangasia* with the characters of which it appears to correspond better than those of any other Indian Genus.

Gen. *Silundia*. Val.

Head small, smooth; adipose very small; anal fin long; 2 very minute cirri.

* *Silundia Childreni.* (Sykes.)

"An *Ageneiurus* without cirri, with the first ray of the dorsal and pectoral fins serrated on the anterior edge only, with 8 rays on the dorsal and 42 in the anal fin; with two sharp lobes to the tail, the upper being somewhat the smallest. Length of fish 18 inches; height $4\frac{1}{2}$ inches, but grows to a larger size. Second dorsal adipose, minute."

I have very little doubt that this is a true *Silundia*, and perhaps the *S. Gangetica*, though Sykes says there are no cirri, for it appears

that the 2 small cirri which are present in that fish are made out sometimes with difficulty.

Gen. *Pimelodus*.

Palate without teeth; maxillary cirri (often) thick, fleshy; otherwise similar to *Bagrus*; frequently marbled or blotched.

* *Pimelodus Yarrelli.* (Sykes.)

"A *Bagrus* with the first rays of the pectoral and dorsal fins terminating in long fleshy tendrils and serrated behind; with 8 cirri, two of which are as long as the head, thick, fleshy, and being lateral elongations of the upper lip; other cirri very short, head broad, covered with a granulated bony plate; the fish olive brown, marked with black blotches like a Dalmatian dog; 2d dorsal fleshy, triangular. Length 18 inches, but attains a very great size; body not vertically compressed. Found in the Mota Mola at Poona."

Seems nearly allied to *P. bargarius* of Bengal.

Pimelodus lonah. (Sykes.)

"A *Bagrus* with 8 small cirri, flat, granulated head; first dorsal of 7 rays, and pectoral of 10 rays, the first ray of which is furnished on the posterior edge with long sharp teeth; anal fin of 10 rays; 2d dorsal of a triangular form, fleshy; something resembling the preceding in colour."

Pimelodus itchkeea. (Sykes.)

"A *Phractocephalus* with 8 cirri, 2 of which from the upper lip extend to the end of the pectoral fins; the other 2 very minute, with the 4 on the chin nearly as long as the head; with the 1st ray in the pectoral fins only serrated; with 8 rays in the dorsal and 12 in the anal fins; with a sharp prolongation of the scapula. Fish handsomely marked on the back with dark colours; length 2 inches."

Pimelodus Carnaticus. New Species.

Head broad, muzzle blunt, eye small, situated far back; dorsal spine smooth; pectoral spine strongly toothed; maxillary cirri barely as long as the head, all the others short, slender—D. 1-6, A 12—colour yellow ochre, blotched and marbled with brown about 4 to 5 inches long.

I have only found this curious fish in the Bowany river. It is said not to exceed 6 inches or so in length.

Gen. *Clarias*.

Dorsal fin single, very long; caudal fin rounded; eyes small; anal fin long.

Clarias marpus. C. V. *Marpoo*.

Russell, 168.

Head one-sixth of total length; sides of head but slightly arched; casque very rough; maxillary cirri reach to the end of the pectorals—D. 68, A. 48—up to 1 foot long. Colour purplish black or brown, paler beneath. Found in rivers and tanks throughout the country. It is called *yerri valé* in Tamool, and is said to be good eating.

* *Clarias magur*. Buch. Ham.

Sides of the head more convex than in the last, giving it a broader head; casque smooth; pectoral spine almost smooth—D. 70, A. 52—up to 12 inches.

Said to have been brought from Malabar as well as from Bengal where it is very common.

Clarias Dussumerii. C. V.

Head as in the last, pectoral spine distinctly toothed; blackish green above, grey beneath; 7 to 8 inches long—D. 69, A. 50. Found in tanks and ditches in Malabar.

* *Clarias batrachus*. Bloch.

Maxillary cirri reach the ventrals, and lower cirri the pectorals; covered with white spots—D. 67, A. 45—said to have been brought from Tranquebar, where it is called *tali*. It is most probably *C. marpus*, badly delineated.

Gen. *Saccobranthus*. Cuv.

A single small dorsal; anal fin very long; all the cirri moderately long; eye minute; tail rounded, distinct from the anal.

Saccobranthus fossilis. (Bloch.)

S. singio. Buch., Cuv.

Very deep chesnut colour, almost black—D. 6, A. 74—up to 1 foot long. Found in tanks and ditches all over the South of India.

I possess a drawing of a species of *Plotosus* of a dark chesnut or maroon colour throughout, which, I was told, at the time, was a fresh

water fish, but I have not had an opportunity again of verifying this. It is however quite possible, as Bengal possesses one or two fresh water *Plotosi*.

Fam. *Clupeidae*.

Dorsal fin single, central; mouth small oblique; teeth minute; body compressed, aperture of gills large; scales large deciduous.

Gen. *Notopterus*. Lacep.

Ventral fins minute; dorsal fins small, nearly central; anal very long, united to the caudal.

Notopterus kapirol. Lac.

I have only observed one species of this genus in South India which I presume to be the one named as above, but as I have no access to any description of the species shall not attempt to characterize it.

Colonel Sykes has one species of this genus which he has named *Mystus badgee*—D. 8, A. 105—length 11 inches, height 3; all his other characters are generic, so that it must remain at present uncertain if his species be identical, or not, with the one of S. India.

Gen. *Butirinus*. Commerson.

Body lanceolate, not much compressed; belly rounded, smooth; dorsal and anal fins both short; ventral under the dorsal; jaws and tongue armed with numerous fine teeth; those in the palate blunt.

Butirinus argenteus. Forster, Bloch.

Head about $4\frac{1}{2}$ times in the whole length of body; eye near the muzzle; and elongated scale at the base of the dorsal (on each side), pectoral and anal fins; and 2 at the base of the caudal; green above, white beneath, the whole fish silvery; fins glossy; up to 3 feet long, about 82 scales along the sides in 22 rows—D. 14, A. 8.

I have hitherto only seen this very handsome fish in a fresh water tank at Coondapoor in North Canara. They abound here, and are supposed to have been introduced by Hyder Ali.

At present they are protected by the officers of government from being caught by any one, but a stranger passing through the place is permitted, on his requisition to the authorities, to have a fish hunting, which takes place in this wise. A line of boats is formed at one end of the tank (which may be about 250 yards long by 150 broad) and a long deep net is carried along the line of boats pulled at either end

by a few men on shore. This net is gradually pulled towards the spectator, the line of boats advancing slowly along, and now and then a fine fish is seen jumping out of the water—when half the tank is drawn and the fish consequently are accumulated towards the hither end of the tank, they begin to attempt to force the line; many succeed by jumping over the net, held as high as the fishermen's hands can reach; some come plump upon the fishermen and knock them over, making their escape thus; and others are caught by the net and fall into the boats where they are quickly despatched. It is indeed a most curious sight; 40 or 50 fish, many of them of large size, being often seen in the air at once. It is not uncommon for 50 or 60 fish from $1\frac{1}{2}$ to 3 feet long to be taken at one haul. The flesh, to the taste of a European, is rank and disagreeable, but the natives esteem it most highly as a restorative and aphrodisiac. It is called *Poo meen* by the natives.

Butirinus Maderaspatensis. New Species.

Palap Contah, Russell 207.

Head one-fourth of whole body; no elongated scales at base of dorsal, anal or caudal fins; 75 scales along the sides in 21 rows; body deeper than in the last; green above, white beneath, silvery throughout, fins tinged with yellowish—D. 14, A. 8, &c.

I possess some small specimens of this fish which appears to differ from the west coast one described above. It was procured at Madras from tanks, I was informed, but I believe it is chiefly an estuary fish. It is called *moram kendé* at Madras.

Gen. *Megalops*. Lac.

Mouth very oblique; body moderately compressed; eye very large; dorsal and anal fins falcate.

Megalops filamentosus.

Kundinga. Russell, 203.

Head $3\frac{1}{2}$ in length of body; eye 3 times in the head; last ray of the dorsal prolonged to a filament; 40 scales along the lateral line in 11 or 12 rows—D. 19, A. 25—up to 2 feet and upwards.

This is chiefly an estuary fish, but it is to be found in many tanks of fresh water on the Malabar Coast; introduced, I suppose.

I have taken it with fly, from a small stone built tank at Mahé, upwards of two pounds weight.

Gen. *Alosa*. Cuv.

Mouth moderately large, upper lip notched; dorsal medial; anal moderately long.

Alosa palasah. Cuv. Probably the same as *Clupanodon ilisha*, Buch., and *Clupea Indica* of Gray, Hardwicke's Ill. Ind. Zool.

Palasah. Russell, 198.

I have every reason to believe that this is the so called sable fish of Trichinopoly, which ascends the Oavery during the freshes for the purpose of spawning, and is caught for the sake of its roe, which is highly esteemed.

It is called *Oolan-min* at Madras.

Another small clupeoid fish is sometimes taken in ponds and ditches in Malabar during the monsoon. It is closely allied to the *Clupanodon chachunda* of Buch. Hamilton.

I have no specimen at present to describe it from.

Fam. *Esocidae*.

Dorsal fin single, near the tail; mouth large; teeth numerous, large, acute.

Gen. *Belone*.

Body linear sub-cylindrical; jaws excessively long, pointed, with acute teeth; scales minute.

Belone Graii. Sykes.

Tail nearly square; head is two and a half times in the body; dorsal fin about 6 times in the length—D. 16, A. 17—Pale green above, with a tinge of fine red on the back, silvery beneath, caudal reddish—length up to 14 inches.

This fish is found in most of the rivers of the west coast up to the base of the mountains. It is very voracious, and devours large quantities of the little *Aplocheili*. I cannot be certain if it is Sykes' species or not. He says of his, "D. 16, A. 16—closely allied to *E. canila* of Buchanan, Hamilton."

ORD. *APODES*.

Fam. *Muraenidae*.

Body serpent like; scales very minute, enveloped in a mucous skin; no ventral; branchial spiracles two, lateral.

Gen. *Anguilla*. L.

Dorsal, anal and caudal fins united into one; pectorals oval; spiracles placed just beneath the base of the pectoral.

A. bicolor. McLelland?*Chemlooo pamoo*, Russell, pl. 31.

I have not a specimen of the common eel of the south of India by me at present, to compare with McLelland's description of his fish which was from Arracan. He suggests that it may be the same as Russell's species, but I should think this very doubtful. Our eel is not a very common, nor abundant fish, being found chiefly in large tanks, and deep holes in the larger rivers. It is of a dark olive colour above, yellowish beneath, length up to 4 feet. It is very good eating. It is taken in nets, or by a night line.

I add McLelland's description of his Malay fish, so that any one who has the opportunity may compare our fish with it. "The dorsal occupies rather more than half the entire length, and commences exactly over the anus. The jaws are depressed, the upper rather shorter, and narrower than the lower jaw. The breadth of the head about equal to that of the body. The distance from the base of the pectorals to the end of the nose, equal to one-third of the interval from the nose to the commencement of the caudal. The teeth are fine, like the pile of velvet, consisting of a broad band on either side of the jaws, and another on the lower. The fin rays are,

P. 18, D. 245, A. 221.

The colour above is dark olive green or brown, and white below. One of the specimens examined was about 2 feet in length.

* *Anguilla Elphinstonei*. Sykes.

"An *anguilla*, with the lower jaw the longest; with the back, tail and anal fins united, and with a broadish, flat head; body dark green, blotched with black; with 2 short tubular processes, one on each side of the upper jaw. Attains the length of 3 feet, and diameter of 3 inches."

This description is insufficient to distinguish it very exactly from other allied species.

III.—Remarks on the Word *Tersai*. By MR. SAMUEL MARCAR.

[We have much pleasure in giving insertion to the following philological observations of a young Armenian friend who has diligently devoted himself to the study of his national history and literature; both on account of its general interest in connection with the ancient people to which it refers, and of its particular bearing on the Syrian Sasanians which were so ably expounded by Dr. Gundert in our 14th vol.]

In the thirty-second number of the *Madras Journal of Literature and Science*, an extract is inserted at page 199 from the letter of the Rev. Dr. Gundert, respecting the name *Tarsa*, which is said to signify a "Christian" in the Persian language. This word occurs likewise in the forms of *Tersai* and *Terzai* in several productions of early times. Various explanations have been offered by learned writers regarding the origin and signification of that epithet: the subject on the whole leads to interesting historical and philological inquiries. I trust, therefore, I shall be excused, if I produce in this place, some passages out of those authors, in reference to the present purpose, accompanying them with a few cursory remarks of my own, by way of illustration.

In a book printed at Rome in 1618 under the title of "*De Christiana Expeditione apud Sinas*"—a compilation from the *Memoirs* or *Commentaries* of Father Matthæus Ricci, a Jesuit, who visited China about the year 1600—the word *Terzai* is found as an appellation given to Christians. The editor of that work, one Nicholas Trigautius, or Trigault, a Dutchman, in speaking of the religion of the Chinese and of the introduction of Christianity among them, has the following curious particulars. "*Saraceni porrò Crucis adoratores præter vulgare gentis vocabulum, quo Christianos omnes ~~Tai~~, id est, Jesuinos vocant, etiam in hoc regno antiquos illos Crucis professores *Terzai* appellant, cujus appellationis causam nescio, nisi quod ex Armenio quodam audivi, Armenios Christianos in Perside eodem nomine nuncupari. Unde fortasse conjicere licet hos Crucis veneratores ex Armenia originem traxisse, et ab occasu variis fortasse temporibus, et eo maxime quum Tartari magnis exercitibus in Sinarum regnum irrupissent, penetrasse, quo etiam tempore Marcum Paulum Venetum constat huc pervenisse.*" A distinguished oriental scholar of Germany, Andreas Muller, in an ingenious *Disquisition* "*De Chataja*," appended to his edition of Marco Polo and Haithon, Berlin, 1671, has investigated the source of the appellative *Tersai*, with great erudition and research. He ascribes, with Trigautius, the employment of that term to Armenian medium, and adduces sundry

proofs in corroboration of his sentiments. The subjoined extract from the above mentioned Essay (p. 89,) relates to the word under consideration. "Longè plures verò et passim in *Tartaria* vicinisque regionibus reperti sunt Christiani. *Armenorum* etiam studium, quod *conversioni Tartaros* impenderint, imprimis commendatur. Christiani etiam, qui ibi locorum degebant, Armenorum propagines fuisse videntur. Communiter enim *Crucis adoratores* vocabantur, et Rex gentis, quem Presbyterum Johannem vulgò vocant, (Arabice) *Prestar Chan*, hoc est, *Adoratorum Imperator*. Armeni vero ab olim *Chazinzanii* dicti sunt, hoc est, *σταυρολάτραι*. Vide not. meas ad *Aziz. num.* 24 et ad *Ep. Mosis Mardeni p.* 17. Certum est Christianos illos *crucem* imprimis (neglectis Imaginibus aliis, *Cadamustus, c.* 133) veneratos esse. a—Tonsura Catholici Armeni in formam crucis est. *Cadam. l. c.* b—Insigne labari Najamici crux erat. *Marc. Paul. Ven. II. 4. c.*—Solebant etiam *Staurolatræ* in *Sinis* crucem digito signare cibum potumque usurpaturi. *Trig. è Riccis ore.* Hi verò in *Sinis Tersai* à Saracenis vocabantur. *Trig.* Eodem nomine, quo Christiani Armeni in Perside appellabantur, Armeno quodam, quem Trigautius laudat, teste. Indeque Trigautius colligit *Crucis adoratores ex Armenia esse, cumque Tartaris in Sinas irrupisse.* Qui cum causam appellationis nescire se fateatur. Vide *sis not ad Azizum. num.* 14." I am sorry that I do not possess the work of Muller referred to at the end of the foregoing citation. A different construction of the subject, however, is adopted by the learned Syro-Maronite, Joseph Simon Assemanus. In the fourth volume of his laborious compilation, the "*Bibliotheca Orientalis Clementino-Vaticana*," he has examined the question in a detailed form. After a lengthy analysis of the authorities, he comes to the conclusion, against Trigautius, that the origin of Tersai is either Persian or Arabic, not Armenian, and that the term was applied to Syrian-Nestorians, not to Armenians. These are his words:—"Christianos in Sinarum regno Syros Nestorianos fuisse, non Armenios, neque ex Armenia, sed partim ex Assyria et Mesopotamia, partim ex Sogdiana, Bactriana et India illuc convolasse, eo maxime tempore, quo Tartari in illud regnum invaserunt." (p. 519.) Not to multiply instances;—a modern scholar, the Rev. Samuel Lee, Arabic Professor at Cambridge, makes an allusion to this affair in a note to his translation of the "*Travels*" of Ibn Batuta. He draws his materials from Assemanus, and proceeds to observe (p. 217) that the word Tersai, "according to Trigautius, must be either Arabic or

Persic, not Armenian." The quotation from Trigautius, inserted above, does not justify such an interpretation: that writer merely remarks, that he is ignorant of the cause of the appellative Tersai, but inclines to believe, on satisfactory grounds, in its connexion with the Armenian; since he was informed by a certain Armenian, that in Persia the Armenian Christians were styled by that name. Besides this, no mention whatsoever, either of Arabic or Persic, occurs in the whole passage out of Trigautius. The statement of the Professor is, therefore, inaccurate; as he attributes to Trigautius an expression, which belongs properly to Assemanus. By an oversight alone of Mr. Lee the error could have escaped detection.

In the next place, the origin and signification of the name demand some attention. There is every reason to suppose that Tersai is a compound word, formed of *Ter* and *Isai*—the *I* being dropped in the coalescence. Assemanus, no doubt, was well aware of this combination; but he has only explained the latter term *Isai*, which he says denotes something belonging to Jesus, in the Persian and Arabic languages. With regard to the prefix *Ter* he has preserved an unaccountable silence: evidently not having found a homophonous word in either of those tongues to suit the purpose. His favorite Syriac failed likewise to help him in the present emergency. Were I permitted to hazard an opinion in this case, I would assign the derivation of the term to Armenian, in which language *Ter* signifies Lord. The appellation Tersai then would be equivalent to "Lord-Jesusites," and the Saracens or Mahomedans might very appositely call the Armenian Christians by that name, since to this day the expression *Ter-Iesous* is extensively used by the Armenians. I am uncertain, how far the explanation now given will prove acceptable to the philologists in general; but, without such an assumption, the difficulty can scarcely be remedied, or, at least, the subject be reduced to a reasonable meaning. Whilst upon this inquiry, I may notice the great similarity existing between *Chazinzanii*, by which the Armenians were denominated by the Tartars, according to Muller, and the Armenian word *chatch* or *khatch*, a Cross, with its derivatives—answering to the Greek *Staurolatræ*. This explanation derives further support from the "*Historia Chatsitzariorum*," written by Demetrius Cysicienus, who flourished about the eleventh century. See Cave, *Historia Literaria*, vol. II. Dissert. I. p. 6.

The objection of Assemanus against the intercourse of Armenians with China ought to be admitted with some restriction. It is true

numerous records are extant to the effect, that Nestorian Missionaries have, in early ages, settled in that region, where they appear to have propagated the doctrines of their sect, with varying results. The monument of Siganfu, illustrated by Kircher, Assemanus, Bayer and others, presents a history of the fortunes of the Syro-Sinic Church. But that fact, by no means invalidates the question about the word *Tersai*. According to the testimony of Trigautius, the appellation was originally employed by the Saracens to designate Armenian Christians, and afterwards introduced by the Tartars among the Chinese, at the period of their settlement in that region. The term, moreover, can lay no claim to be considered as originating from the Chinese; for, we are informed by the same writer, that in the language of the "Celestial empire," the Christians were styled *Hoei*—a circumstance remarked by Muller, Assemanus himself and others. Concerning the relation of the Armenians with the Persians, Saracens and Tartars, proofs are in existence, which strongly and irrefragably bear out the point. As early as the fifth century the Armenians engaged in religious warfare with the Persians on account of the faith of Christ. A minute and faithful narrative of the whole transaction has been transmitted to us by Elisæus, Bishop of the Amatunians, an English version of which, made by Professor Neumann, was published by the Oriental Translation Committee in 1830. The subsequent history of Armenia presents a series of struggles or perpetual hostility with the Moslem powers for the protection of the Christian religion. The commendable spirit of the Armenians in refusing to accept the Koran, has subjected them and their country to miseries and devastations from the fanatical followers of the Prophet of Mecca. And who, but the Saracens, could admire their courage in the cause of their God, and style them with propriety the true believers of the Lord Jesus—*Tersai*. Under the descendants of Genghiz Khan, the state of things improved, only at times. According to Haithon (*Historia Orientalis, sive de Tartaris, c. xxiv.*) Mango Khan became a convert to Christianity, and received baptism at the hands of an Armenian Bishop. Many nobles followed the example of their king, and thus encouragement and support were extended to the Armenian persuasion. The visit of Hethum I., prince of the Cilicio-Armenian kingdom, to the great Khan of Tartary, the said Mango, in 1254, procured considerable immunities to the Christians of Armenia in general. A contemporary historian, Kirakus Ganzakensis, has given an interesting account of the progress of Hethum, which has been

translated into French by M. Klaproth, and inserted in the "*Nouveau Journal Asiatique*" for the month of October, 1833. This mission of the Armenian king is likewise mentioned by an anonymous Syriac writer in the continuation of the Chronicle of Gregory Bar-Hebræus or Abulpharagius (apud Asseman. vol. IV. p. 125.) We are informed by William de Rubruquis, the Minorite Friar, whom Louis IX. king of France, sent on an embassy into Tartary, about 1253, that he found several Armenian priests in the retinue of Mango Khan near the Chinese frontier. From these testimonies, there is reason to infer that Armenian Christians penetrated into China during the invasion of the Tartars. Many valuable particulars in further illustration of this matter are contained in the productions of early writers; such as Vincentius Bellovacensis (*Speculum Historicum*), Marinus Sanutus (*Secreta Fidelium Crucis*), S. Antonius Florentinus (*Summa Historialis*) and others. In conclusion, it seems very evident that *Tersai* is a word compounded from the Armenian *Ter*, and the Persian *Isai*, and that the term was employed by the Persians and Saracens, in direct reference to the Armenian Christians.

IV.—NOTICES.

Effects of Lightning.

On the morning of the 4th April 1848, between 3 and 4 o'clock, a bungalow at Palaverain, occupied by Assistant Apothecary Yaul, was struck by lightning. The electric fluid appeared to have entered through the roof, the tiles being perforated and the palmira rafters splintered. Its course continued half way down the wall marking its way by a deep fissure, whence it spread itself, injuring the globe lamp and extinguishing the light. The table underneath was damaged, and its legs, which were attached by iron hinges, likewise injured. The fluid was then traced in an opposite direction, having passed through an open door leading to a bed room, within which Mrs. Yaul and three children were sleeping. The door was split from top to bottom along the frame work near the hinges, the floor damaged in several places, and part of the plaster removed from the wall. Near this place, opposite to the bed, hung a pair of pistols and flask containing a few ounces of powder, which exploded, driving the head of the flask to the opposite side of the room, which was indented, and rebounding, fell near Mr. Yaul's head, between whose pillows it was found. The stocks of both pistols were somewhat injured, and the

silver ornaments upon them slightly melted: the fluid then made its exit through the venetian of a window near. A relation of Mr. Yaull, and who occupied a bed in the hall, was awake at the time, and temporarily paralyzed, and for some time after his memory was confused. The fragments of the powder flask and the perforated tile are deposited in the Polytechnic Institution.

Phosphorescence of the Sea.

Letters from Aden mention a singularly striking manifestation of luminousness on the sea observed by the passengers by the *Moozuffer* on the 23d January, 1849, when about half way to Aden. The surface of the water at once became smooth and glassy, as if oil had been poured on it,—and was overspread with a sheet of pale greenish light as far as the eye could reach. The steamer lost speed, and masses of sea-weed were seen floating in all directions around. The thin clouds on the horizon reflected back the light, presenting an appearance similar to that witnessed in northern latitudes when the Aurora fills the air.—*Bombay Telegraph, January, 1849.*

V.—PROCEEDINGS OF THE MADRAS LITERARY SOCIETY AND AUXILIARY OF THE ROYAL ASIATIC SOCIETY.

At a Meeting of the Managing Committee of the Madras Literary Society and Auxiliary of the Royal Asiatic Society, held at the Club House on Tuesday, the 7th September, 1847, at 7 o'clock P. M.

PRESENT.

Chairman.

WALTER ELLIOT, Esq.

Member.

J. OUCHTERLONY, Esq., and

Captain J. J. LOSH, *Secretary.*

Read Extract from Minutes of Consultation in the Public Department, No. 822, dated 4th September, 1847.

PUBLIC DEPARTMENT.

No. 822.

Extract from the Minutes of Consultation, dated 4th September, 1847.

Read the following letter from the Secretary to the Madras Literary Society, and Auxiliary of the Royal Asiatic Society.

Here enter 26th August, 1847.

The Government have no objection to the publication in the Society's Journal, of Reports of a scientific character, selected from the records of Government, and from those of other public offices, as proposed by the Society, to a limited extent, and submitted, in the first instance, to the Government; but, before engaging to incur any expense on this account, they request to be furnished with the statement proposed to be submitted in the concluding para. of the foregoing letter.

(A true extract.)

(Signed) J. F. THOMAS,

Chief Secretary.

To

*The Committee of the Madras Literary Society
and Auxiliary of the Royal Asiatic Society.*

I. *Resolved*.—That inquiry be made as to the probable expense of printing the paper regarding the gold mines in Malabar, revised by the Chairman of the Committee, in the forthcoming number of the Society's Journal; and that, as soon as the required information on this point is obtained, the paper be forwarded for the perusal of Government, with the statement called for: further, that it be intimated that the Committee propose, also, to publish the Report of their Sub-Committee on the collection of Native MSS. in the Society's charge, which was forwarded to Government in January last, and that permission be solicited to submit to the Civil Auditor, periodically, bills for the cost of printing the above, and other Government papers, in the Society's Journal.

Read letter from the Senior Secretary to the Asiatic Society of Bengal.

To

The Secretary to the Madras Literary Society.

SIR,

I have the honor to enclose the receipt held by this office for the parcels containing the books referred to in your letter of the 25th June, and which were duly forwarded to you by the Steamer "*Bentinck*," on her June voyage.

I have, &c.

ASIATIC SOCIETY, }
6th August, 1847. }

(Signed) W. B. O'SHAUGHNESSY,
Senior Secretary Asiatic Society.

The Committee observe that the parcel adverted to has been duly received, and that, as expected, its contents were found to be the Academic publications of the Royal Bavarian Academy, mentioned in the letter from the Secretary to that Institution, dated Munich, 10th May, 1846.

II. *Resolved*.—That the publications in question be deposited in the Library, and included in the next catalogue.

* Dated 31st July, 1847. Read letter * from Messrs. Thacker and Co., Calcutta, forwarding a statement of their account, amounting to Rupees 106-8, and requesting an order for the amount.

The Committee observe that the former statement of account, referred to by Messrs. Thacker and Co. as rendered on the 20th May last, was forwarded, according to its address, to Assistant Surgeon Jerdon.

III. *Resolved*,—That this be intimated to Messrs. Thacker and Co., and that they be requested to forward a statement of the items of their account, to enable the Committee to judge if any of them are chargeable to the Society, or if the whole, as before supposed, is a private account with the late Secretary Mr. Jerdon.

MEMO.

Of a Copy of Blackwood's Magazine for June, 1847, which was first circulated to Lieut. Colonel Pratt, C. B., second to Captain Biden, and third to Captain J. J. Losh, pages 703 and 704, and pages 727 to 730 have been torn out.

In the Journal of the Asiatic Society of Bengal for May, 1847, pages 401 to 408, inclusive, are wanting.

The volume of "Maxwell," herewith sent, was returned to the Library by G. F. Fullerton, Esq., in its present condition, with pages 15 and 16 missing. On the book being sent back to Mr. F. he sent the accompanying note.

Laid on the Table 19 of the printed notices recently issued by the Committee, on the subject of the Society's Journal, which have been returned from stations in the Mofussil, with lists of new Subscribers to the Journal; and also a general list of the old and new Subscribers, the latter amounting to 54 according to the last received accounts.

Read letters from Messrs. Wm. H. Allen and Co., dated 17th and 19th July, 1847, advising the despatch of books per "*Wellesley*," and of periodicals per Steamer for the Society.

V. *Resolved*,—That the receipt of these letters and of the periodicals alluded to, be acknowledged, and that they be requested to send out the following works for the use of the Society.

Guizot's History of Civilization, 3 vols.

McCulloch's Account of the British Empire.

Schlosser's History of the 18th Century, translated by Davison, 4 vols.

The Commissioner De Lunatico Inquirendo, 1847.

In conformity with the 7th Resolution at the Meeting on the 8th December, 1846, a Memorandum of the sums received on account of sub-

Read Memorandum from the Librarian.

IV. *Resolved*,—That the Secretaries to the Asiatic Society of Bengal be requested to forward the deficient leaves of No. V. (new series) of the Society's Journal; and that Mr. Fullerton and Captain Biden be applied to, with reference to the 3d Rule for the Library of the Society, which must be enforced, unless a satisfactory explanation be furnished.

scriptions to Nos. 30 and 31 of the Society's Journal, since the last Meeting, is laid on the table.

Memorandum.

Subscriptions to the Journal, Nos. 30 and 31, have been received from the following Gentlemen since the last monthly Meeting of the Committee, held on the 3d August, 1847.

A. Hamilton, Esq., Nos. 30 and 31,.....Rupees 4 0 0

VI. *Resolved*,—That this Memorandum be recorded.

(Signed) WALTER ELLIOT,
Chairman.

(Signed) J. J. LOSH,
Secy. M. L. S. &c.

At a Meeting of the Managing Committee of the Madras Literary Society and Auxiliary of the Royal Asiatic Society, held at the Club House, on Tuesday, the 5th October, 1847, at 7 o'clock P. M.

PRESENT.

Chairman.

WALTER ELLIOT, Esq.

Members.

Lieut. Colonel O. FELIX,

R. H. WILLIAMSON, Esq., and

Captain J. J. LOSH, Secretary.

Read letter from Messrs. Thacker and Co., dated St. Andrew's Library, Calcutta, 9th September, 1847, forwarding, as requested, a statement in detail of their account with the Society, showing a balance unpaid of Rupees 106-8-0. Read also Memorandum from the Librarian in explanation of the above account.

The Committee observe that of the above sum the Society is only responsible for the sum of Rupees 36-12, the balance of Rupees 69-12 being apparently the price of 5 copies of the 4th volume of the *Alif Laila* furnished by Messrs. Thacker and Co. to His Highness the Rajah of Mysore.

I. *Resolved*,—That intimation to the above effect be made to Messrs. Thacker and Co., and also that they be requested to forward a list of the Nos. of the Society's Journal in their possession not yet disposed of.

Read letter from W. Earle, Esq., Curator, Calcutta Public Library, dated 8th September, 1847, requesting that a complete collection of the transactions of the Madras Literary Society (of which only the first

part is in the Public Library at Calcutta) may be transmitted by the next Steamer or by a sailing vessel, and stating that, if necessary, the publication will be gladly paid for.

II. *Resolved*,—That as a complete set of the numbers of the Society's Journal cannot at present be furnished from Madras, this application be reconsidered on the receipt of the expected communication from the London Booksellers respecting the numbers of the Journal remaining in their possession.

Read letters from Messrs Wm. H. Allen and Co., dated 19th and 24th August, 1847, the former advising the periodicals and books per Steamer, and the latter announcing the receipt of a bill of £100 Sterling.

III. *Resolved*,—That the receipt of these letters and of the periodicals and books alluded to be acknowledged, and that Messrs. Allen and Co. be requested to send out the following works for the use of the Society.

Lord Castlereagh's Narrative of His Journey to Damascus.

Travels in Central America, by G. R. Dunlop, Esq.

Narrative of a Journey in the interior of Africa, by John Duncan.

Laid on the table 15 of the printed notices recently issued by the Committee on the subject of the Society's Journal, which have been returned from Stations in the Mofussil, with lists of new Subscribers to the Journal, amounting to 75 according to the last received accounts.

In conformity with the 7th Resolution at the Meeting on the 8th December, 1846, a Memorandum of the sums received on account of Subscriptions to Nos. 30 and 31 of the Society's Journal since the last Meeting is laid on the table.

Memorandum.

Subscriptions to the Journal Nos. 30 and 31 have been received from the following Gentlemen since the last monthly Meeting of the Committee, held on the 7th September, 1847.

Captain R. S. Dobbs, Nos. 30 and 31,	Rupees 4 0 0
H. Stokes, Esq., No. 31, two copies,	„ 4 0 0
	Rupees... 8 0 0

IV. *Resolved*,—That this Memorandum be recorded.

(Signed) WALTER ELLIOT. (Signed) J. J. LOSH.
Chairman. Secy. M. L. S. &c.

At a Meeting of the Managing Committee of the Madras Literary Society and Auxiliary of the Royal Asiatic Society, held at the Club House, on Wednesday, the 10th November, 1847, at 7 o'clock P. M.

PRESENT.

Chairman.

WALTER ELLIOT, Esq.

Members.

Lieut. Colonel O. FELIX,

Lieut. Colonel T. S. PRATT, C. B.

Lieut. Colonel W. WATKINS, and

Captain J. J. LOSH. *Secretary.*

Read letter from the Chief Secretary to Government, dated Fort St. George, 5th October, 1847.

FORT ST. GEORGE, 5th October, 1847.

PUBLIC DEPARTMENT.

No. 921.

GENTLEMEN.

1. In acknowledging the receipt of your Secretary's letter of the 25th ultimo, I am directed to acquaint you that the Government have no objection to the publication, as proposed, of the report of the Subcommittee referred to in its 6th paragraph, and that they are prepared to take 30 copies of each number of the Society's Journal.

2. I am desired to transmit a Report* drawn up by Mr. Robinson, Assistant Collector of Canara, on the general condition and resources of the Laccadive Islands attached to that District; and as it contains so much new and interesting information, to suggest the expediency of its being inserted in the Society's proposed Publication.

3. The paper which accompanied the letter under acknowledgment is herewith returned, as requested.

I have, &c.

(Signed) J. F. THOMAS,

Chief Secretary.

To

The Managing Committee of the Madras Literary Society and Auxiliary of the Royal Asiatic Society.

I. *Resolved*,—That the receipt of this letter be acknowledged, and that Government be informed, with reference to the last paragraph, that the

* To be returned when no longer required.

report which accompanied it was not received in time to be inserted in the number of the Society's Journal now passing through the press, but that it is proposed to publish it, with some trifling omissions of official details, in the next number of the Journal, and that it will be returned, as directed, as soon as a copy has been completed to print from.

The Chairman undertakes to have a copy prepared accordingly.

Read letter from H. Cope, Esq., Secretary to the Archaeological Society of Delhi, dated Delhi, 6th October, 1847.

SIR,

I have the honor to acknowledge the receipt of your letter and of those of the following Nos. of the Madras Journal of Literature and Science, viz., 1, 6, 7, 8, 9, 10, 11, 14, 15, 16, 17, 18, 19, 20; 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, and 31.

These I had the pleasure to lay on the table at the last Meeting of the Archaeological Society of Delhi, and am desired to return their best thanks to the Madras Literary Society, for this most valuable contribution to their Library. The Society is also under obligations to the Madras Institution for their liberal promise to complete the set of the Journal by forwarding the missing Nos. 2, 3, 4, 5, 12, and 13, and hope, ere a short time, when the publication of their own proceedings may commence, to be in a position to return the compliment so liberally paid to us.

I have, &c.

(Signed) HENRY COPE,
Archæological Society of Delhi.

DELHI, }
6th Oct. 1847. }

II. *Resolved*,—That this letter be recorded, and that copies of Nos. 2, 3, 4, 5, 12 and 13 be transmitted to the Archaeological Society of Delhi, with a copy of No. 32 as soon as possible after the publication of the latter.

Read letter from Captain Biden, dated Madras, 15th October, 1847, and letter from G. F. Fullerton, Esq., dated 8th October, 1847.

To

J. J. LOSE, Captain,
Secretary Madras Literary Society.

SIR,

In reply to your letter of the 13th ultimo, which I received yesterday, I beg leave to assure you that I have no recollection of the periodical you allude to being received at my house or passed to another Subscriber in a mutilated condition. I have always been in the habit of taking the greatest care of books, whether belonging to me or to any

other party, when in use by myself or family, therefore I have no hesitation in saying that the No. of Blackwood's Magazine referred to, was neither injured nor mutilated by myself or by any member of my family.

I have, &c.

(Signed) CHRIS. BIDEN.

MADRAS, }
15th Oct. 1847. }

To

The Secretary to the Madras Literary Society.

SIR,

I beg to acknowledge the receipt of a letter from you, dated September, 1847. In reply, I beg to state that I cannot be certain that the pages 16 and 17 were missing from the book when sent to me, but as the book was by no means in good condition, I should think it not improbable that they were wanting.

With reference to the Rule to which you draw my attention, I can only hope that the loss of two pages from a work of the character of the one alluded to by you cannot be considered as a "serious injury."

I beg to remain,

Your's faithfully,

(Signed) G. F. FULLERTON.

III. *Resolved*,—Although there seems no reason to doubt that the book was complete when sent to Mr. Fullerton, and that the periodical in question sustained the injury adverted to, in the interval between its being forwarded to Captain Biden and received by the next Subscriber to whom it was passed, the Committee are of opinion that, under the circumstances of the cases, it would not be expedient to enforce the 3d Rule for the Library, and resolve, accordingly, that it be not enforced in the present instances.

Read Memorandum from the Librarian respecting the detention of books in circulation, in violation of the 6th Rule for the Library of the Society.

MEMO.

Books in circulation are often detained much beyond the time allowed for their perusal by the following gentlemen, who in consequence are generally furnished with books which have been read by other Members of the Society who are regular in returning them.

Sent to Major Anstruther, C. B.
11th May, The Baron's War (here-
1847. with sent) which was
recently found by acci-

IV. *Resolved*,—That the Librarian be instructed to apply for the books not yet returned, and report to the Secretary when they are received for the information of the Committee.

In future whenever a work is detained in circulation double the time allowed for its perusal, the Librarian is to apply for it, and report the cir-

dent by the Chairman in the house of another gentleman.

Sent to T. V. Stonhouse, Esq., and not yet returned.

7th Sept. Lives of twelve Judges, 1847. 2 vols.

" * Stories from the Italian Poets, 2 vols.

Sent to Lieut. Col. W. Watkins, and not yet returned.

31st Aug. * The Debutante, 3 vols. 1847.

" * Bell's Life of Canning. 25th Sept. * History of the Punjab. 1847. 2 vols.

* Since returned.

Read a Memorandum from the Librarian respecting the conduct of Sooboo Moodeliar, late a Subscriber, who has neither paid up his subscription, nor returned certain books belonging to the Library.

Lieutenant Colonel Pratt, C. B., having kindly undertaken to speak on the subject to the gentleman on whose recommendation Sooboo Moodeliar was originally admitted as a Subscriber.

V. *Resolved*,—That the consideration of this subject be deferred until the next monthly Meeting.

Read Memorandum from the Librarian stating that the belts of the Society's seven pons, which were supplied in 1843, are nearly worn out, and require to be replaced, and the price of two yards of blue cloth, which will be enough for the purpose, is Rupees six.

VI. *Resolved*,—That the Librarian be authorized to purchase the cloth required, and instructed to have the new belts made up as soon as possible.

Read letters from Messrs. Wm. H. Allen and Co., dated 13th and 18th September, 1847, the former advising the dispatch of periodicals and books per Steamer, and of a box of books per ship "*Vernon*;" and the latter, in compliance with the Committee's request, enclosing a statement of the copies of the Society's Journal remaining in their hands, showing a balance of £ 3-19-3 due to the Society for copies disposed of.

Resolved further,—That Messrs. Allen and Co. be requested to send out the following works for the use of the Library:

The Prose Writers of America, by R. W. Griswold, 1 vol., 8vo. with plates.

History of the Bank of England, by John Francis.

Pius IX. or the first year of the Life of a Pope.

Picturesque Illustrations of Ancient Architecture in Hindoostan, by J. Fergusson.

Notes of a Residence in Rome in 1846, by a Protestant Clergyman.

VII. *Resolved*,—That the receipt of these letters and of the periodicals and books per Steamer, be acknowledged, and that Messrs. Allen

and Co. be informed that, instead of two numbers of the New Monthly Magazine for September, 1847, as stated in their invoice, only one number for that month, with one for August, has been received, and as two numbers of the Magazine for the latter month were before received, in due course, the Committee must decline to take the extra one, which will be retained on account of Messrs. Allen and Co. and disposed of as they think proper.

and Co. be informed that, instead of two numbers of the New Monthly Magazine for September, 1847, as stated in their invoice, only one number for that month, with one for August, has been received, and as two numbers of the Magazine for the latter month were before received, in due course, the Committee must decline to take the extra one, which will be retained on account of Messrs. Allen and Co. and disposed of as they think proper.

MEMORANDUM.

I have with me one copy of No. 12 and 4 copies of No. 13 of the Society's Journal, and if we get from our London booksellers (who state they have on hand) four copies of the two first volumes, and six copies of the 12th number (which latter is not procurable in Madras) the Society will have, after completing the sets sent to the Royal Society of Bavaria and the Delhi Archaeological Society, at its disposal two complete sets of the Journal; and should we hereafter get three more copies of Nos. 2, 3, 4, 5, and 13, we can make up another three complete sets.

In order to supply the deficient numbers of the Journal to the Royal Society of Bavaria, and the Archaeological Society of Delhi, we must get the two first volumes unbound and separated into numbers to furnish Nos. 2, 3, and 4 to the former Society, and Nos. 2, 3, 4 and 5 to the latter; or we might forward the bound volumes, and request them to return the numbers they have already received, and which are contained in the bound volumes. Besides these numbers we must also furnish these Societies with numbers 12 and 13.

VIII. *Resolved*,—That steps be immediately taken to have such of the required numbers as are procurable ready for transmission to the parties abovementioned, with copies of No. 32 now passing through the Press, and that the Secretary be requested to draft replies to the letters from the President and Secretary of the Royal Society of Bavaria, dated Munich, 9th and 10th May, 1846, from the Secretary to the Royal Society of Antiquarians of the North, dated Copenhagen, 19th November, 1845, and from W. Earle, Esq., Curator of the Calcutta Public Library, containing intimations to the above effect. The numbers of the Journal destined for the Royal Society of Bavaria and the Royal Society of Antiquarians of the North will be sent to Messrs. Allen and Co., who will be requested to supply the deficient numbers, and forward the whole from London to their respective addresses. Messrs. Allen and Co. will, also, be instructed to forward to Madras four copies of the 1st

Read Statement of the numbers of the Society's Journal forwarded to them to be disposed of; statement of the number of copies of each number of the Journal remaining in the Library, and Memorandum from the Librarian respecting the Journal.

The Committee observe that two complete sets of the Journal are required for transmission to the Royal Society of Antiquarians of the North at Copenhagen and to the Public Library at Calcutta respectively that copies of Nos. 2, 3, 4, 5, 12 and 13 are required for the Archaeological Society of Delhi, and copies of Nos. 2, 3, 4, 12 and 13, for the Royal Society of Bavaria.

and 2d volumes, and six copies of the 2nd, and not to dispose of any more numbers without further instructions.

Laid on the table a printed list, containing the names of two new Subscribers to the Journal, which has been returned since the last Meeting.

The Committee observe that several of the printed lists have not yet been returned, so that more new Subscribers may be looked for.

In conformity with the 7th Resolution at the Meeting on the 8th December, 1846, a Memorandum of the sums received on account of Subscriptions to Nos. 30 and 31 of the Society's Journal, since the last Meeting, is laid on the table.

Memorandum.

Subscriptions to the Journal Nos. 30 and 31 have been received from the following gentleman since the last monthly Meeting of the Committee, held on the 5th October, 1847.

Captain T. D. Roberts, No. 31, . . . Rupees 2 0 0

XI. *Resolved*,—That this Memorandum be recorded.

(Signed) WALTER ELLIOT,
Chairman.

(Signed) J. J. LOSH,
Secretary M. L. S. &c.

At a Meeting of the Managing Committee of the Madras Literary Society and Auxiliary of the Royal Asiatic Society, held at the Club House on Wednesday, the 8th December, 1847, at 7 o'clock P. M.

P R E S E N T.

Chairman.

WALTER ELLIOT, Esq.

Members.

Lieut. Colonel W. WATKINS,

R. H. WILLIAMSON, Esq., and

Captain J. J. LOSH, *Secretary.*

Read letter from Messrs. Thacker and Co. of Calcutta.

To J. J. LOSH, Esq.,
Secretary Literary Society,
Madras.

SIR,

We have been favored with your letter of the 25th ultimo, and beg to annex our account for Roxburgh's Flora Indica, and shall feel obliged by your paying the amount to Messrs. Binny and Co. of Madras.

We shall apply to the Rajah of Mysore for the price of the 5 copies of the 4th vol. of the Alif Leila, and have removed the charge from your account.

In compliance with your request we have the pleasure to hand you a list of the numbers of the Society's Journal which we have now in hand, and remain,

Sir,

Your faithful servants,

(Signed) THACKER AND CO.

MADRAS LITERARY SOCIETY.		DR.	
	1845.	RS.	A. P.
Sept. 11th. To Roxburgh's Flora Indica, 3 vols.		36	0 0
" Packing, &c. 8 As. and postage 6 As.		0	14 0
Messrs. Binny and Co.'s Commission for receiving and remitting the amount @ 2 per cent. 11 As. and postage 6 As.		1	1 0
		<u>Company's Rupees 37 15 0</u>	

E. E. (Signed) THACKER AND CO.

I. *Resolved*,—That Messrs. Binny and Co. be requested to transfer the sum of Rupees 37-15 from the credit of the Literary Society to that of Messrs. Thacker and Co., and that the latter be instructed not to dispose of any of the numbers of the Society's Journal remaining in their hands, without further instructions.

Read letter from William Elliot, Esq., Trichinopoly.

Captain LOSH,

Secretary M. L. S., Madras.

DEAR SIR,

I have the pleasure herein to return the paper, received with your note of the 30th June last, with seven new Subscribers' names. Trichinopoly does not exhibit a very scientific community. I have kept the list a long time in hopes of adding to it, but I believe a similar paper was circulated by the Brigadier without any success. If I can be of any assistance or service I shall be very happy to be informed of the same.

Believe me,

Your's faithfully,

(Signed) W. ELLIOT.

TRICHINOPOLY, }
18th Nov. 1847. }

II. *Resolved*,—That this letter be recorded, with a view to its further consideration, should the Committee find it necessary to avail themselves of Mr. Elliot's kind offer of assistance or service, as regards the Society's Journal.

Read Memorandum from the Librarian respecting Mr. C. P. Brown's Subscription to the Library.

MEMO.

Mr. C. P. Brown has not paid his subscription (Rs. 44) to the Society for the last two quarters. He has desired the peon, without assigning any cause, not to bring the bills to him again.

The Committee take it for granted that Mr. Brown considers himself still exempted from paying his quarterly subscriptions under the Resolution at the Meeting on the 21st October, 1844. As, however, the Indian books and Manuscripts in the Society's charge are now under the care of persons employed by Government, and the descriptive catalogue of them which, it appears, Mr. Brown undertook to prepare, is under preparation by other hands, the Committee are of opinion that the Society is not liable to any expense whatever on account of the Native Library, and it was not intended that Mr. Brown should be exempted from the payment of his subscription after the employment of a regular Government establishment for the custody of the Manuscripts and books. Mr. Brown's payment of subscription should, therefore, have been resumed from the 1st February, 1845.

III. *Resolved*,—That the Secretary be requested to draft a communication to Mr. Brown on the above subject.

Read letter from Messrs. W. H. Allen and Co., dated 19th October, 1847, advising the despatch of periodicals and of books per Steamer.

IV. *Resolved*,—That the receipt of Messrs. Allen and Co.'s letter be acknowledged, and that they be requested to send out the following books for the use of the Society.

The Secret History of the Court and Government of Russia, under the Emperors Alexander and Nicholas, 2 vols., 8vo.

The Doctor, by Southey, vol. vii.

A Popular Account of the Manners and Customs of India, by the late Rev. T. Acland, No. 60 of the Home and Colonial Library.

Laid on the table two printed lists containing the names of ten new Subscribers to the Journal which have been returned since the last Meeting.

In conformity with the VII. Resolution at the Meeting on the 8th December, 1846, a Memorandum of the sums received on account of Subscriptions to Nos. 30 and 31 of the Society's Journal, since the last Meeting, is laid on the table.

Memorandum.

Subscriptions to the Journal Nos. 30 and 31 have been received from the following Gentleman since the last monthly Meeting held on the 10th November, 1847.

H. Newill, Esq., Nos. 30 and 31,Rupees 4 0 0

V. *Resolved*,—That this Memorandum be recorded.

With reference to the V. Resolution at the last Meeting the Secretary reports that Sooboo Moodeliar has paid up his arrears of subscription, and promised to return the books in his possession belonging to the Library.

VI. *Resolved*,—That should the books not be duly returned as promised the Librarian be instructed to apply again to Sooboo Moodeliar for them, and report the result for the information of the Committee.

(Signed) WALTER ELLIOT,
Chairman.

(Signed) J. J. LOSH,
Secretary M. L. S. &c.

At a Meeting of the Managing Committee of the Madras Literary Society, held on Tuesday, the 1st February, 1848, at 7 o'clock P. M.

Read letters from Messrs. Binny and Co., dated 21st and 23d December, 1847.

Read letter from Lieutenant Colonel T. S. Pratt, C. B., dated 15th December, 1847, forwarding a copy of Morrison's Chinese and English Dictionary, in 4 volumes, presented to the Society by Lieutenant G. N. Bredin, of H. M. 94th Regiment.

The Committee observe that these papers, which would have been considered at the Meeting in last month, had one taken place, have been already disposed of.

I. *Resolved*,—That the proceedings with regard to the subjects of the above letters be approved of.

The Secretary reports that the following letters have been despatched since the last Meeting of the Committee on the 8th December, 1847.

To

*The Secretary to the Mathematical and Physical Class
of the Royal Academy of Bavaria.*

SIR,

I. I have the honor, by desire of the Managing Committee of the Madras Literary Society and Auxiliary of the Royal Asiatic Society, to

* From the President of the Royal Society of Bavaria to the Madras Literary Society and Auxiliary of the Royal Asiatic Society, dated Munich, 9th May, 1848, with postscript signed by the Secretary of the Mathematical and Physical Class, dated Munich, 10th May, 1848.

acknowledge the receipt of letters as per margin,* under your signature, and also of the Academical publications therein advertised to, which had been sent to the care of H. Torrens, Esq., Vice President of the Asiatic Society of Bengal, and for which the Committee beg to return their best thanks

in the name of the Society. The box containing the latter was received on the 30th June, 1847.

2. The Managing Committee have delayed acknowledging the receipt of the letters, and publications, above-mentioned, until the present time, because they could not before supply the numbers of the Literary Society's Journal required to complete the set furnished to the Royal Society of Bavaria, and further, because they were in hopes of being able to obtain some objects of natural history or dried plants, which might be acceptable to the Royal Society.

3. The latter object they have not yet been able to accomplish; but they have the pleasure to forward herewith numbers, as per margin, of the Literary Society's Journal, which will complete the set supplied to the Royal Society of Bavaria. The parcel containing the periodicals is addressed to Messrs. Wm. H. Allen and Co., Booksellers, No. 7, Leadenhall Street, London, who will either deliver it to the Royal Society's Agent, in London, or forward it to Munich, as circumstances may require.

4. The publication of the Madras Quarterly Medical Journal, mentioned in the letter under acknowledgment, with which the Madras Literary Society had no connection, has been discontinued since 1843.

5. In conclusion the Managing Committee beg to express their sense of the honor conferred on the Madras Literary Society by the offer of the Royal Society of Bavaria to keep up a literary intercourse, of which the Managing Committee will not fail to avail themselves.

The further supply of the publications of the Royal Society of Bavaria promised in the letters under acknowledgment will be thankfully received, on account of the Madras Literary Society.

I have the honor to be,

Sir,

Your most obedient humble servant,

MADRAS, }
13th January, 1848. }

(Signed) J. J. LOSE, }
Secretary M. L. S. &c. }

To

*The Secretary to the Royal Society of
Antiquarians of the North, Copenhagen.*

SIR,

1. I have the honor, by desire of the Managing Committee of the Madras Literary Society and Auxiliary of the Royal Asiatic Society, to acknowledge the receipt in the early part of last year of the letter* under your signature, dated Copenhagen, 19th November, 1845, with the publications therein mentioned, for which the Committee beg to return their best thanks in the name of the Madras Literary Society.

* From the Royal Society of Antiquarians of the North to the President of the Madras Literary Society.

2. In compliance with your request, acknowledgment of the receipt of the letter and publications above-mentioned has been postponed until the present time, when the Managing Committee are able to offer for the acceptance of the Royal Society of Antiquarians of the

North a complete set* of the Madras Literary Society's Journal, which has accordingly been sent to Messrs. W. H. Allen and Co., Booksellers, No. 7, Leadenhall Street, London, who will take measures for transmitting the parcel to your Agents, Messrs. Hambro and Son.

3. In conclusion the Managing Committee beg to express their hope that the Madras Literary Society may be favored with further supplies of the very interesting memoirs and other publications of the Royal Society of Antiquarians of the North.

I have the honor to be, &c. &c.,

(Signed) J. J. LOSE,

Secretary M. L. S. &c.

MADRAS, }
13th January, 1848. }

To the Curator, Calcutta Public Library, dated 5th January, 1848, acknowledging receipt of his letter, dated 8th September, 1847, and forwarding numbers of the Literary Society's Journal.

To H. Cope, Esq., Secretary to the Delhi Archaeological Society, dated 5th January, 1848, forwarding numbers of the Literary Society's Journal.

To Lieut. G. N. Bredin, of H. M. 94th Regiment, dated 13th January, 1848, conveying the thanks of the Committee, on behalf of the Literary Society, for his valuable donation of Morrison's Chinese and English Dictionary.

II. *Resolved*,—That the proceedings with regard to the above correspondence be approved of.

MEMO.

Read Memorandum of the Librarian regarding the book lost by Sooboo Moodeliar. Sooboo Moodeliar has sent a person to say that he has lost the two volumes of Chalmers on the Constitution of Man, and that he will pay the price of the same. The Invoice price of the work is £1-3-0

The Chairman reports that he has ascertained that the 2d volume of the copy of Hamilton's Hindostan, belonging to the Society's Library has been lost.

The Secretary reports that several books included in the Catalogue of the Society's Library are not to be found therein. In particular

* N. B. A copy of this work has just been received from the Booksellers to replace the missing one.
Histoire Naturelle par Buffon, vols. 1, 2, 3 and 4.
Oeuvres de Montesquieu, 6 vols.
Mechanics Magazine, vol. 23d.
Asiatic Annual Register for 1809.

Sheridan's Dramatic Works*, and the Life of Genghis Khan, and the books, as per margin, for which John Sullivan, Esq., is responsible, as admitted in his letter to the late Secretary, dated 2d February, 1844, the last communication received from him on the subject.

III. *Resolved*,—That the Librarian be directed to prepare, for consideration at the next Meeting, a list of all the books included in the Catalogue but not to be found in the Library, with as full an explanation as possible, regarding the time and manner of their disappearance and what parties are responsible for them.

Read letter from Messrs. Wm. H. Allen and Co., dated 18th December, 1847, advising the despatch of periodicals and of books per Steamer.

IV. *Resolved*,—That the receipt of Messrs. Allen and Co.'s letter be acknowledged, and that they be requested to send out the following books for the use of the Society :

The Douglas Case. The reports of the decision on the disputed succession to the Douglas Peerage.

Borneo and Labuan, by Captain Sir E. Belcher.

England under the House of Hanover, by T. Wright, Esq., F. A. S.

Read letters from Messrs. Thacker and Co., Calcutta, dated 4th and 19th January, 1848, from Messrs. Binny and Co., dated 4th January, 1848, and from E. B. Powell, Esq.,* notifying

* Received 24th Jan. 1848. his retirement from the Committee in consequence of his approaching departure from Madras for the benefit of his health.

V. *Resolved*,—That they be recorded.

In conformity with the 7th Resolution at the Meeting on the 8th December, 1846, a Memorandum of the sums received on account of Subscriptions to Nos. 30 and 31 of the Society's Journal, since the last Meeting, is laid on the Table.

Memorandum.

Subscriptions to the Journal Nos. 30 and 31 have been received from the following gentleman since the last monthly Meeting of the Committee held on the 8th December, 1847.

Major General M. Cubbon, Nos. 30 and 31, Rupees 4 0 0

VI. *Resolved*,—That this Memorandum be recorded.

(Signed) WALTER ELLIOT,
 Chairman.

(Signed) J. J. LOSH,
 Secy. M. L. S. &c.

At a Meeting of the Managing Committee, of the Madras Literary Society, held at the Club House on Saturday, the 11th March, 1848, at 7 o'clock P. M.

A general statement of the Society's accounts, for 1847, is laid on the table.

I. *Resolved*,—That this general statement of accounts be approved and passed, and laid before the next Annual General Meeting of the Subscribers; which, according to the revised 13th Rule, should be convened as soon after this Meeting as convenient. Accordingly, *Resolved*, further, that the President, Sir E. J. Gambier, be requested to name some day in the present month for the Annual General Meeting, or should he be unable to attend, that one of the Vice Presidents be asked to fix a day for the Meeting and to preside at it.

The Account Current of Messrs. Binny and Company with the Society for 1847 is laid on the table, with the letter which accompanied it, dated 3d February, 1848.

II. *Resolved*,—That Messrs. Binny and Company be informed that their Account Current has been examined and found correct, and that it be laid before the General Annual Meeting.

Read letter from the Honorable D. Elliott, Esq., dated 21st February, 1848, intimating his acceptance of the office of Vice President to the Society.

III. *Resolved*,—That this letter be recorded.

Read letter from Mr. Samuel Marcar forwarding, for the acceptance of the Society, a parcel containing a book and pamphlet as per margin.

"Bibliographia Armeniaca," or a Catalogue Raisonné of Armenian Books.

General Observations on Armenia.

IV. *Resolved*,—That the book and pamphlet be accepted, and that Mr. Marcar be thanked, on behalf of the Society, for his present to it.

Read letter from W. Middlemass, Esq., dated 21st February, 1848, intimating his retirement from the Managing Committee, in consequence of his immediate departure for Europe.

V. *Resolved*,—That this letter be recorded.

MEMO.
 The business of the Society's Library being now much augmented, the Librarian begs respectfully to bring the same to the notice of the Committee, and begs that an Assistant to him, Read Memorandum from the Librarian requesting, for reasons stated, that he may be allowed the aid of an Assistant, on a small monthly salary, and that the person who has hitherto assisted him without remuneration may be appointed to the situation.

on a small pay, may be granted. As the Stock of the Library increases annually it will be obvious to the Committee that the business also increases. About two or three hundred volumes are daily being issued from the Library, and the Librarian, under such circumstances, begs that a person may be appointed solely for this business, while he will have to conduct the rest of the business, namely, to keep the accounts of the Society, carry on the correspondence with the Subscribers, attend upon those who visit the Library, superintend the book-binding department, &c. &c. Should the Committee have no objection, the Librarian begs he may be permitted—in the event of this request being complied with—to entertain the party who has hitherto assisted him in business.

Read letter from the Officiating Chief Secretary to Government, dated 8th February, 1848, transmitting for the use of the Society, copy of the VII. volume of the Madras Astronomical Observations.

VII. *Resolved*,—That the book in question be deposited in the Library.

Read letter from the Librarian Calcutta Public Library, dated 28th January, 1848, acknowledging receipt of 28 numbers of the Society's Journal, offering the grateful acknowledgments of the Curators for the kind and useful donation, and forwarding a catalogue of the Calcutta Library for the acceptance of the Society.

VIII. *Resolved*,—That the letter be recorded, and that the catalogue which accompanied it be laid on the Library table.

Copy of the bill for printing 350 copies of (No. 32) the Madras Journal of Literature and Science presented for payment by the Superintendent of the Christian Knowledge Society's Press, is laid on the table.

IX. *Resolved*,—That this bill amounting to Rupees 480-4-10, be discharged, and that the cost of publishing the Journal, and sums received on account of it, be included in the regular accounts of the Society.

MEMO.

According to the old Rules of the Society (vide Catalogue of 1834, Rule xii.) when a Subscriber at the

VI. *Resolved*,—That as the services of an Assistant Librarian appear obviously necessary, the request of the Librarian be complied with.

The pay of the Assistant is fixed at Rupees fifteen per mensem, and his employment will commence on the 1st proximo.

Presidency withdraws his name from the list of Subscribers, and wishes after some time to rejoin the Society, he ought to be recommended again for admission and pay his entrance money. Mr. W. E. Underwood was formerly a Member of the Society and withdrew—he has again joined the Society on his own application, and on the recommendation of the Secretary has been admitted a First Class Subscriber of the Society. Under these circumstances is Mr. Underwood to pay a second entrance donation of Rupees 35?

mer period, been Subscribers and paid the entrance donation, are, on re-admission, required to pay it again.

X. *Resolved*,—That under the present regulations, entrance donation cannot be demanded from a Subscriber on re-admission unless he had either been expelled, or had formally desired his name to be withdrawn from the list of Subscribers.

Read list of books included in the Catalogue but not to be found in the Library, prepared in conformity with the 3d Resolution at the last monthly Meeting.

LIST OF BOOKS INCLUDED IN THE CATALOGUE OF THE SOCIETY BUT NOT IN THE LIBRARY.

<i>Time of disappearance.</i>		<i>Parties considered responsible for the loss.</i>
11th Dec. 1827,	Blackwood's Magazine, vols. 13 and 14,	Capt. M. C. Chase.
20th Jan. 1831,	Galt's Letters from the Levant,	Lieut. P. Anstruther.
28th " "	Abdul Feda de Vita et rebus Gestis Mahommedis,	Capt. M. J. Rowlandson.
12th Nov. 1832,	Sheridan's Dramatic Works, 2 vols.	Capt. D. Montgomerie.
18th June 1834,	Moreau's Chronological Records of the British Royal and Commercial Navy (in a sheet),	H. Chamier, Esq.
31st Mar. 1835,	Quarterly Review, vol. 16th,	H. V. Conolly, Esq.
8th Dec. " "	Criminal Trials, vol. 1st,	A. Rowlandson, Esq.
28th Feb. " "	Eustace's Tour through Italy, vol. 1,	T. R. Wheatley, Esq.
" " "	Memoirs of Marshal Ney, vol. 2d,	Do.
26th July 1836,	Twenty-five years in the Rifle Brigade,	J. Ouchterlony, Esq.
4th Mar. 1837,	Love Letters of Mary Queen of Scots,	Do.
11th Aug. " "	Elme's Lectures on Architecture,	Major Ross.
1st Nov. " "	Wood's War in Mysore,	Capt. G. W. Whistler.
21st Sept. 1840,	Memoirs of Hannah More, 4 vols.	Ven. Arch. Harper.
15th July " "	Kennedy's Notes on Cholera,	Dr. Murray.
3d Mar. " "	Fraser's Travels on the Shores of the Caspian Sea,	G. Norton, Esq.
27th " 1841,	Cochrane Chess,	Do.
29th Aug. 1842,	Paul's Letters to his Kinsfolk,	Do.
23d Oct. 1841,	Junius's Letters,	Capt. J. T. Smith.
24th Sept. 1842,	Rennell's Geography of Herodotus,	T. M. Lane, Esq.
26th June 1844,	Jones's Institutes of Menu,	Do.
3d Aug. " "	Malthus's Definitions in Political Economy,	Do.
13th July 1843,	Edinburgh Review, vol. 74,	W. A. Morehead, Esq.
30th June " "	Captain Bonneville's Adventures, 3 vols.	W. Middlemass, Esq.

<i>Time of disappearance.</i>		<i>Parties considered responsible for the loss.</i>
26th May 1843,	Edgeworth's Practical Education, 2 vols.	A. Robertson, Esq.
2d Feb. 1844,	The Menageries 1838,	Lord Arthur Hay.
26th " "	Plays by Knowles, 1 vol.	Do.
4th Apr. 1845,	Night and Morning, 3 vols.	R. O. Campbell, Esq.
" " "	Lady Hervey's Letters,	Lieut. Col. Forster.
3d Mar. "	Reliques of Ancient English Poetry, vol. 3d,	R. S. Ellis, Esq.
18th Jan. 1844,	The English Fireside, 3 vols.	G. Harding, Esq.
4th Oct. "	Chatsworth, 3 vols.	W. H. Rose, Esq.
12th Aug. 1843,	The Jewess,	A. Maclean, Esq.
31st July 1847,	Chalmers on the Constitution of Man, 2 vols.	C. Sooboo Moodeliar.
29th Oct. 1839,	Homeward Bound, 3 vols.	} Lost by the dishonesty of a Peon.
" " "	Mitchell's Eastern Australia, 2 vols.	
7th " "	Melton de Mowbray, 3 vols.	
10th Aug. "	Pictures of the World, 3 vols.	
25th Sept. "	The Only Daughter, 3 vols.	
18th " "	Mrs. Jameson's Rambles in Canada, 3 vols.	
28th Oct. "	Gladstone's Church, &c.	
30th " "	Head's Narrative.	
31st " "	Miller on Law, (replaced by Sir R. Comyn.)	
4th Nov. "	Dunlop's Drinking Usages.	
24th Sept. "	Gurwood's Despatches, vol. 8, (replaced by the Society.)	
25th Oct. "	Alison's French Revolution, vol. 7, (replaced by the Society.)	
13th Sept. "	The Husband Hunter, 3 vols.	
21st Oct. "	Ella, 3 vols.	
7th " "	Oliver Twist, 3 vols., (replaced by the Society.)	
29th " "	Travels in Town, 2 vols.	
20th " "	Lockhart's Life of Sir W. Scott, 1st vol., (replaced by the Society.)	
22d " "	Bryce on Native Education.	
31st " "	Chapman's Hindu Female Education.	
29th Aug. 1831,	The Tuilleries, 2d vol.	Sir J. Doveton, G. C. B.
	Walladmor, vol. 2d lost,	H. V. Conolly, Esq.
	Library of Romance, vols. 8 and 9 lost.	
	Hamilton's Hindostan, vol. 2d lost.	
	The Art of Prolonging Life.	
	History of Genghis Khan,	Destroyed by White Ants.
19th Mar. "	Memoirs of Sebastian Cabot,	Captain Bradford.
22d July "	Lec's Memoirs of Baron Cuvier.	J. Barrow, Esq.

<i>Time of disappearance.</i>		<i>Parties considered responsible for the loss.</i>
28th July 1833,	Boaden's Memoirs of Mrs. Inchbald, 2 vols.	W. Bathie, Esq.
	Paris in 1802 and 1814.	
	Chatham's Letters.	
	Haunah More's Works, vol. 3d,	Colonel Snow.
1st May 1823,	Specimens of Irish Eloquence,	J. Annesley, Esq.
8th Feb. 1833,	The Sketch Book of Fashion, 3 vols.	Sir T. Sevestre.
17th July "	Wondrous Tale of Alroy, 3 vols.	J. A. Hudleston, Esq.

The Committee observe that some of the above works have been replaced at the expense of the Society, some have been paid for by the parties who lost them, and some, which will be accordingly struck out of the Catalogue, it seems unnecessary to replace.

XIII. *Resolved*.—That measures be adopted to replace the following missing works and volumes as soon as possible.

Histoire Naturelle, par Buffon, vols. 1, 2, and 4.	Malthus' Definitions in Political Economy.
Oeuvres de Montesquieu.	Edinburgh Review, vol. 74.
Mechanics' Magazine, vol. 23d.	Captain Bonneville's Adventures.
Asiatic Annual Register for 1809.	Edgeworth's Practical Education.
Blackwood's Magazine, vols. 13 and 14.	The Menageries 1838.
Mercat's Chronological Records of the British Royal and Commercial Navy.	Plays, by Knowles, 1 vol.
Quarterly Review, 16th vol.	Night and Morning.
Criminal Trials, 1st vol.	Lady Hervey's Letters.
Eustace's Tour through Italy, 1st vol.	Reliques of Ancient English Poetry, vol. 3d.
Specimens of Irish Eloquence.	The English Fireside.
The Sketch Book of Fashion, 3 vols.	Chalmers on the Constitution of Man.
Memoirs of Marshal Ney, 2d vol.	Mrs. Jameson's Rambles in Canada.
Twenty-five years in the Rifle Brigade.	Gladstone's Church, &c.
Love Letters of Mary Queen of Scots.	Head's Narrative.
Memoirs of Hannah More.	Dunlop's Drinking Usages.
Fraser's Travels on the Shores of the Caspian Sea.	Library of Romance, vols. 8 and 9.
Paul's Letters to his Kinsfolk.	Hamilton's Hindostan, vol. 2d.
Junius's Letters.	History of Genghis Khan.
Rennell's Geography of Herodotus.	Memoirs of Sebastian Cabot.
Jones's Institutes of Menu.	Chatham's Letters.
	Haunah More's Works, vol. 3d.
	Wondrous Tale of Alroy.

The Committee will hereafter consider and determine what steps should be taken to recover the prices of the books in question from the parties considered responsible for their loss. A new list will accordingly be prepared with an additional column showing the original cost of each missing or deficient work, and laid before the next monthly Meeting of the Committee.

Read letters from Messrs. Wm. H. Allen and Co., dated 17th and 19th January, 1848, the former enclosing a statement of their account with the Society for the past year, and the latter advising the despatch of periodicals and of books per Steamer.

XIV. *Resolved*,—That the receipt of Messrs. Allen and Co.'s letters be acknowledged, and that they be requested to send out the following books for the use of the Society :

Zoological Recreations, by W. J. Broderip, F. R. S.

The Stuart Papers.

Journal of an Expedition into the interior of Tropical Australia, by Colonel Sir T. Mitchell.

Modern Painters, by a Graduate of the University of Oxford.

The History of Auricular Confession, by Count C. P. de Lasteyre, translation by Charles Cooks, B. L.

In conformity with the 7th Resolution at the Meeting on the 8th December, 1848, a Memorandum of the sums received on account of Subscriptions to Nos. 30 and 31 of the Society's Journal, since the last Meeting is laid on the table.

Memorandum.

Subscriptions to the Journal Nos. 30 and 31 have been received from the following gentleman since the last monthly Meeting of the Committee, held on the 1st February, 1848.

Dr. J. Kennedy, No. 31..... Rupees 2 0 0

XV. *Resolved*,—That this Memorandum be recorded.

(Signed) WALTER ELLIOT, (Signed) J. J. LOSH,
Chairman. Secy. M. L. S. &c.

At an Annual General Meeting of the Madras Literary Society, and Auxiliary of the Royal Asiatic Society, held in the Society's Rooms, at the College, on Monday, the 27th March, 1848, at half past 10 o'clock A. M.

P R E S E N T.

The Honorable D. ELLIOT, *Vice President*, in the Chair.

C. P. BROWN, Esq.

WALTER ELLIOT, Esq.

Dr. J. KELLIE,

Sir H. C. MONTGOMERY, Bart., and

Captain J. J. LOSH, *Secretary*.

The Secretary submitted to the Meeting Messrs. Binny and Company's Account Current with the Society for 1847, showing a balance

in favor of the former on the 1st January, 1848, of Rups. 10-6 and, also, a general account of the receipts and disbursements of the Society in 1847, and its credits and liabilities, on the 1st January, 1848, showing a balance in its favor of Rups. 412-14-6.

I. *Resolved*,—That these accounts which have been passed by the Managing Committee, and appear satisfactory, be approved and passed.

Read Extract, Minutes of Consultation in the Public Department, dated 5th February, 1848, No. 129, and despatch therein recorded, from the Honorable the Court of Directors, dated 21st December, (No. 48 of) 1847. Read also letter to the address of the Secretary, from Walter Elliot, Esq., Chairman of the Committee of Management.

PUBLIC DEPARTMENT.

No. 48 of 1847.

No. 129.

Our Governor in Council Fort St. George.

Extract from the Minutes of Consultation, dated 5th February, 1848.

Letters dated 11th March, No. 27, 1847, paras. 2 to 4—and 8th June, No. 12, 1847, paras. 5 to 7.

Madras Literary Society.

Para. 1. We approve of your having undertaken the charge of the Collections of the Madras Literary Society as contributions to the Central Museum, on the conditions proposed; viz., the restoration of the articles to the Society, if the Central Museum should be closed, and free access to it of the Members of the Society.

2. The object of these paragraphs is to obtain our sanction to the temporary outlay of 250 Rs. a month for an Establishment to prepare a list of the Manuscripts in the languages of the south of India which are now in the charge of the Madras Literary Society, and of which no complete catalogue exists.

Resolved,—That a copy of this despatch be forwarded to the Committee of the Madras Literary Society with reference to communications from this department, dated 11th December, 1846, and 5th February, 1847, and that the sum of Rs. 250* a month be disbursed for a temporary establishment for the duty here indicated.

* Superintendent, Rups. 100
2 Pundits at 50 Rs. each, 100
English Writer, 60
Per month, 250

The Committee will be pleased to furnish, for transmission to England a quarterly report of the nature required by the Hon'ble Court.

As it is desirable to have accurate information regarding the contents of the works in question, and as that can be obtained only through natives acquainted with the languages in which the books are written, we assent to your entertaining, as a temporary arrangement, the establishment you propose, requiring from the Superintendent either direct, or through such channel as you may deem most convenient, a quarterly report of the number of manuscripts examined and classed, copies of which reports you will transmit to us.

We are,

Your loving friends,

(Signed) H. ST. G. TUCKER,
" J. L. LUSHINGTON,
LONDON, } &c. &c. &c.
21st Dec. 1847. }

(A true Copy and Extract.)

(Signed) H. C. MONTGOMERY,
Officiating Chief Secy.

To

The Committee of the
Madras Literary Society,
and Auxiliary of the
Royal Asiatic Society.

II. *Resolved*.—That the Managing Committee be requested to acknowledge the receipt of this communication, and to solicit the further instructions of Government regarding the disposal of the Museum, which still remains in the charge of the Society. *Resolved*, further, that the proceedings respecting the Indian books and manuscripts in the charge of the Society, detailed in the letter from the Chairman of the Managing Committee, appear highly satisfactory, and be approved of accordingly; and that the Committee be authorized to make such arrangements as they may consider requisite for carrying out the orders of the Honorable the Court of Directors and Government, in regard to the books and manuscripts.

To

The Secretary of the Literary Society.

SIR,

The Honorable Court of Directors having been pleased to sanction a temporary allowance not exceeding 250 Rupees per mensem for the examination of the Native MSS. now in the custody of the Society, as communicated to us in the Extract from the Minutes of Consultation of Government of the 5th February last, I think it desirable that the Committee should be made acquainted with what has been done since the date of our last report to Government under date 5th June, 1846.

In the 11th para. of that document the Sub-Committee promised a further report upon the same subject in which they proposed to attempt a more accurate classification of the works according to their subjects; being, in fact, the first step towards the preparation of a *catalogue raisonné*.

This object has been steadily, though slowly, prosecuted ever since, principally under my superintendence with the limited means at my disposal, consisting of the unemployed moonshees on the Establishment of the College, one of whom is specially attached to me as a Member of the College Board, and occasional aid rendered by the Canarese translator's Establishment, whenever it could be made available for the purpose.

By these means 1103 MSS. have been examined and their contents abstracted, being not quite half the number of those which required to be subjected to such scrutiny, as per accompanying tabular statement. Of the remainder the greater part of the Sanscrit volumes of the Mackenzie collection have already been catalogued by Dr. Wilson, and those in the vernacular dialects by the Rev. Mr. Taylor. It now remains for the Committee to determine how these various materials are to be amalgamated into one complete work, showing the character and contents of the whole collection, in such a way as to render the books easy of reference, and available for the purposes of literary research.

The plan proposed by the Sub-Committee was to procure the services of a young officer who had given his attention to the study of the vernacular dialects, and showed otherwise an aptitude and taste for such studies. Two young men were then available who seemed well qualified for the purpose, Lieutenant Frye of the 22d M. N. I. and Lieutenant C. D. Grant of the M. N. I., but both of these, it is feared, are beyond our reach. Unless we can obtain the services of such a qualified Superintendent, I would propose that the examination of the MSS. should be prosecuted as at present, without incurring much additional expense, until the whole have been abstracted. We could then take into consideration the best means of putting the whole into shape, which is rather a work of arrangement and order, than one requiring high literature.

rary qualifications. The whole should be sedulously overlooked by the Committee to see that the catalogue is prepared in such a form as will meet the wishes of the Honorable Court, and subserve the purposes of Oriental Scholars. The execution alone should be entrusted to the Superintendent, who should be required to submit all deviations from the prescribed plan to the Committee, and should, on no account, be allowed to introduce any alterations in conformity to his own ideas.

I am, &c.,
(Signed) W. E.

	Books in the Library.			Examined and abstracted.			To be examined.			REMARKS.
	Cadian.	Paper.	Total.	Cadian.	Paper.	Total.	Cadian.	Paper.	Total.	
Sanscrit,.....	805	534	1339	750	38	788	55	498	553	Of these 15 are written in Canarese characters and 5 in Malayalam, also 17 in Nagari and 5 in Bengali. Total. 42.
Teloogoo,.....	712	452	1164	312	0	312	400	452	852	
Canarese,.....	0	22	22	0	0	0	0	22	22	
Tamil,.....	14	0	14	2	0	2	12	0	12	
Malayalam,.....	3	0	3	3	0	3	0	0	0	
Burmah,.....	21	0	21	0	0	0	21	0	21	
Total	1555	1008	2563	1067	38	1105	488	972	1460	

N. B.—Kripacharry the Pundit was employed from 15th October, 1847, to February, 1848, at 35 Rupees per month, Rs. A. P.
Also a Moonshee was employed in examining the Teloogoo Books from 6th January, 1848, 157 8 0
25th February, 1848.

Read the following list of Donations of Books, &c. to the Society since the last Annual General Meeting.

List of Books, &c. presented to the Society since the last Annual General Meeting, held on the 25th February, 1847.

Donors.	
Dana's Two Years before the Mast,	C. P. Brown, Esq.
Morrison's Chinese and English Dictionary, 4 vols,	Lieut. G. N. Bredin, H. M. 94th Regt.
Observations made at the Magnetical and Meteorological Observatory at Bombay, April, Dec. 1845,	Bombay Government.
Horary Meteorological Observations made at the Honorable the East India Company's Magnetic Observatory at Madras by Captain S. O. E. Ludlow, in the interval 1841-1846,	Madras Government.
Astronomical Observations made at the Honorable the East India Company's Observatory at Madras, in the years 1843 to 1847, by T. G. Taylor, Esq.	Do.

Donors.	
Meteorological Observations made at the Meteorological Bungalow on Dodabetta 8640 feet above the level of the sea in the years 1847, 1848, under the direction of T. G. Taylor, Esq.	Madras Government.
Catalogue of the Calcutta Public Library,	The Curator of Calcutta Public Library.
Bibliographia Armeniaca; or an Introduction to the choice collection of Elementary, Classical, Religious and Miscellaneous works in the Armenian language, by Samuel Marcar,	The Author.
General Observations on the Provinces annexed to the Russian Empire under the denomination of the Territory of Armenia. Translated from the French with notes—by Samuel Marcar,	The Translator.
67 Volumes of German Works,	Mathematical and Physical Class of the Royal Academy of Bavaria.

Rudiments de la langue Hindoui, par M. Garcin de Tassy, The Author.
Several mineral specimens, including specimens of Newboldite, a new mineral described by Mr. Piddington, Captain T. J. Newbold.

III. *Resolved*.—That the above mentioned books be placed in the Library for the use of Subscribers, and included in the next Catalogue, and the mineral specimens be added to the Museum; and that the donors who have been already thanked by the Managing Committee, are entitled to the acknowledgments of the Society.

Read list of twenty-four Members of the Society who have ceased to subscribe, left the Presidency, or died, and of thirty-one who have become Subscribers, since the last Annual General Meeting.

Ceased to Subscribe.		Become Subscribers.	
1 D. Pugh, Esq.	First Class.	1 Dr. J. Kellie,	First Class.
2 C. Sooboo Moodaliar,	do.	2 Dr. C. St. John,	do.
3 The Most Noble the Marquis of Tweeddale, K. T. and C. B.	do.	3 J. Goldingham, Esq.	do.
4 A. Robertson, Esq.	do.	4 R. B. Bell, Esq.	do.
5 J. U. Ellis, Esq.	do.	5 W. U. Arbuthnot, Esq.	do.
6 Col. W. Strahan,	do.	6 D. Mackenzie, Esq.	do.
7 Hon. H. Chamier, Esq.	do.	7 Lieut. A. H. Hope,	do.
8 J. Western, Esq.	do.	8 G. S. Hooper, Esq.	do.
9 R. B. Bell, Esq.	do.	9 F. Lushington, Esq.	do.
10 Major Gen. Monteith, K. L. S.	do.	10 H. Corbett, Esq.	do.
11 W. Middlemass, Esq.	do.	11 J. H. Blair, Esq.	do.
12 D. Ross, Esq.	Second Class.	12 W. E. Underwood, Esq.	do.
13 E. R. McDonnell, Esq.	do.	13 C. V. Conniah Chetty,	Second Class.
14 J. R. Boyson, Esq.	do.	14 E. Maltby, Esq.	do.
15 Captain Ludlow,	do.	15 A. W. Phillips, Esq.	do.
		16 Cornet W. Sapse,	do.
		17 Lieut. J. P. Frye,	do.

Ceased to Subscribe.		Become Subscribers.	
16 Major J. T. Philpot,	Second Class.	18 Sir H. C. Montgomery, Bart.	2d Class.
17 Captain Seale,	Under Rule IV.	19 Capt. Seale, H. M. 94th,	Under Rule IV.
18 Lieut. J. S. Menzies,	do.	20 Lieut. H. H. Pratt,	do.
19 Lieut. H. T. McCrea,	do.	21 Capt. L. Desborough,	do.
20 Lieut. Col. L. W. Watson,	do.	22 Lieut. J. S. Menzies,	do.
21 Lieut. A. Campbell,	do.	23 Lieut. H. T. McCrea,	do.
22 Captain A. C. Meik,	do.	24 Lieut. A. Campbell,	do.
23 Captain E. W. Snow,	First Class.	25 Capt. A. C. Meik,	do.
24 Sir John Doveton, G. C. B.	do.	26 Lieut. H. Wahab,	do.
		27 Lieut. Col. L. W. Watson,	do.
		28 Lieut. H. H. Macleod,	do.
		29 Lieut. Col. M. McNeill,	do.
		30 Major Williams, H. M. 4th,	do.
		31 Lieut. Genl. Sir G. H. F.	do.
		Berkeley, K. C. B.	First Class.

IV. *Resolved*,—That these lists, which appear satisfactory, as showing that the number of Subscribers has increased since the last General Meeting, be recorded.

Read list of old bills for sums due to the Society which the Managing Committee consider irrecoverable, and, accordingly, with two exceptions, in which the debtors are still alive and in India, recommend should be cancelled, and struck out of the accounts as bad debts.

List of Old Bills to be Cancelled.

	BILLS.	RS.	A.	P.
C. J. Brown, Esq. dead,	5	110	0	0
Rev. Mr. Webster, dead,	1	22	0	0
Captain A. Mackworth,	4	101	0	0
Captain C. A. Kerr, dead,	4	88	0	0
Captain (now Major) Poole,	8	181	10	8
R. T. Porter, Esq.	5	110	0	0
Captain Otter, returned to England,	3	66	0	0
Captain W. Walker, dead,	1	35	0	0
W. R. Smyth, Esq.	2	29	5	4
Total...	33	743	0	0

V. *Resolved*,—That, as recommended by the Managing Committee, the bills in question be cancelled, and that the two debtors to the Society, who are still alive and in India, be again called upon for payment.

The Meeting proceeds, in conformity with Rule VII., to nominate members to form the General Committee of Management for the current year.

VI. *Resolved, unanimously*,—That Sir H. C. Montgomery, Bart., W. A. Morehead, Esq., Major R. Garstin, and T. Pycroft, Esq. be request-

ed to become Members of the Managing Committee, in addition to the undermentioned members of the present Committee.

WALTER ELLIOT, Esq. (*Chairman*.)
Major P. ANSTRUTHER, C. B.
C. P. BROWN, Esq.
Lieut. Colonel O. FELIX,
J. OUCHTERLONY, Esq.
Lieut. Colonel T. S. PRATT, C. B.
R. H. WILLIAMSON, Esq.

Proposed by Walter Elliot, Esq., seconded by Sir H. C. Montgomery, Bart., that the following Rule be established.

"Any Member of the Committee of management who shall, without satisfactory reasons assigned, absent himself from three successive monthly Meetings of the Committee, shall be held thereby to have ceased to belong to the Committee, which will, accordingly, proceed to supply his place in accordance with Rule X."

VII. *Resolved*,—That the above Rule be established.

Proposed by Walter Elliot, Esq., seconded by C. P. Brown, Esq., that steps be taken to render the Society's Library more available than it has hitherto been to the public at large, by throwing it open to a third class of Subscribers, each of whom will be allowed to carry out a single work at a time, on lodging a small deposit with the Librarian, on terms similar to those observed in the Public Libraries at Calcutta and the Cape of Good Hope.

VIII. *Resolved*,—That this Meeting approves of the proposed arrangement, and that the Committee of Management be authorized to adopt measures for carrying it into effect.

C. P. Brown, Esq., lays before the Meeting a letter from M. Müller, the Editor of the version of the Rig Veda, now in course of publication, under the patronage of the Honorable East India Company, requesting to be favored with copies of the Veda or its commentaries, and states that a copy of the Veda is amongst the works presented by him to Government, and now in charge of the Society.

IX. *Resolved*,—That, as it does not appear expedient that the work in question should be sent to England, the Managing Committee be authorized to apply for the permission of Government to make such arrangements as may appear advisable for supplying M. Müller with a copy of it.

X. *Resolved, unanimously*,—That the thanks of this Meeting be offered to the Honorable the Vice President for his conduct in the Chair.

(Signed) J. J. LOAN,

Secy. M. L. S. &c.

(Signed) D. BURR,

Vice President.

At a Meeting of the Managing Committee of the Madras Literary Society and Auxiliary of the Royal Asiatic Society, held at the Club House, on Tuesday, the 4th April, 1848, at 7 o'clock p. m.

PRESENT.

Chairman.

WALTER ELLIOT, Esq.

Members.

Major P. ANSTRUTHER, C. B.

C. P. BROWN, Esq.

Sir H. C. MONTGOMERY, Bart.

J. OUCHTERLONY, Esq.

T. PYCROFT, Esq.

R. H. WILLIAMSON, Esq., and

Captain J. J. LOSH, Secretary.

Read list of books included in the Catalogue of the Society's Library, but which have been lost or destroyed, and most of which are required to be replaced, prepared in conformity with the 13th Resolution at the last monthly Meeting of the Committee, but not quite completed.

I. *Resolved*,—That Messrs. Allen and Co. be requested to send out the newest and cheapest good editions of such of the missing works in question, as the Committee, at their last Meeting, resolved should be replaced; and also, to adopt the necessary measures for obtaining from dealers in old and second-hand books, such separate volumes of books and numbers of periodicals as are required to supply deficiencies in the Library. The prices of the books and periodicals in question, as soon as ascertained, will be debited to the parties responsible for the deficiencies which they are to supply, and payment will be applied for accordingly. As, in most cases, the charges will not correspond with those originally incurred by the Society for the books and periodicals in question, the Committee do not consider it necessary that this list should be completed or recorded.

Read letters from Messrs. Pharoah and Co., and J. R. Logan, Esq., of Singapore, received with eight numbers of the Journal of the Indian Archipelago and Eastern Asia, presented to the Society by the latter gentleman.

ATHENÆUM LIBRARY, MADRAS, 30th March, 1848.

To

The Secretary to the Literary Society.

SIR,

In handing the accompanying note from J. R. Logan, Esq., of Singapore, we beg to wait on you with eight numbers of the Journal of the In-

dian Archipelago, viz., from the 3d to the last published, and shall feel thankful to be favored with an acknowledgment.

Mr. Logan has asked us to send the two first numbers likewise, but the supply thereof forwarded to us has been sold.

We are, Sir,

Your most obedient servants,

(Signed) PHAROAH AND CO.

To

*The Secretary of the Literary Society,
Madras.*

SIR,

May I beg the Society's acceptance of the back numbers of the Journal of the Indian Archipelago and Eastern Asia. They would have been regularly presented from the commencement if I had been aware that the Society still flourished.

Your most obedient servant,

(Signed) J. R. LOGAN.

SINGAPORE, }
7th March, 1848. }

II. *Resolved*,—That these numbers of the Journal of the Indian Archipelago and Eastern Asia be accepted, and that Mr. Logan be thanked, on behalf of the Society, for his present to it. The Committee observe that they had intended to subscribe to the periodical in question on account of the Society. The subject will be again taken into consideration as soon as the 1st and 2d numbers of the periodical are received, and it is ascertained whether Mr. Logan intends to supply the Society gratuitously with future numbers as published.

Read Memorandum of certain articles of stationery, &c. required by

Memorandum of Stationery
required annually for the use
of the Native Library.
4 Towels for cleaning and
dusting books,
Papers,
Pencils,
Quills,
Penknives,
Country Ink or Sage.

the persons employed at the cost of Government, to look after the Indian Books and Manuscripts at present in the Society's charge.

(Signed) १८५७ ३०४.

4th April, 1848.

III. *Resolved*,—That the Librarian be authorized to supply such of the articles in question as are absolutely requisite, keeping a separate account of the cost of them, (which will be laid before the next monthly Meeting) in order that it may eventually be defrayed by Government.

IV. *Resolved*,—That Messrs. Allen and Co. be requested to send out the following new books for the use of the Society :

Napier's Florentine History.

An Introduction to English Antiquities, by James Nicholson.

The Hakluyt Society's Edition of Hawkins' South Sea Voyage.

Italy Past and Present, by L. Mariotti.

The Birds of Jamaica, by P. H. Gosse Van Voorst.

In conformity with the 7th Resolution at the Meeting on the 8th December, 1846, a memorandum of the sums received on account of subscriptions to Nos. 30 and 31 of the Society's Journal, since the last Meeting, is laid on the table.

Memorandum.

Subscriptions to the Journal Nos. 30 and 31 have been received from the following Gentlemen since the last monthly Meeting of the Committee held on the 11th March, 1848.

C. Whittingham, Esq., No. 30, - - -	Rs. 2 0 0
J. Caldecott, Esq., Nos. 30 and 31, - - -	„ 4 0 0
	<u>Rupees... 6 0 0</u>

(Signed) WALTER ELLIOT,
Chairman.

(Signed) J. J. LOSH,
Secretary M. L. S. &c.

At a Meeting of the Managing Committee of the Madras Literary Society and Auxiliary of the Royal Asiatic Society, held at the Club House, on Tuesday, the 2d May, 1848, at 7 o'clock P. M.

PRESENT.

Chairman.

WALTER ELLIOT, Esq.

Members.

Major P. ANSTREUTHER, C. B.

Lieut. Colonel O. FELIX,

Major R. GASTIN,

Sir H. C. MONTGOMERY, Bart.

W. A. MOREHEAD, Esq.

Lieut. Colonel T. S. PRATT, C. B.

T. PYCHOFT, Esq.

R. H. WILKINSON, Esq., and

Captain J. J. LOSH, Secretary.

The Secretary reports that the Right Honorable Sir H. Pottinger,

Bart., G. C. B., has become a Member of the Society of the first class, and, that, according to rule and practice, the Governor of Madras for the time being holds the Office of Patron of the Society.

I. *Resolved*,—That the Secretary be requested to write to the Private Secretary to the Right Honorable the Governor of Madras, requesting, in the name of the Committee of Management, that His Excellency will confer on the Society the honor of becoming its Patron.

With reference to the 2d Resolution at the last monthly Meeting, the Secretary states that he has ascertained from Messrs. Pharos and Co. that J. R. Logan, Esq., intends to continue to supply the Society gratuitously with the numbers of the Journal of the Indian Archipelago and Eastern Asia as published.

II. *Resolved*,—That Mr. Logan be informed that the Committee have directed copies of Nos. 31 and 32 of the Literary Society's Journal to be transmitted to Singapore for his acceptance, and that a copy of each future number will be, in like manner, forwarded as published.

The Secretary states that, as there have been considerable changes in the Office-bearers, Committee of Management, and Subscribers, as well as several revisions of the rules, since the last Catalogue was printed in 1846, it appears desirable to have the usual number of copies of revised and corrected lists and rules printed, as soon as convenient, for distribution to the Subscribers; but as there are still upwards of 100 copies of the Catalogue in the Library, it does not seem necessary to print a new Catalogue at present.

III. *Resolved*,—That a revised and corrected copy of the lists in question and the rules of the Society be prepared and laid before the next monthly Meeting, with a statement of the probable cost of printing 250 copies for distribution to Subscribers.

A report on the Calcutta Public Library for 1847 and 1848.
A statement of facts relative to the transactions between the Writer and the late British Political Mission to the Court of Shoa in Abyssinia.
By C. T. Beke, Esq., Ph. D.
&c. &c.

Two pamphlets (as per margin) presented to the Society since the last Meeting are laid before the Meeting.

IV. *Resolved*,—That these pamphlets be laid on the Library table, and that the donors of them be thanked on the first convenient opportunity.

Three unpaid bills for subscription for the first quarter of the present year due by Subscribers who have returned to England are laid before the Meeting, and the Secretary re-

Col. W. Strahan, Esq. Rs. 22
Asst. Surg. W. Middle-
mass, Esq. „ 22
A. J. Arbuthnot, Esq. „ 22

ports that it seems to have been usual on former similar occasions to cancel such bills.

V. *Resolved*,—That as it is understood that Colonel Strahan and Dr. Middlemass are not likely to return to India their bills be cancelled, according to former practice, but that Mr. Arbuthnot's bill be presented to him for payment on his return to Madras.

MEMO.		With reference to the 3d Resolution at the
The undermentioned articles of Stationery have been supplied to the Native Librarians from time to time, at the expense of the Society during the last two years.		last Meeting, a Memorandum showing the articles of stationery supplied to the Librarian of the Native (Government) Library within the last two years is laid before the Meeting.
29 quires of brown paper, price.....	Rs. 5 12 9	
67 quills, „	„ 1 15 0	
Total Rupees..		7 11 9

VI. *Resolved*,—That, in future, applications from the Native Librarians for supplies of stationery be laid before the Committee before being complied with.

With reference to the 12th Resolution at the Meeting of the 11th March last, the Secretary reports that at the request of Lieut. Colonel Watkins, the number of the Society's Journal returned, under a misconception, by Captain C. J. Elphinstone, has been re-transmitted to him, and that he has paid for it.

VII. *Resolved*,—That the explanation afforded on behalf of Captain C. J. Elphinstone appears satisfactory.

VIII. *Resolved*,—That Messrs. Allen and Co. be requested to send out the following new books for the use of the Society.

Landon's Hellenes.

Lectures on the Physical Phenomena of Living Beings, by C. Matucca, translated by Pereira.

Indian Railways, by an old Indian Postmaster.

In conformity with the 7th Resolution at the Meeting on the 8th December, 1846, a Memorandum of the sums received on account of subscriptions to Nos. 30 and 31, of the Society's Journal since the last Meeting is laid on the table.

Memorandum.

Subscriptions to the Journal Nos. 30 and 31 have been received from the following gentleman since the last monthly Meeting of the Committee, held on the 4th April, 1848.

C. Desormeaux, Esq., Nos. 30 and 31, . . . Rupees 4 0 0.

IX. *Resolved*,—That this Memorandum be recorded.

(Signed) WALTER ELLIOT,
Chairman.

(Signed) J. J. LOSH,
Secretary M. L. S. &c.

At a Meeting of the Managing Committee of the Madras Literary Society and Auxiliary of the Royal Asiatic Society, held at the Club House, on Tuesday, the 6th June, 1848, at 7 o'clock P. M.

P R E S E N T.

Chairman.

WALTER ELLIOT, Esq.

Members.

Lieut. Colonel O. FELIX,

Sir H. C. MONTGOMERY, Bart.

Lieut. Colonel T. S. PRATT, C. B.

T. PYCROFT, Esq., and

Captain J. J. LOSH, Secretary.

With reference to the 1st Resolution at the last monthly Meeting read letter from R. Woosnam, Esq., Private Secretary to the Right Honorable the Governor of Madras.

GOVERNMENT HOUSE, 5th May, 1848.

SIR,

I have the honor to acknowledge the receipt of your letter of yesterday's date, and in reply to it I am directed by the Right Honorable Sir Henry Pottinger to say that it will afford him great gratification to become the Patron of the Madras Literary Society and Auxiliary of the Royal Asiatic Society.

I remain, Sir,

Your most obedient and faithful servant,

(Signed) RICHARD WOOSNAM.

Captain J. J. LOSH,

Secretary to the Madras Literary Society
and Auxiliary of the Royal Asiatic Society.

X. *Resolved*,—That this letter be recorded, and that the name of the Right Honorable Sir Henry Pottinger, G. C. B., be entered in the revisal list, about to be published, as Patron of the Society.

MEMO.

To Printing 300 copies Rules, &c. of the Madras Literary Society will make about 11 or 12 pages of 8vo.

	RS.	A.	P.
6 plain 8vo. pages of Burgeoise at Rs. 1-6-0.....	8	4	0
5 plain 8vo. pages of Brevier at Rs. 1-10-0.....	8	2	0
1 plain 8vo. page of Nonpareil.....	2	12	0
To 19 quires 3 sheets of French Foolscap paper at 4 Annas the quire.....	4	13	6
To 4 quires 4 sheets colored Demi paper at 12 annas the quire.....	3	2	0
To stitching the above at 1 pie each.....	1	9	0
	Rupees..	28	9 6

* 250 or 300 copies will form the same charge.

C. K. S. PARS, }
20th May, 1848. }

II. *Resolved*.—That the consideration of this subject be postponed until the next monthly Meeting of the Committee, before which it is probable that the arrangement in question will be completed.

MEMO.

The Society has for transmission the undermentioned three parcels, containing numbers of the Society's Journal, two to Calcutta and one to Singapore.

1 Parcel to the Secretary to the Delhi Archaeological Society containing Journal Nos. 2, 3, 4, and 5. Care of Messrs. Ostell, Lepage and Co., Calcutta.

1 Parcel to the Public Library, Calcutta, containing Nos. 3, 4, and 5 of the Journal.

1 Parcel to J. R. Logan, Esq., Singapore, containing Nos. 31 and 32 of the Journal.

III. *Resolved*.—That the parcels in question be transmitted to Calcutta and Singapore by the next Steamer from Madras.

Read letter from Major M. Poole, 5th Regt. N. I., in reply to a demand made by the Secretary, in accordance with the 5th Resolution at the last Annual General Meeting, for payment of the sum of Rupees 181-10-8 due by him to the Society since the year 1834.

To

The Secretary of the Madras Literary Society.

SIR,

I beg to acknowledge the receipt of your letter of the 9th instant, and to state that being under the impression that some mistake exists has caused this delay in settling the account.

In advertence to the 3d Resolution at the last monthly Meeting the Secretary states that, in consequence of the arrangement sanctioned by the 8th Resolution of the last Annual General Meeting, for throwing open the Society's Library to a third class of Subscribers not having been yet completed, it has been found impossible to prepare a complete and correct copy of the rules of the Society, and that the charge for printing 250 copies of the lists of Subscribers, &c. and rules will be about 29 Rupees, as per statement obtained from the Christian Knowledge Society's Press.

It is my intention to take an early opportunity to satisfy myself regarding the matter, and I trust soon to adjust the same.

Your obedient servant,

(Signed) M. POOLE.

10th May, 1848.

IV. *Resolved*.—That should Major Poole not adjust the demand in question within a reasonable time, he be again applied to for payment.

Read two letters applying for information respecting the Rules of the Society, and inquiring whether an Officer residing at Wallajahbad can be allowed to become a Subscriber to the Library.

To

*The Secretary of the Literary Society,
Madras.*

SIR,

It has been suggested to me that the Literary Society of Madras might supply the plan of a book club on certain conditions. I take the liberty of addressing you to make inquiries on the subject, viz., whether the Literary Society supplies the reading of books on the principle of most book clubs, and on what terms. My being perfectly unacquainted with the nature of the Literary Society of Madras, will, I trust, plead my excuse for troubling you with this question.

I remain,

Your most obedient servant,

(Signed) JAMES INNES.

WALLAJAHBAD, }
18th May, 1848. }

ST. THOMAS' MOUNT,
24th May, 1848.

To

*The Secretary to the Madras Literary Society,
Madras.*

SIR,

I shall be obliged by your informing me whether an Officer at present residing at Wallajahbad, 40 miles from Madras, can be allowed to become a Subscriber to the Madras Literary Society and if such is allowable, by your furnishing me with a copy of the conditions and regulations it would be necessary for him to abide by.

I remain, Sir,

Your obedient servant,

(Signed) E. F. PARKER, Lieut.,
Madras Artillery.

V. *Resolved*,—That Dr. Innes and Lieut. Fasken be informed that, under the existing Rules of the Society (with copies of which they have been furnished by the Secretary) books cannot be forwarded from the Library to Wallajahbad, or any other out-station.

Read letter from Messrs. W. H. Allen and Co., dated 19th April, 1848, advising the dispatch of periodicals and books per Steamer.

VI. *Resolved*,—That the receipt of Messrs. Allen and Co.'s letter and of the periodicals and books alluded to, be acknowledged, and that they be requested to send out the following books for the use of the Society.

The Autobiography of Goethe, translated by John Oxenford.
The Life and Adventures of Oliver Goldsmith, by John Foster.
The Life of the Great Lord Clive, by the Rev. G. R. Gleig.
The Three Days in February, 1848, by P. B. St. John.
Contributions to the Literature of the Fine Arts, by C. L. Eastlake, R. A.
The Romance of the Peerage, by G. L. Craik.
History of the Jesuits.
Life and Correspondence of Sir H. Lowe, edited by Sir H. Nicolas.

The Secretary states that an extra copy of the last complete and illustrated Paris edition of the Works* of Beranger has been sent out to him, by mistake, by Mr. J. M. Richardson, which if required for the Society may be had at the original price of £1-18-6, including charges for carriage.

VII. *Resolved*,—That the work in question be purchased for the Society.

In conformity with the 7th Resolution at the Meeting on the 8th December, 1846, a Memorandum of the sums received on account of Subscriptions to Nos. 30 and 31 of the Society's Journal since the last Meeting is laid on the table.

Memorandum.

Subscriptions to the Journal Nos. 30 and 31 have been received from the following gentlemen since the last monthly Meeting of the Committee held on the 2d May, 1848.

Lieut. G. Reade, No. 31.....	Rupees	2	0	0
T. C. Jerdon, Esq. „ „.....	„	2	0	0
	Rupees..	4	0	0

VIII. *Resolved*,—That this Memorandum be recorded.

(Signed) WALTER ELLIOT,
Chairman.

(Signed) J. J. LOSH,
Secretary, M. L. S. &c.

At a Meeting of the Managing Committee of the Madras Literary Society and Auxiliary of the Royal Asiatic Society, held at the Club House, on Tuesday, the 4th July, 1848, at 7 o'clock P. M.

PRESENT.

Chairman.

WALTER ELLIOT, Esq.

Members.

Major P. ANSTRUTHER, C. B.

C. P. BROWN, Esq.

Major R. GARSTIN.

Sir H. O. MONTGOMERY, Bart.

Lieut. Colonel T. S. PRATT, C. B.

T. PYCROFT, Esq., and

Captain J. J. LOSH, *Secretary*.

Read draft of proposed Rules for the establishment of a third class of Subscribers to the Library, in accordance with the 8th Resolution of the last Annual General Meeting, prepared by the Chairman of the Committee.

The Committee are of opinion that it would not be expedient to allow Subscribers of the 3d class to take out of the Library large and valuable works, such as the Encyclopedia Britannica, &c. &c. and that, therefore, a separate catalogue of the works issuable to the 3d class Subscribers should be prepared and printed as soon as possible, and that in the mean time, such books as are not to be taken out by Subscribers of the 3d class should be marked in each catalogue furnished to such Subscribers, and in the Librarian's catalogue for his guidance. The Committee are further of opinion that on a book being duly returned by a third class Subscriber at the expiration of the time allowed for its perusal, it may be again taken by him for a similar period, provided it has not been applied for by any other Subscriber. The Committee consider the proposed rules, modified as above stated, well adapted to answer their intended purpose, and approve of them accordingly.

3D CLASS.

The use of the stock books of the Library shall be open to persons, not Members of the Society, on the following conditions:

1st. Persons subscribing 1 Rupee monthly shall be denominated Subscribers of the third class, and shall be allowed to take out works of one volume, or if more than one, two volumes at a time.

2d. Every Subscriber of the third class before receiving books shall be required to lodge a deposit of not less than 20 Rupees with the Librarian one half in cash

and the other half in a promissory note; and such deposit shall be applicable to the discharge of all claims by the Society upon such Subscriber.

3d. Applications for books to be made by Subscribers in person, or by a written order signed by such Subscriber, and sent by a person provided with a bag or box for the conveyance and security of the books, which shall also be returned with similar precaution.

4th. Subscribers of the third class shall be entitled to keep books for the following periods:

1 8vo. volume,	- - - - -	a week,
1 4to. do.	- - - - -	2 weeks,
1 folio do.	- - - - -	3 weeks,

exclusive of the day of delivery.

5th. On the expiration of the above periods the books to be returned to the Library by the party who took them, in failure of which he shall be subject, at the discretion of the Committee, to a fine not exceeding one anna a day, chargeable on his deposit for the time of detention in excess of the regulated period.

6th. Any 3d class Subscriber, failing to return a book within three months shall be required to provide another complete copy of the work, for which his deposit will be held responsible.

7th. Any book returned in a damaged state shall be reported to the Committee who shall determine the penalty to be exacted.

8th. Any Subscriber taking out a book in a damaged state and not, on returning it, giving notice of the same to the Librarian, shall be held accountable for it.

9th. Any Subscriber lending a book taken out by him shall incur a fine to be fixed by the Committee.

10th. Notice shall be given to any Subscriber of any fine or penalty incurred by him, and the amount, if not paid, shall be deducted from his deposit, and no book issued to him until the deposit be again completed.

11th. Subscriptions to be paid monthly to the Librarian by the parties themselves. No books will be issued to Subscribers in arrears.

12th. Subscribers desiring to withdraw shall receive back their deposit by and under an order of the Committee.

I. *Resolved*,—That the Rules in question, modified as above stated, be published with the revised Rules about to be printed, a draft of which is to be prepared and circulated as soon as possible.

Read letter from Messrs. W. H. Allen and Co., dated 19th May, 1848, advising the dispatch of periodicals and of books per Steamer.

II. *Resolved*,—That the receipt of Messrs. Allen and Co.'s letter, and of the periodicals and books alluded to, be acknowledged, and that they be requested to send out the following books for the use of the Society.

Historic Lands of England, by J. B. Burke.

History of De Bayard, set forth in English, by Edward C. Kinderly.

Narrative of the Expedition sent by Her Majesty's Government to the river Niger in 1841-42.

Recollections of Republican France from 1790 to 1801, by Dr. Millengen.
Personal Recollections of the late Daniel O'Connell, by W. J. O'Neill Daunt, Esq.

The Secretary reports, with reference to the 3d Resolution at the last monthly Meeting, that the parcels containing numbers of the Society's Journal for the Delhi Archæological Society, the Public Library at Calcutta, and J. R. Logan, Esq., of Singapore, were dispatched to their respective addresses by the *Precursor* Steamer on the 1st Instant, and that the Agent to the P. and O. S. N. Company, Mr. R. Franck, undertook to forward them free of any charge.

The Committee consider that Mr. Franck is entitled to their thanks, on behalf of the Literary Society, for his obliging conduct.

(Signed) WALTER ELLIOT,
Chairman.

J. J. LOSH,
Secretary M. L. S. &c.



Madras Magnetic Observatory, from January to June, 1849.

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	Maxi- mum A. M. P. M.	Mini- mum A. M. P. M.	Mean	Max.	Mini.	Rain.	Evapora- tion	Quantity of humidity	N. W.	S. W.	S. E.	N. E.	Mean.	Ex- treme.	Day	Night	Mean month- ly tension of vapour cal- culated by the monthly Means of dry & wet Ther- mometer at 30 inches Barometer standard.	
January, 1849.	80.043	59.925	77.2	83.2	71.3	2.504	6.873	.72	110	23	100	511	0.14	3.50	.41	.27	671	
February	80.04	57.0	78.6	86.0	71.1	0	7.967	.73	33	148	322	169	0.14	1.50	.20	.12	693	
March	80.90	55.6	81.9	90.2	73.6	0	11.362	.72	40	309	463	30	0.21	1.75	.16	.06	769	
April	83.5	70.7	86.2	95.5	81.5	1.123	11.506	.73	25	261	426	6	0.37	2.35	.28	.23	882	
May	78.4	60.4	90.3	101.1	82.3	0.035	13.774	.63	43	323	303	5	0.30	2.20	.37	.31	872	
June	75.0	61.7	87.9	98.3	80.5	3.602	11.029	.64	107	439	159	-15	0.42	4.90	.60	.71	821	

W. S. JACOB,

H. C. Astronomer.