

Government of
EDUCATIONAL DEPARTMENT

G.O. No. 785, 18th July 1916

Government Museum

Recording with remarks the reports on the working of the —, the Marine Aquarium and the Cochin Public Library for the year 1915-16.

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பாதுகாப்பு பரிஷ-1

செப்பனிருபவர் பெயர் : அ. பாலசுந்தரம்

செப்பனிருபவர்க்கு எடுத்துக் கொடுக்கப்பட்ட நாள் : 19-7-1916

<u>26-7-1916</u>	<u>27-7-1916</u>	<u>28-7-1916</u>
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GOVERNMENT OF MADRAS

EDUCATIONAL DEPARTMENT

READ—the following paper :—

Letter—from J. R. HENDERSON, Esq., M.B., C.M., F.L.S., Superintendent, Government Museum.

To—the Secretary to Government, Educational Department.

Dated—Madras, the 3rd June/7th July 1916.

No.—308.

I have the honour to forward, for submission to His Excellency the Governor in Council, the report on the working of the Government Museum, the Marine Aquarium and the Connemara Public Library during the year 1915-16 and to request that I may be supplied with 200 copies for distribution to other museums, etc.

ENCLOSURE.

Administration Report of the Madras Government Museum, the Marine Aquarium and the Connemara Public Library for 1915-16.

VISITORS.—The numbers of visitors to the Museum during the year under review, as compared with the preceding year, were as follows :—

	1914-15.	1915-16.
Total number of visitors to the Old Building ...	347,243	410,080
Total number of visitors to the New Building ...	353,336	394,351
Largest number of visitors on a single day to the Old Building ...	42,659	51,728
Largest number of visitors on a single day to the New Building ...	45,707	72,145
Total number of visitors on Sundays to the Old Building ...	67,211	119,488
Total number of visitors on Sundays to the New Building ...	77,146	136,477
Total number of gosha female visitors (on the first Saturday in each month) ...	12,533	11,526

As usual Kannu Pongal (16th January) was the day on which the Museum was attended by the largest number of visitors.

Excluding the special festival days of Dwādasi and Kannu Pongal, the number of visitors (average of the two buildings) in the year under review was 306,116, against 279,190 in the preceding year and 315,627 the average of the five years ending with the preceding year.

2. BUILDINGS.—The detailed plans and estimate for the proposed extension on the southern side of the new building were returned countersigned to the Public Works Department in the beginning of August, but no orders have as yet been received. The need for extra accommodation is becoming increasingly evident. In more than one section of the Museum considerable difficulty is experienced in finding room for recent accessions and a continual rearrangement of earlier exhibits is thereby rendered necessary.

The Theatre was used on seventeen occasions, seven of these being performances of the Madras Amateur Dramatic Society and six amateur entertainments in aid of the Madras War Fund.

3. ESTABLISHMENT.—The Archaeological Assistant M.R.Ry. R. Srinivasa Baghava Ayyangar, M.A., who was appointed on probation, has been confirmed in the appointment. The Zoological Assistant's post having fallen vacant owing to the transfer of the permanent incumbent M.R.Ry. B. Sundara Raj, M.A., to the Fisheries

Bureau as Assistant to the Piscicultural Expert, M.R.Ry. D. W. Devanesan, M.A., (Zoology), Lecturer on Zoology in the Madras Christian College, was appointed on probation for one year.

I am pleased to record that the entire staff worked well during the year.

4. MUSEUM DEMONSTRATIONS.—The demonstrations to pupils of the higher classes of high schools in Madras city were continued from December to March. Three batches of twenty-five pupils each were conducted by the three Museum Assistants over special sections of the Museum on Monday and Tuesday afternoons. The total number of pupils who attended the demonstrations was 1,526.

As in the previous year a series of demonstrations conducted by myself was given to teachers in Madras schools, on Saturday forenoons from January to March. Ten demonstrations were held at which 154 teachers were present. Special demonstrations were also given to students and pupils of the Madras College for Women, the Doveton Girls' High School and other schools for girls.

The Curators of the Government Museum, Bangalore, and the Pudukkōttai State Museum were deputed by the respective authorities to study the arrangements in this Museum and acquire practical information. They were afforded all possible facilities during their visits.

5. ARCHAEOLOGY AND ART.—The Hindu and Jain exhibits, the rearrangement of which was completed last year, were identified and provided with labels.

The collection of prehistoric antiquities consisting chiefly of objects discovered by Mr. J. W. Brecks, a former Commissioner of the Nilgiris, in the cairns and barrows of those hills, was rearranged in show cases provided with a suitable cloth backing. Under instructions contained in G. O. Mis. No. 1038, Educational, dated 22nd September 1915, an offer to supply duplicate specimens of the extensive series of antiquities excavated by Mr. A. Rea at Adichanallūr, Tinnevely district, and Perumbair, Chingleput district, was made to the British Museum, London, the Royal Scottish Museum, Edinburgh, the University Museum of Archaeology and Ethnology, Cambridge, and the Pitt Rivers Museum, Oxford. Consignments were accordingly sent to the last three of these museums; and when a reply has been received from the British Museum, an application made on behalf of the Pudukkōttai State Museum will be considered. A set of duplicates was also supplied to Dr. H. Meerwarth for the Ethnographical Museum of the Imperial Academy of Sciences, Petrograd, in accordance with instructions conveyed in Government Memorandum No. 931-1, Educational, dated 15th March 1915. Two human skulls from Adichanallūr were sent to Professor G. Elliot Smith of the University of Manchester, and a brief report on them has been promised.

The second volume of the late Mr. R. Bruce Foote's Catalogue of the Collection of Indian Prehistoric and Protohistoric Antiquities, containing notes on the age and distribution of the exhibits, illustrated by sixty-four plates, was published during the year. Mr. A. Rea's Catalogue of the Prehistoric Antiquities from Adichanallūr and Perumbair, illustrated by thirteen plates, was also published.

The Archaeological Assistant during a tour in the Tinnevely district visited the village of Palaya Kāyal, near the mouth of the Tāmrāparni river, and obtained from an ancient site in the neighbourhood numerous fragments of Chinese porcelain, chiefly celadon. Kāyal was a seaport of considerable importance in the middle ages in connection with the pearl trade and was visited by Marco Polo in 1292 A.D.

The metal-ware collection in the Art Gallery was augmented by numerous purchases during the year.

Among the noteworthy additions to this section are the following :—

(1) A Veerakkal or hero-stone from Ipūru, Guntūr district, representing a mounted warrior and apsaras or heavenly nymphs ready to convey the hero's spirit to heaven.

(2) Stone figures of Sūrya, Sarasvatī, Subrahmanya, Bhairava, Dakshināmōrti and Chandikēswara, discovered by a ryot in a field at the village of Mullan-gudi, Tanjore district, and acquired under the provisions of the Treasure Trove Act.

(3) Copper images of Rāma, Lakshmana, Sītā, Hanumān and Vishnu with his two wives, found in a field at Vadakkupayanūr village, Tanjore district, and acquired under the Treasure Trove Act. They are of considerable artistic merit and constitute an important addition to the collection of South Indian "bronzes." The figures are of unusual size, that of Rāma measuring 3 feet 4½ inches in height, while the tallest figure previously in the collection is a Natesa measuring 3 feet 2 inches.

(4) Copper image of a goddess, as yet unidentified, with an attendant female figure, found in the village of Sirugamani, Trichinopoly district, and acquired under the Treasure Trove Act.

(5) Copper image of Sivakāmi Amman (Pārvati) found in the village of Jāmbuvānōdai, Tanjore district, and acquired under the Treasure Trove Act.

(6) A copper figure having the form of a man in front and of a woman behind, found at Sokkanāthanputtūr village, Rāmnād district, and acquired under the Treasure Trove Act. Mr. Longhurst of the Archaeological Survey writes concerning this unusual find:—"I am inclined to think the figure is a votive image representing a Chief or Rāja who was killed in battle and whose wife committed sati, the image representing their union in death. The style of both figures is the usual type of hero and sati carved on the virakkals and mahasatikals of the sixteenth century, which generally represent chiefs or captains of the Vijayanagar period and the wife or wives who committed sati on their funeral pyre."

(7) A set of copper plates strung on a ring, with a very worn seal, presented by M.R.Ry. Togarchedu Ramabhadrayya Garu of Nandyāl, through the Assistant Archaeological Superintendent for Epigraphy, Southern Circle. The plates which are dated 690 A.D. record a grant by the Western Chalukyan king Vinayāditya Satyāsraya, the son of Vikramāditya I, of certain rights in a village to a Brahman in celebration of a victory. The contents were published by Dr. Fleet in the *Indian Antiquary*, volume VI, page 55 (1877).

(8) An iron cage received from the Taluk Office, Chōdavaram, Vizagapatam district, in which the body of Asidhōra, Mokhāsādār of Pedamadina, was exhibited to public view after execution. This man murdered the Sheristadar of the Collector of Vizagapatam in March 1837, and an account of the incident will be found in the Vizagapatam District Gazetteer.

The Archaeological Assistant made two tours, one in the Tanjore district and the other in the Madura and Tinnevely districts.

6. NUMISMATICS.—The following coins were acquired under the provisions of the Indian Treasure Trove Act:—

(1) An extremely large and important find of gold coins from the village of Kōdūr, Nellore district. The first discovery of this treasure was made, in March 1913, by a villager who while digging in a field found a copper vessel containing a large number of gold coins. He for some time concealed the find, but information reached the local Tahsildar who recovered most of the first lot and as the result of further excavations on the spot unearthed three more vessels which were also filled with coins. The bullion value of the treasure is estimated at about one and one-third lakhs of rupees (nearly £9,000 sterling) and three-fourths of the find, which under the Treasure Trove Act became the property of Government, were forwarded to the Museum by the Collector of Nellore. The great majority of the coins are irregular concave discs averaging over 54 grains in weight, with numerous hand-punched impressions which frequently overlap and are practically confined to the concave surface. They are similar to coins which were attributed by Dr. Hultzsch to the Western Chalukyan dynasty (*Indian Antiquary*, volume XXV, page 321, plate II, figures 28 and 29, 1896), but the find also contained several of the well-known "Gajapati" or elephant pagodas, which are probably referable to the Ganga dynasty of Mysore, and a few of the large thin concave gold coins which Dr. Hultzsch attributed to the Eastern Chalukyas. As an examination of the coins disclosed the existence of numerous variations in the hand-punched inscriptions in Dāvanāgarī, old Telugu and other scripts, I have suggested to Government the desirability of having them examined by the Assistant Archaeological Superintendent for Epigraphy.

(2) A Roman gold coin found in the village of Kalikīnāyakanpāliayam, Coimbatore district. It is a solidus of the Emperor Justinianus (527-565 A.D.) and is of special interest because there do not appear to be any previous records of the discovery of coins of this emperor in India. The following is a description:—

Obv. Head of emperor, crowned with a gemmed diadem. D.N. IUSTINIANVS P.P. AVG.

Rev. Victory with a long cross in the right hand and an orb and cross in the left hand. VICTORIA AVGGG. S. In the exergue COXOS.

(3) Seventy-six gold fanams and one-hundred and eighty-five similar coins in silver or impure gold, found at Singaidhorapālem, Vīravillī taluk, Vizagapatam district. They are similar to coins attributed by Dr. Hultzsch to the Ganga dynasty of Kalinganagara and were probably struck in the eleventh century. Some appear to belong to undescribed types.

Specimens of the coins from Singaidhorapālem, have been distributed to the Indian Museum, Calcutta, and other institutions in accordance with the rules to regulate proceedings under the Indian Treasure Trove Act (appended to G.O. No. 604, Public, dated 26th July 1907).

A few Indo-Danish coins in lead and silver were purchased locally, all of them being issues of the Tranquebar mint. It may be as well to warn numismatists that numerous forgeries of Indo-Danish lead coins have recently emanated from Tranquebar. Some of these are difficult to detect because they have been formed by deepening the lines on genuine but worn-out coins from which the original design has almost entirely disappeared. Any lead coin in superfine condition, received in recent times from Tranquebar, should be viewed with suspicion. There are other forgeries which any one with a competent knowledge of Indo-Danish coins should be able to detect.

To the Governments of the United Provinces, Central Provinces, the Punjab and Assam, to the Bombay Branch of the Royal Asiatic Society, and to the Darbārs of Nāgod, Jambugoda and Rewah, the Museum is indebted for coins presented to it in the course of the year.

7. ETHNOLOGY.—Some of the transparencies of the different castes and tribes of South India, which were formerly exhibited on screens, were arranged on windows in the corridor behind the Ethnological Gallery, as a result of which they are now seen to better advantage.

Among the additions made to this section were the following:—

(1) A model of a hut, ornaments, weapons, fire-producing apparatus, etc., used by certain hill-tribes in Travancore, presented by the Travancore Government from their section at the Madras Exhibition held in December and January.

(2) A Sālagrāma or fossil ammonite worshipped by Vaishnavite Hindus in all parts of India, added to the collection of articles used in religious worship.

8. ECONOMIC AND BOTANICAL.—A number of economic products, together with photographs of growing plants and methods of manufacture adopted in the case of various economic products, were added to the collection. Among the economic products added were the following:—

(1) Samples of fish oils, fish guano, etc., prepared by the Madras Fisheries Bureau; sunn-hemp stems, fibre, twine, a fishing-net and spindles for twisting sunn-hemp twine, from Calicut. All these exhibits were presented by the Fisheries Bureau.

(2) A large specimen of the inner bark of the Upas tree (*Antiaris toxicaria*) used for clothing and for making bags and paper; specimens of the Bamboos *Ochlandra travancorica*, *Oxytenanthera bourdillonii*, and *Bambusa arundinacea*. These were presented by the Travancore Government from their section at the Madras Exhibition.

(3) A water-bucket hollowed out of the root end of a palmyra trunk, used in a picotah or water-lift in the neighbourhood of Madras.

The larger timber specimens were rearranged and classified, as a result of which timbers introduced into South India and those which are of special value are now exhibited in separate groups. Descriptive labels were added to all the tree sections and a few of the larger timber specimens. The manuscript of a Catalogue of South Indian Timbers in the Museum has been sent to the press.

Additional specimens of fruits, tubers, etc., in formalin have been exhibited on a bracket round a pillar in the Economic Gallery.

Certain forest products, such as timbers, etc., including two large sections of teak and rosewood were lent to the Forest section of the recent Madras Exhibition. At the request of the Principal, Teachers' College, Saidāpet, photo-negatives of South Indian economic products were lent for the purpose of making lantern slides for the use of the students of the college.

The manuscript of a Catalogue of the Building Stones of South India, prepared by Mr. J. Watson of Cambridge and based on the collection presented in 1914 by the Government of Madras to the Sedgwick Museum of that University was revised at the request of the author.

In the Botany Gallery a large section of teak, measuring over twenty feet in girth, has been used to illustrate the great age of certain trees. The annual rings indicate that the tree from which the section was obtained had attained an age of about five hundred years when it was felled in the Cochin teak forests, and its circumference at each hundred years of growth is shown on the section. The dates of some of the leading events in South Indian history have also been indicated near the corresponding points of growth in the tree.

9. GEOLOGY AND MINERALOGY.—Among the more important additions to this section are the following:—

(1) A large sheet of smoke-coloured mica (phlogopite) from the Nellore district, lent by His Excellency The Right Hon'ble Lord Pentland, P.C., G.C.I.E. It is exhibited as a transparency.

(2) Large blocks of coal from the Singareni coal-field, Hyderabad State, presented by Messrs. Best & Co., Limited, Madras.

A large geological map of the Madras Presidency, with the various formations indicated in colour, has been fixed on the wall at the end of the gallery.

A few cretaceous fossils from the Trichinopoly district were incorporated with the collection.

10. NATURAL HISTORY.—Many additions were made to this department in the course of the year of which the following may be specially referred to:—

(1) The following mammals new to the collection:—An unusual variety of the Giant-squirrel (*Ratufa indica*) from the Eastern Ghats, Nellore district; the Smooth Indian Otter (*Lutra macrotis*) from Cannanore; and two bats, *Pipistrellus ceylonicus* from Calicut and *Megaderma spasma*, var. *trifolium* from Dharmadam, Malabar.

(2) The following birds new to the collection:—Franklin's Wren-Warbler (*Franklinia gracilis*), Verditer Flycatcher (*Stoparola melanops*), Common Pied Bush-chat (*Pratincola caprata*) and Rufous-tailed Finch-Lark (*Ammomanes phoenicea*), all from the Nallamalai Hills, Kurnool district; the Pale Harrier (*Circus macrurus*) from Singaperumalkoil, Chingleput district; the Besra Sparrow-Hawk (*Accipiter virgatus*) from Madras city; the Roseate Tern (*Sterna dougalli*), the Panayan Tern (*Sterna anastheta*), and the Sooty Tern (*Sterna fuliginosa*), all from Rameswaram Island or its vicinity; and the Little Egret (*Herodias garzetta*) from Madras city.

(3) A number of reptiles new to the collection among which may be mentioned:—a river tortoise (*Kachuga testum*, var. *intermedia*) from the lower reaches of the Gōdāvari; the lizards *Gonatodes kandianus* from Trichūr and Chālakudi, Cochin State, *Gonatodes gracilis* from the Sirumalai Hills, Madura district, and *Hemidactylus reticulatus* and *Ophiops jerdoni*, both from the Nallamalai Hills, Kurnool district; and the snakes *Dendrophis grandoculis* from Kavalai, Cochin State, and *Hydrophis obesus* from the Chilka Lake, Ganjam district.

(4) Numerous species of fish new to the collection, obtained chiefly from the Marine Aquarium, and a young Saw-Fish (*Pristis cuspidatus*) from the lower reaches of the Gōdāvari river.

To Mr. D. A. D. Aitchison, Principal, Madras Veterinary College, the Museum is indebted for a number of interesting specimens, including six different birds of prey obtained in a Madras compound, one of which has not been previously recorded from the district. The contributions of sportsmen and others are always welcome, for it frequently happens that even common species, particularly of birds, are useful to replace old and faded ones in the collection.

A case containing the collection of South Indian frogs, toads and cælians was added to the Reptile Gallery and it was largely added to in the course of the year. In the adjoining students' section an exhibit was arranged to show the chief modifications of the mammalian foot.

A collection to illustrate the more important types of South Indian insects is under arrangement in the Arthropod Room and will be added to gradually as additional specimens become available. A wall-case showing the various stages in the life-history of the Tussa Silk-moth (*Antheraea paphia*) was placed in the same room.

The following exhibits illustrating the habits and natural surroundings of South Indian animals have been prepared during the year:—

(1) A pair of the Large Brown Flying Squirrel (*Petaurista philippensis*) with nest-hole in the trunk of a tree, from South Coorg.

(2) Both sexes of the Magpie Robin (*Copsychus saularis*) with nest and eggs in an earthenware pot fixed on a tree branch.

(3) Both sexes of the Roseate Tern (*Sterna dougalli*) with their eggs laid in a simple depression on the sand, from Rameswaram Island.

(4) Group of Night Herons (*Nycticorax griseus*) with nest and eggs and the parent-bird feeding her young in another nest, from Triplicane, Madras.

(5) A pair of the Common Indian Night-jar (*Caprimulgus asiaticus*) with their eggs laid on the bare ground, from Red Hills, Madras.

(6) Group of Chunam Frogs (*Rhacophorus maculatus*) with the mucous nest in which the eggs are enclosed fixed to a leaf hanging over water, from the Museum compound.

These realistic groups which are among the most popular exhibits in the Museum take up a considerable amount of space, and for this reason will unfortunately have to be discontinued. The overcrowding already referred to in this report is nowhere more apparent than in the Natural History Section, and with the space at present available little more can be done than to add sparingly to the general collections.

A male specimen of the Great Indian Spider (*Paciliotheria formosa*) captured in a Madras cotton mill and not previously known to occur in the locality, lived for nearly six months in the vivarium. A constant supply of interesting live animals, mostly snakes, was as usual maintained, and this collection always attracts a considerable amount of attention.

11. MARINE AQUARIUM.—The total number of visitors during the year under review and the amount realized in entrance fees were 105,670 and Rs. 3,769 against 90,623 and Rs. 3,309 in the previous year. The largest number of visitors on any single day was 4,801 on Kattu Pongal (16th January).

Details for the admissions are given below, the ordinary entrance fee being one anna in the forenoon and half an anna in the afternoon:—

	Morning.	Afternoon.	Total.
Gosha days (last Monday of each month) ...	141	1,176	1,317
Other days ...	12,059	92,004	104,063
Students admitted at the concession rate of half an anna each in the morning ...	77	...	77
Visitors specially admitted at four annas each (when the Aquarium was closed to the public).	68	94	162
Zenana visitors admitted at one rupee each under special arrangements (when the Aquarium was closed to the public) ...	6	45	51
Total			105,670

The general health of the fish continued to be good throughout the year.

12. CONNEMARA PUBLIC LIBRARY.—The total number of readers during the year was 20,581 against 20,412 in 1914-15:—

Largest number of readers in a day	198
Smallest number of readers in a day	18
Largest number of readers on Sunday	175
Smallest number of readers on Sunday	21

The number of standard works added to the Library was 500 of which 465 were purchased and the rest presented.

The fifth supplement to the Library Catalogue of Books under Authors' Names (comprising accessions from the 1st April 1912 to 31st March 1915) was published during the year.

A statement of the number of books issued to readers during the last two years arranged under subjects, is subjoined:—

	1914-15.	1915-16.
Anatomy; biology; natural history; zoology	1,214	1,275
Anthropology; folklore	397	407
Archæology; architecture	408	426
Arts; industries	1,062	1,142
Atlases; maps	82	96
Belles lettres	5,324	5,622
Botany; arboriculture; horticulture	407	432
Chemistry; agriculture; photography	312	327
Classics	197	204
Dictionaries; encyclopedias; gazetteers; manuals	7,308	7,429
Economic products	362	408
Education; ethics; logic	1,015	1,236
Exhibitions	16	32
Forestry; timbers	84	119
Geography; physical geography; physiography	168	185
Geology	146	139
History	5,014	5,672
Jurisprudence	418	436
Medicine; surgery; pathology	349	419
Microscopy	15	12
Mineralogy; metallurgy	184	208
Natural philosophy	737	816
Numismatics; medals; heraldry	93	104
Philology; epigraphy	1,315	1,492
Photographs	217	225
Physiology	344	327
Public health	75	62
Religion	1,826	1,976
Sport and games	247	252
Travels; voyages	208	235
Vernacular languages	61	73
Fort St. George Gazette (other than current issues)	1,087	1,274

13. UNIVERSITY LIBRARY.—The total number of readers during the year was 6,456 as against 3,046 in 1914-15, and 9,076 volumes were consulted as against 4,204 in the previous year.

The privilege of taking books on loan from the Library against a deposit of Rs. 20 was claimed by 91 University readers as against 36 in 1914-15, and 2,699 volumes were consulted in this way as against 985 in the previous year.

Manuscript slips for a Supplementary Catalogue of Books under Authors' Names were prepared during the year and are now in the press.

14. VALUABLE STOCK.—The necessary inventory was maintained and duly checked.

The usual list of donations and statement of expenditure are appended.

APPENDIX A.

DONATIONS, 1915-16.

Aitchison, M.B.O.V.S., Mr. D. A. D.—

- Mongoose (*Mungos mungo*).
- Horse's hind foot.
- Cow's hind foot.
- Besta Sparrow-Hawk (*Accipiter virgatus*).
- Brahminy Kite (*Haliastur indus*).
- Shikra (*Astur badius*).
- Small Minivet (*Pericrocotus perigrinus*).
- Crested Honey-Buzzard (*Pernis cristatus*).
- Booted Eagle (*Hieratus pennatus*).
- Common Pariah Kite (*Mitrus gonidia*).
- Orchid Mantis (*Gongylus gongyloides*).
- All from Madras.

Annandale, Dr. N.—

- Porifera
- Laxosuberites lacustris*—Chilka Lake.
- Spongilla alba*, Carter—Chilka Lake.
- Cirripedia
- Balanus amphitrite*, var. *communis*, Darwin—Ennore.
- Polysoa

Membranipora hippopus, Levinson—Ennore.

Mollusca

- Nassodonta insignis*, H. Ad.—Cochin backwater, near Ernakulam.
- Nassodonta gravellyi*, Preston Do. do.
- Meretrix ovum*, Hanley Do. do.
- Cuspidaria annandalei*, Preston Do. do.
- Corbicula cochinchensis*, Preston Do. do.
- Pyrgulma humilis*, Preston Do. do.
- Meltrix casta*, Chem. Ennore backwater, Madras.
- Modiola taprobanensis*, Preston Do.
- Snake (*Hydrophis obscurus*) from Rambha Bay, Chilka Lake.

Assistant Superintendent, Archaeological Survey, Indian Museum, Calcutta—

- Five copper coins (Ādivaraha) found in the Nagod State.
- Five silver coins of Madanavarman of the Chandella Dynasty found in the Rewah State.

Beardsell, Mr. W. A.—

- Nest of Small Minivet, Madras.
- Black scorpions [*Heterometrus (Palamneus) swammerdami*], Madras.

Best and Co., Ltd., Messrs.—

- Samples of Singareni coal.

Birch, Mrs. A. R.—

- Snake (*Lycodon striatus*), Madras.

Cartwright, Mr. C. L.—

- Snake (*Oligodon subgriseus*), Madras.

Central Provinces, Director of Agriculture—

- Fourteen rupees of Shah Ālam II, found in the Sangor district.
- Gold coin of Chandra Gupta II, found in the Damoh district.
- Two gold Padma Tankas, found in the Akola district.
- Rupee of Shah Ālam II, found in the Sangor district.

Chengalroya Narudu, Mr. M.—

- Tussa Silk Moth (*Anthera paphia*) and its eggs, Madras.

Coimbatore, Principal, Agricultural College—

- Common otter (*Lutra lutra*), Coimbatore.

Corporation of Madras—

- Comb duck or Nukta (*Sarcidornis melanotos*).
- Kangaroo (*Macropus* sp.).
- Leopard (*Felis pardus*).
- Smooth Indian Otter (*Lutra macrodus*), from Cannanore.
- Orang-utan (*Simia satyrus*)

- Fernandez, Mr. J. C.—
Skink (*Mabuia carinata*), from the Museum compound.
- Fraser, The Hon'ble Mr. Gordon—
Snake (*Dipsadomorphus trigonatus*).
Snake (*Lycodon aulicus*).
Snake (*Lycodon striatus*).
All from Madras.
- Govardhendas Devji, Mr.—
Great Indian Spider (*Psecilotheria formosa*), Madras.
- Greenall, Mr. R.—
Cobra (*Naia tripudians*), Madras.
- Hannington, I.C.S., Mr. F.—
Flying lizard (*Draco dussumieri*).
Collection of butterflies.
Fetus of Indian elephant.
All from Coorg.
- Heiberg, Rev. Knud—
Caterpillar of a hawk-moth, Madras.
- Henderson, I.C.S., Mr. C.—
Giant oricket (*Schizodactylus monstruosus*), Rajahmundry, Godavari district.
- Holman, Mr. D.—
Fish (*Pterois miles*), Madras.
- Honorary Director of Fisheries, Madras—
Fish oils, fish guano, etc.
Sunn-hemp fibre, twine, fishing net, etc.
- Iyappa, Mr. B.—
Leaf insect (*Phyllium* sp.), South Coorg.
- Lahore Central Museum, Curator—
Thirteen copper coins of Audumbara and Kharosthi, found in the Kangra district.
- Linki, Mr. H. N.—
Locust eggs, from Bostan, Quetta.
- Loganadha Mudaliar, Mr. M. L.—
Cockroach (*Stylopyga rhombifolia*).
Brown Hawk-Owl (*Ninox scutulata*).
House-sparrow (*Passer domesticus*).
All from Madras.
- Mitchell, Mr. H. H. G.—
Muræid fish (*Gymnothorax favagineus*), Madras.
- Nellore, the Collector of—
Earthen pots and broken pieces of copper vessels, which contained gold coins, found at Kōdūr.
- Ramabhadrayya, Mr. Togarehedu—
A set of three copper plates belonging to the reign of the Western Chalukya King Vinayaditya Satyasraya.
- Rangoon, Pasteur Institute of Burma, Director—
Worm (adult specimen of *Gordius*), found in Maymye, Burma.
- Royal Asiatic Society, Bombay Branch—
Four rupees of Aurangzeb, Muhammad Shah, Ahmed Shah and Alamgir II, found in the Ahmednagar district.
- Shillong, Assam Coin Committee—
Gold coin found in the Sibsagar district.
Ten early silver coins of Bengal found in the Sylhet district.
- South Canara, the Collector of—
Twenty-five iron cannon balls, found in the compound of the Taluk Office, Coondapoor.
- Spink, Miss L.—
Caterpillar of a sphinx moth, Madras.
- Srinivasa Raghava Ayyangar, M.A., Mr. R.—
Local unburnt bricks.
- Stoney, Mr. R. F.—
Wing and head of Swinhoe's Snipe (*Gallinago megala*), Madura.
Crustacean (*Theus orientalis*, Fabr.), Dhanushkōdi.
- Subrahmanya Aiyar, Mr. T. S.—
Live Pangolin (*Manis crassicaudata*), Yethāpur, Salem district.

- Sundara Raj, M.A., Mr. B.—
Tortoise (*Kachuga tectum*, var. *intermedia*).
Do. (*Emyda granosa*, var. *intermedia*).
Saw fish (*Pristis cuspidatus*).
All from the lower reaches of the Godavari.
- Superintendent, Archaeological Survey, S.C.—
Nine copper coins chiefly of North Indian Native States.
Veerakkal from Ipūru, Guntūr district.
- Superintendent, Archaeological Survey, W. C.—
Twenty-two silver coins of Mahmūd I, and Muzaffar II, found in the Jambugoda State, Rewa Kantha Agency.
- Tirunarayana, Mr. M. O.—
Snake (*Tropidonotus stolidus*), Madras.
- Todhunter, Mrs. O. G.—
Snake (*Tropidonotus stolidus*), Madras.
Scorpion with young ones (*Buthus tamulus*), Madras.
- Tracy, D.D., Rev. J. E.—
Land shells from the Palni Hills.
- Travancore Government, Forest Department—
Model of a hut, ornaments, weapons, etc., of the hill-men of Travancore.
Bamboo specimens.
Bark of Upas tree (*Anhars toxicaria*).
- United Provinces Government—
Thirty-one billon coins of Sikandar Lodi and Bahlol Lodi, found in the Hardoi district.
Two copper coins of Akbar, found in the Hardoi district.
Fifty-three coins of Wajid Ali Shah, Muhammad Ali Shah of Oudh, Amjad Ali Shah II, Shah Alam II, Nasir-ud-din Haider of Oudh and Ghazi-ud-din Haider, found in the Rae Bareilly district.
Three rupees of Akbar, Shah Jahān, and Aurangzeb, found in the Kheri district.
Nineteen Moghul rupees of Aurangzeb, Muhammad Shah, Ahmad Shah Bahādur and Alamgir II, found in the Tehri district.
Two rupees of Muhammad Shah, found in the Bara Banki district.
Four rupees of Akbar, found in the Banda district.
Two gold coins of Gāngāyā Dēva of Chedi, found in the Hardoi district.
Gold coin of Gōvinda Chandra of Kanaūj, found in the Rae Bareilly district.
Six rupees of Shah Jahān, found in the Pilibhit district.
Five silver coins of Islam Shah and Akbar, found in the Jhānsi district.
Three copper coins of Alā-ud-din, Muhammad, Firoz III and Firoz Tughlaq, found in the Hardoi district.
Eighteen Oudh copper coins of Nasir-ud-din Haider and Ghazi-ud-din Haider, found in the Lucknow district.
Ten Oudh rupees of Nasir-ud-din Haider, Ghazi-ud-din Haider and Muhammad Ali Shah, found in the Lucknow district.
- Vizagapatam, the Collector of—
Old iron cage from the Taluk office, Chōdāvaram.
- Walker, Mr. G. K.—
Pale Harrier (*Circus macrurus*).
Mottled Wood-Owl (*Syrnium ocellatum*).
Small Indian Civet (*Fiverricula malacensis*).
All from Singaperumalkōil, Chingleput district.
Indian Palm Civet (*Paradoxurus niger*), Madras.
- Walker, Mrs. G. K.—
House scorpion (*Buthus tamulus*), Madras.

APPENDIX B.

Classified List of Expenditure of the Government Museum, Connemara Public Library, and the Marine Aquarium, during the year 1915-16.

GOVERNMENT MUSEUM AND CONNEMARA PUBLIC LIBRARY.

	Actuals, 1915-16. RS.	Revised estimate, 1915-16. RS.
Salaries—		
Superintendent	9,550	9,550
Local allowance	420	420
Total	9,970	9,970
Permanent establishment, Government Museum—		
Zoological assistant, herbarium-keeper, archaeological assistant, head clerk, second clerk, third clerk, writer, assistant writer, senior and second taxidermists and 31 peons—41 persons	10,636	10,700
Permanent establishment, Connemara Public Library—		
Sub-librarian, three attendants and three peons	3,012	3,080
Total, Establishment	13,648	13,780
Allowances—		
Travelling allowance	219	550
Total, Allowances	219	550
Supplies and Services—		
Cost of specimens purchased on tour	1,800	
Objects of interest and coins purchased at headquarters	1,740	
Fittings, furniture, etc., for the collection	2,476	
Cost of books and publications		
Library		
Lithographic plates	Nil.	7,400
Ammunition	2	
Charges for feeding live animals	215	
Expenses—reading coins	2	
Cost of indented Europe stores	922	
Cost of locally-purchased stores	94	
Freight on Europe stores	160	
Electric lights and fans	211	
Total, Supplies and Services	7,622	7,400
Contingencies—		
Purchase and repair of furniture	82	
Tour charges	Nil.	
Cleaning charge	406	
Postage and telegraph charges	126	
Telephone charges	150	9,800
Rents, rates and taxes	6,326	
Office expenses	1,576	
Hot and cold weather charges	Nil.	
Pay of menials	945	
Miscellaneous	29	
Total, Contingencies	9,640	9,800
Total, Government Museum and Connemara Public Library	41,099	41,500

MARINE AQUARIUM.

	Actuals, 1915-16. RS.	Revised estimate, 1915-16. RS.
Permanent establishment, Marine Aquarium—		
Head-keeper, second-keeper, third-keeper and two door-keepers—5 persons	974	948
Total, Establishment	974	948
Supplies and Services—		
Food for animals	1,004	
Fittings, etc., for the collection	248	
Cost of locally-purchased stores	4	1,400
Cost of indented Europe stores	80	
Freight on Europe stores	Nil.	
Total, Supplies and Services	1,336	1,400
Contingencies—		
Rents, rates and taxes	176	
Postage and telegraph charges	Nil.	
Office expenses	199	
Purchase and repair of furniture	3	
Miscellaneous	21	2,052
Pay of menials	1,579	
Cleaning charges	Nil.	
Tour charges	Nil.	
Total, Contingencies	1,978	2,052
Total, Marine Aquarium	4,288	4,400
Grand Total	45,387	45,900

Order—No. 785, Educational, dated 18th July 1916.

Recorded.

2. The thanks of the Government are due to the persons who made donations to the Museum during the year.

(True Extract)

P. RAJAGOPALA ACHARIYAR,
Secretary to Government.

To the Superintendent, Government Museum.
" Director of Public Instruction.
" Public Department.
" Revenue Department.
" Accountant-General.
" Director-General of Archaeology (with C.L.).
Editors' Table.

ORDINARY.

PRESS SLIP.

URGENT (a).

Book II—38—3-14.

DEPARTMENT.

Current No. dated 191

G.O. No. 785, dated 18-7-1916

Number of MS. pages sent

(b) Correspondence
(b¹) Notes

Brief subject

(c) Number of copies required when struck off (not including copies for columns and editors' table which are retained in the Press).

(b) E. T. copies to supply requisitions for purchase by the public.

Complete correspondence and orders.

Notes.

FOR RECORD.

Madras Records	4	25	
City Records		7	
For filing with original			
Total		30	

FOR ISSUE.

Letter only	Complete G.O.	Special issue copies of G.O.		Notes
		No.	Papers.	
India Office	6			
Govt. of India				
Revenue Department	6			
Public Works Department				
Local and Municipal Department				
Educational Department				
Public Dept.	6			
Judicial Dept.				
Political				
Financial Dept.				
Marine Dept.				
Ecclesiastical Dept.				
Total				

Signature copies

The	S. R. M.	200	
The	S. P. J.	6	
The	1-3	4	
The			
The			
The			
The			
The			
The			
The			
The			
Total		210	

INSTRUCTIONS FOR THE SECRETARIAT.

(a) If a paper is marked to be printed urgently, the Superintendent of the section concerned should sign the Press slip. The Superintendent should exercise a careful discretion in the matter.

(b) Each letter, memorandum, or order, or set of orders, in the file of correspondence should be headed in succession with the Roman numeral I, II, III, etc., the number being written in red ink or blue chalk above the item. The particular papers to be printed in the special issue-copies should be indicated by the Roman numeral (I, II, etc.) by which that item has been headed in the correspondence file. All matter, including marginal remarks or references, to be printed should be written in ink and matter which should not be printed should be encircled. Initials and signatures that are not quite legible should be re-written distinctly.

(b) For rules regarding printing of notes, see rule 315 of the office Manual.

(c) The number of copies and the details of distribution should be filled in by the Superintendent or Referencer concerned.

(d) In the absence of special instructions to the Press to keep matter standing for a specified period, ordinary papers of 8 pages and under will be kept standing for one week, and larger papers for two weeks only. The type of notes and of all confidential papers is distributed immediately after striking.

(e) This slip, properly and completely filled in, should accompany every paper sent to Press; it will be returned by the Press when proofs are furnished; it should be sent to the Press when a call is made for revised proofs or when a corrected proof is sent for striking. When finally returned by Press it should be filed with the original order or letter.

INSTRUCTIONS FOR THE PRESS.

(a) If, in the opinion of the Superintendent of the Press, a paper has been marked urgent unnecessarily, he should send the Press slip to the Registrar with a remark to that effect.

(b) Unless a note to the contrary is made against the matter, pencil entries should not be printed. The Superintendent of the Press may bring to the notice of the Registrar any instance of incomplete or careless editing.

(c) Signature copies of letters to the Secretary of State or to the Government of India should be printed on hand-made paper.

(d) This slip should be returned by the Press to the Secretariat when proofs are furnished; it will be sent back to the Press when proofs are returned corrected and should be finally returned to the Secretariat when struck-off copies are supplied.

(e) The names of the Secretary and Members should be printed in full when they occur on the right-hand side, only the first time when they appear on the left side, the initials alone being printed later.

*(Press Clerk).

*(Press Despatcher).

* To be initialed and dated.

[P.T.]

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 Me S. C. m.
 D. P. J.
 Pub. ~~Sept~~
 Rev. ~~Sept~~
 A. S.
 Director, ~~Quarrel~~
 Archaeology (with C. L.)

