PUBLIC WORKS DEPARTMENT

Go. No. 2381 dt. 18-9-1886

Order—dated 23rd August 1886, No. 732, Revenue.

Miscellaneous.

With his letter read above the Superintendent, Government Central Museum, submits his report for the year 1885-86. Dr. Bidie gave over charge of the office of Superintendent to Dr. Thurston on October 12th, 1885, and His Excellency the Governor in Council took an opportunity of expressing his appreciation of the former officer's valuable services, in reviewing the report for 1884-85.

2. The number of visitors to the Museum during the year again shows an advance, being 311,462 as against 272,968 in the previous year. The Goverument observe with satisfaction that there was an increase in the number of gosha ladies who visited the Museum on the days reserved for them. There was also a considerable increase in the number of books consulted during the year. The position of the staff has been recently much improved and the Government notice with pleasure the interest which the various assistants take in their work. It appears from paragraph 7 that some of the buildings require slight repairs. The attention of the Public Works Department will be invited to the subject.

3. His Excellency the Governor in Council is much indebted to the various gentlemen who contributed to the Museum during the year.

4. In conclusion, His Excellency in Council desires to notice the evident zeal and interest of Dr. Thurston in his work. He should, however, avoid burdening his report with such unnecessary matter as that contained in paragraph 17.

(True Extract.)

(Signed) H. E. STOKES,
Secretary to Government.

To the Superintendent, Government Central Museum.
„ the Board of Revenue.
„ the Public Works Department.
„ the Public Department.
„ Surgeon-General G. Bidie, M.B., C.I.E.
„ the Editors' Table.

Exd. J. Henricus.

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Recd. 11-9-86 Encl.

G.O., 23rd August 1886, No. 732.

No. 2381/W dy 15th September 1886

AUGUST.

Government Central Museum.

Reviewing report of the — for the year 1885-86.

GOVERNMENT OF MADRAS.

## REVENUE DEPARTMENT.

Read—the following paper:—

From EDGAR THURSTON, Esq., Superintendent, Government Central Museum, to the Secretary to Government, Revenue Department, dated Madras, 2nd July 1886, No. 431:—

Abstract.—Submitting report on the working of the Government Central Museum during the year 1885-86.

Enclosures.

### ADMINISTRATION REPORT OF THE GOVERNMENT CENTRAL MUSEUM FOR THE YEAR 1885-86.

Introductory.—In the present report I am only able to speak from personal experience of the work which has been carried on during the latter half of the year, as I only took over charge of the Museum from my predecessor, Dr. Bidie, on October the 12th.

2. The proper work of the Museum was greatly retarded during the greater part of the year by the formation of a collection of artwares, jewelry, trade products, &c., of Southern India for the Madras Court of the Indian and Colonial Exhibition. I am, however, in the present instance reconciled to what would have otherwise been a great waste of time, inasmuch as Government has consented to my proposal, which was warmly supported by Colonel Hawkes, President of the Exhibition Committee, that at the close of the Exhibition a specified number of the articles exhibited by the Madras Government should be sent back from England and find a permanent place in the Central Museum, which will thus acquire a very handsome addition to its contents.

3. The rapid succession of Exhibitions in Paris, Sydney, Melbourne, Amsterdam, London (Fisheries), Calcutta and London (Indian and Colonial), to all of which collections were sent, has had a most disastrous effect on the working of the Central Museum, and it is most desirable that, in the event of any further Exhibitions taking place, the necessary work in connection with the collection of exhibits from the Madras Presidency should not be thrown upon the Museum, so that the entire staff may be occupied solely with proper Museum work, of which a great deal requires to be done in order that it may be brought up to the standard required of a well-organised Museum at the present day, and become a thorough index of the Presidency, where those who wish can obtain useful information.

4. It is wholly beyond the power or scope of a Presidential Museum to rival the great National Museums in the possession of representative collections from different quarters of the globe, and I have determined to devote my entire attention to the natural history, arts, ethnology, manufactures and raw products of Southern India, accepting only such specimens from other regions as may be sent as donations from time to time, and keeping them entirely apart from the main collections. The necessity of such a course is best illustrated by reference to the geological collection which, while abounding in a chaos of purchased and exchanged specimens of European fossils, is markedly deficient in specimens from the rich fossiliferous beds of the cretaceous system of Southern India.

5. As soon as I had ascertained for myself what line of action it would be necessary for me to carry out, so as to make the Museum more in accordance with my views, I applied to Government for a grant of Rs. 12,000, but, owing to the existing financial pressure, my application could not be acceded to. It, therefore, became necessary for me to make a more moderate estimate and to give up all idea of at present arranging the whole of the Museum collections on a more defined system than has hitherto been adopted; and as I had spent my first official tour in making a collection of fish from Cochin and other places on the West Coast, I decided to pay special attention during the present year to the fish gallery, and converting it into a properly-arranged gallery, illustrative of the marine and fresh water fauna of the Presidency.

6. Visitors to the Museum.—The usual statistical returns of the numbers of visitors during the year are given in Appendix B. The total number was considerably in excess of

20. The total number of books added to the library during the year was 860 and they were acquired as follows :—

| | No. |
|---|---|
| Presented by Government ... ... ... ... ... ... | 144 |
| Do. by private individuals ... ... ... ... ... | 73 |
| Purchased ... ... ... ... ... ... ... ... | 156 |
| British Museum publications presented ... ... ... ... ... | 13 |
| Patent Office papers ... ... ... ... ... ... ... | 20 |
| Trübner's Oriental series ... ... ... ... ... ... ... | 5 |
| Fish library books purchased ... ... ... ... ... ... | 16 |
| Periodicals ... ... ... ... ... ... ... ... ... | 433 |

21. The number of books bound during the year was 99.

22. Madras Harbour and Beach.—Through the kindness of F. N. Thorowgood, Esq., Superintendent of Harbour Works, I have received many interesting specimens which were picked up during the diving operations. These include a red incrusting sponge, two other sponges, a zoanthus, several species of coral (gargonidæ) and a holothurian (sea cucumber). I have also obtained from the surface water in the harbour specimens of Salpa, Velella and Physalia (Portugese man-of-war) and from the beach a shell of Ostræa perforated by a boring sponge (cliona), a shell of Pinna Japanica with hydroids attached to it, and various other molluscan shells. Pieces of pumice stone have been repeatedly picked up on the shore, and I incline to the theory that they have drifted hither from Krakatoa. Similar pieces have been sent to me during the year, picked up on the shore of the West Coast at Calicut and Tellicherry.

23. Numismatics.—Though a catalogue of the gold coins in the Museum collection had been issued, the arrangement of a great mass of silver and copper coins remained to be taken in hand. My first endeavour in this direction was to collect them all together and distribute them roughly into dynasties. This work was completed with the assistance of Captain R. H. C. Tufnell, who from his experience in Indian Numismatics was able to identify many issues to which I should have myself been unable to assign a place. The same gentleman then gave me great help in the arrangement of the different dynasties, and the Roman and Indo-Greek series are already completed. Among the former several coins of very considerable interest and value have come to light, notably an issue of Plautilla, wife of Caracalla, with Latin inscription PLAUTILLA AUGUSTA, and a fine green copper coin of Constantinus Magnus struck in London. The collection of Indo-Greek and Bactrian coins is not very rich, but I am in correspondence with a view to making it more complete. As the coins of each dynasty are arranged, I am compiling a manuscript catalogue, with a view to future publication, in which all issues, gold, silver, copper, &c., will find a place, but I propose to keep the gold coins, as at present, in the Museum strong box, and display the coins in silver and the baser metals in the body of the Museum, so that they may be seen by visitors without any special application.

24. As usual a large number of coins, amounting in all to 1,411, has been presented to the Museum during the year either by various societies or by private individuals. Among these I may specially mention a gold coin of the Gupta era presented through the Honorary Secretary of the Madras Literary Society, and a fine Rama Tanka presented by T. M. Scott, Esq., of Madura.

25. Natural History.—(1). *Arachnida.*—A large living spider (Mygale fasciata) was forwarded to the Museum from Hoonsoor where it was supposed to be causing death among the flocks. An experiment was made on a living sheep to see if the spider would produce any ill-effect on it, but the result proved negative, and the untimely death of the spider stopped any further experiments. I wrote requesting that some more living specimens should be sent to me, but at the end of the year none had arrived.

Mention was made in last year's annual report of a scorpion sent by H. R. P. Carter, Esq., living by preference in water. During the latter end of the year, I kept specimens of two other species of scorpion from Madras in jars containing some water, and though the animals were often seen above water on some stones which I placed in the jar, it frequently happened that they remained for long periods submerged beneath the surface of the water, so that our common scorpions may be considered amphibious in their habits. The subject is one which is worthy of study on the animals in their natural conditions.

(2). *Crustacea.*—My thanks are due to Dr. Henderson of the Christian College for naming many of the species contained in the Museum collection—a task which he was well qualified to carry out, as he has devoted special attention to this order in connection with the "Challenger" Expedition Collection.

(3). *Fish.*—In addition to a large number of fish obtained during my tour on the West Coast (q.v.) 8 specimens were sent to the Museum including a Gourami presented by R. Hollingsworth, Esq. From time to time various species of salted fishes were sent by the Salt Department for identification.

(4). *Insects.*—A large number of insects were sent to the Museum, among the most interesting of which were one which was proving destructive to the sugar-canes in North Arcot, and another which was inflicting its ravages on the cinchona leaves in the Wynaad, and of which specimens were sent, together with some of the affected leaves, by Messrs. Arbuthnot and Co., to whom I made a report suggesting certain precautions to be adopted and certain remedial agents to be tried, while pointing out that the expense of applying chemical reagents where the infested area is a large one is often greater than the loss of money caused by the ravages of the insect pests, and further that in the interest of the planter, a prolonged and careful study in a practical manner, not only of the life history and habits of the parasites, but also of the cheapest and at the same time most effective means of exterminating them is much needed.



(5). *Mammals and Birds.*—The light in the gallery in which both mammals and birds are exhibited is exceedingly bad, and the cases in which they are arranged do not show them off to advantage. Many of the specimens, too, are very old and require replacing by new ones. A great desideratum is a good collection of skeletons of the animals of Southern India, and at the end of the year some of my assistants in the Taxidermic department were engaged in the preparation of skeletons of some of the common types. The collection of birds should possess not only the male and female birds, but also the nest with the eggs of each species, set up artificially in such a way as to imitate the natural surroundings, but I am afraid that this ideal will not be attained to for a long time. During the year 27 mammals were received, of which 8 were purchased and 19 presented. Among them was a lion from the People's Park, the gift of the President of the Municipal Commission, which has been stuffed.

The total number of birds acquired was 626, of which 513 were obtained by purchase. The greater number were collected by Mr. Davison who was engaged for a period of six, which was extended to eight, months to make a collection of South Indian birds. At the end of the year the last consignment had not arrived, but those which had been received were arranged as cabinet specimens for purpose of study.

(6). *Mollusca.*—A great amount of space is wasted in the gallery at present devoted mainly to a collection of shells, mixed up together in cases without reference to locality and containing a number of specimens labelled vaguely "Eastern Seas." In accordance with my views as to making the Museum essentially representative of South India, I have picked out those specimens which I know definitely to have been found in the Madras Presidency and they, together with other specimens collected along the coast by myself, form the nucleus of a South Indian collection. The general collection will be put away in drawers where it will be available to those, who wish to study it specially, and a large amount of space be thus economised.

The total number of shells, exclusive of those collected by myself, acquired during the year was 1,017, nearly all of which were given by the Assistant Curator Mr. R. Damodarum Naidu.

Some minute pelagic shells were sent from Vizagapatam, where they were mistaken by the natives for pearls which had fallen from Heaven.

I am much indebted to H. S. Thomas, Esq , for giving me specimens of the shells of *Avicula vexillum* and *Avicula fucata* in various stages of growth in illustration of his report on Pearl Fisheries.

(7). *Reptiles.*—The additions during the year amounted to 24, of which Deputy Surgeon-General Shortt sent the greater number. A number of specimens were sent to me for identification from Ootacamund by M. A. Lawson, Esq.

26. Taxidermist's Department.—The following is an abstract of the specimens prepared or collected during the year :—

| | No. |
|---|---|
| Mammals ... ... ... ... ... ... ... ... ... | 22 |
| Skeletons of mammals ... ... ... ... ... ... ... | 3 |
| Fishes ... ... ... ... ... ... ... ... ... | 114 |
| Reptiles ... ... ... ... ... ... ... ... ... | 72 |
| Crustacea ... ... ... ... ... ... ... ... ... | 50 |
| Insects ... ... ... ... ... ... ... ... ... | 650 |

This includes (1) a number of birds, fishes, reptiles and insects collected by the Second Taxidermist at Vizagapatam, to which place I sent him for two months at the request of H. G. Turner, Esq., Collector of that district; (2) a series of 159 game birds of South India, which was originally collected for the Indian and Colonial Exhibition, but has been retained for the Central Museum; (3) 75 of the Nilgiri birds collected by Mr. Davison which were stuffed and mounted.

This department is now in good working order, and I notice with pleasure not only the interest, but also the improvement, which the assistants display in their work.

As the result of a suggestion from several gentlemen who complained that, when out on shooting or fishing expeditions, they often met with specimens which would be of interest to the Museum, but were not able to keep them from want of the necessary time for, and special knowledge of, the methods of preserving and stuffing, I am training a young man, whom I shall be happy to place at the disposal of sportsmen, on condition that they give me a share of the spoil for the Museum.

27. Tours.—His Excellency the Governor in Council acceded to my proposal that I should be allowed to make periodical tours to different parts of the Presidency, so as to collect for myself any objects of interest which I may find for the Museum.

that of preceding years, and I notice with pleasure an increase in the number of Gosha ladies who visited the Museum on the days set apart for them. The greatest number of visitors on any single day was 25,834, on December the 19th (Thwathasee).

7. Buildings.—During the last monsoon there was some leakage from the roofs of the lecture theatre and the new gallery which was attended to by the Department of Public Works. The pillars in the main hall were found to be constantly crumbling, and it was found necessary to dig out the chunam and substitute Portland cement, which was painted light blue. The roof is in a similar state and gives some trouble from the frequent dropping of chunam. The roof of the Curator's office still leaks considerably and will require attention. I brought the absence of a *porte-cochère* in front of the Superintendent's house before the notice of the Superintending Engineer on my arrival, and soon afterwards received plans, but I have since then heard nothing more on this subject. The repairs in the Head Taxidermist's house have not proved very satisfactory, as cracks have appeared in some of the walls, in which white ants have taken their abode. The two main gates of the Museum were repaired during the year.

8. Museum Grounds.—The Mahoganies mentioned in the last annual report were planted out, and the experiment is being tried of planting the faster-growing rain tree *Pithecolobium saman* by the side of them to act as nurses of the tender seedlings. Some seedlings of the giant *Bambusa katang*, *Bixa orellana* and *Erythroxylon coca* were also planted, but the last are not thriving. The *Nauclea cadamba* which was planted in 1881 flowered for the first time, but bore no fruit. Several of the palms which were set down a few years ago also flowered. The Andaman trees, presented by Captain Torrie, are all making satisfactory progress.

9. I purpose planting some fruit trees—mango, jack and cocoanut—in the grounds over several barren areas, which are not pleasant to look on.

10 Artist.—The artist was mainly occupied with making a series of drawings of impressions of seals attached to copper grants. These he did neatly and accurately.

11. Erythroxylon Coca.—Some correspondence passed between the Museum and a firm of Pharmaceutists on the extent of the cultivation of Coca in Southern India, and an interesting letter received from them was published in the Madras papers for the information of planters, which resulted in a number of inquiries on the subject from planters and others.

12. Establishment.—On retiring from office as Superintendent of the Museum, Dr. Bidie recommended the revision of the pay of several members of the subordinate staff, and this revision was sanctioned in G.O., Revenue Department, No. 131, dated 15th February 1886, by His Excellency the Governor in Council as noted in the annexed statement :—

| Appointment. | Present pay. | Proposed. | | |
|---|---|---|---|---|
| | | Minimum. | Maximum. | Number of yearly instalments. |
| | Rs. | Rs. | Rs. | Rs. |
| Assistant Curator ... ... ... ... | 30 | 30 | 60 | 5 |
| Herbarium-keeper ... ... ... ... | 45 | 50 | 50 | ... |
| Head Taxidermist ... ... ... ... | 50 | 60 | 60 | ... |
| Third Taxidermist ... ... ... ... | 14 | 15 | 15 | ... |
| Writer ... ... ... ... ... ... | 25 | 30 | 30 | ... |

In a letter (No. 194, dated 3rd March 1886), I further urged the claims of the Assistant Librarian, the third Taxidermist and the man in charge of the Superintendent's room, as deserving of an increase of salary, but sufficient time had not elapsed for a reply to be received to this letter before the end of the year.

13. Ethnology and Antiquities.—Some Buddhist sculptures (174 pieces) were presented to the Museum through Major H. H. Cole, being a portion of the sculptures discovered at two small Buddhist topes near Mian Khan, Eusofzai. The excavations were made for the Punjab Government. The sculptures were conveyed by rail to Madras at the rate of 6 pies a mile per truck and some of the finer pieces will be set up in the sculpture gallery of the Museum.

14. It having been desirable to make a collection as complete as possible of impressions of the seals of the South Indian dynasties, an appeal was made to the various Collectors for copies of any which are to be found in their districts. In response to this appeal a number of copies in wax, and other material, were received and have been figured by the artist.



15. The Museum is indebted to His Excellency the Governor for the donation of an old Dutch manuscript and to His Highness the Maharajah of Travancore for four shields.

16. Herbarium.—The Herbarium was repeatedly visited in the early morning by His Excellency the Governor between the months of November and March. The work of the Herbarium-keeper, Mr. T. Abboy Naidu, was retarded by the collection of raw products for the Indian and Colonial Exhibition. He, however, systematically arranged, according to Hooker's Flora of British India, natural order Acanthaceæ to Amaranthaceæ and natural order Ranunculaceæ to Labiatæ (extra Indian plants) according to the Genera Plantarum. In addition sixty-one plants were collected in Vellore, 59 plants mounted, and 150 Indian and 220 British plants poisoned.

17. Laboratory for the Government Mineralogist.—A proposal for the erection of a laboratory for the Government Mineralogist in the Museum compound was referred to me for my opinion thereon. The site which was originally selected I objected to for many reasons, but consented to the use of another site which was suggested in a different part of the compound. Subsequently, I was asked to try and find a building suitable for the requirements of the Government Mineralogist in the vicinity of the Museum, but was not successful in finding one.

18. Lecture Theatre.—The following lectures were given :—

| | |
|---|---|
| Captain Hayes ... ... ... | On horse management. |
| Edgar Thurston, Esq. ... ... | ,, sponges. |
| Do. do. ... ... | ,, corals. |
| Captain R. H. C. Tufnell ... | ,, musketry. |
| C. Michie Smith, Esq. ... ... | ,, cyclones. |

The lecture on musketry was given specially for members of the Madras Volunteer Guards. The other lectures were all well attended, and I was pleased to see that a large portion of the audience at the scientific ones was composed of native students.

The theatre was also used for the monthly meetings of the South Indian Branch of the British Medical Association.

19. Library.—The total number of visitors who came to consult books was 5,563 against 5,172 in the preceding year, being a monthly average of 463. That, if their duties allowed it, many more would use the books is shown by the greater number of visitors during the Christmas holidays than at any other time.

The following list shows the nature and number of books consulted during the year :—

| *Class of Books.* | *No. consulted.* |
|---|---|
| Anatomy and Physiology ... ... ... ... ... ... | 43 |
| Antiquities and Ethnology ... ... ... ... ... ... | 32 |
| Arts and Industries ... ... ... ... ... ... ... | 34 |
| Astronomy ... ... ... ... ... ... ... ... | 11 |
| Books for Juveniles ... ... ... ... ... ... ... | 17 |
| Botany and Economic Botany ... ... ... ... ... ... | 78 |
| Chemistry ... ... ... ... ... ... ... ... | 23 |
| Classics ... ... ... ... ... ... ... ... ... | 3 |
| Encyclopædias, Dictionaries, &c. ... ... ... ... ... | 130 |
| English Language and Literature ... ... ... ... ... | 110 |
| Fine Arts ... ... ... ... ... ... ... ... | 9 |
| General Science ... ... ... ... ... ... ... ... | 22 |
| Geography, Travels and Sport ... ... ... ... ... ... | 54 |
| Geology, Mineralogy and Palæontology ... ... ... ... | 23 |
| History and Biography ... ... ... ... ... ... ... | 81 |
| Hygiene and Dietetics ... ... ... ... ... ... ... | 13 |
| Law, Politics and Political Economy ... ... ... ... ... | 49 |
| Mathematics ... ... ... ... ... ... ... | 10 |
| Medicine and Surgery ... .. ... ... ... ... ... | 17 |
| Mental and Moral Science ... ... ... ... ... ... | 36 |
| Microscopic Science ... ... ... ... ... ... ... | 2 |
| Official Manuals and Reports ... ... ... ... ... ... | 33 |
| Oriental Languages and Literature ... ... ... ... ... | 144 |
| Physical Science ... ... ... ... ... ... ... ... | 32 |
| Religion and Mythology ... ... ... ... ... ... | 15 |
| Scientific Journals and Periodicals ... ... ... ... ... | 11 |
| Telegraphy and Stenography ... ... ... ... ... ... | 2 |
| Veterinary ... ... ... ... ... ... ... ... | 1 |
| Zoology ... ... ... ... ... ... ... ... ... | 60 |
| Miscellaneous ... ... ... ... ... ... ... ... | 17 |
| Newspapers, &c. ... ... ... ... ... ... ... ... | 4,451 |
| Total ... | 5,563 |

The first of these tours was made in March, when I went, accompanied by my head and third Taxidermists, to Cochin, and visited also Quilon and Trivandrum. The main results of this tour have been embodied in a special report to Government, and I therefore confine myself in the present report to giving a list of the fish (the collection of which was my main object) which I obtained from Trichoor, Cochin and Quilon, and which have either been stuffed or preserved in alcohol.

Table I.

*Species obtained at Trichoor.*

| | | |
|---|---|---|
| 1. | Macrones Malabaricus ... ... ... ... ... .. | Edible |
| 2. | Do. Chryseus ... ... ... ... ... ... | do. |
| 3. | Gobius giurus ... ... ... ... ... .. ... | do. |
| 4. | Etroplus suratensis ... ... ... ... ... ... | do. |
| 5. | Mastacembalus armatus ... ... ... ... ... ... | do. |
| 6. | Do pancalus ... ... ... ... ... ... ... | do. |
| 7. | Ophiocephalus punctatus ... ... ... ... ... ... | ... |
| 8. | Plotosus canius ... ... ... ... ... ... ... | Edible |

Table II.

*Species obtained at Cochin.*

| Number. | Latin Name. | Tamil Name. | Malayalam Name. | Remarks. |
|---|---|---|---|---|
| 1 | Trygon narnak .. .. | Sonakah tiriki .. | Padavanthrandy .. | Young ones captured in back-water. Eaten by natives. |
| 2 | Do. sp. ? .. .. | .... | Pullythrandy .. .. | .... |
| 3 | Ætobatis narinari .. .. | Currooway tiriki .. | Kakathrandy .. .. | Eaten by natives. |
| 4 | Rhinobatus halavi .. .. | Padungan .. .. | Paruthalay .. .. | .... |
| 5 | Rhinoptera adspersa .. .. | Mutta tiriki .. .. | Eroomookanthrandy .. | Large ones cut in pieces and brought to market for sale. |
| 6 | Lates calcarifer .. .. | Koduwa .. .. | Narymeen (jackal fish) | Good eating, known as Nair fish in Malabar. |
| 7 | Serranus Malabaricus .. .. | Punni-calawah .. | Curoopu .. .. | Large fish cut in pieces and salted. |
| 8 | Do. sp. ? .. .. | Calawah .. .. | Do. .. .. | .... |
| 9 | Therapon jarbua .. .. | Palin keechan .. | Cullunkovay .. .. | .... |
| 10 | Diagramma griseum .. .. | .... | Cutraw .. .. | .... |
| 11 | Do. crassispinum .. | .... | Do. .. .. | .... |
| 12 | Lobates surinamensis .. .. | Musalli .. .. | Curruputty .. .. | Good eating. Good isinglass made from air bladder. |
| 13 | Gerres filamentosus .. .. | Oodan .. .. .. | Prawellee .. .. | Eaten by natives and salted. |
| 14 | Do. oyena .. .. .. | .... | Do. .. .. | .... |
| 15 | Scatophagus argas .. .. | Sipili .. .. .. | Nutchar Char .. | Eaten by lowest classes. |
| 16 | Ephippus orbis .. .. .. | Nulla torriti .. .. | Parinthee .. .. | Eaten but not esteemed (Day). |
| 17 | Upeneus Indicus .. .. | Mussara .. .. | Coozy meen .. .. | .... |
| 18 | Do. sp. ? .. .. | Do. .. .. | Do. .. .. | .... |
| 19 | Chrysophrys hasta .. .. | Currupumuttivayan .. | Aree .. .. .. | .... Good eating. |
| 20 | Lutianus rivulatus .. .. | Cuttu pirium .. .. | Cheppary .. .. | Largest specimen measured |
| 21 | Do. roseus .. .. | Moosoodee .. .. | Chembullee .. .. | 34 inches caught in both fresh and salt water. Good eating. |
| 22 | Do. quinquelineatus .. | .... | Cheppary .. .. | .... |
| 23 | Do. Johnii .. .. | .... | .... | .... |
| 24 | Sciæna maculata .. .. | Vari cathalay .. | Cuttalaw .. .. | Air bladders collected extensively for manufacture of isinglass. The price of the bladder sometimes exceeds that of the fish itself. Not much esteemed as food. |
| 25 | Do. vogleri .. .. | .... | Korkaw .. .. | |
| 26 | Do. carutta .. .. | Carung kuthalay .. | Carykutlay .. .. | |
| 27 | Do. osseus .. .. | .... | Cuttalaw .. .. | |
| 28 | Sciænoides sp. ? .. .. | Vanniapunnah .. | Chakalaw .. .. | |
| 29 | Caranx armatus .. .. | Tanga Paray .. .. | Vuttaw .. .. | |
| 30 | Do. sansum .. .. .. | .... | Periavuttay .. .. | .... Eaten by lowest classes. |
| 31 | Do. sp. ? .. .. | Paray .. .. .. | .... | .... |
| 32 | Do. gymnostetheides .. | .... | .... | .... |
| 33 | Chorinemus lysan .. .. | Toal paray .. .. | .... | .... Good eating. |
| 34 | Psettus argenteus .. .. | .... | Kael Parinthee .. | .... |
| 35 | Equula edentula .. .. | .... | Cooroochee .. .. | Used when salted in making pepper water which is supposed to possess medicinal virtues. |
| 36 | Do. ruconius .. .. | Carra pody .. .. | Do. .. .. | |
| 37 | Scomber Microlepidotus .. | Kanang kelleetee .. | .... | Eaten by natives; supply varies from year to year. |
| 38 | Sillago sihama .. .. .. | Culingan .. .. | Veekutha .. .. | Good eating. Known to Europeans as "whiting." |
| 39 | Platycephalus insidiator .. | Ooloopathy .. .. | Oorathallee .. .. | Eaten by natives known in Malabar as "Crocodile Fish." |
| 40 | Gobius biocellatus .. .. | .... | .... | .... |
| 41 | Mugil cunnesius .. .. | Madavay .. .. | Sultham .. .. | Mullet. Good eating; extensively salted and sun dried. |
| 42 | Do. poicilus .. .. .. | Do. .. .. | Nary cunnumboo .. | |
| 43 | Do. cunnumboo .. .. | .... | Cunnumboo .. .. | In Canara an objection was raised to eating them as their heads are like those of snakes. |



Table II.

*Species obtained at Cochin*—continued.

| Number. | Latin Name. | Tamil Name. | Malayalam Name. | Remarks. |
|---|---|---|---|---|
| 44 | Ophiocephalus punctatus .. | Koravay .. .. | .... | Eaten by natives. |
| 45 | Do. striatus .. | Veral .. .. .. | Verarl .. .. .. | Good eating, but muddy, if from stagnant water. |
| 46 | Etroplus suratensis .. .. | Chettha kenday .. | Curry meen .. .. | Very good eating; sometimes more than one foot in length in backwater. |
| 47 | Do. maculatus .. .. | Pitul kass .. .. | .... | Eaten by natives. |
| 48 | Cynoglossus sp ? .. .. | Nakkoo meen .. .. | .... | |
| 49 | Chaca lophioides .. .. | .... | Kadal thavalay .. | |
| 50 | Arius subrostratus .. .. | Kelleetee .. .. | Soondun cooree .. | Good eating only when young. Salted and eaten by poorest classes. |
| 51 | Do. Malabaricus .. .. | Do. .. .. | Thalayatay .. .. | |
| 52 | Do. sp ? .. .. | Do. .. .. | Poovatay .. .. | |
| 53 | Saurida tumbil .. .. | Kadal ooloovay .. | Arana meen .. .. | |
| 54 | Haplochilus rubrostigina .. | .... | Poonchan .. .. | |
| 55 | Do. lineatus .. .. | .... | Do. .. .. | |
| 56 | Hemirhamphus Xanthopterus. | .... | Kola .. .. .. | |
| 57 | Belone annulata .. .. | Pahmun kola .. .. | Do. .. .. .. | |
| 58 | Chatoessus chacunda .. .. | .... | Thodee .. .. | Eaten by natives. |
| 59 | Do. nasus .. .. | Muddu candai .. | Do. .. .. | Good eating. |
| 60 | Engraulis Malabaricus .. | Poor-realn .. .. | Nadu manangu .. | Eaten by natives. |
| 61 | Do. Indicus .. .. | Netteelee .. .. | Ooroo manangu .. | |
| 62 | Clupea toli .. .. .. | Oolum .. .. .. | Palavaw .. .. | |
| 63 | Do. sp ? .. .. | .... | .... | |
| 64 | Elops saurus .. .. .. | Allahti .. .. | Vulleekoomy .. | |
| 65 | Megalops cyprinoides .. .. | Moran candai .. .. | Cunny .. .. .. | |
| 66 | Chanos salmoneus .. .. | Tulu candal .. .. | Kootheekoomy .. | Called milk fish or white mullet by Europeans. |
| 67 | Dussumieria acuta .. .. | .... | Nulla chalay .. .. | Very good eating; known as sardine. |
| 68 | Ophicthys microcephalus .. | .... | .... | .... |
| 69 | Triacanthus brevirostris .. | Moolean .. .. | .... | Eaten by natives (not eaten in Madras.) |
| 70 | Anacanthus barbatus .. .. | Watamookola .. | .... | |

Table III.

*Species obtained at Quilon.*

| Number. | Latin Name. | Tamil Name. | Malayalam Name. | Remarks. |
|---|---|---|---|---|
| 1 | Carcharias sp ? .. .. | Soorah .. .. | Soorah .. .. .. | Used as food by natives. |
| 2 | Narcine timbi .. .. | .... | .... | |
| 3 | Gerres oyena .. .. | .... | Praweellee .. .. | |
| 4 | Drepane punctata .. .. | Torriti .. .. .. | Parunthee .. .. | Used as food. |
| 5 | Holocentrum rubrum .. | Kul-kah-catchee .. | Poollan .. .. | |
| 6 | Acanthurus mata .. .. | Cozy meen .. .. | .... | |
| 7 | Caranx leptolepis .. .. | Paray .. .. .. | Buttaparay .. .. | |
| 8 | Psettus argenteus .. .. | .... | .... | |
| 9 | Trachynotus ovatus .. .. | Thookoonassey .. | .... | Eaten when salted. |
| 10 | Equula insidiatrix .. .. | .... | Combancooroochee .. | |
| 11 | Mene maculata .. .. | .... | .... | |
| 12 | Cybium guttatum .. .. | Vanjeerum .. .. | Arrakeeah .. .. | Good eating. Best tamarind fish made from salted fish. |
| 13 | Platycephalus insidiator .. | Ooloopathy .. .. | Oorathallee .. .. | Eaten by natives. |
| 14 | Salarius frenatus .. .. | Parvut meen .. .. | Poolan .. .. .. | |
| 15 | Do. sp ? .. .. | Do. .. .. | Do. .. .. | |
| 16 | Platyglossus Dussumieri .. | .... | Culladay .. .. | |
| 17 | Synaptura orientalis .. .. | .... | Suptharee .. .. | |
| 18 | Cynoglossus sp ? .. .. | Nakku meen .. .. | .... | |
| 19 | Arius thalassinus .. .. | Kadal kelleetee .. | .... | |
| 20 | Do. subrostratus .. .. | Kelleetee .. .. | Soondum cooree .. | Eaten by natives. |
| 21 | Saurida tumbil .. .. .. | Kadalooloovay .. | Aranay meen .. .. | |
| 22 | Belone annulata .. .. | Phamun kola .. | Kola .. .. .. | |
| 23 | Clupea longiceps .. .. | .... | Kokala chalaw .. | Used for making "fish oil." |
| 24 | Muræsesox telabon .. .. | Kulivi pamboo .. | .... | |
| 25 | Triacanthus brevirostris .. | Moolean .. .. | .... | Eaten by natives. |
| 26 | Tetrodon inermis .. .. | Plachee .. .. | .... | |
| 27 | Do. sp ? .. .. | Do. .. .. | .... | |
| 28 | Do. sp ? .. .. | Do. .. .. | .... | |

Government Central Museum,
Egmore,
2nd July 1886.

(Signed) EDGAR THURSTON,
Superintendent, Government Central Museum.

## APPENDICES.

### A.

General List of the Contributions, &c, received for the Government Central Museum, from 1st April 1885 to 31st March 1886.

| | | NO. |
|---|---|---|
| Abboy, T., Naidu, M.R.Ry.— | | |
| Country smoking pipes | 3 | 3 |
| Armstrong, Dr. H., Kilpauk— | | |
| Bulrush caterpillar from New Zealand | 1 | |
| Plant from New Zealand | 1 | 3 |
| Geological specimens from the volcanic districts of New Zealand, Collection | | |
| Baudry, G. E., Esq., Tellicherry— | | |
| Pumice stones found floating in the sea | Collection. | Collection. |
| Bidie, Dy. Surgn-Genl. G., M.B, C.I.E., Sanitary Commr. for Madras— | | |
| Snake | 1 | |
| Fruits of Vateria Malabarica from Travancore | 4 | 9 |
| Moulds, one of each of Travancore chakram fanam and causy | 3 | |
| Palm-leaf basket for carrying onions on boardship | 1 | |
| Calder, D., Esq., St. Thomé— | | |
| Parrakeet | 1 | 1 |
| Cameron, J., Esq., Superintendent, Bangalore Museum— | | |
| Lac insects on *Shorea taluna* | Collection | 22 |
| Prepared varieties of Areca-nut | 21 | |
| Carter, H. R. P., Esq., Chetput— | | |
| Clavicles of a tiger | 4 | |
| Egg cases of zygæna | 63 | |
| Aquatic Scorpions | 2 | |
| Caterpillars of a moth | 2 | 77 |
| Cocoons of Cricula trifenestrata | 3 | |
| Woods from an old bridge bored by Isopods (Sphæroma vastator). | 2 | |
| Snake | 1 | |
| Chingleput, Collector of— | | |
| Impressions of seals | 2 | 2 |
| Conran, Mr. J. G., Perambúr— | | |
| Copper coins | 6 | 6 |
| Cumine, Master J. C.— | | |
| Bird's nest | 1 | 1 |
| Dale, Mr. J., Poonamallee— | | |
| Reptile (Draco Dussumieri) | 1 | 3 |
| Pumice stones picked up on the sea-beach at Calicut | 2 | |
| Daly, William Mahon, Esq., Yercaud, Shevaroys— | | |
| Birds' nests | 8 | |
| Eggs received in exchange | 37 | 48 |
| Insect | 1 | |
| Fruits | 2 | |
| Damodaram, R., Naidu, M.R.Ry— | | |
| Bat | 1 | |
| Beetles | 2 | |
| Butterfly | 1 | 1,005 |
| Wasp's nest | 1 | |
| Shells | 1,000 | |
| Davasagayam, D., Pillai, M.R.Ry., Salem— | | |
| Samples of coffee | 4 | 4 |
| Davison, W., Esq., Ootacamund— | | |
| Birds | 96 | 96 |
| Deane, G. W., Esq., The Luz— | | |
| Chrysalis of a butterfly | 1 | 1 |
| DeCaster, Mr. E.— | | |
| Tail of a skate | 1 | 2 |
| Head of a stone image | 1 | |
| Dique, Mr. W. F.— | | |
| Leaf insect | 1 | 1 |
| Ditmas, F. W., Esq., Assistant Commissioner of Salt Revenue— | | |
| Fish (Julis lunaris) | 1 | 1 |
| Doyle, Pat., Esq., C.E., Lucknow— | | |
| Pieces of Pinewood pulp for paper-making | 2 | |
| Grass (Pollema eriopoda) bundle | 1 | 11 |
| Specimens of "ball coal" from the Rani Gunj Coal-field, Damuda Valley, Bengal | 8 | |



| | | NO. |
|---|---|---|
| Duncan, J. H., Esq., Nungumbaukum— | | |
| Common tree-cat (Paradoxurus Musanga) | 1 | |
| White Guinea-fowl | 1 | 3 |
| Cobra | 1 | |
| Dunhill, Mrs. E. S., Pursewalkum— | | |
| Fish | 1 | 1 |
| Duraisawmy, A. S., Pillay, M.R.Ry— | | |
| Leech | 1 | |
| Cluster of eggs of a snail | 1 | 4 |
| Rock specimen | 1 | |
| Goglet from Mysore | 1 | |
| Etherajulu Naicker, P., M.R.Ry— | | |
| Rat | 1 | 1 |
| Farmer, H. R., Esq., Acting Collector, Trichinopoly— | | |
| Chrysalis | 2 | 2 |
| Fowler, Mr. G — | | |
| Bird's nest | 1 | 1 |
| Garstin, J. H., Esq., C.S.— | | |
| Indian fire-flies | Collection. | Collection. |
| Gleeson, J. M., Esq., Superintendent, Agri-Horticultural Society's Gardens— | | |
| Spiders | Collection. | Collection. |
| Godávari, Collector of— | | |
| Impressions of seals | 3 | 3 |
| Gompertz, H., Esq., Yercaud— | | |
| Stone implements from fort, human face, and peacock hills in Bellary | 52 | 52 |
| Gordon, D. C., Esq.— | | |
| Caterpillars | 4 | 4 |
| Gordon, Mrs. D. C.— | | |
| Leaf insects | 2 | 2 |
| Governor in Council, His Excellency the— | | |
| Dutch manuscript, a memorial of the Dutch in the East | 1 | 1 |
| Govinda, P., Menon, M.R.Ry.— | | |
| Insect (Mantis flabellicornis) | 1 | 1 |
| Guthrie, Colonel T. K.— | | |
| Mantis | 1 | 1 |
| Handley, J. W., Esq.— | | |
| Insect (Nepa grandis) | 1 | 1 |
| Havelock, Mrs. Ann L.— | | |
| Skull of a tiger | 1 | 1 |
| Hawkes, Colonel H. P.— | | |
| Specimens of raw and ginned Nankin cotton and the coarse cotton-cloths woven from the latter from Aracan | 4 | |
| A wicker basket made by the hill tribes of British Burma | 1 | 13 |
| Burmese copper coins | 8 | |
| Hollingsworth, R., Esq.— | | |
| Gourami fish | 1 | 1 |
| Holmes, W. T. Hamilton, Esq.— | | |
| Egg of horned owl | 1 | 2 |
| Shell of Balanus | 1 | |
| Honorary Secretary, Agri-Horticultural Society, Madras— | | |
| Spiders' nests | 2 | |
| Old casuarina pole with borings | 1 | 4 |
| Specimen of curious growth of the roots of Casuarina muricata | 1 | |
| Honorary Secretary, Bombay Branch of the Royal Asiatic Society— | | |
| Silver coins | 5 | 7 |
| Copper coins | 2 | |
| Honorary Secretary, Madras Literary Society— | | |
| Gold coin | 1 | 1 |
| Honorary Secretary, (Philological) Asiatic Society of Bengal, Calcutta— | | |
| Gold coins | 2 | |
| Silver do. | 17 | 48 |
| Copper do. | 29 | |
| Iya Pillay, Eleazer John, Mr.— | | |
| Silver coins | 3 | 11 |
| Copper do. | 8 | |
| Johnston Major, Chelmsford Estate, Mettupálaiyam— | | |
| Rheea stalk (China grass) Boehmeria nivea, grown on Chelmsford Estate. | 1 | 1 |

| | | NO. |
|---|---|---|
| Kernan, Honorable J., Adyar— | | |
| Snake (Eryx Johnii) with mutilated tail | | 1 |
| Kistna District, Collector of— | | |
| Impressions of seals | | 2 |
| Kurnool District, Collector of— | | |
| Impression of seal | | 1 |
| Leman, J. D., Esq., Collector of Coimbatore, and Pickance, Colonel W. J., Superintendent of Jail, Coimbatore— | | |
| Ancient pottery with peculiar markings on it | | 17 |
| Leonard, Mr. J. H., Mount Road— | | |
| Australian magpie | | 1 |
| London Exhibition Committee, Madras— | | |
| Brass jewelry | 188 | 218 |
| Toys | 30 | |
| McNally, Dr. C. J., Egmore— | | |
| Butterfly (Euplæa midamus) with imago and pupa case | | 3 |
| Madhava Charry, M.R.Ry— | | |
| Double brinjal | | 1 |
| Madura, Collector of— | | |
| Impressions of seals | | 2 |
| Magrath, Colonel B. H. W.— | | |
| Spider (Mygale sp.) | | 1 |
| Maitland, Dr. J., Egmore— | | |
| Larvæ of a fly produced in a bottle of gum | | Collection. |
| Malabar, Collector of— | | |
| Impressions of seals | | 5 |
| Mitchell, A., Esq., Salt Department, Ennore— | | |
| Snout of a saw-fish (Pristis cuspidatus) | | 1 |
| Mitchell, E. A., Esq., Saint Thomé— | | |
| Cray-fish (Palinurus) | | 1 |
| Mitchell, J. H., Esq., Coimbatore— | | |
| Pangolin | | 1 |
| Mitchell, Mr. W. C. H., Kilpauk— | | |
| Birds' eggs | | 10 |
| Moonoosawmy, K., Naidu, M.R.Ry— | | |
| Improved Jew's Harp | | 1 |
| Morgan, Rhodes, Esq.— | | |
| Insect (Nepa grandis) | | 1 |
| Morris, A. W., Esq.— | | |
| Birds' eggs | | 3 |
| Moothoosawmy, C., Pillai, M.R.Ry.— | | |
| Parrakeet | | 1 |
| Nasiruddin, Mahomed, Khan Bahadoor— | | |
| Copper coins | | 2 |
| Nellore, Collector of— | | |
| Impression of a seal | 1 | 2 |
| Copy of impression of a seal | 1 | |
| Nicholas, Mr. E. A. S.— | | |
| Snake (Python Molurus) | | 1 |
| North Arcot, Collector of— | | |
| Impressions of seals | | 8 |
| Peddie, Miss, Royapooram— | | |
| Death's-head hawk-moth | | 1 |
| Peebles, Mrs. J. H.— | | |
| Insect (Trombidium) | | 1 |
| President, Municipal Commission, Madras— | | |
| Monkeys | 2 | 7 |
| Tree-cats | 2 | |
| Lion | 1 | |
| Cockatoo | 1 | |
| Black swan | 1 | |
| Prudhomme, H., Esq., Egmore— | | |
| Specimen of wine (bottle) | 1 | 2 |
| Do. of coca leaves | Collection | |
| Punjab, Government of, through Major H. H. Cole— | | |
| Buddhist sculptures from two small topes, at places called Nuttu and Mian Khan, 24 miles north of Koti Mardan | | 174 pieces. |



| | | NO. |
|---|---|---|
| Raghavendra, T., Row, M.R.Ry., Assistant Commissioner, Shimoga— | | |
| Gold coin | | 1 |
| Rainnier, H., Esq.— | | |
| Copper coins | | 93 |
| Rajaram, T. Misser, Esq.— | | |
| Copper coins | | 6 |
| Ratton, Dr. J. L., Egmore— | | |
| Moth (Actias luna) | 1 | 2 |
| Beetle (Cosyphus) | 1 | |
| Revenue Settlement and Agriculture, Acting Director of— | | |
| Specimens of larva of a beetle | | 3 |
| Robertson, W. R., Esq., Saidápet— | | |
| Fish (Lutianus roseus) | 2 | 3 |
| Fresh-water turtle of the genus Emys | 1 | |
| Royal Botanic Gardens, Seebpore, Calcutta, Superintendent of— | | |
| Seeds (Pithecolobium Laman) (packet) | 1 | 17 |
| Seeds, Palm (packet) | 16 | |
| Salem, Collector of— | | |
| Impression in wax of the image of the goddess Kamatchi Amman of Conjeeveram | | 1 |
| Salunkei, Kistnajee Row, M.R.Ry., Tanjore— | | |
| Fencing sticks | | 2 |
| Scott, T. M., Esq., Madura— | | |
| Rama Tanka gold coin | | 1 |
| Shortt, J., Retired Deputy Surgeon-General— | | |
| Mammals | 3 | 50 |
| Otter skin | 1 | |
| Bird | 1 | |
| Birds' skins | 2 | |
| Birds in spirit | 5 | |
| Chicken | 1 | |
| Reptiles | 15 | |
| Fish | 1 | |
| Crustacea | 10 | |
| Insects | 8 | |
| Worms in a phial | Lot | |
| Calcium carbonate from blackwood | „ | |
| Do. from teak trees | „ | |
| South Canara, Collector of— | | |
| Impression in wax of a "Vamana Madri" seal | | 1 |
| Stafford, H., Esq., District Forest Officer, Godávari— | | |
| Agates | 3 | 5 |
| Lac found on trees in Rékapalle, Upper Godávari Taluk | 1 | |
| Tailor bird's nest | 1 | |
| Steel, H. W., Esq., Deputy Commissioner of Rohtak— | | |
| Silver coin | | 1 |
| Stephenson, Miss C. F., Kilpauk— | | |
| Moths | | 2 |
| Tanjore, Collector of— | | |
| Beetles of the genus Cerambyx | 6 | 18 |
| Impressions on wax from old seals used by the Dutch and Danish Governments | 6 | |
| Impressions on wax from Tanjore palace | 5 | |
| Impression of a seal | 1 | |
| Thomas, H. S., Esq., First Member, Board of Revenue— | | |
| Shells (avicula vexillum) | Collection | 4 |
| Shells (Unio Marginalis) | 3 | |
| Thoroughgood, F. N., Esq.— | | |
| Specimen of coral | | 1 |
| Tinnevelly, Collector of— | | |
| Impressions of seals | | 4 |
| Travancore, His Highness the Maharajah of— | | |
| Shields | | 4 |
| Tufnell, Captain R. H. C.— | | |
| Silver punch mark Buddhist coin (in exchange) | | 1 |
| Turner, H. G., Esq., Acting Collector of Vizagapatam— | | |
| Impressions of seals | | 2 |

| | No. |
|---|---|
| VanIngens, Mrs. Alice, Egmore— | |
| Spider's nest and young ... ... ... ... ... ... ... | 2 |
| Vizagapatam, Senior Assistant Collector of— | |
| Pelagic shells ... ... ... ... ... ... ... ... | 12 |
| Volluru, the Zemindar of— | |
| Copper coins ... ... ... ... ... ... ... ... | 1,222 |
| West, H. C., Esq., Nungambaukum— | |
| Bird (Nycticorax griseus) ... ... ... ... ... | 1 |
| Egg of Ixos luteolus ... ... ... ... ... ... | 1 } 2 |
| White, Mr. Willie A. F.— | |
| Egg of white scavenger vulture ... ... ... ... ... ... | 1 |
| Whiteside, W. S., Esq.— | |
| Snake (Tropidonotus quincunciatus) ... ... ... ... ... | 1 |
| Winde, Monsieur B., Germany— | |
| Beetles ... ... ... ... ... ... ... ... ... | 115 |
| Wilson Fellows, V. S., Esq., Tuticorin— | |
| Plant (Capparis aphylla) ... ... ... ... ... ... ... | 1 |

B.

Visitors to the Government Central Museum from 1st April 1885 to 31st March 1886.

| 1885-86. | Signatures made in | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | English. | Telugu. | Hindustani. | Tamil. | Mahratta. | Nagaree. | Guzerattee. | Canarese. | Chinese. | Cingalese. | Malayalam. | Bengalee. |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| April .. .. .. .. | 1,961 | 345 | 147 | 1,199 | 13 | 9 | 18 | 20 | .. | .. | 48 | 3 |
| May .. .. .. .. | 1,996 | 437 | 203 | 1,400 | 17 | 5 | 27 | 14 | .. | .. | 16 | .. |
| June .. .. .. .. | 2,420 | 697 | 269 | 1,882 | 14 | 5 | 3 | 29 | .. | .. | 25 | .. |
| July .. .. .. .. | 2,260 | 591 | 460 | 2,185 | 8 | 7 | 24 | 16 | .. | .. | 27 | .. |
| August .. .. .. | 2,020 | 419 | 213 | 1,987 | 11 | 2 | 27 | 23 | .. | .. | 21 | .. |
| September .. .. .. | 2,433 | 498 | 253 | 1,943 | 14 | 12 | 31 | 14 | .. | .. | 40 | .. |
| October .. .. .. | 1,506 | 403 | 139 | 1,474 | 17 | 7 | 24 | 18 | .. | .. | 26 | 2 |
| November .. .. .. | 1,714 | 347 | 147 | 1,534 | .. | 7 | 17 | 12 | .. | .. | 35 | .. |
| December .. .. .. | 4,519 | 1,103 | 341 | 4,023 | 12 | 25 | 72 | 66 | .. | .. | 51 | .. |
| January .. .. .. | 2,636 | 578 | 259 | 1,765 | 4 | 6 | 26 | 34 | 2 | .. | 49 | .. |
| February .. .. .. | 1,947 | 338 | 160 | 1,222 | 9 | 7 | 17 | 23 | .. | 2 | 37 | .. |
| March .. .. .. . | 2,046 | 439 | 182 | 1,205 | 11 | 18 | 16 | 21 | 1 | .. | 62 | .. |
| Total .. | 27,458 | 6,195 | 2,773 | 21,819 | 130 | 110 | 302 | 290 | 3 | 2 | 437 | 5 |

| 1885-86. | Total of signatures. | Unable to sign, but tally kept. | Total of visitors. | Number of | | Total of visitors. |
|---|---|---|---|---|---|---|
| | | | | Men and boys. | Women and girls. | |
| | 14 | 15 | 16 | 17 | 18 | 19 |
| April .. .. .. .. .. | 3,763 | 12,278 | 16,041 | 9,755 | 6,286 | 16,041 |
| May .. .. .. .. .. | 4,115 | 15,635 | 19,750 | 11,412 | 8,338 | 19,750 |
| June .. .. .. .. .. | 5,344 | 23,057 | 28,401 | 16,403 | 11,998 | 28,401 |
| July .. .. .. .. .. | 5,578 | 18,976 | 24,554 | 14,650 | 9,904 | 24,554 |
| August .. .. .. .. .. | 4,723 | 16,498 | 21,221 | 12,724 | 8,497 | 21,221 |
| September .. .. .. .. | 5,238 | 23,730 | 28,968 | 16,154 | 12,814 | 28,968 |
| October .. .. .. .. | 3,616 | 13,635 | 17,251 | 10,266 | 6,985 | 17,251 |
| November .. .. .. .. | 3,813 | 11,487 | 15,300 | 9,728 | 5,572 | 15,300 |
| December .. .. .. .. | 10,212 | 50,052 | 60,264 | 32,923 | 27,341 | 60,264 |
| January .. .. .. .. | 5,359 | 44,337 | 49,696 | 25,103 | 24,593 | 49,696 |
| February .. .. .. .. | 3,762 | 10,955 | 14,717 | 9,058 | 5,659 | 14,717 |
| March .. .. .. .. .. | 4,001 | 14,298 | 15,299 | 9,587 | 5,712 | 15,299 |
| Total .. | 59,524 | 251,938 | 311,462 | 177,763 | 133,699 | 311,462 |



C.

Statement showing the number of Visitors to the Government Central Museum for the past five years.

| | |
|---|---|
| 1881-82 ... ... ... ... ... ... ... ... | 211,246 |
| 1882-83 ... ... ... ... ... ... ... ... | 271,881 |
| 1883-84 ... ... ... ... ... ... ... ... | 242,514 |
| 1884-85 ... ... ... ... ... ... ... ... | 272,968 |
| 1885-86 ... ... ... ... ... ... ... ... | 311,462 |

D-1.

List of Books added to the Public Library.

1.—*By Purchase* (*Standard Works*).

| | Volumes. |
|---|---|
| Anaryan Early Ideas, a group of Hindoo stories ... ... ... ... | 1 |
| Antiquities of Asia, by Sir W. Jones ... .. ... ... ... | 2 |
| Bagehot, W.—Physics and Politics ... ... ... ... ... ... | 1 |
| Balfour, Surgeon-General E. G.—The Cyclopædia of India ... ... | 3 |
| Bernstein, J.—The Five Senses of Man ... ... ... ... ... | 1 |
| Bird, F. J.—The American Practical Dyer's Companion ... ... ... | 1 |
| Blades, William.—The Enemies of Books ... ... ... ... ... | 1 |
| Bower, F. O. and S. H.—Vines Course of Practical Instruction in Botany. | 1 |
| Buckley, Arabella B.A.—Short History of Natural Science ... ... | 1 |
| Caird, Sir James India.—The Land and the People ... ... ... | 1 |
| Capper, J.—Observations of the Winds and Monsoons ... ... ... | 1 |
| Chambers' Encyclopædia of Universal Knowledge ... ... ... | 10 |
| Clarke, C. B.—Commelynaceæ et Cyrtandraceæ Bengalensis, folio ... | 1 |
| Clayton, Sir R.—Life of Alexander the Great ... ... ... ... | 1 |
| Cooke, M. C.—Hand-book of British Fungi ... .. ... ... ... | 2 |
| Cox, Sir G. W.—The Mythology of the Aryan Nations ... ... ... | 2 |
| Curtis's Botanical Magazine, Vols. 13 to 37 ... ... ... ... | 25 |
| Deane, Rev. J. B.—Worship of the Serpent ... ... ... ... | 1 |
| De Leon, E.—The Khedives of Egypt ... ... ... ... ... | 1 |
| De Candolle, A.—Origin of Cultivated Plants ... ... ... ... | 1 |
| Deschanel, A.—Elementary Treatise on Natural Philosophy ... ... | 1 |
| Dictionary of the Religious Ceremonies of the Eastern Nations, &c. ... | 1 |
| Echoes from Old Calcutta, by H. E. Busteed ... ... ... ... | 1 |
| Forbes, James.—Oriental Memoirs ... ... ... ... ... ... | 4 |
| Gladwin, F.—Memoirs of Khojeh Abdul Kurreem ... ... ... | 1 |
| Gladwin, F.—Dissertation of the Rhetoric Prosody and Rhyme of the Persians ... ... ... ... ... ... ... ... ... | 1 |
| Graham, M.—Journal of a Residence in India ... ... ... ... | 1 |
| Haite's Plant Studies, Parts 3 to 7 ... ... ... ... ... ... | 5 |
| Hamilton, A.—Account of the East Indies ... ... ... ... | 1 |
| Historical View of Plans for the Government of British India ... ... | 1 |
| Hooker, J. D.—Rhododendrons of Sikkim Himalaya, folio ... ... | 1 |
| Hooker, J. D.—Illustrations of Himalayan Plants, folio ... ... ... | 1 |
| Hunter, R.—The Encyclopædia Dictionary ... ... ... ... ... | 5 |
| Husbandry and Commerce of Bengal—Remarks on the present state of the— ... .. ... ... ... ... ... ... ... | 1 |
| Huxley, T. H.—Elementary Lessons in Physiology ... ... ... | 1 |
| Kirby, W. F.—Elementary Text Book of Entomology ... ... ... | 1 |
| Land of Temples ... ... ... ... ... ... ... ... ... | 1 |
| Malley, A. C.—Micro-Photography .. ... ... ... ... ... ... | 1 |
| Max Müller, F.—Sacred Books of the East, Vols. 20, 22 and 24 ... | 3 |
| Meyen, F. J. F.—Outlines of the Geography of Plants ... ... ... | 1 |
| Mitchell, Mrs. M.—In India, Sketches of Indian Life and Travel ... | 1 |
| Money, Colonel E.—The Cultivation and Manufacture of Tea ... ... | 1 |
| Orme, R.—Fragments of the Mogul Empire ... ... ... ... | 1 |
| Penant, T.—View of Hindoostan ... ... ... ... ... ... | 1 |
| Ribot, T.—Diseases of Memory ... ... ... ... ... ... | 1 |
| Sadleir, R.—The Aborigines of Australia ... ... ... ... ... | 1 |
| Smith, John A.—Dictionary of Popular Names of Plants ... ... | 1 |
| Stallo, J. B.—The Concepts and Theories of Modern Physics ... ... | 1 |
| Stocqueler, J. H.—Memoir and Correspondence of Major-General Sir William Nott ... ... ... ... .. ... ... ... | 2 |
| Sully, James.—Illusions, a Psychological Study ... ... ... ... | 1 |
| The Boats of the World by one of the Craft ... ... ... ... | 1 |
| Thumberg, C. P.—Travels in Europe, Africa and Asia ... ... ... | 4 |

| | Volumes. |
|---|---|
| Vogel, Dr. H.—The Chemistry of Light and Photography ... ... | 1 |
| Voigt, J. O.—Hortus Suburbanus Calcuttensis ... ... ... ... | 1 |
| Whitney, W. D.—The Life and Growth of Language ... ... ... | 1 |
| Wise, T. A.—Commentary on the Hindu System of Medicine ... ... | 1 |
| Wood, John.—A Journey to the Source of the River Oxus ... ... | 1 |
| Wurtz, A.—The Atomic Theory ... ... ... ... ... ... | 1 |
| Year Book of the Scientific and Learned Societies of Great Britain and Ireland ... ... ... ... ... ... ... ... ... | 2 |

D-2.

*Periodicals.*

| | |
|---|---|
| American Naturalist, Nos. 2 to 12 for 1885 ... ... ... ... | 1 |
| Annual Register for 1884 ... ... ... ... ... ... | 1 |
| Asiatic Journal and Monthly Register ... ... ... ... ... | 41 |
| Asylum Press Almanac for 1886 ... ... ... ... ... ... | 1 |
| Illustrated London News, Vols. 87 and 88 ... ... ... ... | 2 |
| Journal of the Royal Asiatic Society of Great Britain and Ireland, Parts 2, 3 and 4 for 1885 and Part 1 for 1886 ... ... ... | 1 |
| "London Times," Weekly Edition, Nos. 426 to 481 ... ... ... | 1 |
| Selections from the Calcutta Review, Vol. 11 for 1884 ... ... ... | 1 |
| Tropical Agriculturist, Vol. 4, Nos. 9, 10 and 11 ... ... ... | 1 |

D-3.

*(By Gift) Standard Works.*

| | |
|---|---|
| Benjamin, Rev. R.—Confirmation Class Book ... ... ... ... | 1 |
| Calendar of Letters, City of London, 1350—1370, by Reginald R. Sharpe. | 1 |
| Catalogue of the Australian Hydroid Zoophytes, by W. M. Bale ... | 1 |
| Catalogue of the Library of the Geological Survey of India, by W. R. Bion ... ... ... ... ... ... ... ... ... ... | 1 |
| Catalogue of Surgical Instruments ... ... ... ... ... ... | 1 |
| Catalogue of Sanskrit Manuscripts, North-Western Provinces, Part 9 ... | 1 |
| Catalogue of Sanskrit Manuscripts existing in Oudh, for 1884 ... ... | 1 |
| Catalogue of Sanskrit Manuscript in the Library of the Deccan College with Index ... ... ... ... ... ... ... ... ... | 1 |
| Catalogue of the Art Collection in the Sir J. J. School of Art, Bombay... | 1 |
| Catalogue of the Victoria and Albert Museum, Bombay ... ... ... | 1 |
| Centenary Review of the Researches of the Asiatic Society of Bengal, 1784—1883 ... ... ... ... ... ... ... ... | 1 |
| Challenger—Report on the Scientific Results of the Exploring Voyage of the— (Zoology), Vol. 11th ... ... ... ... ... ... | 1 |
| Challenger—Report on the Scientific Results of the Exploring Voyage of the— (Narrative of the Cruise), Vol. 1, Parts 1 and 2 ... ... | 2 |
| Challenger—Report on the Scientific Results of the Exploring Voyage of the— (Botany) ... ... ... ... ... ... ... ... | 1 |
| China Report, by Mr. Hosie, of a journey through Central Sou-chuan, 1884, No. 2 ... ... ... ... ... ... ... ... | 2 |
| Cunningham's Archæological Survey of India, Vols. 19 and 20 ... ... | 2 |
| Duka, T.—Life and Works of Cosma de Körös, (Trübner's Oriental Series) | 1 |
| Export Catalogue of Machinery and Hardwares of the Principal Makers in Great Britain ... ... ... ... ... ... ... ... | 1 |
| Essays relating to Indo-China (Trübner's Oriental Series) ... ... | 2 |
| Foulkes, Rev. T.—The Pallavas (Pamphlet) ... ... ... ... | 1 |
| Guide to the Collection of Fossil Fishes in the Department of Geology and Palæontology in the British Museum (Pamphlet) ... ... ... | 1 |
| Guide to the Galleries of Mammalia in the British Museum (Natural History) ... ... ... ... ... ... ... ... ... | 1 |
| Howes, G. B.—Atlas of Practical Elementary Biology ... ... ... | 1 |
| Indian Museum Annual Report for 1884-85 ... ... ... ... | 1 |
| Indian Art-work in the Calcutta International Exhibition, 1883-84 ... | 1 |
| Leggett, E.—Notes on the Mint Towns and Coins of the Muhammadans. | 1 |
| Madras Magnetical Observations for 1851 and 1855, by W. S. Jacob, Esq. ... ... ... ... ... ... ... ... ... ... | 1 |
| Manual of the Administration of the Madras Presidency, Vols. 1 and 2 .. | 3 |
| Maps prepared for the Madras Manual of the Administration ... ... | 1 |
| Memorials of the Jeypore Exhibition, 1883, by Thomas H. Hendley ... | 4 |
| Mills, James.—The Indian Stock-owner's Manual ... ... ... ... | 1 |
| Mills, James.—Plain Hints on Diseases of Cattle in India ... ... | 1 |
| Mills, James.—Treatment of Cattle Diseases ... ... ... ... | 1 |



| | Volumes. |
|---|---|
| Montefiore, Sir Moses, Sacred Memorial Services in memory of the late— | 1 |
| Mukharji, T. N.—Agricultural Implements collected for the International Exhibition, 1883-84 ... ... ... ... ... ... ... ... | 1 |
| Oppert, Gustav.—Ne Sutor Ultra Crepidam ... ... ... ... ... | 1 |
| Oppert, G.—List of Sanskrit Manuscripts in Southern India, Vol. 2nd ... | 1 |
| Pogson, N. R.—Telegraphic Longitude Determinations in India... ... | 1 |
| Prudhomme, E. N.—The Banker's Ready Reckoner; Tables showing the rates of Interest per cent. per annum on purchases and sales of Bills of Exchange, &c. ... ... ... ... ... ... ... ... | 1 |
| Prudhomme, E. N.—The Indian Investor's Guide ... ... ... | 1 |
| Prudhomme, E. N.—The Indian Stock Notes Calculator ... ... | 1 |
| Records of the Saidápet Experimental Farm, by Charles Benson ... | 1 |
| Rees, J. D.—Notes of a Journey from Kasveen to Hamadan across the Karaghan Country ... ... ... ... ... ... ... ... ... | 1 |
| Sabda Ratnakaram, a Comprehensive Telugu Dictionary, by B. Sitaramacharyulu ... ... ... ... ... ... ... ... ... | 1 |
| Sewell, Robert.—A Letter to Gustav Oppert, Ph. D., in reply to his Pamphlet Ne Sutor Ultra Crepidam ... ... ... ... ... ... | 1 |
| Textile Fabrics of India, Nos. 1 to 1120, 2nd Series ... ... ... | 17 |
| Third Report of the Curator of Ancient Monuments in India for 1883-84 | 1 |
| Wardle, Thomas.—Researches on Silk Fibre ... ... ... ... | 1 |
| Wherry, Rev. E. M.—A Comprehensive Commentary on the Qurán, Vol. 3rd (Trübner's Oriental Series) ... ... ... ... ... | 1 |
| Wortham, Rev. B. H.—The Satakas of Bhartrihari (Trübner's Oriental Series) ... ... ... ... ... ... ... ... ... | 1 |

D-4.

*Periodicals (by Gift).*

Bulletin of the Brookville Society of Natural History, No. 1.
"Fort St. George Gazette," Nos. 14 to 51 for 1885, Nos. 1 to 13 for 1886.
"Gazette of India," Nos. 12 to 52 for 1885, and 1 to 13 for 1886.
Indian, Antiquary, by J. Burgess, Vol. 14 for 1885.
Journal of the Asiatic Society of Bengal, Part 1, Nos. 1 to 4 for 1885; Part 2, No. 3 for 1884; Part 2, Nos. 2 and 3 for 1885.
Journal of Indian Arts, Nos. 7, 8 and 9.
Memoirs of the Geological Survey of India, Vol. 21, Parts 3 and 4, and Vol. 22, Parts 1 to 4, for 1885.
Memoirs of the Geological Survey of India (Palæontologia Indica), Vol. 1, S. 4, S. 13; Vol. 3, S. 10; Vol. 1, S. 4, S. 13; Vol. 1, S. 14.
Oesterreichische Monatsschrift fur den Orient, Nos. 1 to 12 for 1885.
Proceedings of the Asiatic Society of Bengal, Nos. 11 and 12 for 1884; Nos. 1 to 9 for 1885.
Proceedings of the Natural History Society of Wisconsin, Vol. 1.
Quarterly Journal of Veterinary Science in India, Nos. 11 to 13 for 1884-85.
Records of the Geological Survey of India, Parts 1 to 4 for 1885.
Statement of Imports and Exports, September to December 1885, and January and February 1886.
The Pandit, a Monthly Publication devoted to Sanskrit Literature, Nos. 1 to 12 for 1885.

D-5.

*Reports.*

| | Copies. |
|---|---|
| Act to obtain Lands and Mines, &c., Arabic ... ... ... ... | 1 |
| Administration Report on the Jails of Bengal for 1884, by E. V. Westmacott, Esq. ... ... ... ... ... ... ... ... | 1 |
| Administration Report on the Bombay Jails for 1884 ... ... ... | 1 |
| Administration Report of the Meteorological Reporter to the Government of Madras for 1884-85 ... ... ... ... ... ... | 1 |
| Age at which Candidates for the Civil Service of India are admitted for competition in England, being a correspondence between the Government of India and the Secretary of State (Parliamentary Blue Book). | 1 |
| Agricultural Statistics, Ireland—General Abstracts showing the Acreage under Crops; also the Number and Description of Live Stock in each Country and Province, 1884-85 (Parliamentary Blue Book) ... | 1 |
| A List of Agricultural Implements and Machines which have been experimented with and found efficient and useful in India for 1884-85. | 2 |
| Annual Report on the Administration of the Land Revenue in Assam for 1884-85 ... ... ... ... ... ... ... ... | 1 |

| | Copies. |
|---|---|
| Annual Report on the Foreign Trade of the North-West Provinces and Oudh, 1885 | 2 |
| Annual Administration Reports of the Forest Department, Madras Presidency, for 1883-84 | 1 |
| Annual Report of the Madras Court of Small Causes for 1884 | 1 |
| Annual Report on the Civil Hospitals and Dispensaries in the Madras Presidency, 1883 | 1 |
| Annual Report with Tabular Statements on the Condition and Management of the Jails in the North-West Provinces and Oudh for 1884 | 1 |
| Annual Report on the Gardens of His Highness the Maharana of Oodeypore for 1884 | 1 |
| Annual Report on the Jails of the Hyderabad Assigned Districts for 1884 | 1 |
| Annual Report on the Administration of Prisons in the Province of Coorg for 1884 | 1 |
| Annual Report on the Lunatic Asylums in the Madras Presidency for 1884-85 | 1 |
| Annual Report of the Director of Agriculture, Bombay Presidency, for 1884-85 | 2 |
| Annual Report of the Khandesh Experimental Farm for 1885 | 2 |
| Annual Report, Government Experimental Farm, Hyderabad, Sind, for 1885 | 2 |
| Annual Report of the Royal Botanic Gardens, Calcutta, for 1884-85 | 2 |
| Annual Report on the Botanical Gardens of Poona for 1885 | 2 |
| Annual Report of the Department of Revenue Settlement and Agriculture for 1884-85 | 1 |
| Annual Volume of the Sea-borne Trade and Navigation of the Madras Presidency for the year 1884-85 | 1 |
| Assessment of Sub-soil Water, being extracts from the Despatch of the Governor of Bombay, 1885 (Parliamentary Blue Book) | 1 |
| Catalogue of the Lucknow Exhibition, 1885 | 1 |
| Central Asia—Further correspondence respecting Central Asia, with Maps, Nos. 2, 3 and 4 (Parliamentary Blue Book) | 2 |
| Central Asia—Circular Despatch addressed by Prince Gortchakow to Russian Representatives abroad for 1864 (Parliamentary Blue Book). | 1 |
| Central Asia—Further correspondence respecting the affairs of Central Asia, 1885, No. 5 (Parliamentary Blue Book) | 1 |
| China correspondence respecting the duties on Opium, 1885, No. 5 (Parliamentary Blue Book) | 1 |
| Civil Justice Report of British Burma for 1884 | 1 |
| Civil Statements of the North-Western Provinces for 1884 | 1 |
| Cotton in Assam, 1885 | 1 |
| Criminal Justice Report of British Burma for 1884 | 1 |
| Criminal Statements of the North-Western Provinces for 1884 | 1 |
| East Indian Financial Statement for 1885-86 (Parliamentary Blue Book) | 1 |
| Egypt correspondence respecting Ports in the Red Sea and the Gulf of Aden and the Province of Harar, 1885 (Parliamentary Blue Book) | 1 |
| Elephant Pipes in the Museum of the Academy of Natural Science, Davenport Jowa | 1 |
| Emigration Statistics of Ireland for 1884 (Parliamentary Blue Book) | 1 |
| Estimate of Revenue and Expenditure of the Government of India, 1884-85 (Parliamentary Blue Book) | 1 |
| Home Accounts of the Government of India, 1885 (Parliamentary Blue Book) | 1 |
| Indian Meteorological Memoirs, by H. F. Blanford, Vol. 2, Parts 4 and 5 | 2 |
| Instructions for the preparation of Village Papers in the Punjab for 1885 | 2 |
| Monograph on Cotton Manufacture in the Punjab | 1 |
| Muhammadan Proper Names of Females—A list of — | 1 |
| Note on the Agricultural Products of the Hyderabad Assigned Districts, by Surgeon S. Hume, M.B., 1885 | 1 |
| Note on Agricultural Implements in America | 1 |
| New South Wales Technological, Industrial, and Sanitary Museum—Report of the Committee of Management for 1884 | 1 |
| New South Wales Australian Museum—Report of the Trustees for 1884. | 1 |
| Non-effective Charges of Her Majesty's Forces, 1885 (Parliamentary Blue Book) | 1 |
| Proceedings of the Director of Public Instruction—Report of the Madras Agricultural College for 1885 | 1 |



| | Copies. |
|---|---|
| Proceedings of the Honorable the Lieutenant-Governor of the Punjab in the Departments of Revenue and Agriculture, 1885 | 2 |
| Progress Report of Forest Administration in the Hyderabad Assigned Districts for 1884-85 | 2 |
| Proposed Changes in the Indian Army System, being copy of correspondence between the Government of India and the Secretary of State for 1884 (Parliamentary Blue Book) | 1 |
| Question Papers of the 17th and 18th Lessons | 1 |
| Report on the Nagpore Experimental Farm in the Central Provinces for 1884-85 | 2 |
| Report on the Railway-borne Traffic of the Central Provinces for 1884-85 | 1 |
| Report on Public Instruction in the Madras Presidency for 1883-84 | 1 |
| Report on the Administration of the Madras Presidency for 1884-85 | 1 |
| Report on the Meteorology of India for 1883, by H. F. Blanford | 1 |
| Report on the Administration of the Meteorological Department of the Government of India for 1884-85 | 1 |
| Report on the Revenue Administration of British Burma for 1884-85 | 2 |
| Report on the Prison Administration of British Burma for 1884 | 1 |
| Report on the Administration of Civil Justice in the Punjab and its Dependencies for 1884 | 1 |
| Report on the Administration of (Criminal) Justice in Oudh for 1884 | 1 |
| Report on the Administration of the Department of Salt Revenue in the Presidency of Fort St. George, 1883-84 | 1 |
| Report on the Judicial Administration (Civil) of the Central Provinces for 1884 | 1 |
| Report on the Judicial Administration (Criminal) of the Central Provinces for 1884 | 1 |
| Report on the Jails of the Central Provinces for 1884 | 1 |
| Report on Criminal and Civil Justice in the Hyderabad Assigned Districts for 1884 | 1 |
| Report on the Progress and Condition of the Government Botanical Gardens at Saharanpur and Mussoorie for 1885 | 2 |
| Report on the Administration of Criminal Justice in the Punjab and its Dependencies for 1884 | 1 |
| Report on the Jails of the Punjab for 1884, by R. Gray, Esq. | 1 |
| Report on the Horticultural Gardens, Lucknow, for 1885 | 2 |
| Report on the Cawnpore Agricultural Station for 1884 | 2 |
| Report on the Administration of Civil Justice in Oudh for 1884 | 1 |
| Report on the Jail Administration of the Province of Assam for 1884 | 1 |
| Report on the External Trade of Bengal with Nepaul, Sikkim and Bhutan for 1884-85 | 1 |
| Report on the Revenue Administration of the Punjab and its Dependencies for 1884-85 | 1 |
| Report on the Operations of the Department of Agriculture and Commerce, North-West Provinces and Oudh, for 1885 | 2 |
| Report on the Railway-borne Traffic of the North-West Provinces and Oude for 1885 | 2 |
| Report of the Government Agri-Horticultural Gardens, Lahore, for 1884-85 | 1 |
| Report of the Indian Famine Commission, Appendix, Vols. 3 and 4. Evidence in reply to inquiries of the Commission (Parliamentary Blue Book) | 2 |
| Report of the Indian Famine Commission, Part 3rd (Parliamentary Blue Book) | 1 |
| Report from the Select Committee on Forestry, with the Proceedings of the Minutes of Evidence, 1885 (Parliamentary Blue Book) | 1 |
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Madras,
2nd *July* 1886.

(Signed) EDGAR THURSTON,
*Superintendent, Government Central Museum.*

Order—dated 23rd August 1886, No. 732, Revenue.

Miscellaneous.

With his letter read above the Superintendent, Government Central Museum, submits his report for the year 1885-86. Dr. Bidie gave over charge of the office of Superintendent to Dr. Thurston on October 12th, 1885, and His Excellency the Governor in Council took an opportunity of expressing his appreciation of the former officer's valuable services, in reviewing the report for 1884-85.

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(True Extract.)

Secretary to Government.

To the Superintendent, Government Central Museum.
,, the Board of Revenue.
,, the Public Works Department.
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| Cotton in Assam, 1885 ... ... ... ... ... ... ... | 1 |
| Criminal Justice Report of British Burma for 1884 ... ... ... | 1 |
| Criminal Statements of the North-Western Provinces for 1884 ... ... | 1 |
| East Indian Financial Statement for 1885-86 (Parliamentary Blue Book) ... ... ... ... ... ... ... ... | 1 |
| Egypt correspondence respecting Ports in the Red Sea and the Gulf of Aden and the Province of Harar, 1885 (Parliamentary Blue Book) ... | 1 |
| Elephant Pipes in the Museum of the Academy of Natural Science, Davenport Jowa ... ... ... ... ... ... ... ... | 1 |
| Emigration Statistics of Ireland for 1884 (Parliamentary Blue Book) ... | 1 |
| Estimate of Revenue and Expenditure of the Government of India, 1884-85 (Parliamentary Blue Book) ... ... ... ... ... | 1 |
| Home Accounts of the Government of India, 1885 (Parliamentary Blue Book) ... ... ... ... ... ... ... ... | 1 |
| Indian Meteorological Memoirs, by H. F. Blanford, Vol. 2, Parts 4 and 5 ... ... ... ... ... ... ... ... | 2 |
| Instructions for the preparation of Village Papers in the Punjab for 1885 ... ... ... ... ... ... ... ... | 2 |
| Monograph on Cotton Manufacture in the Punjab ... ... ... | 1 |
| Muhammadan Proper Names of Females—A list of — ... ... ... | 1 |
| Note on the Agricultural Products of the Hyderabad Assigned Districts, by Surgeon S. Hume, M.B., 1885 ... ... ... ... ... | 1 |
| Note on Agricultural Implements in America ... ... ... ... | 1 |
| New South Wales Technological, Industrial, and Sanitary Museum—Report of the Committee of Management for 1884 ... ... ... | 1 |
| New South Wales Australian Museum—Report of the Trustees for 1884. | 1 |
| Non-effective Charges of Her Majesty's Forces, 1885 (Parliamentary Blue Book) ... ... ... ... ... ... ... ... | 1 |
| Proceedings of the Director of Public Instruction—Report of the Madras Agricultural College for 1885 ... ... ... ... ... ... | 1 |

Order—dated 23rd August 1886, No. 732, Revenue.

Miscellaneous.

With his letter read above the Superintendent, Government Central Museum, submits his report for the year 1885-86. Dr. Bidie gave over charge of the office of Superintendent to Dr. Thurston on October 12th, 1885, and His Excellency the Governor in Council took an opportunity of expressing his appreciation of the former officer's valuable services, in reviewing the report for 1884-85.

2. The number of visitors to the Museum during the year again shows an advance, being 311,462 as against 272,968 in the previous year. The Government observe with satisfaction that there was an increase in the number of gosha ladies who visited the Museum on the days reserved for them. There was also a considerable increase in the number of books consulted during the year. The position of the staff has been recently much improved and the Government notice with pleasure the interest which the various assistants take in their work. It appears from paragraph 7 that some of the buildings require slight repairs. The attention of the Public Works Department will be invited to the subject.

3. His Excellency the Governor in Council is much indebted to the various gentlemen who contributed to the Museum during the year.

4. In conclusion, His Excellency in Council desires to notice the evident zeal and interest of Dr. Thurston in his work. He should, however, avoid burdening his report with such unnecessary matter as that contained in paragraph 17.

(True Extract.)

(Signed) H. E. STOKES,
Secretary to Government.

To the Superintendent, Government Central Museum.
,, the Board of Revenue.
,, the Public Works Department.
,, the Public Department.
,, Surgeon-General G. Bidie, M.B., C.I.E.
,, the Editors' Table.

Exd. J. Henricus.

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which was inflicting its ravages on the cinchona leaves in the Wynaad, and of which specimens were sent, together with some of the affected leaves, by Messrs. Arbuthnot and Co., to whom I made a report suggesting certain precautions to be adopted and certain remedial agents to be tried, while pointing out that the expense of applying chemical reagents where the infested area is a large one is often greater than the loss of money caused by the ravages of the insect pests, and further that in the interest of the planter, a prolonged and careful study in a practical manner, not only of the life history and habits of the parasites, but also of the cheapest and at the same time most effective means of exterminating them is much needed.

(5). *Mammals and Birds.*—The light in the gallery in which both mammals and birds are exhibited is exceedingly bad, and the cases in which they are arranged do not show them off to advantage. Many of the specimens, too, are very old and require replacing by new ones. A great desideratum is a good collection of skeletons of the animals of Southern India, and at the end of the year some of my assistants in the Taxidermic department were engaged in the preparation of skeletons of some of the common types. The collection of birds should possess not only the male and female birds, but also the nest with the eggs of each species, set up artificially in such a way as to imitate the natural surroundings, but I am afraid that this ideal will not be attained to for a long time. During the year 27 mammals were received, of which 8 were purchased and 19 presented. Among them was a lion from the People's Park, the gift of the President of the Municipal Commission, which has been stuffed.

The total number of birds acquired was 626, of which 513 were obtained by purchase. The greater number were collected by Mr. Davison who was engaged for a period of six, which was extended to eight, months to make a collection of South Indian birds. At the end of the year the last consignment had not arrived, but those which had been received were arranged as cabinet specimens for purpose of study.

(6). *Mollusca.*—A great amount of space is wasted in the gallery at present devoted mainly to a collection of shells, mixed up together in cases without reference to locality and containing a number of specimens labelled vaguely "Eastern Seas." In accordance with my views as to making the Museum essentially representative of South India, I have picked out those specimens which I know definitely to have been found in the Madras Presidency and they, together with other specimens collected along the coast by myself, form the nucleus of a South Indian collection. The general collection will be put away in drawers where it will be available to those, who wish to study it specially, and a large amount of space be thus economised.

The total number of shells, exclusive of those collected by myself, acquired during the year was 1,017, nearly all of which were given by the Assistant Curator Mr. R. Damodarum Naidu.

Some minute pelagic shells were sent from Vizagapatam, where they were mistaken by the natives for pearls which had fallen from Heaven.

I am much indebted to H. S. Thomas, Esq, for giving me specimens of the shells of *Avicula vexillum* and *Avicula fucata* in various stages of growth in illustration of his report on Pearl Fisheries.

(7). *Reptiles.*—The additions during the year amounted to 24, of which Deputy Surgeon-General Shortt sent the greater number. A number of specimens were sent to me for identification from Ootacamund by M. A. Lawson, Esq.

26. Taxidermist's Department.—The following is an abstract of the specimens prepared or collected during the year :—

| | No. |
|---|---|
| Mammals ... ... ... ... ... ... ... ... ... | 22 |
| Skeletons of mammals ... ... ... ... ... ... ... | 3 |
| Fishes ... ... ... ... ... ... ... ... ... | 114 |
| Reptiles ... ... ... ... ... ... ... ... ... | 72 |
| Crustacea ... ... ... ... ... ... ... ... ... | 50 |
| Insects ... ... ... ... ... ... ... ... ... | 650 |

This includes (1) a number of birds, fishes, reptiles and insects collected by the Second Taxidermist at Vizagapatam, to which place I sent him for two months at the request of H. G. Turner, Esq., Collector of that district; (2) a series of 159 game birds of South India, which was originally collected for the Indian and Colonial Exhibition, but has been retained for the Central Museum; (3) 75 of the Nilgiri birds collected by Mr. Davison which were stuffed and mounted.

This department is now in good working order, and I notice with pleasure not only the interest, but also the improvement, which the assistants display in their work.

As the result of a suggestion from several gentlemen who complained that, when out on shooting or fishing expeditions, they often met with specimens which would be of interest to the Museum, but were not able to keep them from want of the necessary time for, and special knowledge of, the methods of preserving and stuffing, I am training a young man, whom I shall be happy to place at the disposal of sportsmen, on condition that they give me a share of the spoil for the Museum.

27. Tours.—His Excellency the Governor in Council acceded to my proposal that I should be allowed to make periodical tours to different parts of the Presidency, so as to collect for myself any objects of interest which I may find for the Museum.

The first of these tours was made in March, when I went, accompanied by my head and third Taxidermists, to Cochin, and visited also Quilon and Trivandrum. The main results of this tour have been embodied in a special report to Government, and I therefore confine myself in the present report to giving a list of the fish (the collection of which was my main object) which I obtained from Trichoor, Cochin and Quilon, and which have either been stuffed or preserved in alcohol.

Table I.

*Species obtained at Trichoor.*

| | | |
|---|---|---|
| 1. | Macrones Malabaricus ... ... ... ... ... ... | Edible |
| 2. | Do. Chryseus ... ... ... ... ... ... | do. |
| 3. | Gobius giurus ... ... ... ... ... ... ... | do. |
| 4. | Etroplus suratensis ... ... ... ... ... ... | do. |
| 5. | Mastacembalus armatus ... ... ... ... ... ... | do. |
| 6. | Do pancalus ... ... ... ... ... ... ... | ... |
| 7. | Ophiocephalus punctatus ... ... ... ... ... ... | Edible |
| 8. | Plotosus canius ... ... ... ... ... ... ... | ... |

Table II.

*Species obtained at Cochin.*

| Number. | Latin Name. | Tamil Name. | Malayalam Name. | Remarks. |
|---|---|---|---|---|
| 1 | Trygon narnak .. .. | Sonakah tiriki .. | Padavanthrandy .. | Young ones captured in back-water. Eaten by natives. |
| 2 | Do. sp. ? .. .. | .... | Pullythrandy .. .. | .... |
| 3 | Ætobatis narinari .. .. | Currooway tiriki .. | Kakathrandy .. .. | Eaten by natives. |
| 4 | Rhinobatus halavi .. .. | Padungan .. .. | Paruthalay .. .. | .... |
| 5 | Rhinoptera adspersa .. .. | Mutta tiriki .. .. | Eroomookanthrandy .. | Large ones cut in pieces and brought to market for sale. |
| 6 | Lates calcarifer .. .. | Koduwa .. .. | Narymeen (jackal fish) | Good eating known as Nair fish in Malabar. |
| 7 | Serranus Malabaricus .. .. | Punni-calawah .. | Curoopu .. .. | Large fish cut in pieces and salted. |
| 8 | Do. sp. ? .. .. | Calawah .. .. | Do. .. .. | .... |
| 9 | Therapon jarbua .. .. | Palin keechan .. | Cullankovay .. .. | .... |
| 10 | Diagramma griseum .. .. | .... | Cutraw .. .. | .... |
| 11 | Do. crassispinum .. | .... | Do. .. .. | .... |
| 12 | Lobates surinamensis .. .. | Musalli .. .. | Curruputty .. .. | Good eating. Good isinglass made from air bladder. |
| 13 | Gerres filamentosus .. .. | Oodan .. .. .. | Prawellee .. .. | Eaten by natives and salted. |
| 14 | Do. oyena .. .. .. | .... | Do. .. .. | .... |
| 15 | Scatophagus argas .. .. | Sipili .. .. .. | Nutchar Char .. | Eaten by lowest classes. |
| 16 | Ephippus orbis .. .. .. | Nulla torriti .. .. | Parinthee .. .. | Eaten but not esteemed (Day). |
| 17 | Upeneus Indicus .. .. | Mussara .. .. | Coozy meen .. .. | .... |
| 18 | Do. sp. ? .. .. | Do. .. .. | Do. .. .. | .... |
| 19 | Chrysophrys hasta .. .. | Currupumuttivayan .. | Aree .. .. .. | Good eating. |
| 20 | Lutianus rivulatus .. .. | Cuttu pirium .. .. | Cheppary .. .. | Largest specimen measured 34 inches caught in both fresh and salt water. Good eating. |
| 21 | Do. roseus .. .. | Moosoodee .. .. | Chembullee .. .. | |
| 22 | Do. quinquelineatus .. | .... | Cheppary .. .. | .... |
| 23 | Do. Johnii .. .. | .... | .... | .... |
| 24 | Sciæna maculata .. .. | Vari cathalay .. | Cuttalaw .. .. | Air bladders collected extensively for manufacture of isinglass. The price of the bladder sometimes exceeds that of the fish itself. Not much esteemed as food. |
| 25 | Do. vogleri .. .. | .... | Korkaw .. .. | |
| 26 | Do. carutta .. .. | Carung kuthalay .. | Carykutlay .. .. | |
| 27 | Do. osseus .. .. | .... | Cuttalaw .. .. | |
| 28 | Sciænoides sp. ? .. .. | Vanniapunnah .. | Chakalaw .. .. | |
| 29 | Caranx armatus .. .. | Tanga Paray .. .. | Vuttaw .. .. | .... |
| 30 | Do. sansum .. .. .. | .... | Periavuttay .. .. | Eaten by lowest classes. |
| 31 | Do. sp. ? .. .. | Paray .. .. .. | .... | .... |
| 32 | Do. gymnostetheides .. | .... | .... | .... |
| 33 | Chorinemus lysan .. .. | Toal paray .. .. | .... | Good eating. |
| 34 | Psettus argenteus .. .. | .... | Kael Parinthee .. | .... |
| 35 | Equula edentula .. .. | .... | Cooroochee .. .. | Used when salted in making pepper water which is supposed to possess medicinal virtues. |
| 36 | Do. ruconius .. .. | Carra pody .. .. | Do. .. .. | |
| 37 | Scomber Microlepidotus .. | Kanang kelleetee .. | .... | Eaten by natives ; supply varies from year to year. |
| 38 | Sillago sihama .. .. .. | Culingan .. .. | Veekutha .. .. | Good eating. Known to Europeans as "whiting." |
| 39 | Platycephalus insidiator .. | Ooloopathy .. .. | Oorathallee .. .. | Eaten by natives known in Malabar as "Crocodile Fish." |
| 40 | Gobius biocellatus .. .. | .... | .... | .... |
| 41 | Mugil cunnesius .. .. | Madavay .. .. | Sultham .. .. | Mullet. Good eating ; extensively salted and sun dried. |
| 42 | Do. poicilus .. .. .. | Do. .. .. | Nary cunnumboo .. | In Canara an objection was raised to eating them as their heads are like those of snakes. |
| 43 | Do. cunnumboo .. .. | .... | Cunnumboo .. .. | |



Table II.

*Species obtained at Cochin*—continued.

| Number. | Latin Name. | Tamil Name. | Malayalam Name. | Remarks. |
|---|---|---|---|---|
| 44 | Ophiocephalus punctatus .. | Koravay .. .. | .... | Eaten by natives. |
| 45 | Do. striatus .. | Veral .. .. .. | Verarl .. .. .. | Good eating, but muddy, if from stagnant water. |
| 46 | Etroplus suratensis .. .. | Chettha kenday .. | Curry meen .. .. | Very good eating ; sometimes more than one foot in length in backwater. |
| 47 | Do. maculatus .. .. | Pitul kass .. .. | .... | Eaten by natives. |
| 48 | Cynoglossus sp ? .. .. | Nakkoo meen .. .. | .... | |
| 49 | Chaca lophioides .. .. | .... | Kadal thavalay .. | |
| 50 | Arius subrostratus .. .. | Kelleetee .. .. | Soondun cooree .. | Good eating only when young. Salted and eaten by poorest classes. |
| 51 | Do. Malabaricus .. .. | Do. .. .. | Thalayatay .. .. | |
| 52 | Do. sp ? .. .. | Do. .. .. | Poovatay .. .. | |
| 53 | Saurida tumbil .. .. | Kadal ooloovay .. | Arana meen .. .. | |
| 54 | Haplochilus rubrostigina .. | .... | Poonchan .. .. | |
| 55 | Do. lineatus .. .. | .... | Do. .. .. | |
| 56 | Hemirhamphus Xanthopterus. | .... | Kola .. .. .. | |
| 57 | Belone annulata .. .. | Pahmun kola .. .. | Do. .. .. .. | |
| 58 | Chatoessus chacunda .. .. | .... | Thodee .. .. | Eaten by natives. |
| 59 | Do. nasus .. .. | Muddu candai .. | Do. .. .. | Good eating. |
| 60 | Engraulis Malabaricus .. | Poor-realn .. .. | Nadu manangu .. | Eaten by natives. |
| 61 | Do. Indicus .. .. | Netteelee .. .. | Ooroo manangu .. | |
| 62 | Clupea toli .. .. .. | Oolum .. .. .. | Palavaw .. .. | |
| 63 | Do. sp ? .. .. | .... | .... | |
| 64 | Elops saurus .. .. .. | Allahti .. .. | Vulleekoomy .. | |
| 65 | Megalops cyprinoides .. .. | Moran candai .. .. | Cunny .. .. .. | |
| 66 | Chanos salmoneus .. .. | Tulu candal .. .. | Kootheekoomy .. | Called milk fish or white mullet by Europeans. |
| 67 | Dussumieria acuta .. .. | .... | Nulla chalay .. .. | Very good eating ; known as sardine. |
| 68 | Ophicthys microcephalus .. | .... | .... | .... |
| 69 | Triacanthus brevirostris .. | Moolean .. .. | .... | Eaten by natives (not eaten in Madras.) |
| 70 | Anacanthus barbatus .. .. | Watamookola .. | .... | |

Table III.

*Species obtained at Quilon.*

| Number. | Latin Name. | Tamil Name. | Malayalam Name. | Remarks. |
|---|---|---|---|---|
| 1 | Carcharias sp ? .. .. | Soorah .. .. | Soorah .. .. .. | Used as food by natives. |
| 2 | Narcine timbi .. .. | .... | .... | .... |
| 3 | Gerres oyena .. .. | .... | Praweellee .. .. | |
| 4 | Drepane punctata .. .. | Torriti .. .. .. | Parunthee .. .. | Used as food. |
| 5 | Holocentrum rubrum .. | Kul-kah-catchee .. | Poollan .. .. | |
| 6 | Acanthurus mata .. .. | Cozy meen .. .. | .... | |
| 7 | Caranx leptolepis .. .. | Paray .. .. .. | Buttaparay .. .. | |
| 8 | Psettus argenteus .. .. | .... | .... | .... |
| 9 | Trachynotus ovatus .. .. | Thookoonassey .. | .... | Eaten when salted. |
| 10 | Equula insidiatrix .. .. | .... | Combancooroochee .. | |
| 11 | Mene maculata .. .. | .... | .... | .... |
| 12 | Cybium guttatum .. .. | Vanjeerum .. .. | Arrakeeah .. .. | Good eating. Best tamarind fish made from salted fish. |
| 13 | Platycephalus insidiator .. | Ooloopathy .. .. | Oorathallee .. .. | Eaten by natives. |
| 14 | Salarius frenatus .. .. | Parvut meen .. .. | Poolan .. .. .. | |
| 15 | Do. sp ? .. .. | Do. .. .. | Do. .. .. | |
| 16 | Platyglossus Dussumieri .. | .... | Culladay .. .. | |
| 17 | Synaptura orientalis .. .. | .... | Suptharee .. .. | |
| 18 | Cynoglossus sp ? .. .. | Nakku meen .. .. | .... | |
| 19 | Arius thalassinus .. .. | Kadal kelleetee .. | .... | |
| 20 | Do. subrostratus .. .. | Kelleetee .. .. | Soondum cooree .. | Eaten by natives. |
| 21 | Saurida tumbil .. .. .. | Kadalooloovay .. | Aranay meen .. .. | |
| 22 | Belone annulata .. .. | Phamun kola .. | Kola .. .. .. | |
| 23 | Clupea longiceps .. .. | .... | Kokala chalaw .. | Used for making "fish oil." |
| 24 | Muræsesox telabon .. .. | Kulivi pamboo .. | .... | .... |
| 25 | Triacanthus brevirostris .. | Moolean .. .. | .... | Eaten by natives. |
| 26 | Tetrodon inermis .. .. | Plachee .. .. | .... | |
| 27 | Do. sp ? .. .. | Do. .. .. | .... | |
| 28 | Do. sp ? .. .. | Do. .. .. | .... | |

Government Central Museum,
Egmore,
2nd July 1886.

(Signed) EDGAR THURSTON,
Superintendent, Government Central Museum.

## APPENDICES.

### A.

General List of the Contributions, &c., received for the Government Central Museum, from 1st April 1885 to 31st March 1886.

| | | No. |
|---|---|---|
| Abboy, T., Naidu, M.R.Ry.— | | |
| Country smoking pipes | 3 | 3 |
| Armstrong, Dr. H., Kilpauk— | | |
| Bulrush caterpillar from New Zealand | 1 | 3 |
| Plant from New Zealand | 1 | |
| Geological specimens from the volcanic districts of New Zealand, Collection | | |
| Baudry, G. E., Esq., Tellicherry— | | |
| Pumice stones found floating in the sea | Collection. | Collection. |
| Bidie, Dy. Surgn-Genl. G., M.B, C.I.E., Sanitary Commr. for Madras— | | |
| Snake | 1 | 9 |
| Fruits of Vateria Malabarica from Travancore | 4 | |
| Moulds, one of each of Travancore chakram fanam and causy | 3 | |
| Palm-leaf basket for carrying onions on boardship | 1 | |
| Calder, D., Esq., St. Thomé— | | |
| Parrakeet | 1 | 1 |
| Cameron, J., Esq., Superintendent, Bangalore Museum— | | |
| Lac insects on *Shorea taluna* | Collection | 22 |
| Prepared varieties of Areca-nut | 21 | |
| Carter, H. R. P., Esq., Chetput— | | |
| Clavicles of a tiger | 4 | 77 |
| Egg cases of zygæna | 63 | |
| Aquatic Scorpions | 2 | |
| Caterpillars of a moth | 2 | |
| Cocoons of Cricula trifenestrata | 3 | |
| Woods from an old bridge bored by Isopods (Sphæroma vastator). | 2 | |
| Snake | 1 | |
| Chingleput, Collector of— | | |
| Impressions of seals | 2 | 2 |
| Conran, Mr. J. G., Perambúr— | | |
| Copper coins | 6 | 6 |
| Cumine, Master J. C.— | | |
| Bird's nest | 1 | 1 |
| Dale, Mr. J., Poonamallee— | | |
| Reptile (Draco Dussumieri) | 1 | 3 |
| Pumice stones picked up on the sea-beach at Calicut | 2 | |
| Daly, William Mahon, Esq., Yercaud, Shevaroys— | | |
| Birds' nests | 8 | 48 |
| Eggs received in exchange | 37 | |
| Insect | 1 | |
| Fruits | 2 | |
| Damodaram, R., Naidu, M.R.Ry— | | |
| Bat | 1 | 1,005 |
| Beetles | 2 | |
| Butterfly | 1 | |
| Wasp's nest | 1 | |
| Shells | 1,000 | |
| Davasagayam, D., Pillai, M.R.Ry., Salem— | | |
| Samples of coffee | 4 | 4 |
| Davison, W., Esq., Ootacamund— | | |
| Birds | 96 | 96 |
| Deane, G. W., Esq., The Luz— | | |
| Chrysalis of a butterfly | 1 | 1 |
| DeCaster, Mr. E.— | | |
| Tail of a skate | 1 | 2 |
| Head of a stone image | 1 | |
| Dique, Mr. W. F.— | | |
| Leaf insect | 1 | 1 |
| Ditmas, F. W., Esq., Assistant Commissioner of Salt Revenue— | | |
| Fish (Julis lunaris) | 1 | 1 |
| Doyle, Pat., Esq., C.E., Lucknow— | | |
| Pieces of Pinewood pulp for paper-making | 2 | 11 |
| Grass (Pollema eriopoda) bundle | 1 | |
| Specimens of "ball coal" from the Rani Gunj Coal-field, Damuda Valley, Bengal | 8 | |



| | | No. |
|---|---|---|
| Duncan, J. H., Esq., Nungumbaukum— | | |
| Common tree-cat (Paradoxurus Musanga) | 1 | 3 |
| White Guinea-fowl | 1 | |
| Cobra | 1 | |
| Dunhill, Mrs. E. S., Pursewalkum— | | |
| Fish | 1 | 1 |
| Duraisawmy, A. S., Pillay, M.R.Ry— | | |
| Leech | 1 | 4 |
| Cluster of eggs of a snail | 1 | |
| Rock specimen | 1 | |
| Goglet from Mysore | 1 | |
| Etherajulu Naicker, P., M.R.Ry— | | |
| Rat | 1 | 1 |
| Farmer, H. R., Esq., Acting Collector, Trichinopoly— | | |
| Chrysalis | 2 | 2 |
| Fowler, Mr. G — | | |
| Bird's nest | 1 | 1 |
| Garstin, J. H., Esq., C.S.— | | |
| Indian fire-flies | Collection. | Collection. |
| Gleeson, J. M., Esq., Superintendent, Agri-Horticultural Society's Gardens— | | |
| Spiders | Collection. | Collection. |
| Godávari, Collector of— | | |
| Impressions of seals | 3 | 3 |
| Gompertz, H., Esq., Yercaud— | | |
| Stone implements from fort, human face, and peacock hills in Bellary | 52 | 52 |
| Gordon, D. C., Esq.— | | |
| Caterpillars | 4 | 4 |
| Gordon, Mrs. D. C.— | | |
| Leaf insects | 2 | 2 |
| Governor in Council, His Excellency the— | | |
| Dutch manuscript, a memorial of the Dutch in the East | 1 | 1 |
| Govinda, P., Menon, M.R.Ry.— | | |
| Insect (Mantis flabellicornis) | 1 | 1 |
| Guthrie, Colonel T. K.— | | |
| Mantis | 1 | 1 |
| Handley, J. W., Esq.— | | |
| Insect (Nepa grandis) | 1 | 1 |
| Havelock, Mrs. Ann L.— | | |
| Skull of a tiger | 1 | 1 |
| Hawkes, Colonel H. P.— | | |
| Specimens of raw and ginned Nankin cotton and the coarse cotton-cloths woven from the latter from Aracan | 4 | 13 |
| A wicker basket made by the hill tribes of British Burma | 1 | |
| Burmese copper coins | 8 | |
| Hollingsworth, R., Esq.— | | |
| Gourami fish | 1 | 1 |
| Holmes, W. T. Hamilton, Esq.— | | |
| Egg of horned owl | 1 | 2 |
| Shell of Balanus | 1 | |
| Honorary Secretary, Agri-Horticultural Society, Madras— | | |
| Spiders' nests | 2 | 4 |
| Old casuarina pole with borings | 1 | |
| Specimen of curious growth of the roots of Casuarina muricata | 1 | |
| Honorary Secretary, Bombay Branch of the Royal Asiatic Society— | | |
| Silver coins | 5 | 7 |
| Copper coins | 2 | |
| Honorary Secretary, Madras Literary Society— | | |
| Gold coin | 1 | 1 |
| Honorary Secretary, (Philological) Asiatic Society of Bengal, Calcutta— | | |
| Gold coins | 2 | 48 |
| Silver do. | 17 | |
| Copper do. | 29 | |
| Iya Pillay, Eleazer John, Mr.— | | |
| Silver coins | 3 | 11 |
| Copper do. | 8 | |
| Johnston Major, Chelmsford Estate, Mettupálaiyam— | | |
| Rheea stalk (China grass) Boehmeria nivea, grown on Chelmsford Estate. | 1 | 1 |

| | NO. |
|---|---|
| Kernan, Honorable J., Adyar— | |
| Snake (Eryx Johnii) with mutilated tail ... ... ... ... ... | 1 |
| Kistna District, Collector of— | |
| Impressions of seals ... ... ... ... ... ... ... ... | 2 |
| Kurnool District, Collector of— | |
| Impression of seal ... ... ... ... ... ... ... ... | 1 |
| Leman, J. D., Esq., Collector of Coimbatore, and Pickance, Colonel W. J., Superintendent of Jail, Coimbatore— | |
| Ancient pottery with peculiar markings on it ... ... ... ... | 17 |
| Leonard, Mr. J. H., Mount Road— | |
| Australian magpie ... ... ... ... ... ... ... ... | 1 |
| London Exhibition Committee, Madras— | |
| Brass jewelry ... ... ... ... ... ... ... 188 | 218 |
| Toys ... ... ... ... ... ... ... ... 30 | |
| McNally, Dr. C. J., Egmore— | |
| Butterfly (Euplæa midamus) with imago and pupa case ... ... ... | 3 |
| Madhava Charry, M.R.Ry— | |
| Double brinjal ... ... ... ... ... ... ... ... | 1 |
| Madura, Collector of— | |
| Impressions of seals ... ... ... ... ... ... ... ... | 2 |
| Magrath, Colonel B. H. W.— | |
| Spider (Mygale sp.) ... ... ... ... ... ... ... ... | 1 |
| Maitland, Dr. J., Egmore— | |
| Larvæ of a fly produced in a bottle of gum ... ... ... | Collection. |
| Malabar, Collector of— | |
| Impressions of seals ... ... ... ... ... ... ... ... | 5 |
| Mitchell, A., Esq., Salt Department, Ennore— | |
| Snout of a saw-fish (Pristis cuspidatus) ... ... ... ... ... | 1 |
| Mitchell, E. A., Esq., Saint Thomé— | |
| Cray-fish (Palinurus) ... ... ... ... ... ... ... ... | 1 |
| Mitchell, J. H., Esq., Coimbatore— | |
| Pangolin ... ... ... ... ... ... ... ... ... | 1 |
| Mitchell, Mr. W. C. H., Kilpauk— | |
| Birds' eggs ... ... ... ... ... ... ... ... ... | 10 |
| Moonoosawmy, K., Naidu, M.R.Ry— | |
| Improved Jew's Harp ... ... ... ... ... ... ... ... | 1 |
| Morgan, Rhodes, Esq.— | |
| Insect (Nepa grandis) ... ... ... ... ... ... ... ... | 1 |
| Morris, A. W., Esq.— | |
| Birds' eggs ... ... ... ... ... ... ... ... ... | 3 |
| Moothoosawmy, C., Pillai, M.R.Ry.— | |
| Parrakeet ... ... ... ... ... ... ... ... ... | 1 |
| Nasiruddin, Mahomed, Khan Bahadoor— | |
| Copper coins ... ... ... ... ... ... ... ... ... | 2 |
| Nellore, Collector of— | |
| Impression of a seal ... ... ... ... ... ... 1 | 2 |
| Copy of impression of a seal ... ... ... ... ... 1 | |
| Nicholas, Mr. E. A. S.— | |
| Snake (Python Molurus) ... ... ... ... ... ... ... ... | 1 |
| North Arcot, Collector of— | |
| Impressions of seals ... ... ... ... ... ... ... ... | 8 |
| Peddie, Miss, Royapooram— | |
| Death's-head hawk-moth ... ... ... ... ... ... ... ... | 1 |
| Peebles, Mrs. J. H.— | |
| Insect (Trombidium) ... ... ... ... ... ... ... ... | 1 |
| President, Municipal Commission, Madras— | |
| Monkeys ... ... ... ... ... ... ... ... 2 | 7 |
| Tree-cats ... ... ... ... ... ... ... ... 2 | |
| Lion ... ... ... ... ... ... ... ... 1 | |
| Cockatoo ... ... ... ... ... ... ... ... 1 | |
| Black swan ... ... ... ... ... ... ... ... 1 | |
| Prudhomme, H., Esq., Egmore— | |
| Specimen of wine (bottle) ... ... ... ... ... ... 1 | 2 |
| Do. of coca leaves ... ... ... ... ... Collection | |
| Punjab, Government of, through Major H. H. Cole— | |
| Buddhist sculptures from two small topes, at places called Nuttu and Mian Khan, 24 miles north of Koti Mardan ... ... ... ... | 174 pieces. |



| | NO. |
|---|---|
| Raghavendra, T., Row, M.R.Ry., Assistant Commissioner, Shimoga— | |
| Gold coin ... ... ... ... ... ... ... ... ... | 1 |
| Rainnier, H., Esq.— | |
| Copper coins ... ... ... ... ... ... ... ... ... | 93 |
| Rajaram, T. Misser, Esq.— | |
| Copper coins ... ... ... ... ... ... ... ... ... | 6 |
| Ratton, Dr. J. L., Egmore— | |
| Moth (Actias luna) ... ... ... ... ... ... ... 1 | 2 |
| Beetle (Cosyphus) ... ... ... ... ... ... ... 1 | |
| Revenue Settlement and Agriculture, Acting Director of— | |
| Specimens of larva of a beetle ... ... ... ... ... ... | 3 |
| Robertson, W. R., Esq., Saidápet— | |
| Fish (Lutianus roseus) ... ... ... ... ... ... 2 | 3 |
| Fresh-water turtle of the genus Emys ... ... ... ... 1 | |
| Royal Botanic Gardens, Seebpore, Calcutta, Superintendent of— | |
| Seeds (Pithecolobium Laman) (packet) ... ... ... ... 1 | 17 |
| Seeds, Palm (packet) ... ... ... ... ... ... 16 | |
| Salem, Collector of— | |
| Impression in wax of the image of the goddess Kamatchi Amman of Conjeeveram ... ... ... ... ... ... ... ... | 1 |
| Salunkei, Kistnajee Row, M.R.Ry., Tanjore— | |
| Fencing sticks ... ... ... ... ... ... ... ... | 2 |
| Scott, T. M., Esq., Madura— | |
| Rama Tanka gold coin ... ... ... ... ... ... ... | 1 |
| Shortt, J., Retired Deputy Surgeon-General— | |
| Mammals ... ... ... ... ... ... ... ... 3 | 50 |
| Otter skin ... ... ... ... ... ... ... ... 1 | |
| Bird ... ... ... ... ... ... ... ... 1 | |
| Birds' skins ... ... ... ... ... ... ... ... 2 | |
| Birds in spirit ... ... ... ... ... ... ... 5 | |
| Chicken ... ... ... ... ... ... ... ... 1 | |
| Reptiles ... ... ... ... ... ... ... ... 15 | |
| Fish ... ... ... ... ... ... ... ... 1 | |
| Crustacea ... ... ... ... ... ... ... ... 10 | |
| Insects ... ... ... ... ... ... ... ... 8 | |
| Worms in a phial ... ... ... ... ... ... ... Lot | |
| Calcium carbonate from blackwood ... ... ... ... ,, | |
| Do. from teak trees ... ... ... ... ,, | |
| South Canara, Collector of— | |
| Impression in wax of a "Vamana Madri" seal ... ... ... | 1 |
| Stafford, H., Esq., District Forest Officer, Godávari— | |
| Agates ... ... ... ... ... ... ... ... 3 | 5 |
| Lac found on trees in Rékapalle, Upper Godávari Taluk ... 1 | |
| Tailor bird's nest ... ... ... ... ... ... ... 1 | |
| Steel, H. W., Esq., Deputy Commissioner of Rohtak— | |
| Silver coin ... ... ... ... ... ... ... ... | 1 |
| Stephenson, Miss C. F., Kilpauk— | |
| Moths ... ... ... ... ... ... ... ... | 2 |
| Tanjore, Collector of— | |
| Beetles of the genus Cerambyx ... ... ... ... ... 6 | 18 |
| Impressions on wax from old seals used by the Dutch and Danish Governments ... ... ... ... ... ... ... 6 | |
| Impressions on wax from Tanjore palace... ... ... ... 5 | |
| Impression of a seal ... ... ... ... ... ... 1 | |
| Thomas, H. S., Esq., First Member, Board of Revenue— | |
| Shells (avicula vexillum) ... ... ... ... ... Collection | 4 |
| Shells (Unio Marginalis) ... ... ... ... ... ... 3 | |
| Thoroughgood, F. N., Esq.— | |
| Specimen of coral ... ... ... ... ... ... ... ... | 1 |
| Tinnevelly, Collector of— | |
| Impressions of seals ... ... ... ... ... ... ... | 4 |
| Travancore, His Highness the Maharajah of— | |
| Shields ... ... ... ... ... ... ... ... ... | 4 |
| Tufnell, Captain R. H. C.— | |
| Silver punch mark Buddhist coin (in exchange) ... ... ... ... | 1 |
| Turner, H. G., Esq., Acting Collector of Vizagapatam— | |
| Impressions of seals ... ... ... ... ... ... ... ... | 2 |

| | No. |
|---|---|
| VanIngens, Mrs. Alice, Egmore— | |
| Spider's nest and young | 2 |
| Vizagapatam, Senior Assistant Collector of— | |
| Pelagic shells | 12 |
| Volluru, the Zemindar of— | |
| Copper coins | 1,222 |
| West, H. C., Esq., Nungambaukum— | |
| Bird (Nycticorax griseus) | 1 |
| Egg of Ixos luteolus | 1 |
| | 2 |
| White, Mr. Willie A. F.— | |
| Egg of white scavenger vulture | 1 |
| Whiteside, W. S., Esq.— | |
| Snake (Tropidonotus quincunciatus) | 1 |
| Winde, Monsieur B., Germany— | |
| Beetles | 115 |
| Wilson Fellows, V. S., Esq., Tuticorin— | |
| Plant (Capparis aphylla) | 1 |

B.

Visitors to the Government Central Museum from 1st April 1885 to 31st March 1886.

| 1885-86. | Signatures made in | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | English. | Telugu. | Hindustani. | Tamil. | Mahratta. | Nagaree. | Guzerattee. | Canarese. | Chinese. | Cingalese. | Malayalam. | Bengalee. |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| April | 1,961 | 345 | 147 | 1,199 | 13 | 9 | 18 | 20 | .. | .. | 48 | 3 |
| May | 1,996 | 437 | 203 | 1,400 | 17 | 5 | 27 | 14 | .. | .. | 16 | .. |
| June | 2,420 | 697 | 269 | 1,882 | 14 | 5 | 3 | 29 | .. | .. | 25 | .. |
| July | 2,260 | 591 | 460 | 2,185 | 8 | 7 | 24 | 16 | .. | .. | 27 | .. |
| August | 2,020 | 419 | 213 | 1,987 | 11 | 2 | 27 | 23 | .. | .. | 21 | .. |
| September | 2,433 | 498 | 253 | 1,943 | 14 | 12 | 31 | 14 | .. | .. | 40 | .. |
| October | 1,506 | 403 | 139 | 1,474 | 17 | 7 | 24 | 18 | .. | .. | 26 | 2 |
| November | 1,714 | 347 | 147 | 1,534 | .. | 7 | 17 | 12 | .. | .. | 35 | .. |
| December | 4,519 | 1,103 | 341 | 4,023 | 12 | 25 | 72 | 66 | .. | .. | 51 | .. |
| January | 2,636 | 578 | 259 | 1,765 | 4 | 6 | 26 | 34 | 2 | .. | 49 | .. |
| February | 1,947 | 338 | 160 | 1,222 | 9 | 7 | 17 | 23 | .. | 2 | 37 | .. |
| March | 2,046 | 439 | 182 | 1,205 | 11 | 18 | 16 | 21 | 1 | .. | 62 | .. |
| Total | 27,458 | 6,195 | 2,773 | 21,819 | 130 | 110 | 302 | 290 | 3 | 2 | 437 | 5 |

| 1885-86. | Total of signatures. | Unable to sign, but tally kept. | Total of visitors. | Number of | | Total of visitors. |
|---|---|---|---|---|---|---|
| | | | | Men and boys. | Women and girls. | |
| | 14 | 15 | 16 | 17 | 18 | 19 |
| April | 3,763 | 12,278 | 16,041 | 9,755 | 6,286 | 16,041 |
| May | 4,115 | 15,635 | 19,750 | 11,412 | 8,338 | 19,750 |
| June | 5,344 | 23,057 | 28,401 | 16,403 | 11,998 | 28,401 |
| July | 5,578 | 18,976 | 24,554 | 14,650 | 9,904 | 24,554 |
| August | 4,723 | 16,498 | 21,221 | 12,724 | 8,497 | 21,221 |
| September | 5,238 | 23,730 | 28,968 | 16,154 | 12,814 | 28,968 |
| October | 3,616 | 13,635 | 17,251 | 10,266 | 6,985 | 17,251 |
| November | 3,813 | 11,487 | 15,300 | 9,728 | 5,572 | 15,300 |
| December | 10,212 | 50,052 | 60,264 | 32,923 | 27,341 | 60,264 |
| January | 5,359 | 44,337 | 49,696 | 25,103 | 24,593 | 49,696 |
| February | 3,762 | 10,955 | 14,717 | 9,058 | 5,659 | 14,717 |
| March | 4,001 | 14,298 | 15,299 | 9,587 | 5,712 | 15,299 |
| Total | 59,524 | 251,938 | 311,462 | 177,763 | 133,699 | 311,462 |



C.

Statement showing the number of Visitors to the Government Central Museum for the past five years.

| | |
|---|---|
| 1881-82 | 211,246 |
| 1882-83 | 271,881 |
| 1883-84 | 242,514 |
| 1884-85 | 272,968 |
| 1885-86 | 311,462 |

D-1.

List of Books added to the Public Library.

1.—*By Purchase (Standard Works).*

| | Volumes. |
|---|---|
| Anaryan Early Ideas, a group of Hindoo stories | 1 |
| Antiquities of Asia, by Sir W. Jones | 2 |
| Bagehot, W.—Physics and Politics | 1 |
| Balfour, Surgeon-General E. G.—The Cyclopædia of India | 3 |
| Bernstein, J.—The Five Senses of Man | 1 |
| Bird, F. J.—The American Practical Dyer's Companion | 1 |
| Blades, William.—The Enemies of Books | 1 |
| Bower, F. O. and S. H.—Vines Course of Practical Instruction in Botany. | 1 |
| Buckley, Arabella B.A.—Short History of Natural Science | 1 |
| Caird, Sir James India.—The Land and the People | 1 |
| Capper, J.—Observations of the Winds and Monsoons | 1 |
| Chambers' Encyclopædia of Universal Knowledge | 10 |
| Clarke, C. B.—Commelynaceæ et Cyrtandraceæ Bengalensis, folio | 1 |
| Clayton, Sir R.—Life of Alexander the Great | 1 |
| Cooke, M. C.—Hand-book of British Fungi | 2 |
| Cox, Sir G. W.—The Mythology of the Aryan Nations | 2 |
| Curtis's Botanical Magazine, Vols. 13 to 37 | 25 |
| Deane, Rev. J. B.—Worship of the Serpent | 1 |
| De Leon, E.—The Khedives of Egypt | 1 |
| De Candolle, A.—Origin of Cultivated Plants | 1 |
| Deschanel, A.—Elementary Treatise on Natural Philosophy | 1 |
| Dictionary of the Religious Ceremonies of the Eastern Nations, &c. | 1 |
| Echoes from Old Calcutta, by H. E. Busteed | 1 |
| Forbes, James.—Oriental Memoirs | 4 |
| Gladwin, F.—Memoirs of Khojeh Abdul Kurreem | 1 |
| Gladwin, F.—Dissertation of the Rhetoric Prosody and Rhyme of the Persians | 1 |
| Graham, M.—Journal of a Residence in India | 1 |
| Haite's Plant Studies, Parts 3 to 7 | 5 |
| Hamilton, A.—Account of the East Indies | 1 |
| Historical View of Plans for the Government of British India | 1 |
| Hooker, J. D.—Rhododendrons of Sikkim Himalaya, folio | 1 |
| Hooker, J. D.—Illustrations of Himalayan Plants, folio | 1 |
| Hunter, R.—The Encyclopædia Dictionary | 5 |
| Husbandry and Commerce of Bengal—Remarks on the present state of the— | 1 |
| Huxley, T. H.—Elementary Lessons in Physiology | 1 |
| Kirby, W. F.—Elementary Text Book of Entomology | 1 |
| Land of Temples | 1 |
| Malley, A. C.—Micro-Photography | 1 |
| Max Müller, F.—Sacred Books of the East, Vols. 20, 22 and 24 | 3 |
| Meyen, F. J. F.—Outlines of the Geography of Plants | 1 |
| Mitchell, Mrs. M.—In India, Sketches of Indian Life and Travel | 1 |
| Money, Colonel E.—The Cultivation and Manufacture of Tea | 1 |
| Orme, R.—Fragments of the Mogul Empire | 1 |
| Penant, T.—View of Hindoostan | 1 |
| Ribot, T.—Diseases of Memory | 1 |
| Sadleir, R.—The Aborigines of Australia | 1 |
| Smith, John A.—Dictionary of Popular Names of Plants | 1 |
| Stallo, J. B.—The Concepts and Theories of Modern Physics | 1 |
| Stocqueler, J. H.—Memoir and Correspondence of Major-General Sir William Nott | 2 |
| Sully, James.—Illusions, a Psychological Study | 1 |
| The Boats of the World by one of the Craft | 1 |
| Thumberg, C. P.—Travels in Europe, Africa and Asia | 4 |

| | Volumes. |
|---|---|
| Vogel, Dr. H.—The Chemistry of Light and Photography ... ... | 1 |
| Voigt, J. O.—Hortus Suburbanus Calcuttensis ... ... ... ... | 1 |
| Whitney, W. D.—The Life and Growth of Language ... ... ... | 1 |
| Wise, T. A.—Commentary on the Hindu System of Medicine ... ... | 1 |
| Wood, John.—A Journey to the Source of the River Oxus ... ... | 1 |
| Wurtz, A.—The Atomic Theory ... ... ... ... ... ... | 1 |
| Year Book of the Scientific and Learned Societies of Great Britain and Ireland ... ... ... ... ... ... ... ... ... | 2 |

D-2.

*Periodicals.*

| | |
|---|---|
| American Naturalist, Nos. 2 to 12 for 1885 ... ... ... ... | 1 |
| Annual Register for 1884 ... ... ... ... ... ... ... | 1 |
| Asiatic Journal and Monthly Register ... ... ... ... ... | 41 |
| Asylum Press Almanac for 1886 ... ... ... ... ... ... | 1 |
| Illustrated London News, Vols. 87 and 88 ... ... ... ... | 2 |
| Journal of the Royal Asiatic Society of Great Britain and Ireland, Parts 2, 3 and 4 for 1885 and Part 1 for 1886 ... ... ... ... | 1 |
| "London Times," Weekly Edition, Nos. 426 to 481 ... ... ... | 1 |
| Selections from the Calcutta Review, Vol. 11 for 1884 ... ... ... | 1 |
| Tropical Agriculturist, Vol. 4, Nos. 9, 10 and 11 ... ... ... | 1 |

D-3.

*(By Gift) Standard Works.*

| | |
|---|---|
| Benjamin, Rev. R.—Confirmation Class Book ... ... ... ... | 1 |
| Calendar of Letters, City of London, 1350—1370, by Reginald R. Sharpe. | 1 |
| Catalogue of the Australian Hydroid Zoophytes, by W. M. Bale ... | 1 |
| Catalogue of the Library of the Geological Survey of India, by W. R. Bion ... ... ... ... ... ... ... ... ... ... | 1 |
| Catalogue of Surgical Instruments ... ... ... ... ... ... | 1 |
| Catalogue of Sanskrit Manuscripts, North-Western Provinces, Part 9 ... | 1 |
| Catalogue of Sanskrit Manuscripts existing in Oudh, for 1884 ... ... | 1 |
| Catalogue of Sanskrit Manuscript in the Library of the Deccan College with Index ... ... ... ... ... ... ... ... ... | 1 |
| Catalogue of the Art Collection in the Sir J. J. School of Art, Bombay... | 1 |
| Catalogue of the Victoria and Albert Museum, Bombay ... ... ... | 1 |
| Centenary Review of the Researches of the Asiatic Society of Bengal, 1784—1883 ... ... ... ... ... ... ... ... | 1 |
| Challenger—Report on the Scientific Results of the Exploring Voyage of the— (Zoology), Vol. 11th ... ... ... ... ... ... | 1 |
| Challenger—Report on the Scientific Results of the Exploring Voyage of the— (Narrative of the Cruise), Vol. 1, Parts 1 and 2 ... ... | 2 |
| Challenger—Report on the Scientific Results of the Exploring Voyage of the— (Botany) ... ... ... ... ... ... ... ... | 1 |
| China Report, by Mr. Hosie, of a journey through Central Sou-chuan, 1884, No. 2 ... ... ... ... ... ... ... ... ... | 2 |
| Cunningham's Archæological Survey of India, Vols. 19 and 20 ... ... | 2 |
| Duka, T.—Life and Works of Cosma de Körös, (Trübner's Oriental Series) | 1 |
| Export Catalogue of Machinery and Hardwares of the Principal Makers in Great Britain ... ... ... ... ... ... ... ... | 1 |
| Essays relating to Indo-China (Trübner's Oriental Series) ... ... | 2 |
| Foulkes, Rev. T.—The Pallavas (Pamphlet) ... ... ... ... | 1 |
| Guide to the Collection of Fossil Fishes in the Department of Geology and Palæontology in the British Museum (Pamphlet) ... ... ... | 1 |
| Guide to the Galleries of Mammalia in the British Museum (Natural History) ... ... ... ... ... ... ... ... ... | 1 |
| Howes, G. B.—Atlas of Practical Elementary Biology ... ... ... | 1 |
| Indian Museum Annual Report for 1884-85 ... ... ... ... | 1 |
| Indian Art-work in the Calcutta International Exhibition, 1883-84 ... | 1 |
| Leggett, E.—Notes on the Mint Towns and Coins of the Muhammadans. | 1 |
| Madras Magnetical Observations for 1851 and 1855, by W. S. Jacob, Esq. ... ... ... ... ... ... ... ... ... | 1 |
| Manual of the Administration of the Madras Presidency, Vols. 1 and 2 .. | 3 |
| Maps prepared for the Madras Manual of the Administration ... ... | 1 |
| Memorials of the Jeypore Exhibition, 1883, by Thomas H. Hendley ... | 4 |
| Mills, James.—The Indian Stock-owner's Manual ... ... ... ... | 1 |
| Mills, James.—Plain Hints on Diseases of Cattle in India ... ... | 1 |
| Mills, James.—Treatment of Cattle Diseases ... ... ... ... | 1 |



| | Volumes. |
|---|---|
| Montefiore, Sir Moses, Sacred Memorial Services in memory of the late— | 1 |
| Mukharji, T. N.—Agricultural Implements collected for the International Exhibition, 1883-84 ... ... ... ... ... ... ... | 1 |
| Oppert, Gustav.—Ne Sutor Ultra Crepidam ... ... ... ... | 1 |
| Oppert, G.—List of Sanskrit Manuscripts in Southern India, Vol. 2nd ... | 1 |
| Pogson, N. R.—Telegraphic Longitude Determinations in India... ... | 1 |
| Prudhomme, E. N.—The Banker's Ready Reckoner; Tables showing the rates of Interest per cent. per annum on purchases and sales of Bills of Exchange, &c. ... ... ... ... ... ... ... ... | 1 |
| Prudhomme, E. N.—The Indian Investor's Guide ... ... ... | 1 |
| Prudhomme, E. N.—The Indian Stock Notes Calculator ... ... | 1 |
| Records of the Saidápet Experimental Farm, by Charles Benson ... | 1 |
| Rees, J. D.—Notes of a Journey from Kasveen to Hamadan across the Karaghan Country ... ... ... ... ... ... ... ... | 1 |
| Sabda Ratnakaram, a Comprehensive Telugu Dictionary, by B. Sitaramacharyulu ... ... ... ... ... ... ... ... ... | 1 |
| Sewell, Robert.—A Letter to Gustav Oppert, Ph. D., in reply to his Pamphlet Ne Sutor Ultra Crepidam ... ... ... ... ... ... | 1 |
| Textile Fabrics of India, Nos. 1 to 1120, 2nd Series ... ... ... | 17 |
| Third Report of the Curator of Ancient Monuments in India for 1883-84 | 1 |
| Wardle, Thomas.—Researches on Silk Fibre ... ... ... ... | 1 |
| Wherry, Rev. E. M.—A Comprehensive Commentary on the Qurán, Vol. 3rd (Trübner's Oriental Series) ... ... ... ... ... | 1 |
| Wortham, Rev. B. H.—The Satakas of Bhartrihari (Trübner's Oriental Series) ... ... ... ... ... ... ... ... ... | 1 |

D-4.

*Periodicals (by Gift).*

Bulletin of the Brookville Society of Natural History, No. 1.
"Fort St. George Gazette," Nos. 14 to 51 for 1885, Nos. 1 to 13 for 1886.
"Gazette of India," Nos. 12 to 52 for 1885, and 1 to 13 for 1886.
Indian, Antiquary, by J. Burgess, Vol. 14 for 1885.
Journal of the Asiatic Society of Bengal, Part 1, Nos. 1 to 4 for 1885; Part 2, No. 3 for 1884; Part 2, Nos. 2 and 3 for 1885.
Journal of Indian Arts, Nos. 7, 8 and 9.
Memoirs of the Geological Survey of India, Vol. 21, Parts 3 and 4, and Vol. 22, Parts 1 to 4, for 1885.
Memoirs of the Geological Survey of India (Palæontologia Indica), Vol. 1, S. 4, S. 13; Vol. 3, S. 10; Vol. 1, S. 4, S. 13; Vol. 1, S. 14.
Oesterreichische Monatsschrift fur den Orient, Nos. 1 to 12 for 1885.
Proceedings of the Asiatic Society of Bengal, Nos. 11 and 12 for 1884; Nos. 1 to 9 for 1885.
Proceedings of the Natural History Society of Wisconsin, Vol. 1.
Quarterly Journal of Veterinary Science in India, Nos. 11 to 13 for 1884-85.
Records of the Geological Survey of India, Parts 1 to 4 for 1885.
Statement of Imports and Exports, September to December 1885, and January and February 1886.
The Pandit, a Monthly Publication devoted to Sanskrit Literature, Nos. 1 to 12 for 1885.

D-5.

*Reports.*

| | Copies. |
|---|---|
| Act to obtain Lands and Mines, &c., Arabic ... ... ... ... | 1 |
| Administration Report on the Jails of Bengal for 1884, by E. V. Westmacott, Esq. ... ... ... ... ... ... ... ... | 1 |
| Administration Report on the Bombay Jails for 1884 ... ... ... | 1 |
| Administration Report of the Meteorological Reporter to the Government of Madras for 1884-85 ... ... ... ... ... ... | 1 |
| Age at which Candidates for the Civil Service of India are admitted for competition in England, being a correspondence between the Government of India and the Secretary of State (Parliamentary Blue Book). | 1 |
| Agricultural Statistics, Ireland—General Abstracts showing the Acreage under Crops; also the Number and Description of Live Stock in each Country and Province, 1884-85 (Parliamentary Blue Book) ... | 1 |
| A List of Agricultural Implements and Machines which have been experimented with and found efficient and useful in India for 1884-85. | 2 |
| Annual Report on the Administration of the Land Revenue in Assam for 1884-85 ... ... ... ... ... ... ... ... | 1 |

| | Copies. |
|---|---|
| Annual Report on the Foreign Trade of the North-West Provinces and Oudh, 1885 | 2 |
| Annual Administration Reports of the Forest Department, Madras Presidency, for 1883-84 | 1 |
| Annual Report of the Madras Court of Small Causes for 1884 | 1 |
| Annual Report on the Civil Hospitals and Dispensaries in the Madras Presidency, 1883 | 1 |
| Annual Report with Tabular Statements on the Condition and Management of the Jails in the North-West Provinces and Oudh for 1884 | 1 |
| Annual Report on the Gardens of His Highness the Maharana of Oodeypore for 1884 | 1 |
| Annual Report on the Jails of the Hyderabad Assigned Districts for 1884 | 1 |
| Annual Report on the Administration of Prisons in the Province of Coorg for 1884 | 1 |
| Annual Report on the Lunatic Asylums in the Madras Presidency for 1884-85 | 1 |
| Annual Report of the Director of Agriculture, Bombay Presidency, for 1884-85 | 2 |
| Annual Report of the Khandesh Experimental Farm for 1885 | 2 |
| Annual Report, Government Experimental Farm, Hyderabad, Sind, for 1885 | 2 |
| Annual Report of the Royal Botanic Gardens, Calcutta, for 1884-85 | 2 |
| Annual Report on the Botanical Gardens of Poona for 1885 | 2 |
| Annual Report of the Department of Revenue Settlement and Agriculture for 1884-85 | 1 |
| Annual Volume of the Sea-borne Trade and Navigation of the Madras Presidency for the year 1884-85 | 1 |
| Assessment of Sub-soil Water, being extracts from the Despatch of the Governor of Bombay, 1885 (Parliamentary Blue Book) | 1 |
| Catalogue of the Lucknow Exhibition, 1885 | 1 |
| Central Asia—Further correspondence respecting Central Asia, with Maps, Nos. 2, 3 and 4 (Parliamentary Blue Book) | 2 |
| Central Asia—Circular Despatch addressed by Prince Gortchakow to Russian Representatives abroad for 1864 (Parliamentary Blue Book). | 1 |
| Central Asia—Further correspondence respecting the affairs of Central Asia, 1885, No. 5 (Parliamentary Blue Book) | 1 |
| China correspondence respecting the duties on Opium, 1885, No. 5 (Parliamentary Blue Book) | 1 |
| Civil Justice Report of British Burma for 1884 | 1 |
| Civil Statements of the North-Western Provinces for 1884 | 1 |
| Cotton in Assam, 1885 | 1 |
| Criminal Justice Report of British Burma for 1884 | 1 |
| Criminal Statements of the North-Western Provinces for 1884 | 1 |
| East Indian Financial Statement for 1885-86 (Parliamentary Blue Book) | 1 |
| Egypt correspondence respecting Ports in the Red Sea and the Gulf of Aden and the Province of Harar, 1885 (Parliamentary Blue Book) | 1 |
| Elephant Pipes in the Museum of the Academy of Natural Science, Davenport Jowa | 1 |
| Emigration Statistics of Ireland for 1884 (Parliamentary Blue Book) | 1 |
| Estimate of Revenue and Expenditure of the Government of India, 1884-85 (Parliamentary Blue Book) | 1 |
| Home Accounts of the Government of India, 1885 (Parliamentary Blue Book) | 1 |
| Indian Meteorological Memoirs, by H. F. Blanford, Vol. 2, Parts 4 and 5 | 2 |
| Instructions for the preparation of Village Papers in the Punjab for 1885 | 2 |
| Monograph on Cotton Manufacture in the Punjab | 1 |
| Muhammadan Proper Names of Females—A list of — | 1 |
| Note on the Agricultural Products of the Hyderabad Assigned Districts, by Surgeon S. Hume, M.B., 1885 | 1 |
| Note on Agricultural Implements in America | 1 |
| New South Wales Technological, Industrial, and Sanitary Museum—Report of the Committee of Management for 1884 | 1 |
| New South Wales Australian Museum—Report of the Trustees for 1884. | 1 |
| Non-effective Charges of Her Majesty's Forces, 1885 (Parliamentary Blue Book) | 1 |
| Proceedings of the Director of Public Instruction—Report of the Madras Agricultural College for 1885 | 1 |



GOVERNMENT OF MADRAS.

## REVENUE DEPARTMENT.

Read—the following paper:—

From EDGAR THURSTON, Esq., Superintendent, Government Central Museum, to the Secretary to Government, Revenue Department, dated Madras, 2nd July 1886, No. 431:—

Abstract.—Submitting report on the working of the Government Central Museum during the year 1885-86.

Enclosures.

### ADMINISTRATION REPORT OF THE GOVERNMENT CENTRAL MUSEUM FOR THE YEAR 1885-86.

Introductory.—In the present report I am only able to speak from personal experience of the work which has been carried on during the latter half of the year, as I only took over charge of the Museum from my predecessor, Dr. Bidie, on October the 12th.

2. The proper work of the Museum was greatly retarded during the greater part of the year by the formation of a collection of artwares, jewelry, trade products, &c., of Southern India for the Madras Court of the Indian and Colonial Exhibition. I am, however, in the present instance reconciled to what would have otherwise been a great waste of time, inasmuch as Government has consented to my proposal, which was warmly supported by Colonel Hawkes, President of the Exhibition Committee, that at the close of the Exhibition a specified number of the articles exhibited by the Madras Government should be sent back from England and find a permanent place in the Central Museum, which will thus acquire a very handsome addition to its contents.

3. The rapid succession of Exhibitions in Paris, Sydney, Melbourne, Amsterdam, London (Fisheries), Calcutta and London (Indian and Colonial), to all of which collections were sent, has had a most disastrous effect on the working of the Central Museum, and it is most desirable that, in the event of any further Exhibitions taking place, the necessary work in connection with the collection of exhibits from the Madras Presidency should not be thrown upon the Museum, so that the entire staff may be occupied solely with proper Museum work, of which a great deal requires to be done in order that it may be brought up to the standard required of a well-organised Museum at the present day, and become a thorough index of the Presidency, where those who wish can obtain useful information.

4. It is wholly beyond the power or scope of a Presidential Museum to rival the great National Museums in the possession of representative collections from different quarters of the globe, and I have determined to devote my entire attention to the natural history, arts, ethnology, manufactures and raw products of Southern India, accepting only such specimens from other regions as may be sent as donations from time to time, and keeping them entirely apart from the main collections. The necessity of such a course is best illustrated by reference to the geological collection which, while abounding in a chaos of purchased and exchanged specimens of European fossils, is markedly deficient in specimens from the rich fossiliferous beds of the cretaceous system of Southern India.

5. As soon as I had ascertained for myself what line of action it would be necessary for me to carry out, so as to make the Museum more in accordance with my views, I applied to Government for a grant of Rs. 12,000, but, owing to the existing financial pressure, my application could not be acceded to. It, therefore, became necessary for me to make a more moderate estimate and to give up all idea of at present arranging the whole of the Museum collections on a more defined system than has hitherto been adopted; and as I had spent my first official tour in making a collection of fish from Cochin and other places on the West Coast, I decided to pay special attention during the present year to the fish gallery, and converting it into a properly-arranged gallery, illustrative of the marine and fresh water fauna of the Presidency.

6. Visitors to the Museum.—The usual statistical returns of the numbers of visitors during the year are given in Appendix B. The total number was considerably in excess of

that of preceding years, and I notice with pleasure an increase in the number of Gosha ladies who visited the Museum on the days set apart for them. The greatest number of visitors on any single day was 25,834, on December the 19th (Thwathasee).

7. Buildings.—During the last monsoon there was some leakage from the roofs of the lecture theatre and the new gallery which was attended to by the Department of Public Works. The pillars in the main hall were found to be constantly crumbling, and it was found necessary to dig out the chunam and substitute Portland cement, which was painted light blue. The roof is in a similar state and gives some trouble from the frequent dropping of chunam. The roof of the Curator's office still leaks considerably and will require attention. I brought the absence of a *porte-cochère* in front of the Superintendent's house before the notice of the Superintending Engineer on my arrival, and soon afterwards received plans, but I have since then heard nothing more on this subject. The repairs in the Head Taxidermist's house have not proved very satisfactory, as cracks have appeared in some of the walls, in which white ants have taken their abode. The two main gates of the Museum were repaired during the year.

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| Herbarium-keeper ... ... ... ... | 45 | 50 | 50 | ... |
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In a letter (No. 194, dated 3rd March 1886), I further urged the claims of the Assistant Librarian, the third Taxidermist and the man in charge of the Superintendent's room, as deserving of an increase of salary, but sufficient time had not elapsed for a reply to be received to this letter before the end of the year.

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15. The Museum is indebted to His Excellency the Governor for the donation of an old Dutch manuscript and to His Highness the Maharajah of Travancore for four shields.

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The theatre was also used for the monthly meetings of the South Indian Branch of the British Medical Association.

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| Telegraphy and Stenography ... ... ... ... ... ... | 2 |
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| Zoology ... ... ... ... ... ... ... ... | 60 |
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21. The number of books bound during the year was 99.

22. Madras Harbour and Beach.—Through the kindness of F. N. Thorowgood, Esq., Superintendent of Harbour Works, I have received many interesting specimens which were picked up during the diving operations. These include a red incrusting sponge, two other sponges, a zoanthus, several species of coral (gargonidæ) and a holothurian (sea cucumber). I have also obtained from the surface water in the harbour specimens of Salpa, Velella and Physalia (Portugese man-of-war) and from the beach a shell of Ostræa perforated by a boring sponge (cliona), a shell of Pinna Japanica with hydroids attached to it, and various other molluscan shells. Pieces of pumice stone have been repeatedly picked up on the shore, and I incline to the theory that they have drifted hither from Krakatoa. Similar pieces have been sent to me during the year, picked up on the shore of the West Coast at Calicut and Tellicherry.

23. Numismatics.—Though a catalogue of the gold coins in the Museum collection had been issued, the arrangement of a great mass of silver and copper coins remained to be taken in hand. My first endeavour in this direction was to collect them all together and distribute them roughly into dynasties. This work was completed with the assistance of Captain R. H. C. Tufnell, who from his experience in Indian Numismatics was able to identify many issues to which I should have myself been unable to assign a place. The same gentleman then gave me great help in the arrangement of the different dynasties, and the Roman and Indo-Greek series are already completed. Among the former several coins of very considerable interest and value have come to light, notably an issue of Plautilla, wife of Caracalla, with Latin inscription PLAUTILLA AUGUSTA, and a fine green copper coin of Constantinus Magnus struck in London. The collection of Indo-Greek and Bactrian coins is not very rich, but I am in correspondence with a view to making it more complete. As the coins of each dynasty are arranged, I am compiling a manuscript catalogue, with a view to future publication, in which all issues, gold, silver, copper, &c., will find a place, but I propose to keep the gold coins, as at present, in the Museum strong box, and display the coins in silver and the baser metals in the body of the Museum, so that they may be seen by visitors without any special application.

24. As usual a large number of coins, amounting in all to 1,411, has been presented to the Museum during the year either by various societies or by private individuals. Among these I may specially mention a gold coin of the Gupta era presented through the Honorary Secretary of the Madras Literary Society, and a fine Rama Tanka presented by T. M. Scott, Esq., of Madura.

25. Natural History.—(1). *Arachnida.*—A large living spider (Mygale fasciata) was forwarded to the Museum from Hoonsoor where it was supposed to be causing death among the flocks. An experiment was made on a living sheep to see if the spider would produce any ill-effect on it, but the result proved negative, and the untimely death of the spider stopped any further experiments. I wrote requesting that some more living specimens should be sent to me, but at the end of the year none had arrived.

Mention was made in last year's annual report of a scorpion sent by H. R. P. Carter, Esq., living by preference in water. During the latter end of the year, I kept specimens of two other species of scorpion from Madras in jars containing some water, and though the animals were often seen above water on some stones which I placed in the jar, it frequently happened that they remained for long periods submerged beneath the surface of the water, so that our common scorpions may be considered amphibious in their habits. The subject is one which is worthy of study on the animals in their natural conditions.

(2). *Crustacea.*—My thanks are due to Dr. Henderson of the Christian College for naming many of the species contained in the Museum collection—a task which he was well qualified to carry out, as he has devoted special attention to this order in connection with the "Challenger" Expedition Collection.

(3). *Fish.*—In addition to a large number of fish obtained during my tour on the West Coast (q.v.) 8 specimens were sent to the Museum including a Gourami presented by R. Hollingsworth, Esq. From time to time various species of salted fishes were sent by the Salt Department for identification.

(4). *Insects.*—A large number of insects were sent to the Museum, among the most interesting of which were one which was proving destructive to the sugar-canes in North Arcot, and another

# Govt. of {1886} Madras.

## REVENUE.

*Issued*

*Recd.* *Encl.*

G.O., 23rd August 1886, No. 732.

AUGUST.

**Government Central Museum.**

Reviewing report of the — for the year 1885-86.



GOVERNMENT OF MADRAS.

## REVENUE DEPARTMENT.

READ—the following paper:—

From EDGAR THURSTON, Esq., Superintendent, Government Central Museum, to the Secretary to Government, Revenue Department, dated Madras, 2nd July 1886, No. 431:—

ABSTRACT.—Submitting report on the working of the Government Central Museum during the year 1885-86.

ENCLOSURES.

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22. Madras Harbour and Beach.—Through the kindness of F. N. Thorowgood, Esq., Superintendent of Harbour Works, I have received many interesting specimens which were picked up during the diving operations. These include a red incrusting sponge, two other sponges, a zoanthus, several species of coral (gargonidæ) and a holothurian (sea cucumber). I have also obtained from the surface water in the harbour specimens of Salpa, Velella and Physalia (Portugese man-of-war) and from the beach a shell of Ostræa perforated by a boring sponge (cliona), a shell of Pinna Japanica with hydroids attached to it, and various other molluscan shells. Pieces of pumice stone have been repeatedly picked up on the shore, and I incline to the theory that they have drifted hither from Krakatoa. Similar pieces have been sent to me during the year, picked up on the shore of the West Coast at Calicut and Tellicherry.

23. Numismatics.—Though a catalogue of the gold coins in the Museum collection had been issued, the arrangement of a great mass of silver and copper coins remained to be taken in hand. My first endeavour in this direction was to collect them all together and distribute them roughly into dynasties. This work was completed with the assistance of Captain R. H. C. Tufnell, who from his experience in Indian Numismatics was able to identify many issues to which I should have myself been unable to assign a place. The same gentleman then gave me great help in the arrangement of the different dynasties, and the Roman and Indo-Greek series are already completed. Among the former several coins of very considerable interest and value have come to light, notably an issue of Plautilla, wife of Caracalla, with Latin inscription PLAUTILLA AUGUSTA, and a fine green copper coin of Constantinus Magnus struck in London. The collection of Indo-Greek and Bactrian coins is not very rich, but I am in correspondence with a view to making it more complete. As the coins of each dynasty are arranged, I am compiling a manuscript catalogue, with a view to future publication, in which all issues, gold, silver, copper, &c., will find a place, but I propose to keep the gold coins, as at present, in the Museum strong box, and display the coins in silver and the baser metals in the body of the Museum, so that they may be seen by visitors without any special application.

24. As usual a large number of coins, amounting in all to 1,411, has been presented to the Museum during the year either by various societies or by private individuals. Among these I may specially mention a gold coin of the Gupta era presented through the Honorary Secretary of the Madras Literary Society, and a fine Rama Tanka presented by T. M. Scott, Esq., of Madura.

25. Natural History.—(1). *Arachnida.*—A large living spider (Mygale fasciata) was forwarded to the Museum from Hoonsoor where it was supposed to be causing death among the flocks. An experiment was made on a living sheep to see if the spider would produce any ill-effect on it, but the result proved negative, and the untimely death of the spider stopped any further experiments. I wrote requesting that some more living specimens should be sent to me, but at the end of the year none had arrived.

Mention was made in last year's annual report of a scorpion sent by H. R. P. Carter, Esq., living by preference in water. During the latter end of the year, I kept specimens of two other species of scorpion from Madras in jars containing some water, and though the animals were often seen above water on some stones which I placed in the jar, it frequently happened that they remained for long periods submerged beneath the surface of the water, so that our common scorpions may be considered amphibious in their habits. The subject is one which is worthy of study on the animals in their natural conditions.

(2). *Crustacea.*—My thanks are due to Dr. Henderson of the Christian College for naming many of the species contained in the Museum collection—a task which he was well qualified to carry out, as he has devoted special attention to this order in connection with the "Challenger" Expedition Collection.

(3). *Fish.*—In addition to a large number of fish obtained during my tour on the West Coast (q.v.) 8 specimens were sent to the Museum including a Gourami presented by R. Hollingsworth, Esq. From time to time various species of salted fishes were sent by the Salt Department for identification.

(4). *Insects.*—A large number of insects were sent to the Museum, among the most interesting of which were one which was proving destructive to the sugar-canes in North Arcot, and another



which was inflicting its ravages on the cinchona leaves in the Wynaad, and of which specimens were sent, together with some of the affected leaves, by Messrs. Arbuthnot and Co., to whom I made a report suggesting certain precautions to be adopted and certain remedial agents to be tried, while pointing out that the expense of applying chemical reagents where the infested area is a large one is often greater than the loss of money caused by the ravages of the insect pests, and further that in the interest of the planter, a prolonged and careful study in a practical manner, not only of the life history and habits of the parasites, but also of the cheapest and at the same time most effective means of exterminating them is much needed.

(5). *Mammals and Birds.*—The light in the gallery in which both mammals and birds are exhibited is exceedingly bad, and the cases in which they are arranged do not show them off to advantage. Many of the specimens, too, are very old and require replacing by new ones. A great desideratum is a good collection of skeletons of the animals of Southern India, and at the end of the year some of my assistants in the Taxidermic department were engaged in the preparation of skeletons of some of the common types. The collection of birds should possess not only the male and female birds, but also the nest with the eggs of each species, set up artificially in such a way as to imitate the natural surroundings, but I am afraid that this ideal will not be attained to for a long time. During the year 27 mammals were received, of which 8 were purchased and 19 presented. Among them was a lion from the People's Park, the gift of the President of the Municipal Commission, which has been stuffed.

The total number of birds acquired was 626, of which 513 were obtained by purchase. The greater number were collected by Mr. Davison who was engaged for a period of six, which was extended to eight, months to make a collection of South Indian birds. At the end of the year the last consignment had not arrived, but those which had been received were arranged as cabinet specimens for purpose of study.

(6). *Mollusca.*—A great amount of space is wasted in the gallery at present devoted mainly to a collection of shells, mixed up together in cases without reference to locality and containing a number of specimens labelled vaguely "Eastern Seas." In accordance with my views as to making the Museum essentially representative of South India, I have picked out those specimens which I know definitely to have been found in the Madras Presidency and they, together with other specimens collected along the coast by myself, form the nucleus of a South Indian collection. The general collection will be put away in drawers where it will be available to those, who wish to study it specially, and a large amount of space be thus economised.

The total number of shells, exclusive of those collected by myself, acquired during the year was 1,017, nearly all of which were given by the Assistant Curator Mr. R. Damodarum Naidu.

Some minute pelagic shells were sent from Vizagapatam, where they were mistaken by the natives for pearls which had fallen from Heaven.

I am much indebted to H. S. Thomas, Esq, for giving me specimens of the shells of *Avicula vexillum* and *Avicula fucata* in various stages of growth in illustration of his report on Pearl Fisheries.

(7). *Reptiles.*—The additions during the year amounted to 24, of which Deputy Surgeon-General Shortt sent the greater number. A number of specimens were sent to me for identification from Ootacamund by M. A. Lawson, Esq.

26. Taxidermist's Department.—The following is an abstract of the specimens prepared or collected during the year :—

| | No. |
|---|---|
| Mammals ... ... ... ... ... ... ... ... ... | 22 |
| Skeletons of mammals ... ... ... ... ... ... | 3 |
| Fishes ... ... ... ... ... ... ... ... ... | 114 |
| Reptiles ... ... ... ... ... ... ... ... ... | 72 |
| Crustacea ... ... ... ... ... ... ... ... ... | 50 |
| Insects ... ... ... ... ... ... ... ... ... | 650 |

This includes (1) a number of birds, fishes, reptiles and insects collected by the Second Taxidermist at Vizagapatam, to which place I sent him for two months at the request of H. G. Turner, Esq., Collector of that district; (2) a series of 159 game birds of South India, which was originally collected for the Indian and Colonial Exhibition, but has been retained for the Central Museum; (3) 75 of the Nilgiri birds collected by Mr. Davison which were stuffed and mounted.

This department is now in good working order, and I notice with pleasure not only the interest, but also the improvement, which the assistants display in their work.

As the result of a suggestion from several gentlemen who complained that, when out on shooting or fishing expeditions, they often met with specimens which would be of interest to the Museum, but were not able to keep them from want of the necessary time for, and special knowledge of, the methods of preserving and stuffing, I am training a young man, whom I shall be happy to place at the disposal of sportsmen, on condition that they give me a share of the spoil for the Museum.

27. Tours.—His Excellency the Governor in Council acceded to my proposal that I should be allowed to make periodical tours to different parts of the Presidency, so as to collect for myself any objects of interest which I may find for the Museum.

The first of these tours was made in March, when I went, accompanied by my head and third Taxidermists, to Cochin, and visited also Quilon and Trivandrum. The main results of this tour have been embodied in a special report to Government, and I therefore confine myself in the present report to giving a list of the fish (the collection of which was my main object) which I obtained from Trichoor, Cochin and Quilon, and which have either been stuffed or preserved in alcohol.

Table I.

*Species obtained at Trichoor.*

| | | |
|---|---|---|
| 1. | Macrones Malabaricus ... ... ... ... ... ... | Edible |
| 2. | Do. Chryseus ... ... ... ... ... ... | do. |
| 3. | Gobius giurus ... ... ... ... ... ... ... | do. |
| 4. | Etroplus suratensis ... ... ... ... ... ... | do. |
| 5. | Mastacembalus armatus ... ... ... ... ... ... | do. |
| 6. | Do pancalus ... ... ... ... ... ... ... | ... |
| 7. | Ophiocephalus punctatus ... ... ... ... ... ... | Edible |
| 8. | Plotosus canius ... ... ... ... ... ... ... | ... |

Table II.

*Species obtained at Cochin.*

| Number. | Latin Name. | Tamil Name. | Malayalam Name. | Remarks. |
|---|---|---|---|---|
| 1 | Trygon narnak .. .. | Sonakah tiriki .. | Padavanthrandy .. | Young ones captured in backwater. Eaten by natives. |
| 2 | Do. sp. ? .. .. | .... | Pullythrandy .. .. | .... |
| 3 | Ætobatis narinari .. .. | Currooway tiriki .. | Kakathrandy .. .. | Eaten by natives. |
| 4 | Rhinobatus halavi .. .. | Padungan .. .. | Paruthalay .. .. | .... |
| 5 | Rhinoptera adspersa .. .. | Mutta tiriki .. .. | Eroomookanthrandy .. | Large ones cut in pieces and brought to market for sale. |
| 6 | Lates calcarifer .. .. | Koduwa .. .. | Narymeen (jackal fish) | Good eating known as Nair fish in Malabar. |
| 7 | Serranus Malabaricus .. .. | Punni-calawah .. | Curoopu .. .. | Large fish cut in pieces and salted. |
| 8 | Do. sp. ? .. .. | Calawah .. .. | Do. .. .. | .... |
| 9 | Therapon jarbua .. .. | Palin keechan .. | Cullankovay .. .. | .... |
| 10 | Diagramma griseum .. .. | .... | Cutraw .. .. | .... |
| 11 | Do. crassispinum .. | .... | Do. .. .. | .... |
| 12 | Lobates surinamensis .. .. | Musalli .. .. | Curruputty .. .. | Good eating. Good isinglass made from air bladder. |
| 13 | Gerres filamentosus .. .. | Oodan .. .. .. | Prawellee .. .. | Eaten by natives and salted. |
| 14 | Do. oyena .. .. .. | .... | Do. .. .. | .... |
| 15 | Scatophagus argas .. .. | Sipili .. .. .. | Nutchar Char .. | Eaten by lowest classes. |
| 16 | Ephippus orbis .. .. .. | Nulla torriti .. .. | Parinthee .. .. | Eaten but not esteemed (Day). |
| 17 | Upeneus Indicus .. .. | Mussara .. .. | Coozy meen .. .. | .... |
| 18 | Do. sp. ? .. .. | Do. .. .. | Do. .. .. | .... |
| 19 | Chrysophrys hasta .. .. | Currupumuttivayan .. | Aree .. .. .. | Good eating. |
| 20 | Lutianus rivulatus .. .. | Cuttu pirium .. .. | Cheppary .. .. | Largest specimen measured 34 inches caught in both fresh and salt water. Good eating. |
| 21 | Do. roseus .. .. | Moosoodee .. .. | Chembullee .. .. | |
| 22 | Do. quinquelineatus .. | .... | Cheppary .. .. | .... |
| 23 | Do. Johnii .. .. | .... | .... | .... |
| 24 | Sciæna maculata .. .. | Vari cathalay .. | Cuttalaw .. .. | Air bladders collected extensively for manufacture of isinglass. The price of the bladder sometimes exceeds that of the fish itself. Not much esteemed as food. |
| 25 | Do. vogleri .. .. | .... | Korkaw .. .. | |
| 26 | Do. carutta .. .. | Carung kuthalay .. | Carykutlay .. .. | |
| 27 | Do. osseus .. .. | .... | Cuttalaw .. .. | |
| 28 | Sciænoides sp. ? .. .. | Vanniapunnah .. | Chakalaw .. .. | |
| 29 | Caranx armatus .. .. | Tanga Paray .. .. | Vuttaw .. .. | |
| 30 | Do. sansum .. .. .. | .... | Periavuttay .. .. | .... |
| 31 | Do. sp. ? .. .. | Paray .. .. .. | .... | Eaten by lowest classes. |
| 32 | Do. gymnostetheides .. | .... | .... | .... |
| 33 | Chorinemus lysan .. .. | .... | .... | .... |
| 34 | Psettus argenteus .. .. | Toal paray .. .. | Kael Parinthee .. | Good eating. |
| 35 | Equula edentula .. .. | .... | .... | .... |
| 36 | Do. ruconius .. .. | .... | Cooroochee .. .. | Used when salted in making pepper water which is supposed to possess medicinal virtues. |
| 37 | Scomber Microlepidotus .. | Carra pody .. .. | Do. .. .. | |
| 38 | Sillago sihama .. .. .. | Kanang kelleetee .. | .... | Eaten by natives; supply varies from year to year. |
| 39 | Platycephalus insidiator .. | Culingan .. .. | Veekutha .. .. | Good eating. Known to Europeans as "whiting." |
| 40 | Gobius biocellatus .. .. | Ooloopathy .. .. | Oorathallee .. .. | Eaten by natives known in Malabar as "Crocodile Fish." |
| 41 | Mugil cunnesius .. .. | .... | .... | .... |
| 42 | Do. poicilus .. .. .. | Madavay .. .. | Sultham .. .. | Mullet. Good eating; extensively salted and sun dried. In Canara an objection was raised to eating them as their heads are like those of snakes. |
| 43 | Do. cunnumboo .. .. | Do. .. .. | Nary cunnumboo .. | |
| | | .... | Cunnumboo .. .. | |



Table II.

*Species obtained at Cochin*—continued.

| Number. | Latin Name. | Tamil Name. | Malayalam Name. | Remarks. |
|---|---|---|---|---|
| 44 | Ophiocephalus punctatus .. | Koravay .. .. | .... | Eaten by natives. |
| 45 | Do. striatus .. | Veral .. .. .. | Verarl .. .. .. | Good eating, but muddy, if from stagnant water. |
| 46 | Etroplus suratensis .. .. | Chettha kenday .. | Curry meen .. .. | Very good eating; sometimes more than one foot in length in backwater. |
| 47 | Do. maculatus .. .. | Pitul kass .. .. | .... | Eaten by natives. |
| 48 | Cynoglossus sp ? .. .. | Nakkoo meen .. .. | .... | |
| 49 | Chaca lophioides .. .. | .... | Kadal thavalay .. | |
| 50 | Arius subrostratus .. .. | Kelleetee .. .. | Soondun cooree .. | Good eating only when young. Salted and eaten by poorest classes. |
| 51 | Do. Malabaricus .. .. | Do. .. .. | Thalayatay .. .. | |
| 52 | Do. sp ? .. .. | Do. .. .. | Poovatay .. .. | |
| 53 | Saurida tumbil .. .. | Kadal ooloovay .. | Arana meen .. .. | |
| 54 | Haplochilus rubrostigina .. | .... | Poonchan .. .. | |
| 55 | Do. lineatus .. .. | .... | Do. .. .. | |
| 56 | Hemirhamphus Xanthopterus. | .... | Kola .. .. .. | |
| 57 | Belone annulata .. .. | Pahmun kola .. .. | Do. .. .. .. | |
| 58 | Chatoessus chacunda .. .. | .... | Thodee .. .. | Eaten by natives. |
| 59 | Do. nasus .. .. | Muddu candai .. | Do. .. .. | Good eating. |
| 60 | Engraulis Malabaricus .. | Poor-realn .. .. | Nadu manangu .. | Eaten by natives. |
| 61 | Do. Indicus .. .. | Netteelee .. .. | Ooroo manangu .. | |
| 62 | Clupea toli .. .. .. | Oolum .. .. .. | Palavaw .. .. | |
| 63 | Do. sp ? .. .. | .... | .... | |
| 64 | Elops saurus .. .. .. | Allahti .. .. | Vulleekoomy .. | |
| 65 | Megalops cyprinoides .. .. | Moran candai .. .. | Cunny .. .. .. | |
| 66 | Chanos salmoneus .. .. | Tulu candal .. .. | Kootheekoomy .. | Called milk fish or white mullet by Europeans. |
| 67 | Dussumieria acuta .. .. | .... | Nulla chalay .. .. | Very good eating; known as sardine. |
| 68 | Ophicthys microcephalus .. | .... | .... | .... |
| 69 | Triacanthus brevirostris .. | Moolean .. .. | .... | Eaten by natives (not eaten in Madras.) |
| 70 | Anacanthus barbatus .. .. | Watamookola .. | .... | |

Table III.

*Species obtained at Quilon.*

| Number. | Latin Name. | Tamil Name. | Malayalam Name. | Remarks. |
|---|---|---|---|---|
| 1 | Carcharias sp ? .. .. | Soorah .. .. | Soorah .. .. .. | Used as food by natives. |
| 2 | Narcine timbi .. .. | .... | .... | |
| 3 | Gerres oyena .. .. | .... | Praweellee .. .. | |
| 4 | Drepane punctata .. .. | Torriti .. .. .. | Parunthee .. .. | Used as food. |
| 5 | Holocentrum rubrum .. | Kul-kah-catchee .. | Poollan .. .. | |
| 6 | Acanthurus mata .. .. | Cozy meen .. .. | .... | |
| 7 | Caranx leptolepis .. .. | Paray .. .. .. | Buttaparay .. .. | |
| 8 | Psettus argenteus .. .. | .... | .... | |
| 9 | Trachynotus ovatus .. .. | Thookoonassey .. | .... | Eaten when salted. |
| 10 | Equula insidiatrix .. .. | .... | Combancooroochee .. | |
| 11 | Mene maculata .. .. | .... | .... | |
| 12 | Cybium guttatum .. .. | Vanjeerum .. .. | Arrakeeah .. .. | Good eating. Best tamarind fish made from salted fish. |
| 13 | Platycephalus insidiator .. | Ooloopathy .. .. | Oorathallee .. .. | Eaten by natives. |
| 14 | Salarius frenatus .. .. | Parvut meen .. .. | Poolan .. .. .. | |
| 15 | Do. sp ? .. .. | Do. .. .. | Do. .. .. | |
| 16 | Platyglossus Dussumieri .. | .... | Culladay .. .. | |
| 17 | Synaptura orientalis .. .. | .... | Suptharee .. .. | |
| 18 | Cynoglossus sp ? .. .. | Nakku meen .. .. | .... | |
| 19 | Arius thalassinus .. .. | Kadal kelleetee .. | .... | |
| 20 | Do. subrostratus .. .. | Kelleetee .. .. | Soondum cooree .. | Eaten by natives. |
| 21 | Saurida tumbil .. .. .. | Kadalooloovay .. | Aranay meen .. .. | |
| 22 | Belone annulata .. .. | Phamun kola .. | Kola .. .. .. | |
| 23 | Clupea longiceps .. .. | .... | Kokala chalaw .. | Used for making "fish oil." |
| 24 | Muræenesox telabon .. .. | Kulivi pamboo .. | .... | |
| 25 | Triacanthus brevirostris .. | Moolean .. .. | .... | Eaten by natives. |
| 26 | Tetrodon inermis .. .. | Plachee .. .. | .... | |
| 27 | Do. sp ? .. .. | Do. .. .. | .... | |
| 28 | Do. sp ? .. .. | Do. .. .. | .... | |

Government Central Museum,
Egmore,
2nd July 1886.

(Signed) EDGAR THURSTON,
Superintendent, Government Central Museum.

## APPENDICES.

### A.

General List of the Contributions, &c., received for the Government Central Museum, from 1st April 1885 to 31st March 1886.

| | | No. |
|---|---|---|
| Abboy, T., Naidu, M.R.Ry.— | | |
| Country smoking pipes | 3 | 3 |
| Armstrong, Dr. H., Kilpauk— | | |
| Bulrush caterpillar from New Zealand | 1 | 3 |
| Plant from New Zealand | 1 | |
| Geological specimens from the volcanic districts of New Zealand, Collection | | |
| Baudry, G. E., Esq., Tellicherry— | | |
| Pumice stones found floating in the sea | Collection. | Collection. |
| Bidie, Dy. Surgn-Genl. G., M.B, C.I.E., Sanitary Commr. for Madras— | | |
| Snake | 1 | 9 |
| Fruits of Vateria Malabarica from Travancore | 4 | |
| Moulds, one of each of Travancore chakram fanam and causy | 3 | |
| Palm-leaf basket for carrying onions on boardship | 1 | |
| Calder, D., Esq., St. Thomé— | | |
| Parrakeet | 1 | 1 |
| Cameron, J., Esq., Superintendent, Bangalore Museum— | | |
| Lac insects on *Shorea taluna* | Collection | 22 |
| Prepared varieties of Areca-nut | 21 | |
| Carter, H. R. P., Esq., Chetput— | | |
| Clavicles of a tiger | 4 | 77 |
| Egg cases of zygæna | 63 | |
| Aquatic Scorpions | 2 | |
| Caterpillars of a moth | 2 | |
| Cocoons of Cricula trifenestrata | 3 | |
| Woods from an old bridge bored by Isopods (Sphæroma vastator). | 2 | |
| Snake | 1 | |
| Chingleput, Collector of— | | |
| Impressions of seals | 2 | 2 |
| Conran, Mr. J. G., Perambúr— | | |
| Copper coins | 6 | 6 |
| Cumine, Master J. C.— | | |
| Bird's nest | 1 | 1 |
| Dale, Mr. J., Poonamallee— | | |
| Reptile (Draco Dussumieri) | 1 | 3 |
| Pumice stones picked up on the sea-beach at Calicut | 2 | |
| Daly, William Mahon, Esq., Yercaud, Shevaroys— | | |
| Birds' nests | 8 | 48 |
| Eggs received in exchange | 37 | |
| Insect | 1 | |
| Fruits | 2 | |
| Damodaram, R., Naidu, M.R.Ry— | | |
| Bat | 1 | 1,005 |
| Beetles | 2 | |
| Butterfly | 1 | |
| Wasp's nest | 1 | |
| Shells | 1,000 | |
| Davasagayam, D., Pillai, M.R.Ry., Salem— | | |
| Samples of coffee | 4 | 4 |
| Davison, W., Esq., Ootacamund— | | |
| Birds | 96 | 96 |
| Deane, G. W., Esq., The Luz— | | |
| Chrysalis of a butterfly | 1 | 1 |
| DeCaster, Mr. E.— | | |
| Tail of a skate | 1 | 2 |
| Head of a stone image | 1 | |
| Dique, Mr. W. F.— | | |
| Leaf insect | 1 | 1 |
| Ditmas, F. W., Esq., Assistant Commissioner of Salt Revenue— | | |
| Fish (Julis lunaris) | 1 | 1 |
| Doyle, Pat., Esq., C.E., Lucknow— | | |
| Pieces of Pinewood pulp for paper-making | 2 | 11 |
| Grass (Pollema eriopoda) bundle | 1 | |
| Specimens of "ball coal" from the Rani Gunj Coal-field, Damuda Valley, Bengal | 8 | |



| | | No. |
|---|---|---|
| Duncan, J. H., Esq., Nungumbaukum— | | |
| Common tree-cat (Paradoxurus Musanga) | 1 | 3 |
| White Guinea-fowl | 1 | |
| Cobra | 1 | |
| Dunhill, Mrs. E. S., Pursewalkum— | | |
| Fish | | 1 |
| Duraisawmy, A. S., Pillay, M.R.Ry— | | |
| Leech | 1 | 4 |
| Cluster of eggs of a snail | 1 | |
| Rock specimen | 1 | |
| Goglet from Mysore | 1 | |
| Etherajulu Naicker, P., M.R.Ry— | | |
| Rat | | 1 |
| Farmer, H. R., Esq., Acting Collector, Trichinopoly— | | |
| Chrysalis | | 2 |
| Fowler, Mr. G.— | | |
| Bird's nest | | 1 |
| Garstin, J. H., Esq., C.S.— | | |
| Indian fire-flies | | Collection. |
| Gleeson, J. M., Esq., Superintendent, Agri-Horticultural Society's Gardens— | | |
| Spiders | | Collection. |
| Godávari, Collector of— | | |
| Impressions of seals | | 3 |
| Gompertz, H., Esq., Yercaud— | | |
| Stone implements from fort, human face, and peacock hills in Bellary | | 52 |
| Gordon, D. C., Esq.— | | |
| Caterpillars | | 4 |
| Gordon, Mrs. D. C.— | | |
| Leaf insects | | 2 |
| Governor in Council, His Excellency the— | | |
| Dutch manuscript, a memorial of the Dutch in the East | | 1 |
| Govinda, P., Menon, M.R.Ry.— | | |
| Insect (Mantis flabellicornis) | | 1 |
| Guthrie, Colonel T. K.— | | |
| Mantis | | 1 |
| Handley, J. W., Esq.— | | |
| Insect (Nepa grandis) | | 1 |
| Havelock, Mrs. Ann L.— | | |
| Skull of a tiger | | 1 |
| Hawkes, Colonel H. P.— | | |
| Specimens of raw and ginned Nankin cotton and the coarse cotton-cloths woven from the latter from Aracan | 4 | 13 |
| A wicker basket made by the hill tribes of British Burma | 1 | |
| Burmese copper coins | 8 | |
| Hollingsworth, R., Esq.— | | |
| Gourami fish | | 1 |
| Holmes, W. T. Hamilton, Esq.— | | |
| Egg of horned owl | 1 | 2 |
| Shell of Balanus | 1 | |
| Honorary Secretary, Agri-Horticultural Society, Madras— | | |
| Spiders' nests | 2 | 4 |
| Old casuarina pole with borings | 1 | |
| Specimen of curious growth of the roots of Casuarina muricata | 1 | |
| Honorary Secretary, Bombay Branch of the Royal Asiatic Society— | | |
| Silver coins | 5 | 7 |
| Copper coins | 2 | |
| Honorary Secretary, Madras Literary Society— | | |
| Gold coin | | 1 |
| Honorary Secretary, (Philological) Asiatic Society of Bengal, Calcutta— | | |
| Gold coins | 2 | 48 |
| Silver do. | 17 | |
| Copper do. | 29 | |
| Iya Pillay, Eleazer John, Mr.— | | |
| Silver coins | 3 | 11 |
| Copper do. | 8 | |
| Johnston Major, Chelmsford Estate, Mettupálaiyam— | | |
| Rheea stalk (China grass) Boehmeria nivea, grown on Chelmsford Estate. | | 1 |

| | | NO. |
|---|---|---|
| Kernan, Honorable J., Adyar— | | |
| | Snake (Eryx Johnii) with mutilated tail | 1 |
| Kistna District, Collector of— | | |
| | Impressions of seals | 2 |
| Kurnool District, Collector of— | | |
| | Impression of seal | 1 |
| Leman, J. D., Esq., Collector of Coimbatore, and Pickance, Colonel W. J., Superintendent of Jail, Coimbatore— | | |
| | Ancient pottery with peculiar markings on it | 17 |
| Leonard, Mr. J. H., Mount Road— | | |
| | Australian magpie | 1 |
| London Exhibition Committee, Madras— | | |
| | Brass jewelry | 188 |
| | Toys | 30 } 218 |
| McNally, Dr. C. J., Egmore— | | |
| | Butterfly (Euplæa midamus) with imago and pupa case | 3 |
| Madhava Charry, M.R.Ry— | | |
| | Double brinjal | 1 |
| Madura, Collector of— | | |
| | Impressions of seals | 2 |
| Magrath, Colonel B. H. W.— | | |
| | Spider (Mygale sp.) | 1 |
| Maitland, Dr. J., Egmore— | | |
| | Larvæ of a fly produced in a bottle of gum | Collection. |
| Malabar, Collector of— | | |
| | Impressions of seals | 5 |
| Mitchell, A., Esq., Salt Department, Ennore— | | |
| | Snout of a saw-fish (Pristis cuspidatus) | 1 |
| Mitchell, E. A., Esq., Saint Thomé— | | |
| | Cray-fish (Palinurus) | 1 |
| Mitchell, J. H., Esq., Coimbatore— | | |
| | Pangolin | 1 |
| Mitchell, Mr. W. C. H., Kilpauk— | | |
| | Birds' eggs | 10 |
| Moonoosawmy, K., Naidu, M.R.Ry— | | |
| | Improved Jew's Harp | 1 |
| Morgan, Rhodes, Esq.— | | |
| | Insect (Nepa grandis) | 1 |
| Morris, A. W., Esq.— | | |
| | Birds' eggs | 3 |
| Moothoosawmy, C., Pillai, M.R.Ry.— | | |
| | Parrakeet | 1 |
| Nasiruddin, Mahomed, Khan Bahadoor— | | |
| | Copper coins | 2 |
| Nellore, Collector of— | | |
| | Impression of a seal | 1 |
| | Copy of impression of a seal | 1 } 2 |
| Nicholas, Mr. E. A. S.— | | |
| | Snake (Python Molurus) | 1 |
| North Arcot, Collector of— | | |
| | Impressions of seals | 8 |
| Peddie, Miss, Royapooram— | | |
| | Death's-head hawk-moth | 1 |
| Peebles, Mrs. J. H.— | | |
| | Insect (Trombidium) | 1 |
| President, Municipal Commission, Madras— | | |
| | Monkeys | 2 |
| | Tree-cats | 2 |
| | Lion | 1 |
| | Cockatoo | 1 } 7 |
| | Black swan | 1 |
| Prudhomme, H., Esq., Egmore— | | |
| | Specimen of wine (bottle) | 1 |
| | Do. of coca leaves | Collection } 2 |
| Punjab, Government of, through Major H. H. Cole— | | |
| | Buddhist sculptures from two small topes, at places called Nuttu and Mian Khan, 24 miles north of Koti Mardan | 174 pieces. |



| | | NO. |
|---|---|---|
| Raghavendra, T., Row, M.R.Ry., Assistant Commissioner, Shimoga— | | |
| | Gold coin | 1 |
| Rainnier, H., Esq.— | | |
| | Copper coins | 93 |
| Rajaram, T. Misser, Esq.— | | |
| | Copper coins | 6 |
| Ratton, Dr. J. L., Egmore— | | |
| | Moth (Actias luna) | 1 |
| | Beetle (Cosyphus) | 1 } 2 |
| Revenue Settlement and Agriculture, Acting Director of— | | |
| | Specimens of larva of a beetle | 3 |
| Robertson, W. R., Esq., Saidápet— | | |
| | Fish (Lutianus roseus) | 2 |
| | Fresh-water turtle of the genus Emys | 1 } 3 |
| Royal Botanic Gardens, Seebpore, Calcutta, Superintendent of— | | |
| | Seeds (Pithecolobium Laman) (packet) | 1 |
| | Seeds, Palm (packet) | 16 } 17 |
| Salem, Collector of— | | |
| | Impression in wax of the image of the goddess Kamatchi Amman of Conjeeveram | 1 |
| Salunkei, Kistnajee Row, M.R.Ry., Tanjore— | | |
| | Fencing sticks | 2 |
| Scott, T. M., Esq., Madura— | | |
| | Rama Tanka gold coin | 1 |
| Shortt, J., Retired Deputy Surgeon-General— | | |
| | Mammals | 3 |
| | Otter skin | 1 |
| | Bird | 1 |
| | Birds' skins | 2 |
| | Birds in spirit | 5 |
| | Chicken | 1 |
| | Reptiles | 15 } 50 |
| | Fish | 1 |
| | Crustacea | 10 |
| | Insects | 8 |
| | Worms in a phial | Lot |
| | Calcium carbonate from blackwood | „ |
| | Do. from teak trees | „ |
| South Canara, Collector of— | | |
| | Impression in wax of a "Vamana Madri" seal | 1 |
| Stafford, H., Esq., District Forest Officer, Godávari— | | |
| | Agates | 3 |
| | Lac found on trees in Rékapalle, Upper Godávari Taluk | 1 } 5 |
| | Tailor bird's nest | 1 |
| Steel, H. W., Esq., Deputy Commissioner of Rohtak— | | |
| | Silver coin | 1 |
| Stephenson, Miss C. F., Kilpauk— | | |
| | Moths | 2 |
| Tanjore, Collector of— | | |
| | Beetles of the genus Cerambyx | 6 |
| | Impressions on wax from old seals used by the Dutch and Danish Governments | 6 } 18 |
| | Impressions on wax from Tanjore palace | 5 |
| | Impression of a seal | 1 |
| Thomas, H. S., Esq., First Member, Board of Revenue— | | |
| | Shells (avicula vexillum) | Collection |
| | Shells (Unio Marginalis) | 3 } 4 |
| Thoroughgood, F. N., Esq.— | | |
| | Specimen of coral | 1 |
| Tinnevelly, Collector of— | | |
| | Impressions of seals | 4 |
| Travancore, His Highness the Maharajah of— | | |
| | Shields | 4 |
| Tufnell, Captain R. H. C.— | | |
| | Silver punch mark Buddhist coin (in exchange) | 1 |
| Turner, H. G., Esq., Acting Collector of Vizagapatam— | | |
| | Impressions of seals | 2 |

| | no. |
|---|---|
| VanIngens, Mrs. Alice, Egmore— | |
| Spider's nest and young | 2 |
| Vizagapatam, Senior Assistant Collector of— | |
| Pelagic shells | 12 |
| Volluru, the Zemindar of— | |
| Copper coins | 1,222 |
| West, H. C., Esq., Nungambaukum— | |
| Bird (Nycticorax griseus) | 1 |
| Egg of Ixos luteolus | 1 } 2 |
| White, Mr. Willie A. F.— | |
| Egg of white scavenger vulture | 1 |
| Whiteside, W. S., Esq.— | |
| Snake (Tropidonotus quincunciatus) | 1 |
| Winde, Monsieur B., Germany— | |
| Beetles | 115 |
| Wilson Fellows, V. S., Esq., Tuticorin— | |
| Plant (Capparis aphylla) | 1 |

B.

Visitors to the Government Central Museum from 1st April 1885 to 31st March 1886.

| 1885-86. | Signatures made in English. | Telugu. | Hindustani. | Tamil. | Mahratta. | Nagaree. | Guzerattee. | Canarese. | Chinese. | Cingalese. | Malayalam. | Bengalee. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| April | 1,961 | 345 | 147 | 1,199 | 13 | 9 | 18 | 20 | .. | .. | 48 | 3 |
| May | 1,996 | 437 | 203 | 1,400 | 17 | 5 | 27 | 14 | .. | .. | 16 | .. |
| June | 2,420 | 697 | 269 | 1,882 | 14 | 5 | 3 | 29 | .. | .. | 25 | .. |
| July | 2,260 | 591 | 460 | 2,185 | 8 | 7 | 24 | 16 | .. | .. | 27 | .. |
| August | 2,020 | 419 | 213 | 1,987 | 11 | 2 | 27 | 23 | .. | .. | 21 | .. |
| September | 2,433 | 498 | 253 | 1,943 | 14 | 12 | 31 | 14 | .. | .. | 40 | .. |
| October | 1,506 | 403 | 139 | 1,474 | 17 | 7 | 24 | 18 | .. | .. | 26 | 2 |
| November | 1,714 | 347 | 147 | 1,534 | .. | 7 | 17 | 12 | .. | .. | 35 | .. |
| December | 4,519 | 1,103 | 341 | 4,023 | 12 | 25 | 72 | 66 | .. | .. | 51 | .. |
| January | 2,636 | 578 | 259 | 1,765 | 4 | 6 | 26 | 34 | 2 | .. | 49 | .. |
| February | 1,947 | 338 | 160 | 1,222 | 9 | 7 | 17 | 23 | .. | 2 | 37 | .. |
| March | 2,046 | 439 | 182 | 1,205 | 11 | 18 | 16 | 21 | 1 | .. | 62 | .. |
| Total | 27,458 | 6,195 | 2,773 | 21,819 | 130 | 110 | 302 | 290 | 3 | 2 | 437 | 5 |

| 1885-86. | Total of signatures. | Unable to sign, but tally kept. | Total of visitors. | Number of: Men and boys. | Number of: Women and girls. | Total of visitors. |
|---|---|---|---|---|---|---|
| | 14 | 15 | 16 | 17 | 18 | 19 |
| April | 3,763 | 12,278 | 16,041 | 9,755 | 6,286 | 16,041 |
| May | 4,115 | 15,635 | 19,750 | 11,412 | 8,338 | 19,750 |
| June | 5,344 | 23,057 | 28,401 | 16,403 | 11,998 | 28,401 |
| July | 5,578 | 18,976 | 24,554 | 14,650 | 9,904 | 24,554 |
| August | 4,723 | 16,498 | 21,221 | 12,724 | 8,497 | 21,221 |
| September | 5,238 | 23,730 | 28,968 | 16,154 | 12,814 | 28,968 |
| October | 3,616 | 13,635 | 17,251 | 10,266 | 6,985 | 17,251 |
| November | 3,813 | 11,487 | 15,300 | 9,728 | 5,572 | 15,300 |
| December | 10,212 | 50,052 | 60,264 | 32,923 | 27,341 | 60,264 |
| January | 5,359 | 44,337 | 49,696 | 25,103 | 24,593 | 49,696 |
| February | 3,762 | 10,955 | 14,717 | 9,058 | 5,659 | 14,717 |
| March | 4,001 | 14,298 | 15,299 | 9,587 | 5,712 | 15,299 |
| Total | 59,524 | 251,938 | 311,462 | 177,763 | 133,699 | 311,462 |



C.

Statement showing the number of Visitors to the Government Central Museum for the past five years.

| | |
|---|---|
| 1881-82 | 211,246 |
| 1882-83 | 271,881 |
| 1883-84 | 242,514 |
| 1884-85 | 272,968 |
| 1885-86 | 311,462 |

D-1.

List of Books added to the Public Library.

1.—*By Purchase* (*Standard Works*).

| | Volumes. |
|---|---|
| Anaryan Early Ideas, a group of Hindoo stories | 1 |
| Antiquities of Asia, by Sir W. Jones | 2 |
| Bagehot, W.—Physics and Politics | 1 |
| Balfour, Surgeon-General E. G.—The Cyclopædia of India | 3 |
| Bernstein, J.—The Five Senses of Man | 1 |
| Bird, F. J.—The American Practical Dyer's Companion | 1 |
| Blades, William.—The Enemies of Books | 1 |
| Bower, F. O. and S. H.—Vines Course of Practical Instruction in Botany. | 1 |
| Buckley, Arabella B.A.—Short History of Natural Science | 1 |
| Caird, Sir James India.—The Land and the People | 1 |
| Capper, J.—Observations of the Winds and Monsoons | 1 |
| Chambers' Encyclopædia of Universal Knowledge | 10 |
| Clarke, C. B.—Commelynaceæ et Cyrtandraceæ Bengalensis, folio | 1 |
| Clayton, Sir R.—Life of Alexander the Great | 1 |
| Cooke, M. C.—Hand-book of British Fungi | 2 |
| Cox, Sir G. W.—The Mythology of the Aryan Nations | 2 |
| Curtis's Botanical Magazine, Vols. 13 to 37 | 25 |
| Deane, Rev. J. B.—Worship of the Serpent | 1 |
| De Leon, E.—The Khedives of Egypt | 1 |
| De Candolle, A.—Origin of Cultivated Plants | 1 |
| Deschanel, A.—Elementary Treatise on Natural Philosophy | 1 |
| Dictionary of the Religious Ceremonies of the Eastern Nations, &c. | 1 |
| Echoes from Old Calcutta, by H. E. Busteed | 1 |
| Forbes, James.—Oriental Memoirs | 4 |
| Gladwin, F.—Memoirs of Khojeh Abdul Kurreem | 1 |
| Gladwin, F.—Dissertation of the Rhetoric Prosody and Rhyme of the Persians | 1 |
| Graham, M.—Journal of a Residence in India | 1 |
| Haite's Plant Studies, Parts 3 to 7 | 5 |
| Hamilton, A.—Account of the East Indies | 1 |
| Historical View of Plans for the Government of British India | 1 |
| Hooker, J. D.—Rhododendrons of Sikkim Himalaya, folio | 1 |
| Hooker, J. D.—Illustrations of Himalayan Plants, folio | 5 |
| Hunter, R.—The Encyclopædia Dictionary | 1 |
| Husbandry and Commerce of Bengal—Remarks on the present state of the— | 1 |
| Huxley, T. H.—Elementary Lessons in Physiology | 1 |
| Kirby, W. F.—Elementary Text Book of Entomology | 1 |
| Land of Temples | 1 |
| Malley, A. C.—Micro-Photography | 1 |
| Max Müller, F.—Sacred Books of the East, Vols. 20, 22 and 24 | 3 |
| Meyen, F. J. F.—Outlines of the Geography of Plants | 1 |
| Mitchell, Mrs. M.—In India, Sketches of Indian Life and Travel | 1 |
| Money, Colonel E.—The Cultivation and Manufacture of Tea | 1 |
| Orme, R.—Fragments of the Mogul Empire | 1 |
| Penant, T.—View of Hindoostan | 1 |
| Ribot, T.—Diseases of Memory | 1 |
| Sadleir, R.—The Aborigines of Australia | 1 |
| Smith, John A.— Dictionary of Popular Names of Plants | 1 |
| Stallo, J. B.—The Concepts and Theories of Modern Physics | 1 |
| Stocqueler, J. H.—Memoir and Correspondence of Major-General Sir William Nott | 2 |
| Sully, James.—Illusions, a Psychological Study | 1 |
| The Boats of the World by one of the Craft | 1 |
| Thumberg, C. P.—Travels in Europe, Africa and Asia | 4 |

| | Volumes. |
|---|---|
| Vogel, Dr. H.—The Chemistry of Light and Photography ... ... | 1 |
| Voigt, J. O.—Hortus Suburbanus Calcuttensis ... ... ... ... | 1 |
| Whitney, W. D.—The Life and Growth of Language ... ... ... | 1 |
| Wise, T. A.—Commentary on the Hindu System of Medicine ... ... | 1 |
| Wood, John.—A Journey to the Source of the River Oxus ... ... | 1 |
| Wurtz, A.—The Atomic Theory ... ... ... ... ... ... | 1 |
| Year Book of the Scientific and Learned Societies of Great Britain and Ireland ... ... ... ... ... ... ... ... ... | 2 |

D-2.

*Periodicals.*

| | |
|---|---|
| American Naturalist, Nos. 2 to 12 for 1885 ... ... ... ... | 1 |
| Annual Register for 1884 ... ... ... ... ... ... | 1 |
| Asiatic Journal and Monthly Register ... ... ... ... ... | 41 |
| Asylum Press Almanac for 1886 ... ... ... ... ... ... | 1 |
| Illustrated London News, Vols. 87 and 88 ... ... ... ... | 2 |
| Journal of the Royal Asiatic Society of Great Britain and Ireland, Parts 2, 3 and 4 for 1885 and Part 1 for 1886 ... ... ... ... | 1 |
| "London Times," Weekly Edition, Nos. 426 to 481 ... ... ... | 1 |
| Selections from the Calcutta Review, Vol. 11 for 1884 ... ... ... | 1 |
| Tropical Agriculturist, Vol. 4, Nos. 9, 10 and 11 ... ... ... | 1 |

D-3.

*(By Gift) Standard Works.*

| | |
|---|---|
| Benjamin, Rev. R.—Confirmation Class Book ... ... ... ... | 1 |
| Calendar of Letters, City of London, 1350—1370, by Reginald R. Sharpe. | 1 |
| Catalogue of the Australian Hydroid Zoophytes, by W. M. Bale ... | 1 |
| Catalogue of the Library of the Geological Survey of India, by W. R. Bion ... ... ... ... ... ... ... ... ... ... | 1 |
| Catalogue of Surgical Instruments ... ... ... ... ... ... | 1 |
| Catalogue of Sanskrit Manuscripts, North-Western Provinces, Part 9 ... | 1 |
| Catalogue of Sanskrit Manuscripts existing in Oudh, for 1884 ... ... | 1 |
| Catalogue of Sanskrit Manuscript in the Library of the Deccan College with Index ... ... ... ... ... ... ... ... ... | 1 |
| Catalogue of the Art Collection in the Sir J. J. School of Art, Bombay... | 1 |
| Catalogue of the Victoria and Albert Museum, Bombay ... ... ... | 1 |
| Centenary Review of the Researches of the Asiatic Society of Bengal, 1784—1883 ... ... ... ... ... ... ... ... | 1 |
| Challenger—Report on the Scientific Results of the Exploring Voyage of the— (Zoology), Vol. 11th ... ... ... ... ... ... | 1 |
| Challenger—Report on the Scientific Results of the Exploring Voyage of the— (Narrative of the Cruise), Vol. 1, Parts 1 and 2 ... ... | 2 |
| Challenger—Report on the Scientific Results of the Exploring Voyage of the— (Botany) ... ... ... ... ... ... ... ... | 1 |
| China Report, by Mr. Hosie, of a journey through Central Sou-chuan, 1884, No. 2 ... ... ... ... ... ... ... ... ... | 2 |
| Cunningham's Archæological Survey of India, Vols. 19 and 20 ... ... | 2 |
| Duka, T.—Life and Works of Cosma de Körös, (Trübner's Oriental Series) | 1 |
| Export Catalogue of Machinery and Hardwares of the Principal Makers in Great Britain ... ... ... ... ... ... ... ... | 1 |
| Essays relating to Indo-China (Trübner's Oriental Series) ... ... | 2 |
| Foulkes, Rev. T.—The Pallavas (Pamphlet) ... ... ... ... | 1 |
| Guide to the Collection of Fossil Fishes in the Department of Geology and Palæontology in the British Museum (Pamphlet) ... ... ... | 1 |
| Guide to the Galleries of Mammalia in the British Museum (Natural History) ... ... ... ... ... ... ... ... ... | 1 |
| Howes, G. B.—Atlas of Practical Elementary Biology ... ... ... | 1 |
| Indian Museum Annual Report for 1884-85 ... ... ... ... | 1 |
| Indian Art-work in the Calcutta International Exhibition, 1883-84 ... | 1 |
| Leggett, E.—Notes on the Mint Towns and Coins of the Muhammadans. | 1 |
| Madras Magnetical Observations for 1851 and 1855, by W. S. Jacob, Esq. ... ... ... ... ... ... ... ... ... ... | 1 |
| Manual of the Administration of the Madras Presidency, Vols. 1 and 2 .. | 3 |
| Maps prepared for the Madras Manual of the Administration ... ... | 1 |
| Memorials of the Jeypore Exhibition, 1883, by Thomas H. Hendley ... | 4 |
| Mills, James.—The Indian Stock-owner's Manual ... ... ... ... | 1 |
| Mills, James.—Plain Hints on Diseases of Cattle in India ... ... | 1 |
| Mills, James.—Treatment of Cattle Diseases ... ... ... ... | 1 |



| | Volumes. |
|---|---|
| Montefiore, Sir Moses, Sacred Memorial Services in memory of the late— | 1 |
| Mukharji, T. N.—Agricultural Implements collected for the International Exhibition, 1883-84 ... ... ... ... ... ... ... ... | 1 |
| Oppert, Gustav.—Ne Sutor Ultra Crepidam ... ... ... ... | 1 |
| Oppert, G.—List of Sanskrit Manuscripts in Southern India, Vol. 2nd ... | 1 |
| Pogson, N. R.—Telegraphic Longitude Determinations in India... ... | 1 |
| Prudhomme, E. N.—The Banker's Ready Reckoner; Tables showing the rates of Interest per cent. per annum on purchases and sales of Bills of Exchange, &c. ... ... ... ... ... ... ... ... ... | 1 |
| Prudhomme, E. N.—The Indian Investor's Guide ... ... ... | 1 |
| Prudhomme, E. N.—The Indian Stock Notes Calculator ... ... | 1 |
| Records of the Saidápet Experimental Farm, by Charles Benson ... | 1 |
| Rees, J. D.—Notes of a Journey from Kasveen to Hamadan across the Karaghan Country ... ... ... ... ... ... ... ... | 1 |
| Sabda Ratnakaram, a Comprehensive Telugu Dictionary, by B. Sitaramacharyulu ... ... ... ... ... ... ... ... ... | 1 |
| Sewell, Robert.—A Letter to Gustav Oppert, Ph. D., in reply to his Pamphlet Ne Sutor Ultra Crepidam ... ... ... ... ... ... | 1 |
| Textile Fabrics of India, Nos. 1 to 1120, 2nd Series ... ... ... | 17 |
| Third Report of the Curator of Ancient Monuments in India for 1883-84 | 1 |
| Wardle, Thomas.—Researches on Silk Fibre ... ... ... ... | 1 |
| Wherry, Rev. E. M.—A Comprehensive Commentary on the Qurán, Vol. 3rd (Trübner's Oriental Series) ... ... ... ... ... | 1 |
| Wortham, Rev. B. H.—The Satakas of Bhartrihari (Trübner's Oriental Series) ... ... ... ... ... ... ... ... ... | 1 |

D-4.

*Periodicals (by Gift).*

Bulletin of the Brookville Society of Natural History, No. 1.
"Fort St. George Gazette," Nos. 14 to 51 for 1885, Nos. 1 to 13 for 1886.
"Gazette of India," Nos. 12 to 52 for 1885, and 1 to 13 for 1886.
Indian, Antiquary, by J. Burgess, Vol. 14 for 1885.
Journal of the Asiatic Society of Bengal, Part 1, Nos. 1 to 4 for 1885; Part 2, No. 3 for 1884; Part 2, Nos. 2 and 3 for 1885.
Journal of Indian Arts, Nos. 7, 8 and 9.
Memoirs of the Geological Survey of India, Vol. 21, Parts 3 and 4, and Vol. 22, Parts 1 to 4, for 1885.
Memoirs of the Geological Survey of India (Palæontologia Indica), Vol. 1, S. 4, S. 13; Vol. 3, S. 10; Vol. 1, S. 4, S. 13; Vol. 1, S. 14.
Oesterreichische Monatsschrift fur den Orient, Nos. 1 to 12 for 1885.
Proceedings of the Asiatic Society of Bengal, Nos. 11 and 12 for 1884; Nos. 1 to 9 for 1885.
Proceedings of the Natural History Society of Wisconsin, Vol. 1.
Quarterly Journal of Veterinary Science in India, Nos. 11 to 13 for 1884-85.
Records of the Geological Survey of India, Parts 1 to 4 for 1885.
Statement of Imports and Exports, September to December 1885, and January and February 1886.
The Pandit, a Monthly Publication devoted to Sanskrit Literature, Nos. 1 to 12 for 1885.

D-5.

*Reports.*

| | Copies. |
|---|---|
| Act to obtain Lands and Mines, &c., Arabic ... ... ... ... | 1 |
| Administration Report on the Jails of Bengal for 1884, by E. V. Westmacott, Esq. ... ... ... ... ... ... ... ... | 1 |
| Administration Report on the Bombay Jails for 1884 ... ... ... | 1 |
| Administration Report of the Meteorological Reporter to the Government of Madras for 1884-85 ... ... ... ... ... ... | 1 |
| Age at which Candidates for the Civil Service of India are admitted for competition in England, being a correspondence between the Government of India and the Secretary of State (Parliamentary Blue Book). | 1 |
| Agricultural Statistics, Ireland—General Abstracts showing the Acreage under Crops; also the Number and Description of Live Stock in each Country and Province, 1884-85 (Parliamentary Blue Book) ... | 1 |
| A List of Agricultural Implements and Machines which have been experimented with and found efficient and useful in India for 1884-85. | 2 |
| Annual Report on the Administration of the Land Revenue in Assam for 1884-85 ... ... ... ... ... ... ... ... | 1 |

| | Copies. |
|---|---|
| Annual Report on the Foreign Trade of the North-West Provinces and Oudh, 1885 | 2 |
| Annual Administration Reports of the Forest Department, Madras Presidency, for 1883-84 | 1 |
| Annual Report of the Madras Court of Small Causes for 1884 | 1 |
| Annual Report on the Civil Hospitals and Dispensaries in the Madras Presidency, 1883 | 1 |
| Annual Report with Tabular Statements on the Condition and Management of the Jails in the North-West Provinces and Oudh for 1884 | 1 |
| Annual Report on the Gardens of His Highness the Maharana of Oodeypore for 1884 | 1 |
| Annual Report on the Jails of the Hyderabad Assigned Districts for 1884 | 1 |
| Annual Report on the Administration of Prisons in the Province of Coorg for 1884 | 1 |
| Annual Report on the Lunatic Asylums in the Madras Presidency for 1884-85 | 1 |
| Annual Report of the Director of Agriculture, Bombay Presidency, for 1884-85 | 2 |
| Annual Report of the Khandesh Experimental Farm for 1885 | 2 |
| Annual Report, Government Experimental Farm, Hyderabad, Sind, for 1885 | 2 |
| Annual Report of the Royal Botanic Gardens, Calcutta, for 1884-85 | 2 |
| Annual Report on the Botanical Gardens of Poona for 1885 | 2 |
| Annual Report of the Department of Revenue Settlement and Agriculture for 1884-85 | 1 |
| Annual Volume of the Sea-borne Trade and Navigation of the Madras Presidency for the year 1884-85 | 1 |
| Assessment of Sub-soil Water, being extracts from the Despatch of the Governor of Bombay, 1885 (Parliamentary Blue Book) | 1 |
| Catalogue of the Lucknow Exhibition, 1885 | 1 |
| Central Asia—Further correspondence respecting Central Asia, with Maps, Nos. 2, 3 and 4 (Parliamentary Blue Book) | 2 |
| Central Asia—Circular Despatch addressed by Prince Gortchakow to Russian Representatives abroad for 1864 (Parliamentary Blue Book). | 1 |
| Central Asia—Further correspondence respecting the affairs of Central Asia, 1885, No. 5 (Parliamentary Blue Book) | 1 |
| China correspondence respecting the duties on Opium, 1885, No. 5 (Parliamentary Blue Book) | 1 |
| Civil Justice Report of British Burma for 1884 | 1 |
| Civil Statements of the North-Western Provinces for 1884 | 1 |
| Cotton in Assam, 1885 | 1 |
| Criminal Justice Report of British Burma for 1884 | 1 |
| Criminal Statements of the North-Western Provinces for 1884 | 1 |
| East Indian Financial Statement for 1885-86 (Parliamentary Blue Book) | 1 |
| Egypt correspondence respecting Ports in the Red Sea and the Gulf of Aden and the Province of Harar, 1885 (Parliamentary Blue Book) | 1 |
| Elephant Pipes in the Museum of the Academy of Natural Science, Davenport Jowa | 1 |
| Emigration Statistics of Ireland for 1884 (Parliamentary Blue Book) | 1 |
| Estimate of Revenue and Expenditure of the Government of India, 1884-85 (Parliamentary Blue Book) | 1 |
| Home Accounts of the Government of India, 1885 (Parliamentary Blue Book) | 1 |
| Indian Meteorological Memoirs, by H. F. Blanford, Vol. 2, Parts 4 and 5 | 2 |
| Instructions for the preparation of Village Papers in the Punjab for 1885 | 2 |
| Monograph on Cotton Manufacture in the Punjab | 1 |
| Muhammadan Proper Names of Females—A list of — | 1 |
| Note on the Agricultural Products of the Hyderabad Assigned Districts, by Surgeon S. Hume, M.B., 1885 | 1 |
| Note on Agricultural Implements in America | 1 |
| New South Wales Technological, Industrial, and Sanitary Museum—Report of the Committee of Management for 1884 | 1 |
| New South Wales Australian Museum—Report of the Trustees for 1884. | 1 |
| Non-effective Charges of Her Majesty's Forces, 1885 (Parliamentary Blue Book) | 1 |
| Proceedings of the Director of Public Instruction—Report of the Madras Agricultural College for 1885 | 1 |



| | Copies. |
|---|---|
| Proceedings of the Honorable the Lieutenant-Governor of the Punjab in the Departments of Revenue and Agriculture, 1885 | 2 |
| Progress Report of Forest Administration in the Hyderabad Assigned Districts for 1884-85 | 2 |
| Proposed Changes in the Indian Army System, being copy of correspondence between the Government of India and the Secretary of State for 1884 (Parliamentary Blue Book) | 1 |
| Question Papers of the 17th and 18th Lessons | 1 |
| Report on the Nagpore Experimental Farm in the Central Provinces for 1884-85 | 2 |
| Report on the Railway-borne Traffic of the Central Provinces for 1884-85 | 1 |
| Report on Public Instruction in the Madras Presidency for 1883-84 | 1 |
| Report on the Administration of the Madras Presidency for 1884-85 | 1 |
| Report on the Meteorology of India for 1883, by H. F. Blanford | 1 |
| Report on the Administration of the Meteorological Department of the Government of India for 1884-85 | 1 |
| Report on the Revenue Administration of British Burma for 1884-85 | 2 |
| Report on the Prison Administration of British Burma for 1884 | 1 |
| Report on the Administration of Civil Justice in the Punjab and its Dependencies for 1884 | 1 |
| Report on the Administration of (Criminal) Justice in Oudh for 1884 | 1 |
| Report on the Administration of the Department of Salt Revenue in the Presidency of Fort St. George, 1883-84 | 1 |
| Report on the Judicial Administration (Civil) of the Central Provinces for 1884 | 1 |
| Report on the Judicial Administration (Criminal) of the Central Provinces for 1884 | 1 |
| Report on the Jails of the Central Provinces for 1884 | 1 |
| Report on Criminal and Civil Justice in the Hyderabad Assigned Districts for 1884 | 1 |
| Report on the Progress and Condition of the Government Botanical Gardens at Saharanpur and Mussoorie for 1885 | 2 |
| Report on the Administration of Criminal Justice in the Punjab and its Dependencies for 1884 | 1 |
| Report on the Jails of the Punjab for 1884, by R. Gray, Esq. | 1 |
| Report on the Horticultural Gardens, Lucknow, for 1885 | 2 |
| Report on the Cawnpore Agricultural Station for 1884 | 2 |
| Report on the Administration of Civil Justice in Oudh for 1884 | 1 |
| Report on the Jail Administration of the Province of Assam for 1884 | 1 |
| Report on the External Trade of Bengal with Nepaul, Sikkim and Bhutan for 1884-85 | 1 |
| Report on the Revenue Administration of the Punjab and its Dependencies for 1884-85 | 1 |
| Report on the Operations of the Department of Agriculture and Commerce, North-West Provinces and Oudh, for 1885 | 2 |
| Report on the Railway-borne Traffic of the North-West Provinces and Oude for 1885 | 2 |
| Report of the Government Agri-Horticultural Gardens, Lahore, for 1884-85 | 1 |
| Report of the Indian Famine Commission, Appendix, Vols. 3 and 4. Evidence in reply to inquiries of the Commission (Parliamentary Blue Book) | 2 |
| Report of the Indian Famine Commission, Part 3rd (Parliamentary Blue Book) | 1 |
| Report from the Select Committee on Forestry, with the Proceedings of the Minutes of Evidence, 1885 (Parliamentary Blue Book) | 1 |
| Report on Arboriculture in the Hyderabad Assigned Districts for 1884-85 | 2 |
| Report on the River-borne Traffic of the Lower Provinces of Bengal and Inland Trade of Calcutta for 1884-85 | 1 |
| Report of the Agricultural Department in Assam, by H. Z. Darrah, Esq., for 1884-85 | 2 |
| Report on Publications issued and registered in the several Provinces of British India for 1883 | 1 |
| Report on Sanitary Measures in India in 1883-84, with Miscellaneous Information up to June 1885 (Parliamentary Blue Book) | 1 |
| Returns of Railway-borne Traffic, Central Provinces, for 1885 and 1884. | 4 |

| | Copies. |
|---|---|
| Review of the Revenue Administration of the Province of Oudh for 1884. | 1 |
| Review of Forest Administration in British India, by B. Ribbentrop, for 1883-84 ... ... ... ... ... ... ... ... ... | 1 |
| Review of the Agricultural and Revenue Reports for 1884-85 ... ... | 1 |
| Second Annual Report of the Board of Trustees of the Public Museum of the City of Milwankee for 1884 ... ... ... ... ... | 1 |
| Statement of the Trade of British India with British Possessions and Foreign Countries for 1879-80 to 1883-84 (Parliamentary Blue Book). | 1 |
| Statement exhibiting the Moral and Material Progress and Condition of India for 1882-83 (Parliamentary Blue Book) ... ... ... ... | 1 |
| Statement showing the Net Revenue and Expenditure of India from 1874-75 to 1883-84 and as estimated for 1884-85 and 1885-86 (Parliamentary Blue Book) ... ... ... ... ... ... ... | 1 |
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| Statistical Report of the Health of the Navy for 1883 (Parliamentary Blue Book)... ... ... ... ... ... ... ... ... | 1 |
| Statistical Abstract for the Principal and other Foreign Countries in each year from 1873 to 1882-83 (Parliamentary Blue Book) ... ... | 1 |
| Statistical Abstract for the United Kingdom in each of the last fifteen years from 1870 to 1884 (Parliamentary Blue Book) ... ... ... | 1 |
| Statistical Abstract relating to British India from 1874-75 to 1883-84 (Parliamentary Blue Book) ... ... ... ... ... ... | 1 |
| Statistical Abstract of the several Colonial and other Possessions of the United Kingdom from 1869 to 1883 (Parliamentary Blue Book) ... | 1 |
| Sugar-cane and Sugar Trade in British Burma—Memorandum, by Mr. J. E. Bridges ... ... ... ... ... ... ... ... ... | 1 |
| Sugar Bounties, being a copy of correspondence on the subject (Parliamentary Blue Book) ... ... ... ... ... ... ... | 1 |

D-6.

*Patent Office Papers.*

| | |
|---|---|
| Alphabetical Index of Patents and Applicants for Patents of Invention for 1884 ... ... ... ... ... ... ... ... ... | 1 |
| Illustrated Journal of Patented Inventions from No. 1 to 125 (incomplete) ... ... ... ... ... ... ... ... ... | 1 |
| Patents for Inventions, Specifications and Drawings, Vol. 60 for 1883 ... | 1 |
| Patents for Inventions, Specifications and Drawings, Vols. 1 to 12 for 1884, Vol. 6 wanting ... ... ... ... ... ... | 11 |
| Subject-matter Index of Applicants for Letters Patent for 1884 ... | 1 |
| Specifications relating to Railways, Part 2, 1867—1876 ... ... | 1 |
| Specifications relating to the preparation of India Rubber and Gutta-percha, Part 2, 1867—1876 ... ... ... ... ... ... | 1 |
| Specifications relating to Artificial Leather, Floor-cloth, Oil-cloth, Oil-skin and other Water-proof Fabrics, Part 2, A.D. 1867—1876 ... | 1 |
| Specifications relating to Starch, Gum, Size, Glue and other Stiffening and Adhesive Materials, Parts 1 and 2, A.D. 1817—1876 ... ... | 1 |
| Specifications relating to preparing and cutting Cork, bottling Liquids, securing and opening Bottles, &c., Part 2, A.D. 1867—1876 ... | 1 |

E-1.

List of Books added to the Scientific Library.

*By Purchase (Standard Works).*

| | Volumes. |
|---|---|
| Bell, F. J.—The Zoological Record, Vol. 21, for 1884 ... ... ... | 1 |
| Iconographie der Schalentragenden Europaischen Meeresconchylien, by Dr. W. Kobelt Heft, 3 ... ... ... ... ... ... ... ... | 1 |
| Report of the British Association for the advancement of Science for 1884 ... ... ... ... ... ... ... ... ... | 1 |
| Semper, Dr. C.—Reisen in Archipel der Philippinen, Die Seewalzen, Vol. 4, Part 3, 1885 ... ... ... ... ... ... ... | 1 |
| Semper, Dr. C.—Reisen in Archipel der Philippinen, Die Seewalzen Von Dr. Kurt Lampert ... ... ... ... ... ... ... | 1 |
| Semper, Dr. C.—Reisen in Archipel der Philippinen Land, Mollusken Heft 7 ... ... ... ... ... ... ... ... ... | 1 |



E-2.

*Periodicals.*

| | |
|---|---|
| Annals and Magazine of Natural History ... | Nos. 85 to 96 for 1885. |
| Annales de la Société Entomologique de France ... ... ... ... ... | Nos. 1 to 4 for 1885. |
| Annales des Science Naturelles Botanique ... | Vols. 20 and Vols. 1 and 2 for 1885. |
| Annales des Science Naturelles, Zoologie ... | Nos. 1 to 4 for 1885. |
| Bulletin de la Société Imperiale des Moscow... | Nos. 1 to 4 for 1884. |
| Conchologische Mittheilungen ... ... | Vol. 2, Nos. 1 to 6. |
| Ibis—A Quarterly Journal of Ornithology ... | Nos. 9 to 12 for 1885. |
| Journal de Conchyliologie ... ... ... | Nos. 1 to 4 for 1885. |
| Journal of the Linnean Society, Botany ... | Nos. 136 to 141 for 1885. |
| Do. do. Zoology ... | Nos. 107 to 112 for 1885. |
| Nature—A Weekly Illustrated Journal of Science ... ... ... ... ... | Vols. 31 and 32, Nos. 784 to 835, for 1884-85. |
| Nouvelles Archives du Museum d'Histoire Naturelle ... ... ... ... ... | No. 2 for 1884, No. 1 for 1885. |
| Philosophical Magazine ... ... ... | Nos. 116 to 127 for 1885. |
| Proceedings of the Zoological Society... ... | Parts 1 to 4 for 1885. |
| Quarterly Journal of the Geological Society ... | Nos. 161 to 164 for 1885. |
| Transactions of the Entomological Society ... | Parts 1 to 5 for 1885. |
| Transactions of the Linnean Society, Zoology. | Vol. 3, Part 3 for 1885. |
| Transactions of the Palæontographical Society. | Vol. 39 for 1885. |

E-3.

*By Gift (Standard Works).*

| | Volumes. |
|---|---|
| Catalogue of Indian Coins (Greek and Scythic) ... ... ... ... | 1 |
| Catalogue of the Fossil Mammalia in the British Museum, Parts 1 and 2. | 2 |
| Catalogue of the Lizards in the British Museum ... ... ... . | 2 |
| Catalogue of the Passeriformes or Perching Birds in the British Museum, Vol. 10th ... ... ... ... ... ... ... | 1 |
| Catalogue of the Palæozoic Plants in the British Museum ... ... | 1 |
| Catalogue of the Indian Coins in the British Museum (Muhammadan Coins) ... ... ... ... ... ... ... ... ... | 1 |
| Catalogue of the Indian Coins in the British Museum (The Sultans of Delhi) ... ... ... ... ... ... ... ... ... | 1 |
| Hawkins, Edward.—Medallic Illustrations of British History ... ... | 2 |
| Hand List of Mollusca in the Indian Museum, Calcutta, (Gastropoda), Part 2 ... ... ... ... ... ... ... ... ... | 1 |
| List of the Specimens of Cetacea in the British Museum, by W. H. Flower, LL. D. ... ... ... ... ... ... ... ... | 1 |

Fish Library.

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| Henshall, J. A.—Book of the Black Bass ... ... ... ... | 1 |
| Lambert, O.—Angling Literature in England ... ... ... ... | 1 |
| Mackenzie, M.—View of the Salmon Fishery of Scotland ... ... | 1 |
| Norris, T.—American Fish Culture ... ... ... ... ... | 1 |
| Note on private rights in Fisheries in connection with the Madras Fisheries Bill ... ... ... ... ... ... ... ... | 1 |
| Report of the Fish Commission, United States, Parts 7, 8, 9 and 10 ... | 4 |
| Report on Salmon Fisheries (Ireland) ... ... ... ... ... | 1 |
| Report of the Inspectors of Irish Fisheries on the Sea and Inland Fisheries of Ireland for 1884 ... ... ... ... ... ... | 1 |
| Report of the Commissioners appointed to inquire and report upon the complaints that have been made by Line and Drift Net Fishermen of injuries sustained by them in their calling owing to the use of the Trawl Net and Beam Trawl in the Territorial Waters of the United Kingdom for 1885 ... ... ... ... ... ... ... ... | 1 |
| Slack, J. H.—Practical Trout Culture ... ... ... ... ... | 1 |
| Third Annual Report of the Fishery Board for Scotland for 1884 ... | 1 |
| Twenty-fourth Annual Report of the Inspector of Fisheries (England and Wales) for 1884 ... ... ... ... ... ... ... | 1 |
| Yarrell, W.—On the growth of the Salmon in Fresh-water (Pamphlet). | 1 |

(Signed) EDGAR THURSTON,
*Superintendent, Government Central Museum.*

Madras,
*2nd July* 1886.

Order—dated 23rd August 1886, No. 732, Revenue.

Miscellaneous.

With his letter read above the Superintendent, Government Central Museum, submits his report for the year 1885-86. Dr. Bidie gave over charge of the office of Superintendent to Dr. Thurston on October 12th, 1885, and His Excellency the Governor in Council took an opportunity of expressing his appreciation of the former officer's valuable services, in reviewing the report for 1884-85.

2. The number of visitors to the Museum during the year again shows an advance, being 311,462 as against 272,968 in the previous year. The Government observe with satisfaction that there was an increase in the number of gosha ladies who visited the Museum on the days reserved for them. There was also a considerable increase in the number of books consulted during the year. The position of the staff has been recently much improved and the Government notice with pleasure the interest which the various assistants take in their work. It appears from paragraph 7 that some of the buildings require slight repairs. The attention of the Public Works Department will be invited to the subject.

3. His Excellency the Governor in Council is much indebted to the various gentlemen who contributed to the Museum during the year.

4. In conclusion, His Excellency in Council desires to notice the evident zeal and interest of Dr. Thurston in his work. He should, however, avoid burdening his report with such unnecessary matter as that contained in paragraph 17.

(True Extract.)

(Signed) H. E. STOKES,
Secretary to Government.

To the Superintendent, Government Central Museum.
„ the Board of Revenue.
„ the Public Works Department.
„ the Public Department.
„ Surgeon-General G. Bidie, M.B., C.I.E.
„ the Editors' Table.

Exd. J. Henricus.

120 Copies.



C.

Statement showing the number of Visitors to the Government Central Museum for the past five years.

| | |
|---|---|
| 1881-82 | 211,246 |
| 1882-83 | 271,881 |
| 1883-84 | 242,514 |
| 1884-85 | 272,968 |
| 1885-86 | 311,462 |

D-1.

List of Books added to the Public Library.

1.—*By Purchase* (*Standard Works*).

| | Volumes. |
|---|---|
| Anaryan Early Ideas, a group of Hindoo stories | 1 |
| Antiquities of Asia, by Sir W. Jones | 2 |
| Bagehot, W.—Physics and Politics | 1 |
| Balfour, Surgeon-General E. G.—The Cyclopædia of India | 3 |
| Bernstein, J.—The Five Senses of Man | 1 |
| Bird, F. J.—The American Practical Dyer's Companion | 1 |
| Blades, William.—The Enemies of Books | 1 |
| Bower, F. O. and S. H.—Vines Course of Practical Instruction in Botany. | 1 |
| Buckley, Arabella B.A.—Short History of Natural Science | 1 |
| Caird, Sir James India.—The Land and the People | 1 |
| Capper, J.—Observations of the Winds and Monsoons | 1 |
| Chambers' Encyclopædia of Universal Knowledge | 1 |
| Clarke, C. B.—Commelynaceæ et Cyrtandraceæ Bengalensis, folio | 10 |
| Clayton, Sir R.—Life of Alexander the Great | 1 |
| Cooke, M. C.—Hand-book of British Fungi | 1 |
| Cox, Sir G. W.—The Mythology of the Aryan Nations | 2 |
| Curtis's Botanical Magazine, Vols. 13 to 37 | 2 |
| Deane, Rev. J. B.—Worship of the Serpent | 25 |
| De Leon, E.—The Khedives of Egypt | 1 |
| De Candolle, A.—Origin of Cultivated Plants | 1 |
| Deschanel, A.—Elementary Treatise on Natural Philosophy | 1 |
| Dictionary of the Religious Ceremonies of the Eastern Nations, &c. | 1 |
| Echoes from Old Calcutta, by H. E. Busteed | 1 |
| Forbes, James.—Oriental Memoirs | 1 |
| Gladwin, F.—Memoirs of Khojeh Abdul Kurreem | 4 |
| Gladwin, F.—Dissertation of the Rhetoric Prosody and Rhyme of the Persians | 1 |
| Graham, M.—Journal of a Residence in India | 1 |
| Haite's Plant Studies, Parts 3 to 7 | 1 |
| Hamilton, A.—Account of the East Indies | 5 |
| Historical View of Plans for the Government of British India | 1 |
| Hooker, J. D.—Rhododendrons of Sikkim Himalaya, folio | 1 |
| Hooker, J. D.—Illustrations of Himalayan Plants, folio | 1 |
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| Malley, A. C.—Micro-Photography | 1 |
| Max Müller, F.—Sacred Books of the East, Vols. 20, 22 and 24 | 3 |
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| Mitchell, Mrs. M.—In India, Sketches of Indian Life and Travel | 1 |
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| Orme, R.—Fragments of the Mogul Empire | 1 |
| Penant, T.—View of Hindoostan | 1 |
| Ribot, T.—Diseases of Memory | 1 |
| Sadleir, R.—The Aborigines of Australia | 1 |
| Smith, John A.— Dictionary of Popular Names of Plants | 1 |
| Stallo, J. B.—The Concepts and Theories of Modern Physics | 1 |
| Stocqueler, J. H.—Memoir and Correspondence of Major-General Sir William Nott | 1 |
| Sully, James.—Illusions, a Psychological Study | 2 |
| The Boats of the World by one of the Craft | 1 |
| Thumberg, C. P.—Travels in Europe, Africa and Asia | 4 |

| | Volumes. |
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| Vogel, Dr. H.—The Chemistry of Light and Photography ... ... | 1 |
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| Whitney, W. D.—The Life and Growth of Language ... ... ... | 1 |
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| Wood, John.—A Journey to the Source of the River Oxus ... ... | 1 |
| Wurtz, A.—The Atomic Theory ... ... ... ... ... ... | 1 |
| Year Book of the Scientific and Learned Societies of Great Britain and Ireland ... ... ... ... ... ... ... ... ... | 2 |

D-2.

*Periodicals.*

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|---|---|
| American Naturalist, Nos. 2 to 12 for 1885 ... ... ... ... | 1 |
| Annual Register for 1884 ... ... ... ... ... ... ... | 1 |
| Asiatic Journal and Monthly Register ... ... ... ... ... | 41 |
| Asylum Press Almanac for 1886 ... ... ... ... ... ... | 1 |
| Illustrated London News, Vols. 87 and 88 ... ... ... ... | 2 |
| Journal of the Royal Asiatic Society of Great Britain and Ireland, Parts 2, 3 and 4 for 1885 and Part 1 for 1886 ... ... ... ... | 1 |
| "London Times," Weekly Edition, Nos. 426 to 481 ... ... ... | 1 |
| Selections from the Calcutta Review, Vol. 11 for 1884 ... ... ... | 1 |
| Tropical Agriculturist, Vol. 4, Nos. 9, 10 and 11 ... ... ... | 1 |

D-3.

(*By Gift*) *Standard Works.*

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| Benjamin, Rev. R.—Confirmation Class Book ... ... ... ... | 1 |
| Calendar of Letters, City of London, 1350—1370, by Reginald R. Sharpe. | 1 |
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| Catalogue of Sanskrit Manuscripts existing in Oudh, for 1884 ... ... | 1 |
| Catalogue of Sanskrit Manuscript in the Library of the Deccan College with Index ... ... ... ... ... ... ... ... ... | 1 |
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| Catalogue of the Victoria and Albert Museum, Bombay ... ... ... | 1 |
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| Madras Magnetical Observations for 1851 and 1855, by W. S. Jacob, Esq. ... ... ... ... ... ... ... ... ... | 1 |
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*Periodicals (by Gift).*

Bulletin of the Brookville Society of Natural History, No. 1.
"Fort St. George Gazette," Nos. 14 to 51 for 1885, Nos. 1 to 13 for 1886.
"Gazette of India," Nos. 12 to 52 for 1885, and 1 to 13 for 1886.
Indian, Antiquary, by J. Burgess, Vol. 14 for 1885.
Journal of the Asiatic Society of Bengal, Part 1, Nos. 1 to 4 for 1885; Part 2, No. 3 for 1884; Part 2, Nos. 2 and 3 for 1885.
Journal of Indian Arts, Nos. 7, 8 and 9.
Memoirs of the Geological Survey of India, Vol. 21, Parts 3 and 4, and Vol. 22, Parts 1 to 4, for 1885.
Memoirs of the Geological Survey of India (Palæontologia Indica), Vol. 1, S. 4, S. 13; Vol. 3, S. 10; Vol. 1, S. 4, S. 13; Vol. 1, S. 14.
Oesterreichische Monatsschrift fur den Orient, Nos. 1 to 12 for 1885.
Proceedings of the Asiatic Society of Bengal, Nos. 11 and 12 for 1884; Nos. 1 to 9 for 1885.
Proceedings of the Natural History Society of Wisconsin, Vol. 1.
Quarterly Journal of Veterinary Science in India, Nos. 11 to 13 for 1884-85.
Records of the Geological Survey of India, Parts 1 to 4 for 1885.
Statement of Imports and Exports, September to December 1885, and January and February 1886.
The Pandit, a Monthly Publication devoted to Sanskrit Literature, Nos. 1 to 12 for 1885.

D-5.

*Reports.*

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| Criminal Justice Report of British Burma for 1884 | 1 |
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| Home Accounts of the Government of India, 1885 (Parliamentary Blue Book) | 1 |
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| Monograph on Cotton Manufacture in the Punjab | 1 |
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| Note on the Agricultural Products of the Hyderabad Assigned Districts, by Surgeon S. Hume, M.D., 1885 | 1 |
| Note on Agricultural Implements in America | 1 |
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| New South Wales Australian Museum—Report of the Trustees for 1884. | 1 |
| Non-effective Charges of Her Majesty's Forces, 1885 (Parliamentary Blue Book) | 1 |
| Proceedings of the Director of Public Instruction—Report of the Madras Agricultural College for 1885 | 1 |



which was inflicting its ravages on the cinchona leaves in the Wynaad, and of which specimens were sent, together with some of the affected leaves, by Messrs. Arbuthnot and Co., to whom I made a report suggesting certain precautions to be adopted and certain remedial agents to be tried, while pointing out that the expense of applying chemical reagents where the infested area is a large one is often greater than the loss of money caused by the ravages of the insect pests, and further that in the interest of the planter, a prolonged and careful study in a practical manner, not only of the life history and habits of the parasites, but also of the cheapest and at the same time most effective means of exterminating them is much needed.

(5). *Mammals and Birds.*—The light in the gallery in which both mammals and birds are exhibited is exceedingly bad, and the cases in which they are arranged do not show them off to advantage. Many of the specimens, too, are very old and require replacing by new ones. A great desideratum is a good collection of skeletons of the animals of Southern India, and at the end of the year some of my assistants in the Taxidermic department were engaged in the preparation of skeletons of some of the common types. The collection of birds should possess not only the male and female birds, but also the nest with the eggs of each species, set up artificially in such a way as to imitate the natural surroundings, but I am afraid that this ideal will not be attained to for a long time. During the year 27 mammals were received, of which 8 were purchased and 19 presented. Among them was a lion from the People's Park, the gift of the President of the Municipal Commission, which has been stuffed.

The total number of birds acquired was 626, of which 513 were obtained by purchase. The greater number were collected by Mr. Davison who was engaged for a period of six, which was extended to eight, months to make a collection of South Indian birds. At the end of the year the last consignment had not arrived, but those which had been received were arranged as cabinet specimens for purpose of study.

(6). *Mollusca.*—A great amount of space is wasted in the gallery at present devoted mainly to a collection of shells, mixed up together in cases without reference to locality and containing a number of specimens labelled vaguely "Eastern Seas." In accordance with my views as to making the Museum essentially representative of South India, I have picked out those specimens which I know definitely to have been found in the Madras Presidency and they, together with other specimens collected along the coast by myself, form the nucleus of a South Indian collection. The general collection will be put away in drawers where it will be available to those, who wish to study it specially, and a large amount of space be thus economised.

The total number of shells, exclusive of those collected by myself, acquired during the year was 1,017, nearly all of which were given by the Assistant Curator Mr. R. Damodarum Naidu.

Some minute pelagic shells were sent from Vizagapatam, where they were mistaken by the natives for pearls which had fallen from Heaven.

I am much indebted to H. S. Thomas, Esq, for giving me specimens of the shells of *Avicula vexillum* and *Avicula fucata* in various stages of growth in illustration of his report on Pearl Fisheries.

(7). *Reptiles.*—The additions during the year amounted to 24, of which Deputy Surgeon-General Shortt sent the greater number. A number of specimens were sent to me for identification from Ootacamund by M. A. Lawson, Esq.

26. Taxidermist's Department.—The following is an abstract of the specimens prepared or collected during the year :—

| | No. |
|---|---|
| Mammals | 22 |
| Skeletons of mammals | 3 |
| Fishes | 114 |
| Reptiles | 72 |
| Crustacea | 50 |
| Insects | 650 |

This includes (1) a number of birds, fishes, reptiles and insects collected by the Second Taxidermist at Vizagapatam, to which place I sent him for two months at the request of H. G. Turner, Esq., Collector of that district; (2) a series of 159 game birds of South India, which was originally collected for the Indian and Colonial Exhibition, but has been retained for the Central Museum; (3) 75 of the Nilgiri birds collected by Mr. Davison which were stuffed and mounted.

This department is now in good working order, and I notice with pleasure not only the interest, but also the improvement, which the assistants display in their work.

As the result of a suggestion from several gentlemen who complained that, when out on shooting or fishing expeditions, they often met with specimens which would be of interest to the Museum, but were not able to keep them from want of the necessary time for, and special knowledge of, the methods of preserving and stuffing, I am training a young man, whom I shall be happy to place at the disposal of sportsmen, on condition that they give me a share of the spoil for the Museum.

27. Tours.—His Excellency the Governor in Council acceded to my proposal that I should be allowed to make periodical tours to different parts of the Presidency, so as to collect for myself any objects of interest which I may find for the Museum.

The first of these tours was made in March, when I went, accompanied by my head and third Taxidermists, to Cochin, and visited also Quilon and Trivandrum. The main results of this tour have been embodied in a special report to Government, and I therefore confine myself in the present report to giving a list of the fish (the collection of which was my main object) which I obtained from Trichoor, Cochin and Quilon, and which have either been stuffed or preserved in alcohol.

Table I.

*Species obtained at Trichoor.*

| | | |
|---|---|---|
| 1. | Macrones Malabaricus ... ... ... ... ... ... | Edible |
| 2. | Do. Chryseus ... ... ... ... ... ... | do. |
| 3. | Gobius giurus ... ... ... ... ... ... ... | do. |
| 4. | Etroplus suratensis ... ... ... ... ... ... | do. |
| 5. | Mastacembalus armatus ... ... ... ... ... ... | do. |
| 6. | Do pancalus ... ... ... ... ... ... | ... |
| 7. | Ophiocephalus punctatus ... ... ... ... ... ... | Edible |
| 8. | Plotosus canius ... ... ... ... ... ... ... | ... |

Table II.

*Species obtained at Cochin.*

| Number. | Latin Name. | Tamil Name. | Malayalam Name. | Remarks. |
|---|---|---|---|---|
| 1 | Trygon narnak .. .. | Sonakah tiriki .. | Padavanthrandy .. | Young ones captured in back-water. Eaten by natives. |
| 2 | Do. sp. ? .. .. | .... | Pullythrandy .. .. | .... |
| 3 | Ætobatis narinari .. .. | Currooway tiriki .. | Kakathrandy .. .. | Eaten by natives. |
| 4 | Rhinobatus halavi .. .. | Padungan .. .. | Paruthalay .. .. | .... |
| 5 | Rhinoptera adspersa .. .. | Mutta tiriki .. .. | Eroomookanthrandy .. | Large ones cut in pieces and brought to market for sale. |
| 6 | Lates calcarifer .. .. | Koduwa .. .. | Narymeen (jackal fish) | Good eating known as Nair fish in Malabar. |
| 7 | Serranus Malabaricus .. .. | Punni-calawah .. | Curoopu .. .. | Large fish cut in pieces and salted. |
| 8 | Do. sp. ? .. .. | Calawah .. .. | Do. .. .. | .... |
| 9 | Therapon jarbua .. .. | Palin keechan .. | Cullankovay .. .. | .... |
| 10 | Diagramma griseum .. .. | .... | Cutraw .. .. | .... |
| 11 | Do. crassispinum .. | .... | Do. .. .. | .... |
| 12 | Lobates surinamensis .. .. | Musalli .. .. | Curruputty .. .. | Good eating. Good isinglass made from air bladder. |
| 13 | Gerres filamentosus .. .. | Oodan .. .. .. | Prawellee .. .. | Eaten by natives and salted. |
| 14 | Do. oyena .. .. .. | .... | Do. .. .. | .... |
| 15 | Scatophagus argas .. .. | Sipili .. .. .. | Nutchar Char .. | Eaten by lowest classes. |
| 16 | Ephippus orbis .. .. .. | Nulla torriti .. .. | Parinthee .. .. | Eaten but not esteemed (Day). |
| 17 | Upeneus Indicus .. .. | Mussara .. .. | Coozy meen .. .. | .... |
| 18 | Do. sp. ? .. .. | Do. .. .. | Do. .. .. | .... |
| 19 | Chrysophrys hasta .. .. | Currupumuttivayan .. | Aree .. .. .. | Good eating. |
| 20 | Lutianus rivulatus .. .. | Cuttu pirium .. .. | Cheppary .. .. | Largest specimen measured 34 inches caught in both fresh and salt water. Good eating. |
| 21 | Do. roseus .. .. | Moosoodee .. .. | Chembullee .. .. | |
| 22 | Do. quinquelineatus .. | .... | Cheppary .. .. | .... |
| 23 | Do. Johnii .. .. | .... | .... | .... |
| 24 | Sciæna maculata .. .. | Vari cathalay .. | Cuttalaw .. .. | Air bladders collected extensively for manufacture of isinglass. The price of the bladder sometimes exceeds that of the fish itself. Not much esteemed as food. |
| 25 | Do. vogleri .. .. | .... | Korkaw .. .. | |
| 26 | Do. carutta .. .. | Carung kuthalay .. | Carykutlay .. .. | |
| 27 | Do. osseus .. .. | .... | Cuttalaw .. .. | |
| 28 | Sciænoides sp. ? .. .. | Vanniapunnah .. | Chakalaw .. .. | |
| 29 | Caranx armatus .. .. | Tanga Paray .. .. | Vuttaw .. .. | .... |
| 30 | Do. sansum .. .. .. | .... | Periavuttay .. .. | Eaten by lowest classes. |
| 31 | Do. sp. ? .. .. | Paray .. .. .. | .... | .... |
| 32 | Do. gymnostetheides .. | .... | .... | .... |
| 33 | Chorinemus lysan .. .. | Toal paray .. .. | .... | Good eating. |
| 34 | Psettus argenteus .. .. | .... | Kael Parinthee .. | .... |
| 35 | Equula edentula .. .. | .... | Cooroochee .. .. | Used when salted in making pepper water which is supposed to possess medicinal virtues. |
| 36 | Do. ruconius .. .. | Carra pody .. .. | Do. .. .. | |
| 37 | Scomber Microlepidotus .. | Kanang kelleetee .. | .... | Eaten by natives; supply varies from year to year. |
| 38 | Sillago sihama .. .. .. | Culingan .. .. | Veekutha .. .. | Good eating. Known to Europeans as "whiting." |
| 39 | Platycephalus insidiator .. | Ooloopathy .. .. | Oorathallee .. .. | Eaten by natives known in Malabar as "Crocodile Fish." |
| 40 | Gobius biocellatus .. .. | .... | .... | .... |
| 41 | Mugil cunnesius .. .. | Madavay .. .. | Sultham .. .. | Mullet. Good eating; extensively salted and sun dried. In Canara an objection was raised to eating them as their heads are like those of snakes. |
| 42 | Do. poicilus .. .. .. | Do. .. .. | Nary cunnumboo .. | |
| 43 | Do. cunnumboo .. .. | .... | Cunnumboo .. .. | |



Table II.

*Species obtained at Cochin*—continued.

| Number. | Latin Name. | Tamil Name. | Malayalam Name. | Remarks. |
|---|---|---|---|---|
| 44 | Ophiocephalus punctatus .. | Koravay .. .. | .... | Eaten by natives. |
| 45 | Do. striatus .. | Veral .. .. .. | Verarl .. .. .. | Good eating, but muddy, if from stagnant water. |
| 46 | Etroplus suratensis .. .. | Chettha kenday .. | Curry meen .. .. | Very good eating; sometimes more than one foot in length in backwater. |
| 47 | Do. maculatus .. .. | Pitul kass .. .. | .... | Eaten by natives. |
| 48 | Cynoglossus sp ? .. .. | Nakkoo meen .. .. | .... | |
| 49 | Chaca lophioides .. .. | .... | Kadal thavalay .. | |
| 50 | Arius subrostratus .. .. | Kelleetee .. .. | Soondun cooree .. | Good eating only when young. Salted and eaten by poorest classes. |
| 51 | Do. Malabaricus .. .. | Do. .. .. | Thalayatay .. .. | |
| 52 | Do. sp ? .. .. | Do. .. .. | Poovatay .. .. | |
| 53 | Saurida tumbil .. .. | Kadal ooloovay .. | Arana meen .. .. | |
| 54 | Haplochilus rubrostigina .. | .... | Poonchan .. .. | |
| 55 | Do. lineatus .. .. | .... | Do. .. .. | |
| 56 | Hemirhamphus Xanthopterus. | .... | Kola .. .. .. | |
| 57 | Belone annulata .. .. | Pahmun kola .. .. | Do. .. .. .. | |
| 58 | Chatoessus chacunda .. .. | .... | Thodee .. .. | Eaten by natives. |
| 59 | Do. nasus .. .. | Muddu candai .. | Do. .. .. | Good eating. |
| 60 | Engraulis Malabaricus .. | Poor-realn .. .. | Nadu manangu .. | Eaten by natives. |
| 61 | Do. Indicus .. .. | Netteelee .. .. | Ooroo manangu .. | |
| 62 | Clupea toli .. .. .. | Oolum .. .. .. | Palavaw .. .. | |
| 63 | Do. sp ? .. .. | .... | .... | |
| 64 | Elops saurus .. .. .. | Allahti .. .. | Vulleekoomy .. | |
| 65 | Megalops cyprinoides .. .. | Moran candai .. .. | Cunny .. .. .. | |
| 66 | Chanos salmoneus .. .. | Tulu candal .. .. | Kootheekoomy .. | Called milk fish or white mullet by Europeans. |
| 67 | Dussumieria acuta .. .. | .... | Nulla chalay .. .. | Very good eating; known as sardine. |
| 68 | Ophicthys microcephalus .. | .... | .... | .... |
| 69 | Triacanthus brevirostris .. | Moolean .. .. | .... | Eaten by natives (not eaten in Madras.) |
| 70 | Anacanthus barbatus .. .. | Watamookola .. | .... | |

Table III.

*Species obtained at Quilon.*

| Number. | Latin Name. | Tamil Name. | Malayalam Name. | Remarks. |
|---|---|---|---|---|
| 1 | Carcharias sp ? .. .. | Soorah .. .. | Soorah .. .. .. | Used as food by natives. |
| 2 | Narcine timbi .. .. | .... | .... | .... |
| 3 | Gerres oyena .. .. | .... | Praweellee .. .. | |
| 4 | Drepane punctata .. .. | Torriti .. .. .. | Paruntnee .. .. | Used as food. |
| 5 | Holocentrum rubrum .. | Kul-kah-catchee .. | Poollan .. .. | |
| 6 | Acanthurus mata .. .. | Cozy meen .. .. | .... | .... |
| 7 | Caranx leptolepis .. .. | Paray .. .. .. | Buttaparay .. .. | .... |
| 8 | Psettus argenteus .. .. | .... | .... | .... |
| 9 | Trachynotus ovatus .. .. | Thookoonassey .. | .... | Eaten when salted. |
| 10 | Equula insidiatrix .. .. | .... | Combancooroochee .. | .... |
| 11 | Mene maculata .. .. | .... | .... | .... |
| 12 | Cybium guttatum .. .. | Vanjeerum .. .. | Arrakeeah .. .. | Good eating. Best tamarind fish made from salted fish. |
| 13 | Platycephalus insidiator .. | Ooloopathy .. .. | Oorathallee .. .. | Eaten by natives. |
| 14 | Salarius frenatus .. .. | Parvut meen .. .. | Poolan .. .. .. | |
| 15 | Do. sp ? .. .. | Do. .. .. | Do. .. .. | |
| 16 | Platyglossus Dussumieri .. | .... | Culladay .. .. | |
| 17 | Synaptura orientalis .. .. | .... | Suptharee .. .. | |
| 18 | Cynoglossus sp ? .. .. | Nakku meen .. .. | .... | .... |
| 19 | Arius thalassinus .. .. | Kadal kelleetee .. | .... | .... |
| 20 | Do. subrostratus .. .. | Kelleetee .. .. | Soondum cooree .. | Eaten by natives. |
| 21 | Saurida tumbil .. .. .. | Kadalooloovay .. | Aranay meen .. .. | |
| 22 | Belone annulata .. .. | Phamun kola .. | Kola .. .. .. | |
| 23 | Clupea longiceps .. .. | .... | Kokala chalaw .. | Used for making "fish oil." |
| 24 | Muræsesox telabon .. .. | Kulivi pamboo .. | .... | .... |
| 25 | Triacanthus brevirostris .. | Moolean .. .. | .... | Eaten by natives. |
| 26 | Tetrodon inermis .. .. | Plachee .. .. | .... | |
| 27 | Do. sp ? .. .. | Do. .. .. | .... | |
| 28 | Do. sp ? .. .. | Do. .. .. | .... | |

Government Central Museum,
Egmore,
2nd July 1886.

(Signed) EDGAR THURSTON,
Superintendent, Government Central Museum.

## APPENDICES.

### A.

General List of the Contributions, &c., received for the Government Central Museum, from 1st April 1885 to 31st March 1886.

| | | NO. |
|---|---|---|
| Abboy, T., Naidu, M.R.Ry.— | | |
| Country smoking pipes | 3 | 3 |
| Armstrong, Dr. H., Kilpauk— | | |
| Bulrush caterpillar from New Zealand | 1 | |
| Plant from New Zealand | 1 | 3 |
| Geological specimens from the volcanic districts of New Zealand, Collection | | |
| Baudry, G. E., Esq., Tellicherry— | | |
| Pumice stones found floating in the sea | Collection. | Collection. |
| Bidie, Dy. Surgn-Genl. G., M.B, C.I.E., Sanitary Commr. for Madras— | | |
| Snake | 1 | |
| Fruits of Vateria Malabarica from Travancore | 4 | 9 |
| Moulds, one of each of Travancore chakram fanam and causy | 3 | |
| Palm-leaf basket for carrying onions on boardship | 1 | |
| Calder, D., Esq., St. Thomé— | | |
| Parrakeet | 1 | 1 |
| Cameron, J., Esq., Superintendent, Bangalore Museum— | | |
| Lac insects on *Shorea taluna* | Collection | 22 |
| Prepared varieties of Areca-nut | 21 | |
| Carter, H. R. P., Esq., Chetput— | | |
| Clavicles of a tiger | 4 | |
| Egg cases of zygæna | 63 | |
| Aquatic Scorpions | 2 | |
| Caterpillars of a moth | 2 | 77 |
| Cocoons of Cricula trifenestrata | 3 | |
| Woods from an old bridge bored by Isopods (Sphæroma vastator). | 2 | |
| Snake | 1 | |
| Chingleput, Collector of— | | |
| Impressions of seals | 2 | 2 |
| Conran, Mr. J. G., Perambúr— | | |
| Copper coins | 6 | 6 |
| Cumine, Master J. C.— | | |
| Bird's nest | 1 | 1 |
| Dale, Mr. J., Poonamallee— | | |
| Reptile (Draco Dussumieri) | 1 | |
| Pumice stones picked up on the sea-beach at Calicut | 2 | 3 |
| Daly, William Mahon, Esq., Yercaud, Shevaroys— | | |
| Birds' nests | 8 | |
| Eggs received in exchange | 37 | 48 |
| Insect | 1 | |
| Fruits | 2 | |
| Damodaram, R., Naidu, M.R.Ry— | | |
| Bat | 1 | |
| Beetles | 2 | |
| Butterfly | 1 | 1,005 |
| Wasp's nest | 1 | |
| Shells | 1,000 | |
| Davasagayam, D., Pillai, M.R.Ry., Salem— | | |
| Samples of coffee | 4 | 4 |
| Davison, W., Esq., Ootacamund— | | |
| Birds | 96 | 96 |
| Deane, G. W., Esq., The Luz— | | |
| Chrysalis of a butterfly | 1 | 1 |
| DeCaster, Mr. E.— | | |
| Tail of a skate | 1 | 2 |
| Head of a stone image | 1 | |
| Dique, Mr. W. F.— | | |
| Leaf insect | 1 | 1 |
| Ditmas, F. W., Esq., Assistant Commissioner of Salt Revenue— | | |
| Fish (Julis lunaris) | 1 | 1 |
| Doyle, Pat., Esq., C.E., Lucknow— | | |
| Pieces of Pinewood pulp for paper-making | 2 | |
| Grass (Pollema eriopoda) bundle | 1 | 11 |
| Specimens of "ball coal" from the Rani Gunj Coal-field, Damuda Valley, Bengal | 8 | |



| | | NO. |
|---|---|---|
| Duncan, J. H., Esq., Nungumbaukum— | | |
| Common tree-cat (Paradoxurus Musanga) | 1 | |
| White Guinea-fowl | 1 | 3 |
| Cobra | 1 | |
| Dunhill, Mrs. E. S., Pursewalkum— | | |
| Fish | | 1 |
| Duraisawmy, A. S., Pillay, M.R.Ry— | | |
| Leech | 1 | |
| Cluster of eggs of a snail | 1 | |
| Rock specimen | 1 | 4 |
| Goglet from Mysore | 1 | |
| Etherajulu Naicker, P., M.R.Ry— | | |
| Rat | | 1 |
| Farmer, H. R., Esq., Acting Collector, Trichinopoly— | | |
| Chrysalis | | 2 |
| Fowler, Mr. G.— | | |
| Bird's nest | | 1 |
| Garstin, J. H., Esq., C.S.— | | |
| Indian fire-flies | | Collection. |
| Gleeson, J. M., Esq., Superintendent, Agri-Horticultural Society's Gardens— | | |
| Spiders | | Collection. |
| Godávari, Collector of— | | |
| Impressions of seals | | 3 |
| Gompertz, H., Esq., Yercaud— | | |
| Stone implements from fort, human face, and peacock hills in Bellary | | 52 |
| Gordon, D. C., Esq.— | | |
| Caterpillars | | 4 |
| Gordon, Mrs. D. C.— | | |
| Leaf insects | | 2 |
| Governor in Council, His Excellency the— | | |
| Dutch manuscript, a memorial of the Dutch in the East | | 1 |
| Govinda, P., Menon, M.R.Ry.— | | |
| Insect (Mantis flabellicornis) | | 1 |
| Guthrie, Colonel T. K.— | | |
| Mantis | | 1 |
| Handley, J. W., Esq.— | | |
| Insect (Nepa grandis) | | 1 |
| Havelock, Mrs. Ann L.— | | |
| Skull of a tiger | | 1 |
| Hawkes, Colonel H. P.— | | |
| Specimens of raw and ginned Nankin cotton and the coarse cotton-cloths woven from the latter from Aracan | 4 | |
| A wicker basket made by the hill tribes of British Burma | 1 | 13 |
| Burmese copper coins | 8 | |
| Hollingsworth, R., Esq.— | | |
| Gourami fish | | 1 |
| Holmes, W. T. Hamilton, Esq.— | | |
| Egg of horned owl | 1 | |
| Shell of Balanus | 1 | 2 |
| Honorary Secretary, Agri-Horticultural Society, Madras— | | |
| Spiders' nests | 2 | |
| Old casuarina pole with borings | 1 | 4 |
| Specimen of curious growth of the roots of Casuarina muricata | 1 | |
| Honorary Secretary, Bombay Branch of the Royal Asiatic Society— | | |
| Silver coins | 5 | |
| Copper coins | 2 | 7 |
| Honorary Secretary, Madras Literary Society— | | |
| Gold coin | | 1 |
| Honorary Secretary, (Philological) Asiatic Society of Bengal, Calcutta— | | |
| Gold coins | 2 | |
| Silver do. | 17 | 48 |
| Copper do. | 29 | |
| Iya Pillay, Eleazer John, Mr.— | | |
| Silver coins | 3 | |
| Copper do. | 8 | 11 |
| Johnston Major, Chelmsford Estate, Mettupálaiyam— | | |
| Rheea stalk (China grass) Boehmeria nivea, grown on Chelmsford Estate. | | 1 |

| | NO. |
|---|---|
| Kernan, Honorable J., Adyar— | |
| Snake (Eryx Johnii) with mutilated tail ... ... ... ... ... | 1 |
| Kistna District, Collector of— | |
| Impressions of seals ... ... ... ... ... ... ... ... | 2 |
| Kurnool District, Collector of— | |
| Impression of seal ... ... ... ... ... ... .. ... | 1 |
| Leman, J. D., Esq., Collector of Coimbatore, and Pickance, Colonel W. J., Superintendent of Jail, Coimbatore— | |
| Ancient pottery with peculiar markings on it ... ... ... ... | 17 |
| Leonard, Mr. J. H., Mount Road— | |
| Australian magpie ... ... ... ... ... ... ... ... | 1 |
| London Exhibition Committee, Madras— | |
| Brass jewelry ... ... ... ... ... ... ... 188 | 218 |
| Toys .. ... ... ... ... ... ... ... 30 | |
| McNally, Dr. C. J., Egmore— | |
| Butterfly (Euplæa midamus) with imago and pupa case ... ... ... | 3 |
| Madhava Charry, M.R.Ry— | |
| Double brinjal ... ... ... ... ... ... ... ... | 1 |
| Madura, Collector of— | |
| Impressions of seals ... ... ... ... ... ... ... | 2 |
| Magrath, Colonel B. H. W.— | |
| Spider (Mygale sp.) ... ... ... ... ... ... ... | 1 |
| Maitland, Dr. J., Egmore— | |
| Larvæ of a fly produced in a bottle of gum ... ... ... | Collection. |
| Malabar, Collector of— | |
| Impressions of seals ... ... ... ... ... ... ... ... | 5 |
| Mitchell, A., Esq., Salt Department, Ennore— | |
| Snout of a saw-fish (Pristis cuspidatus) ... ... ... ... ... | 1 |
| Mitchell, E. A., Esq., Saint Thomé— | |
| Cray-fish (Palinurus) ... ... ... ... ... ... ... | 1 |
| Mitchell, J. H., Esq., Coimbatore— | |
| Pangolin ... ... ... ... ... ... ... ... ... | 1 |
| Mitchell, Mr. W. C. H., Kilpauk— | |
| Birds' eggs ... ... ... ... ... ... ... ... ... | 10 |
| Moonoosawmy, K., Naidu, M.R.Ry— | |
| Improved Jew's Harp ... ... ... ... ... ... ... ... | 1 |
| Morgan, Rhodes, Esq.— | |
| Insect (Nepa grandis) ... ... ... ... ... ... ... ... | 1 |
| Morris, A. W., Esq.— | |
| Birds' eggs ... ... ... ... ... ... ... ... ... | 3 |
| Moothoosawmy, C., Pillai, M.R.Ry.— | |
| Parrakeet ... ... ... ... ... ... ... ... ... | 1 |
| Nasiruddin, Mahomed, Khan Bahadoor— | |
| Copper coins ... ... ... ... ... ... ... ... ... | 2 |
| Nellore, Collector of— | |
| Impression of a seal ... ... ... ... ... ... ... 1 | 2 |
| Copy of impression of a seal ... ... ... ... ... ... 1 | |
| Nicholas, Mr. E. A. S.— | |
| Snake (Python Molurus) ... ... ... ... ... ... ... ... | 1 |
| North Arcot, Collector of— | |
| Impressions of seals ... ... ... ... ... ... ... ... | 8 |
| Peddie, Miss, Royapooram— | |
| Death's-head hawk-moth ... ... ... ... ... ... ... ... | 1 |
| Peebles, Mrs. J. H.— | |
| Insect (Trombidium) ... ... ... ... ... ... ... ... | 1 |
| President, Municipal Commission, Madras— | |
| Monkeys ... ... ... ... ... ... ... ... 2 | 7 |
| Tree-cats ... ... ... ... ... ... ... ... 2 | |
| Lion ... ... ... ... ... ... ... ... ... 1 | |
| Cockatoo ... ... ... ... ... ... ... ... ... 1 | |
| Black swan ... ... ... ... ... ... ... ... ... 1 | |
| Prudhomme, H., Esq., Egmore— | |
| Specimen of wine (bottle) ... ... ... ... ... ... 1 | 2 |
| Do. of coca leaves ... ... ... ... ... Collection | |
| Punjab, Government of, through Major H. H. Cole— | |
| Buddhist sculptures from two small topes, at places called Nuttu and Mian Khan, 24 miles north of Koti Mardan ... ... ... ... | 174 pieces. |



| | NO. |
|---|---|
| Raghavendra, T., Row, M.R.Ry., Assistant Commissioner, Shimoga— | |
| Gold coin ... ... ... ... ... ... ... ... ... ... | 1 |
| Rainnier, H., Esq.— | |
| Copper coins ... ... ... ... ... ... ... ... ... | 93 |
| Rajaram, T. Misser, Esq.— | |
| Copper coins ... ... ... ... ... ... ... ... ... | 6 |
| Ratton, Dr. J. L., Egmore— | |
| Moth (Actias luna) ... ... ... ... ... ... 1 | 2 |
| Beetle (Cosyphus) ... ... ... ... ... ... ... 1 | |
| Revenue Settlement and Agriculture, Acting Director of— | |
| Specimens of larva of a beetle ... ... ... ... ... ... | 3 |
| Robertson, W. R., Esq., Saidápet— | |
| Fish (Lutianus roseus) ... ... ... ... ... ... 2 | 3 |
| Fresh-water turtle of the genus Emys ... ... ... ... 1 | |
| Royal Botanic Gardens, Seebpore, Calcutta, Superintendent of— | |
| Seeds (Pithecolobium Laman) (packet) ... ... ... ... 1 | 17 |
| Seeds, Palm (packet) ... ... ... ... ... ... 16 | |
| Salem, Collector of— | |
| Impression in wax of the image of the goddess Kamatchi Amman of Conjeeveram ... ... ... ... ... ... ... ... | 1 |
| Salunkei, Kistnajee Row, M.R.Ry., Tanjore— | |
| Fencing sticks ... ... ... ... ... ... ... ... | 2 |
| Scott, T. M., Esq., Madura— | |
| Rama Tanka gold coin ... ... ... ... ... ... ... | 1 |
| Shortt, J., Retired Deputy Surgeon-General— | |
| Mammals ... ... ... ... ... ... ... ... 3 | 50 |
| Otter skin ... ... ... ... ... ... ... ... 1 | |
| Bird ... ... ... ... ... ... ... ... ... 1 | |
| Birds' skins ... ... ... ... ... ... ... ... 2 | |
| Birds in spirit ... ... ... ... ... ... ... 5 | |
| Chicken ... ... ... ... .. ... ... ... 1 | |
| Reptiles ... ... ... ... ... ... ... ... 15 | |
| Fish ... ... ... ... ... ... ... ... 1 | |
| Crustacea ... ... ... ... ... ... ... ... 10 | |
| Insects ... ... ... ... ... ... ... .. 8 | |
| Worms in a phial ... ... ... ... ... ... ... Lot | |
| Calcium carbonate from blackwood ... ... ... ... ,, | |
| Do. from teak trees ... ... ... ... ,, | |
| South Canara, Collector of— | |
| Impression in wax of a "Vamana Madri" seal ... ... ... | 1 |
| Stafford, H., Esq., District Forest Officer, Godávari— | |
| Agates ... ... ... ... ... ... ... ... 3 | 5 |
| Lac found on trees in Rékapalle, Upper Godávari Taluk ... 1 | |
| Tailor bird's nest ... ... ... ... ... ... 1 | |
| Steel, H. W., Esq., Deputy Commissioner of Rohtak— | |
| Silver coin ... ... ... ... ... ... ... ... | 1 |
| Stephenson, Miss C. F., Kilpauk— | |
| Moths ... ... ... ... .. ... ... ... | 2 |
| Tanjore, Collector of— | |
| Beetles of the genus Cerambyx ... ... ... ... ... 6 | 18 |
| Impressions on wax from old seals used by the Dutch and Danish Governments ... ... ... ... ... ... ... 6 | |
| Impressions on wax from Tanjore palace... ... ... ... 5 | |
| Impression of a seal ... ... ... ... ... ... 1 | |
| Thomas, H. S., Esq., First Member, Board of Revenue— | |
| Shells (avicula vexillum) ... ... ... ... ... Collection | 4 |
| Shells (Unio Marginalis) ... ... ... ... ... ... 3 | |
| Thoroughgood, F. N., Esq.— | |
| Specimen of coral ... ... ... ... ... ... ... ... | 1 |
| Tinnevelly, Collector of— | |
| Impressions of seals ... ... ... ... ... ... ... | 4 |
| Travancore, His Highness the Maharajah of— | |
| Shields ... ... ... ... ... ... ... ... ... | 4 |
| Tufnell, Captain R. H. C.— | |
| Silver punch mark Buddhist coin (in exchange) ... ... ... ... | 1 |
| Turner, H. G., Esq., Acting Collector of Vizagapatam— | |
| Impressions of seals ... ... ... ... ... ... ... | 2 |

| | NO. |
|---|---|
| VanIngens, Mrs. Alice, Egmore— | |
| Spider's nest and young ... ... ... ... ... ... ... | 2 |
| Vizagapatam, Senior Assistant Collector of— | |
| Pelagic shells ... ... ... ... ... ... ... ... | 12 |
| Volluru, the Zemindar of— | |
| Copper coins ... ... ... ... ... ... ... ... | 1,222 |
| West, H. C., Esq., Nungambaukum— | |
| Bird (Nycticorax griseus) ... ... ... ... ... ... | 1 |
| Egg of Ixos luteolus ... ... ... ... ... ... | 1 } 2 |
| White, Mr. Willie A. F.— | |
| Egg of white scavenger vulture ... ... ... ... ... ... | 1 |
| Whiteside, W. S., Esq.— | |
| Snake (Tropidonotus quincunciatus) ... ... ... ... ... | 1 |
| Winde, Monsieur B., Germany— | |
| Beetles ... ... ... ... ... ... ... ... ... | 115 |
| Wilson Fellows, V. S., Esq., Tuticorin— | |
| Plant (Capparis aphylla) ... ... ... ... ... ... ... | 1 |

B.

VISITORS to the Government Central Museum from 1st April 1885 to 31st March 1886.

| 1885-86. | SIGNATURES MADE IN | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | English. | Telugu. | Hindustani. | Tamil. | Mahratta. | Nagaree. | Guzerattee. | Canarese. | Chinese. | Cingalese. | Malayalam. | Bengalee. |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| April .. .. .. .. | 1,961 | 345 | 147 | 1,199 | 13 | 9 | 16 | 20 | .. | .. | 48 | 3 |
| May .. .. .. .. | 1,996 | 437 | 203 | 1,400 | 17 | 5 | 27 | 14 | .. | .. | 16 | .. |
| June .. .. .. .. | 2,420 | 697 | 269 | 1,882 | 14 | 5 | 3 | 29 | .. | .. | 25 | .. |
| July .. .. .. .. | 2,260 | 591 | 460 | 2,185 | 8 | 7 | 24 | 16 | .. | .. | 27 | .. |
| August .. .. .. | 2,020 | 419 | 213 | 1,987 | 11 | 2 | 27 | 23 | .. | .. | 21 | .. |
| September .. .. .. | 2,433 | 498 | 253 | 1,943 | 14 | 12 | 31 | 14 | .. | .. | 40 | .. |
| October .. .. .. | 1,506 | 403 | 139 | 1,474 | 17 | 7 | 24 | 18 | .. | .. | 26 | 2 |
| November .. .. .. | 1,714 | 347 | 147 | 1,534 | .. | 7 | 17 | 12 | .. | .. | 35 | .. |
| December .. .. .. | 4,519 | 1,103 | 341 | 4,023 | 12 | 25 | 72 | 66 | .. | .. | 51 | .. |
| January .. .. .. | 2,636 | 578 | 259 | 1,765 | 4 | 6 | 26 | 34 | 2 | .. | 49 | .. |
| February .. .. .. | 1,947 | 338 | 160 | 1,222 | 9 | 7 | 17 | 23 | .. | 2 | 37 | .. |
| March .. .. .. .. | 2,046 | 439 | 182 | 1,205 | 11 | 18 | 16 | 21 | 1 | .. | 62 | .. |
| Total .. | 27,458 | 6,195 | 2,773 | 21,819 | 130 | 110 | 302 | 290 | 3 | 2 | 437 | 5 |

| 1885-86. | Total of signatures. | Unable to sign, but tally kept. | Total of visitors. | NUMBER OF | | Total of visitors. |
|---|---|---|---|---|---|---|
| | | | | Men and boys. | Women and girls. | |
| | 14 | 15 | 16 | 17 | 18 | 19 |
| April .. .. .. .. .. | 3,763 | 12,278 | 16,041 | 9,755 | 6,286 | 16,041 |
| May .. .. .. .. .. | 4,115 | 15,635 | 19,750 | 11,412 | 8,338 | 19,750 |
| June .. .. .. .. .. | 5,344 | 23,057 | 28,401 | 16,403 | 11,998 | 28,401 |
| July .. .. .. .. .. | 5,578 | 18,976 | 24,554 | 14,650 | 9,904 | 24,554 |
| August .. .. .. .. .. | 4,723 | 16,498 | 21,221 | 12,724 | 8,497 | 21,221 |
| September .. .. .. .. | 5,238 | 23,730 | 28,968 | 16,154 | 12,814 | 28,968 |
| October .. .. .. .. | 3,616 | 13,635 | 17,251 | 10,266 | 6,985 | 17,251 |
| November .. .. .. .. | 3,813 | 11,487 | 15,300 | 9,728 | 5,572 | 15,300 |
| December .. .. .. .. | 10,212 | 50,052 | 60,264 | 32,923 | 27,341 | 60,264 |
| January .. .. .. .. | 5,359 | 44,337 | 49,696 | 25,103 | 24,593 | 49,696 |
| February .. .. .. .. | 3,762 | 10,955 | 14,717 | 9,058 | 5,659 | 14,717 |
| March .. .. .. .. .. | 4,001 | 14,298 | 15,299 | 9,587 | 5,712 | 15,299 |
| Total .. | 59,524 | 251,938 | 311,462 | 177,763 | 133,699 | 311,462 |



GOVERNMENT OF MADRAS.

## REVENUE DEPARTMENT.

READ—the following paper:—

From EDGAR THURSTON, Esq., Superintendent, Government Central Museum, to the Secretary to Government, Revenue Department, dated Madras, 2nd July 1886, No. 431:—

ABSTRACT.—Submitting report on the working of the Government Central Museum during the year 1885-86.

ENCLOSURES.

### ADMINISTRATION REPORT OF THE GOVERNMENT CENTRAL MUSEUM FOR THE YEAR 1885-86.

INTRODUCTORY.—In the present report I am only able to speak from personal experience of the work which has been carried on during the latter half of the year, as I only took over charge of the Museum from my predecessor, Dr. Bidie, on October the 12th.

2. The proper work of the Museum was greatly retarded during the greater part of the year by the formation of a collection of artwares, jewelry, trade products, &c., of Southern India for the Madras Court of the Indian and Colonial Exhibition. I am, however, in the present instance reconciled to what would have otherwise been a great waste of time, inasmuch as Government has consented to my proposal, which was warmly supported by Colonel Hawkes, President of the Exhibition Committee, that at the close of the Exhibition a specified number of the articles exhibited by the Madras Government should be sent back from England and find a permanent place in the Central Museum, which will thus acquire a very handsome addition to its contents.

3. The rapid succession of Exhibitions in Paris, Sydney, Melbourne, Amsterdam, London (Fisheries), Calcutta and London (Indian and Colonial), to all of which collections were sent, has had a most disastrous effect on the working of the Central Museum, and it is most desirable that, in the event of any further Exhibitions taking place, the necessary work in connection with the collection of exhibits from the Madras Presidency should not be thrown upon the Museum, so that the entire staff may be occupied solely with proper Museum work, of which a great deal requires to be done in order that it may be brought up to the standard required of a well-organised Museum at the present day, and become a thorough index of the Presidency, where those who wish can obtain useful information.

4. It is wholly beyond the power or scope of a Presidential Museum to rival the great National Museums in the possession of representative collections from different quarters of the globe, and I have determined to devote my entire attention to the natural history, arts, ethnology, manufactures and raw products of Southern India, accepting only such specimens from other regions as may be sent as donations from time to time, and keeping them entirely apart from the main collections. The necessity of such a course is best illustrated by reference to the geological collection which, while abounding in a chaos of purchased and exchanged specimens of European fossils, is markedly deficient in specimens from the rich fossiliferous beds of the cretaceous system of Southern India.

5. As soon as I had ascertained for myself what line of action it would be necessary for me to carry out, so as to make the Museum more in accordance with my views, I applied to Government for a grant of Rs. 12,000, but, owing to the existing financial pressure, my application could not be acceded to. It, therefore, became necessary for me to make a more moderate estimate and to give up all idea of at present arranging the whole of the Museum collections on a more defined system than has hitherto been adopted; and as I had spent my first official tour in making a collection of fish from Cochin and other places on the West Coast, I decided to pay special attention during the present year to the fish gallery, and converting it into a properly-arranged gallery, illustrative of the marine and fresh water fauna of the Presidency.

6. VISITORS TO THE MUSEUM.—The usual statistical returns of the numbers of visitors during the year are given in Appendix B. The total number was considerably in excess of

that of preceding years, and I notice with pleasure an increase in the number of Gosha ladies who visited the Museum on the days set apart for them. The greatest number of visitors on any single day was 25,834, on December the 19th (Thwathasee).

7. Buildings.—During the last monsoon there was some leakage from the roofs of the lecture theatre and the new gallery which was attended to by the Department of Public Works. The pillars in the main hall were found to be constantly crumbling, and it was found necessary to dig out the chunam and substitute Portland cement, which was painted light blue. The roof is in a similar state and gives some trouble from the frequent dropping of chunam. The roof of the Curator's office still leaks considerably and will require attention. I brought the absence of a *porte-cochère* in front of the Superintendent's house before the notice of the Superintending Engineer on my arrival, and soon afterwards received plans, but I have since then heard nothing more on this subject. The repairs in the Head Taxidermist's house have not proved very satisfactory, as cracks have appeared in some of the walls, in which white ants have taken their abode. The two main gates of the Museum were repaired during the year.

8. Museum Grounds.—The Mahoganies mentioned in the last annual report were planted out, and the experiment is being tried of planting the faster-growing rain tree *Pithecolobium saman* by the side of them to act as nurses of the tender seedlings. Some seedlings of the giant *Bambusa katang*, *Bixa orellana* and *Erythroxylon coca* were also planted, but the last are not thriving. The *Nauclea cadamba* which was planted in 1881 flowered for the first time, but bore no fruit. Several of the palms which were set down a few years ago also flowered. The Andaman trees, presented by Captain Torrie, are all making satisfactory progress.

9. I purpose planting some fruit trees—mango, jack and cocoanut—in the grounds over several barren areas, which are not pleasant to look on.

10 Artist.—The artist was mainly occupied with making a series of drawings of impressions of seals attached to copper grants. These he did neatly and accurately.

11. Erythroxylon Coca.—Some correspondence passed between the Museum and a firm of Pharmaceutists on the extent of the cultivation of Coca in Southern India, and an interesting letter received from them was published in the Madras papers for the information of planters, which resulted in a number of inquiries on the subject from planters and others.

12. Establishment.—On retiring from office as Superintendent of the Museum, Dr. Bidie recommended the revision of the pay of several members of the subordinate staff, and this revision was sanctioned in G.O., Revenue Department, No. 131, dated 15th February 1886, by His Excellency the Governor in Council as noted in the annexed statement :—

| Appointment. | Present pay. | Proposed. | | |
|---|---|---|---|---|
| | | Minimum. | Maximum. | Number of yearly instalments. |
| | Rs. | Rs. | Rs. | Rs. |
| Assistant Curator ... ... ... ... | 30 | 30 | 60 | 5 |
| Herbarium-keeper ... ... ... ... | 45 | 50 | 50 | ... |
| Head Taxidermist ... ... ... ... | 50 | 60 | 60 | ... |
| Third Taxidermist ... ... ... ... | 14 | 15 | 15 | ... |
| Writer ... ... ... ... ... ... | 25 | 30 | 30 | ... |

In a letter (No. 194, dated 3rd March 1886), I further urged the claims of the Assistant Librarian, the third Taxidermist and the man in charge of the Superintendent's room, as deserving of an increase of salary, but sufficient time had not elapsed for a reply to be received to this letter before the end of the year.

13. Ethnology and Antiquities.—Some Buddhist sculptures (174 pieces) were presented to the Museum through Major H. H. Cole, being a portion of the sculptures discovered at two small Buddhist topes near Mian Khan, Eusofzai. The excavations were made for the Punjab Government. The sculptures were conveyed by rail to Madras at the rate of 6 pies a mile per truck and some of the finer pieces will be set up in the sculpture gallery of the Museum.

14. It having been desirable to make a collection as complete as possible of impressions of the seals of the South Indian dynasties, an appeal was made to the various Collectors for copies of any which are to be found in their districts. In response to this appeal a number of copies in wax, and other material, were received and have been figured by the artist.



15. The Museum is indebted to His Excellency the Governor for the donation of an old Dutch manuscript and to His Highness the Maharajah of Travancore for four shields.

16. Herbarium.—The Herbarium was repeatedly visited in the early morning by His Excellency the Governor between the months of November and March. The work of the Herbarium-keeper, Mr. T. Abboy Naidu, was retarded by the collection of raw products for the Indian and Colonial Exhibition. He, however, systematically arranged, according to Hooker's Flora of British India, natural order Acanthaceæ to Amaranthaceæ and natural order Ranunculaceæ to Labiatæ (extra Indian plants) according to the Genera Plantarum. In addition sixty-one plants were collected in Vellore, 59 plants mounted, and 150 Indian and 220 British plants poisoned.

17. Laboratory for the Government Mineralogist.—A proposal for the erection of a laboratory for the Government Mineralogist in the Museum compound was referred to me for my opinion thereon. The site which was originally selected I objected to for many reasons, but consented to the use of another site which was suggested in a different part of the compound. Subsequently, I was asked to try and find a building suitable for the requirements of the Government Mineralogist in the vicinity of the Museum, but was not successful in finding one.

18. Lecture Theatre.—The following lectures were given :—

| | |
|---|---|
| Captain Hayes ... ... ... | On horse management. |
| Edgar Thurston, Esq. ... ... | ,, sponges. |
| Do. do. ... ... | ,, corals. |
| Captain R. H. C. Tufnell ... | ,, musketry. |
| C. Michie Smith, Esq. ... ... | ,, cyclones. |

The lecture on musketry was given specially for members of the Madras Volunteer Guards. The other lectures were all well attended, and I was pleased to see that a large portion of the audience at the scientific ones was composed of native students.

The theatre was also used for the monthly meetings of the South Indian Branch of the British Medical Association.

19. Library.—The total number of visitors who came to consult books was 5,563 against 5,172 in the preceding year, being a monthly average of 463. That, if their duties allowed it, many more would use the books is shown by the greater number of visitors during the Christmas holidays than at any other time.

The following list shows the nature and number of books consulted during the year :—

| *Class of Books.* | *No. consulted.* |
|---|---|
| Anatomy and Physiology ... ... ... ... ... ... | 43 |
| Antiquities and Ethnology ... ... ... ... ... ... | 32 |
| Arts and Industries ... ... ... ... ... ... ... | 34 |
| Astronomy ... ... ... ... ... ... ... ... | 11 |
| Books for Juveniles ... ... ... ... ... ... ... | 17 |
| Botany and Economic Botany ... ... ... ... ... ... | 78 |
| Chemistry ... ... ... ... ... ... ... ... | 23 |
| Classics ... ... ... ... ... ... ... ... ... | 3 |
| Encyclopædias, Dictionaries, &c. ... ... ... ... ... | 130 |
| English Language and Literature ... ... ... ... ... | 110 |
| Fine Arts ... ... ... ... ... ... ... ... | 9 |
| General Science ... ... ... ... ... ... ... ... | 22 |
| Geography, Travels and Sport ... ... ... ... ... ... | 54 |
| Geology, Mineralogy and Palæontology ... ... ... ... | 23 |
| History and Biography ... ... ... ... ... ... ... | 81 |
| Hygiene and Dietetics ... ... ... ... ... ... ... | 13 |
| Law, Politics and Political Economy ... ... ... ... ... | 49 |
| Mathematics ... ... ... ... ... ... ... ... | 10 |
| Medicine and Surgery ... .. ... ... ... ... .. | 17 |
| Mental and Moral Science ... ... ... ... ... ... | 36 |
| Microscopic Science ... ... ... ... ... ... ... | 2 |
| Official Manuals and Reports ... ... ... ... ... ... | 33 |
| Oriental Languages and Literature ... ... ... ... ... | 144 |
| Physical Science ... ... ... ... ... ... ... | 32 |
| Religion and Mythology ... ... ... ... ... ... | 15 |
| Scientific Journals and Periodicals ... ... ... ... ... | 11 |
| Telegraphy and Stenography ... ... ... ... ... ... | 2 |
| Veterinary ... ... ... ... ... ... ... ... | 1 |
| Zoology ... ... ... ... ... ... ... ... ... | 60 |
| Miscellaneous ... ... ... ... ... ... ... ... | 17 |
| Newspapers, &c. ... ... ... ... ... ... ... ... | 4,451 |
| Total ... | 5,563 |

20. The total number of books added to the library during the year was 860 and they were acquired as follows :—

| | No. |
|---|---|
| Presented by Government ... ... ... ... ... ... | 144 |
| Do. by private individuals ... ... ... ... ... | 73 |
| Purchased ... ... ... ... ... ... ... ... ... | 156 |
| British Museum publications presented ... ... ... ... ... | 13 |
| Patent Office papers ... ... ... ... ... ... ... | 20 |
| Trübner's Oriental series ... ... ... ... ... ... ... | 5 |
| Fish library books purchased ... ... ... ... ... ... | 16 |
| Periodicals ... ... ... ... ... ... ... ... ... | 433 |

21. The number of books bound during the year was 99.

22. MADRAS HARBOUR AND BEACH.—Through the kindness of F. N. Thorowgood, Esq., Superintendent of Harbour Works, I have received many interesting specimens which were picked up during the diving operations. These include a red incrusting sponge, two other sponges, a zoanthus, several species of coral (gargonidæ) and a holothurian (sea cucumber). I have also obtained from the surface water in the harbour specimens of Salpa, Velella and Physalia (Portugese man-of-war) and from the beach a shell of Ostræa perforated by a boring sponge (cliona), a shell of Pinna Japanica with hydroids attached to it, and various other molluscan shells. Pieces of pumice stone have been repeatedly picked up on the shore, and I incline to the theory that they have drifted hither from Krakatoa. Similar pieces have been sent to me during the year, picked up on the shore of the West Coast at Calicut and Tellicherry.

23. NUMISMATICS.—Though a catalogue of the gold coins in the Museum collection had been issued, the arrangement of a great mass of silver and copper coins remained to be taken in hand. My first endeavour in this direction was to collect them all together and distribute them roughly into dynasties. This work was completed with the assistance of Captain R. H. C. Tufnell, who from his experience in Indian Numismatics was able to identify many issues to which I should have myself been unable to assign a place. The same gentleman then gave me great help in the arrangement of the different dynasties, and the Roman and Indo-Greek series are already completed. Among the former several coins of very considerable interest and value have come to light, notably an issue of Plautilla, wife of Caracalla, with Latin inscription PLAUTILLA AUGUSTA, and a fine green copper coin of Constantinus Magnus struck in London. The collection of Indo-Greek and Bactrian coins is not very rich, but I am in correspondence with a view to making it more complete. As the coins of each dynasty are arranged, I am compiling a manuscript catalogue, with a view to future publication, in which all issues, gold, silver, copper, &c., will find a place, but I propose to keep the gold coins, as at present, in the Museum strong box, and display the coins in silver and the baser metals in the body of the Museum, so that they may be seen by visitors without any special application.

24. As usual a large number of coins, amounting in all to 1,411, has been presented to the Museum during the year either by various societies or by private individuals. Among these I may specially mention a gold coin of the Gupta era presented through the Honorary Secretary of the Madras Literary Society, and a fine Rama Tanka presented by T. M. Scott, Esq., of Madura.

25. NATURAL HISTORY.—(1). *Arachnida.*—A large living spider (Mygale fasciata) was forwarded to the Museum from Hoonsoor where it was supposed to be causing death among the flocks. An experiment was made on a living sheep to see if the spider would produce any ill-effect on it, but the result proved negative, and the untimely death of the spider stopped any further experiments. I wrote requesting that some more living specimens should be sent to me, but at the end of the year none had arrived.

Mention was made in last year's annual report of a scorpion sent by H. R. P. Carter, Esq., living by preference in water. During the latter end of the year, I kept specimens of two other species of scorpion from Madras in jars containing some water, and though the animals were often seen above water on some stones which I placed in the jar, it frequently happened that they remained for long periods submerged beneath the surface of the water, so that our common scorpions may be considered amphibious in their habits. The subject is one which is worthy of study on the animals in their natural conditions.

(2). *Crustacea.*—My thanks are due to Dr. Henderson of the Christian College for naming many of the species contained in the Museum collection—a task which he was well qualified to carry out, as he has devoted special attention to this order in connection with the "Challenger" Expedition Collection.

(3). *Fish.*—In addition to a large number of fish obtained during my tour on the West Coast (q.v.) 8 specimens were sent to the Museum including a Gourami presented by R. Hollingsworth, Esq. From time to time various species of salted fishes were sent by the Salt Department for identification.

(4). *Insects.*—A large number of insects were sent to the Museum, among the most interesting of which were one which was proving destructive to the sugar-canes in North Arcot, and another

# Govt. of {1886} Madras.

## REVENUE.

*Issued*

*Recd.* *Encl.*

G.O., 23rd August 1886, No. 732.

AUGUST.

**Government Central Museum.**

Reviewing report of the — for the year 1885-86.