

Government of Madras

HOME DEPARTMENT (EDUCATION)

G.O. No. 968, 24th July 1917

Government Museum

Recording, with remarks, the report on the working of the —, the Marine Aquarium and the
Connemara Public Library for the year 1916-17.

INDEXED

ORIGINAL

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Recording, with remarks, the report on the working of the —, the Marine Aquarium and the Connemara Public Library for the year 1916-17.

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, Home (Education) Department.

Dated—Madras, the 7th July 1917.

No.—346.

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 1916-17 and to request that I may be supplied with 135 copies for distribution to other museums, etc.

ENCLOSURE

ADMINISTRATION REPORT OF THE MADRAS GOVERNMENT MUSEUM, THE MARINE AQUARIUM AND THE CONNEMARA PUBLIC LIBRARY FOR 1916-17

I was on privilege leave for three months from 5th June when Mr. H. Dodwell acted for me without prejudice to his duties as Curator, Madras Record Office. My thanks are due to him for the efficient manner in which he carried on the work during my absence.

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

	1915-16.	1916-17.
Total number of visitors to the Old Building ...	410,080	392,627
Total number of visitors to the New Building ...	394,351	361,689
Largest number of visitors on a single day to the Old Building ...	51,728	51,572
Largest number of visitors on a single day to the New Building ...	72,145	54,587
Total number of visitors on Sundays to the Old Building ...	119,488	66,250
Total number of visitors on Sundays to the New Building ...	136,477	57,816
Total number of gosha female visitors (on the first Saturday in each month) ...	11,526	12,216

As usual Kattu Pongal (16th January) was the day on which the Museum was attended by the largest number of visitors. The apparent fall in the number of visitors on Sundays is accounted for by the fact that in 1916 Kattu Pongal fell on a Sunday.

Excluding the special festival days of Dwādasi and Kattu Pongal, the number of visitors (average of the two buildings) in the year under review was 290,813 against 306,116 in the preceding year and 306,747, the average of the five years ending with the preceding year.

3. BUILDINGS.—The detailed plans and estimates for the proposed extension on the south side of the New Building have been approved and at the time of writing this report the work of construction is in progress. While this additional space will do much to relieve the congestion of exhibits which was referred to in the last Annual Report, the difficulty of finding room for recent accessions is increasing in other sections of the Museum and more particularly in the zoological section.

The Theatre was used on nineteen occasions, eleven of these being performances of the Madras Amateur Dramatic Society and three concerts of the Madras Musical Association.

4. ESTABLISHMENT.—The Zoological Assistant's post having fallen vacant owing to the resignation of M.R.Ry. D. W. Devanesan, M.A., M.R.Ry. H. Chennappaia, M.A. (Zoology), L.T., was appointed on probation for one year.

I regret to record the premature death in October of the third clerk R. Ramamurti Sastri, after a service of about four years.

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

5. MUSEUM DEMONSTRATIONS.—The demonstrations to pupils of the higher classes of high schools in Madras City were continued from November 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 2,355.

As in previous years 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 210 teachers were present.

An electric lantern with the necessary accessories was received towards the end of the year, and with its aid it is hoped to develop a scheme for the delivery of popular lectures at the Museum. A considerable number of lantern slides, illustrating Museum exhibits, has already been prepared.

6. HISTORY.—Several cannon received from the Arsenal, Fort St. George, in 1897, were provided with labels during the year. Among these are four old European cannon taken at Mandalay in the third Burmese war of 1885, two of which bear the arms of the House of Orange and one of the latter the date 1602. As three of the cannon bore Burmese inscriptions estampages were sent to Mr. C. Duroiselle, Assistant Archaeological Superintendent for Epigraphy, Burma, and I am indebted to that gentleman for translations which reveal information of some interest. They record the fact that the cannon were captured at Dvārawatī, a former capital of Siam, by Sinbyuyin, King of Burma, who subjugated Siam in 1767 A.D. In the course of the investigation it was discovered that some of the inscriptions are in old Siamese characters, and as estampages have been sent to Bangkok it is hoped that their decipherment may carry the history of these much travelled weapons still further back. Two cannon which were probably brought to Madras as trophies after the first China war of 1842, are furnished with Chinese inscriptions, for a translation of which I am indebted to Mr. Taw Sein Ko, I.S.O., C.I.E., Superintendent, Archaeological Survey, Burma. The inscriptions state that the cannon were made by Yen, Viceroy of the Min-Che Provinces, and Liu, Governor of Fuchien, and were placed at Amoy in the fifth month of the twenty-first regnal year of the Chinese Emperor Tao Kuang (corresponding to June 1841).

7. ARCHAEOLOGY AND ART.—Selections of duplicate specimens of the prehistoric antiquities excavated by Mr. Rea at Adichanallūr, Tinnevely district, and Perumbāir, Chingleput district, were sent to the British Museum, London, and the State Museum, Pudukkottai. A few duplicate South Indian stone implements were sent to Professor L. White King, C.S.I., for the Dublin University Museum.

At the request of the Director-General of Archaeology in India, the Bhattiprolu relic which was ordered to be delivered to him, for restoration to the Buddhist community, in G.O. Mis. No. 472, Educational, dated 1st May 1916, is retained in the Museum till the question of its disposal has been finally settled. This fragment of bone, one of the few remaining relics of the Buddha, was discovered by Mr. Rea during his excavations at the Bhattiprolu stupa, in the Kistna district, and forwarded to the Museum in 1892.

A catalogue of the extensive series of copper-plate inscriptions in this Museum is almost ready for the press.

Mr. G. Yazdani, M.A., Superintendent of Archaeology, His Highness the Nizam's Dominions, spent some time during November in studying the "ownership" marks on prehistoric pottery in the Museum collections.

The metal-ware collection was augmented by numerous purchases during the year, among which may be mentioned koftgari and steel articles from Trivandrum and Sivaganga respectively, purchased at the loan Exhibition of objects of Indian Art, held at Madras in February last.

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

(1) An inscribed memorial stone commemorating the greatness of Viddērasi (Vidyārasi), a Pasupata or Saivite teacher who lived at Tagadūr, an old name for Dharmapuri, Salem district, obtained by the Archaeological Assistant during a tour in the district. It contains two figures of the teacher placed on either side of a linga, one in the attitude of worshipping Siva and the other practising Siva yoga. The inscription, which is in old Kanarese and undated, gives a description of the ancient town of Tagadūr and extols the virtues of the teacher. This valuable acquisition to the Museum may on paleogeographical grounds be ascribed to the eighth century, A.D.

(2) Stone figures of a Nāgini, Sūrya, a Saivite saint, and a mukhalinga from a ruined Saivite temple at Jōti, Cuddapah district, sent at the instance of the Superintendent, Archaeological Survey, Southern Circle.

(3) A stone figure of Krishna from the Krishna temple at Vijayanagara, Bellary district, sent by the Superintendent, Archaeological Survey, Southern Circle. An inscription in the temple states that it was built by Krishna Dēva Rāya in 1513 A.D., for an image of Krishna which he removed from a temple in the hill fortress at Udayagiri, Nellore district, on his expedition against Orissa. The figure which is about two feet in height is carved out of a block of dark green chlorite, and Mr. Longhurst who believes that it is the one taken from Udayagiri, writes—"as a rule all the images at Hampi are hopelessly mutilated, probably by the Muhammadans after the battle of Talikōta. The darkness of the sanctum alone, has saved this historic image from utter destruction."

(4) A nāgakkal (snake-stone) from Puttūr village and a veerakkal (hero-stone) from Adamānkottai, near Dharmapuri, obtained by the Archaeological Assistant during a tour in the Salem district.

(5) An erect marble figure of Buddha, unfortunately headless, from a ruined stupa at Vidyādharaपुरam, near Bezvada.

(6) Copper images of Natēsa, Sivakāmēundarī, Somāskanda, Pārvaṭi, Chandrasēkhara and his wife, Mōhini, and Chandikēśvara, from Belūr, Salem district, acquired under the Treasure Trove Act. They are of considerable artistic merit. The pedestal of Natēsa, which appears to have been made later than the image, bears an inscription in Tamil, "a gift by several (persons) to the God of Tandōmi in the Kali year 4611," a date corresponding to 1510 A.D. This is the first example of a copper or bronze image carrying a date which has reached the Museum.

(7) Copper images of Varadarāja (Vishnu) and his two wives found in the village of Perunthōttam, Tanjore district, and acquired under the Treasure Trove Act.

(8) Copper images of Kāmākshi, Durgā, Pārvaṭi, Bhairava, Ganēsa, and Mānikavāsagar, for use in household worship, found in the Tanjore district and acquired under the Treasure Trove Act.

(9) A set of five copper plates strung on a ring, with a massive seal bearing in relief the Chālukyan bear and the legend "Sri-Tribhuvanāṅkusa," from the Collector's office, Masulipatam, and received from the Assistant Archaeological Superintendent for Epigraphy, Southern Circle. The plates record the grant by Chālukya-Bhima I, who ruled from 888 to 918 A.D., of the village of Vedatalūru to forty-six Brahmins, on the occasion of the nityasāddha of his son who was killed in battle at the age of sixteen.

(10) A set of five copper plates strung on a ring with a worn seal, dug up in the village of Peravali, Guntūr district, received from the Collector through the

Assistant Archaeological Superintendent for Epigraphy. The plates record a grant by the eastern Chālukyan King Vishnuvardhana V, *alias* Vishamasiddhi, who ascended the throne in 843 A.D., of the village of Randuballi to a Brahman on the occasion of a solar eclipse.

(11) A set of three copper plates found at the village of Peravali and received from the Collector of Guntūr through the Assistant Archaeological Superintendent for Epigraphy. The plates which are undated record the grant by the Eastern Chālukyan King Vishnuvardhana III, of the village of Māvinthipalli to a Brahman. Records of this king who reigned from 709 to 746 A.D. are extremely rare.

(12) A number of prehistoric cornelian beads found in the Pālgāt taluk and forwarded by the Sub-Collector, and a set of prehistoric quartz and chalcedony beads found in Travancore and presented by Mr. E. Masillamani.

The Archaeological Assistant toured in the Salem, Coimbatore and Kistna districts.

8. NUMISMATICS.—Under orders contained in Government Memorandum No. 4399/15-4, Public, dated 21st June 1916, the Archaeological Assistant was deputed to assist the Assistant Archaeological Superintendent for Epigraphy, Southern Circle, in the examination of the large find, numbering over 16,000, of gold coins concerned in the Kōdūr Treasure Trove case which is referred to in the last Annual Report. The majority of these coins are attributed by Mr. Krishna Sastri to the Telugu-Chola chiefs who ruled during the thirteenth century in the modern Nellore and Cuddapah districts. His report on the find was forwarded to me and I have submitted suggestions for the distribution of the coins.

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

(1) A very important find of eleven Roman gold coins, discovered by Mr. J. Craig Harvey in the course of excavations in the compound of the Madura Mills at the town of Madura. These aurei of which there are nine varieties, all new to the Museum collection, were struck by the Roman emperors Claudius I, who reigned from 41 to 54 A.D., Nero from 54 to 68 A.D., and Domitian from 81 to 96 A.D.; they include a rare aureus of Antonia the mother of Claudius, struck during the reign of her son, and another commemorating Claudius and his wife Agrippina. Seven of the coins have been defaced by a slight cut across the emperor's head, but they are otherwise in fine condition. The following are descriptions of the coins :—

- (i) *Obv.* Laureate head of Antonia to right. ANTONIA AVGVSTA.
Rev. Standing female figure, emblematic of Constasy, with a staff in the right hand and a cornucopia in the left hand. CONSTANTIAE AVGVSTI.
- (ii) *Obv.* Laureate head of Claudius to right. TI. CLAVD. CAESAR AVG. GERM. P.M. TRIB. POT. P.P.
Rev. Wreathed head of Agrippina to right. AGRIPPINAE AVGVSTAE.
- (iii) *Obv.* Laureate head of Claudius to right. TI. CLAVD. CAESAR AVG. GERM. P.M. TR. P.
Rev. Seated female figure (Constasy?). CONSTANTIAE AVGVSTI.
- (iv) *Obv.* Laureate head of Claudius to right. TI. CLAVD. CAESAR. AVG. P.M. TR. P. VI. IMP. XI.
Rev. S.P.Q.R. P.P. O.E. C.S., all within a wreath.
- (v) *Obv.* Laureate head of Claudius to right. TI. CLAVD. CAESAR. AVG. P.M. TR. P.X. IMP. P.P.
Rev. Winged Victory pointing with caduceus to a serpent. PACI AVGVSTAE.
- (vi) *Obv.* Head of Nero to right. NERO CAESAR AVG. IMP.
Rev. EX. S.C. within a wreath. PONTIF. MAX. TR. P. II. P.P. in the margin.
- (vii) *Obv.* Head of Nero to right. NERO CAESAR AVG. IMP.
Rev. Helmeted warrior to right, holding a globe (?). PONTIF. MAX. TR. P. VIII. COS. III. P.P. In the field EX. S.C.

(viii) *Obv.* Head of Nero to right. NERO CAESAR AVG. IMP.
Rev. Helmeted warrior to left. PONTIF. MAX. TR. P. VIII. COS. III. P.P. In the field EX. S.C.

(ix) *Obv.* Laureate head of Domitian to right. IMP. CAES. DOMITIANVS AVG. P.M.
Rev. Helmeted head (Minerva?) to left. TR. POT. IMP. II. COS. VIII. DES. IX. P.P.

(2) A gold pagoda of Haidar Ali, found in the village of Ganapathipalayam, Coimbatore district.

(3) Fourteen French Arcot rupees, struck at Pondicherry, and three rupees of Tipu Sultan, struck at Seringapatam, found in the village of Pottireddipatti, Trichinopoly district.

(4) Twenty-six Moghul rupees, struck for Southern India at the Imtiazgarh (Adōni) and other mints, found in the village of Nagatūr, Kurnool district.

(5) Thirteen Bahaduri fanams of Haidar Ali, three Ikkeri fanams and fourteen fanams of similar type, found in the village of Bommarbettu, South Kanara district.

Specimens of the coins from Pottireddipatti, Nagatūr and Bommarbettu 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).

The Museum is indebted to Mr. P. E. Pieris, C.C.S., District Judge, Jaffna, for copies of the rare copper masses of Chōdaganga Deva and Nissanka Malla of Ceylon.

To the Governments of the United Provinces, the Central Provinces, and Bengal, the Bombay Branch of the Royal Asiatic Society, and to the Darbar of Gwalior, the Museum is indebted for coins presented to it in the course of the year.

9. TEXTILES.—The exhibits in the Fabric Room have been completely rearranged in the course of the year. By adopting, in place of the old table-cases, a series of new flat erect cases, on both sides of which the exhibits are arranged under glass, it has been found possible both to economize space and to show the objects to better advantage. Space has now been found for the palampores which were formerly displayed on the walls of the Art Gallery, but had to be removed as they were deteriorating in consequence of exposure, and for a number of other fabrics stored away for lack of room. All the exhibits are being provided with descriptive labels.

A series of specimens illustrating the manufacture of a block-printed palampore, together with the materials at present used in block-printing at Masulipatam, was added to the collection. The method followed in this locality is briefly as follows :—

The cloth is first mordanted in a solution of myrobalans and milk. The required designs are then printed on the cloth by means of wood-blocks dipped in a paste of either Indian gum-arabic and iron dissolved in jaggery water, which gives a deep black print, or gum-arabic and alum in ordinary water, giving a lighter print. The cloth is next washed and immersed in a solution of chay-root (*Oldenlandia umbellata*) and twigs of *Woodfordia floribunda*, as a result of which a slight red colour is imparted to the fabric. Then certain parts are coloured blue by the wax method. All the parts not intended to be blue are covered with melted wax by means of a special pen or brush and the cloth is immersed in a solution of indigo. As a result the parts not covered by the wax are dyed blue while the rest is unaffected. The wax is afterwards removed by plunging the fabric in hot water. The green and yellow portions of the design are now added by hand-painting and a solution of certain galls from the leaves of the myrobalan tree (*Terminalia chebula*) is used for the purpose. Finally the cloth is washed in a solution of alum.

10. ETHNOLOGY.—The collection of miscellaneous ethnographic objects, including votive offerings, etc., was rearranged and furnished with descriptive labels.

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

(1) Models of huts, weapons, domestic utensils, etc., together with photographs of the Mala Arayans and Mannans, hill tribes of Travancore, obtained from Travancore.

(2) A model of a hut, wearing apparel, implements, etc., of the Chenchus, from Kondapalli, Kistna district.

(3) Metal yantras with cabalistic figures used by Māppillas in sorcery, from Malabar.

(4) Slings made of vegetable fibre, used by boys watching fields in the Gōdāvari Agency Tracts.

(5) Fire-making sticks made of the wood of *Cordia myxa*, used by Yānādis, from Nellore.

11. ECONOMIC AND BOTANICAL.—Two tours were made by the Herbarium Keeper, one to Travancore in October and the other to the Kistna district in March. They resulted in numerous additions to the economic and botanical sections, and a number of new photographs were added to the series illustrating growing plants and the methods of manufacture adopted in the case of various economic products.

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

(1) From Travancore, exhibits connected with the manufacture of stearine from the seeds of the piney varnish tree (*Vateria indica*); the fibrous bark of *Acacia intea* used as a soap-substitute, and the fibres of the bamboo *Ochlandra travancorica* used for paper-making and of *Spatholobus roxburghii* used for ropes and bowstrings; the resin of *Ailanthus malabarica* used as incense and of black dammar (*Canarium strictum*) used as a medicine and varnish.

(2) From the Kistna district sunn-hemp fibre, and rope, gunny-bag and canvas made from the same; a brush made from the leaves of the wild date palm (*Phoenix sylvestris*); samples of the wood of *Gyrocarpus jacquini* used in the manufacture of Kondapalli toys and of *Givotia rotleriformis* used by the Madras Pencil Factory for the cheaper kind of pencils; a receptacle or basket for a kavadi vessel made of the twigs of a *Jasminum*; and a toy-model made at Kondapalli showing the local method of hulling rice.

(3) To the Director of Industries, Madras, the Museum is indebted for a series of specimens illustrating the manufacture of pencils from the wood of pencil cedar (*Juniperus procera*) from East Africa. One set represents the stages from the crude graphite to the finished pencil lead, while another shows the stages from the slat to the "Star of India" pencil. Slats and pencils made of South Indian woods (*Givotia rotleriformis* and *Gmelina arborea*) were also included in the selection.

(4) A series of silk moths (*Bombyx mori*), eggs, cocoons, and samples of silk and silk cloth, presented by the Manager of the Salvation Army Tata Silk Farm, Bangalore.

(5) A model of a country hand-loom with a piece of cloth woven on it, made at Triplicane, Madras.

In the Botany Gallery the work of remounting the old herbarium specimens was completed during the year and new ones have also been added. Among the additions to this gallery may be noted a specimen of rattan cane (*Calamus rotang*) nearly forty feet in length, and an abnormal cocconut inflorescence showing viviparous growth, both from Travancore, and polished specimens of fossil wood from Tiruvakkara, South Arcot district.

A catalogue of the extensive collection of timber specimens, with brief notes on the distribution and uses of the different woods, was published during the year.

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

(1) Graphite crystals, phlogopite mica, mica monazite pegmatite, fine monazite from mica monazite pegmatite, coarse monazite, pyrrhotite, zircon and garnet, all from Travancore, presented by Mr. E. Masillamani.

(2) Molybdenite in quartz, apatite stained with molybdenite ochre, and allanite, presented by Mr. R. H. A. Johnston, Madras Survey, Trichinopoly.

(3) Concretionary sandstone with ferruginous bands of limonite and haematite, also sandstone showing cavities formed by pebbles, etc., kept rotating by eddies of running water, from Tiruvakkara, South Arcot.

An index collection of South Indian rocks was added to the Mineral Gallery during the year.

13. NATURAL HISTORY.—Owing to the increasing difficulties in regard to space there were fewer additions to this section than in former years, and it was not found possible to add to the popular series of exhibits showing animals in their natural surroundings. A large number of new labels were prepared during the year and practically all the exhibits in the Fish and Reptile Galleries were relabelled. Two tours were made, one by the Second Taxidermist to the Kistna district in December, and a short one by the Zoological Assistant to Chingleput in March. Among the more important additions the following may be noted :—

(1) The following mammals new to the collection :—Both sexes of the langūr or Hanūmān monkey (*Presbytis entellus*), and the Bengal monkey (*Macaca rhesus*), both from the Kistna district.

(2) The following birds new to the collection :—The Yellow-headed Wagtail (*Motacilla citreola*), the Blue-headed Wagtail (*Motacilla flava*) and the large Egret (*Herodias alba*), all from the Kistna district, and Richard's Pipit (*Anthus richardi*) from Chingleput.

(3) Several reptiles new to the collection among which may be mentioned :—A carapace of the large fresh-water turtle (*Ohitra indica*), from the Tanjore district, forming the first record of this species for the Madras Presidency; a lizard (*Lygosoma travancoricum*) from the Palni Hills; and specimens of the pond tortoises, *Emyda granosa*, var. *intermedia*, from the Gōdāvari river and *Geoemyda trijuga*, var. *plumbrea*, from Coorg. Eggs of pond tortoises (*Emyda granosa*, var. *vittata*, and *Geoemyda trijuga*) were also added to the collection.

A preparation of the sternal regions of the frog (*Rana*) and the toad (*Bufo*), to show the firmisternal and arciferous conditions, has been exhibited for the use of students.

The Museum is indebted to Mr. F. Hannington, I.C.S., Commissioner of Coorg, for a selection of butterflies from Coorg, which included a number of species new to the collection.

In the Vivarium a large black scorpion (*Palamnaeus swammerdami*) gave birth to twelve young ones in June, and as in the case of the smaller scorpions carried them on her back. A snake (*Tropidonotus stolicus*) laid two eggs in July.

14. MARINE AQUARIUM.—The total number of visitors during the year under review and the amount realized in entrance fees were 106,641 and Rs. 3,795 against 105,670 and Rs. 3,769 in the previous year. The largest number of visitors on any single day was 4,182 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)	175	1,472	1,647
Other days	12,366	92,339	104,705
Students admitted at the concession rate of half an anna each in the morning...	47	...	47
Visitors specially admitted at four annas each (when the Aquarium was closed to the public) ...	130	89	219
Zenana visitors admitted at one rupee each under special arrangements (when the Aquarium was closed to the public).	23	...	23
			106,641

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

The Aquarium building was constructed on a low level so that it might not form too conspicuous an object on the foreshore of the Marina. As a result of this considerable inconvenience is experienced in wet weather by rain water flowing in from the outside and also rising through the floor. On the day after the heavy storm of the 22nd November last, water lay to the depth of nine inches in the main hall.

15. CONNEMARA PUBLIC LIBRARY.—The total number of readers during the year was 22,776 against 20,581 in 1915-16 :—

Largest number of readers in a day	...	...	...	...	233
Smallest number of readers in a day	...	...	...	...	22
Largest number of readers on a Sunday	...	...	...	...	186
Smallest number of readers on a Sunday	...	...	...	...	32

The total number of readers is the highest ever reached in a single year since the Library was opened to the public.

The number of standard works added to the library was 136, of which 101 were purchased and the rest presented. The decrease in the number of books purchased, as compared with preceding years, is due to the fact that a large consignment which was due in the latter part of the year was lost at sea, and although the order was repeated it was not possible to receive the second consignment before the close of the year.

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

	1915-16.	1916-17.
Anatomy ; biology ; natural history ; zoology	1,275	1,686
Anthropology ; folklore	407	468
Archæology ; architecture	426	495
Arts ; industries	1,142	1,484
Atlases ; maps	96	106
Belles lettres	5,622	7,749
Botany ; arboriculture ; horticulture	432	567
Chemistry ; agriculture ; photography	327	438
Classics	204	417
Dictionaries ; encyclopædias ; gazetteers ; manuals	7,429	8,062
Economic products	408	513
Education ; ethics ; logic	1,236	1,844
Exhibitions	32	68
Forestry ; timbers	119	140
Geography ; physical geography ; physiography	185	203
Geology	139	168
History	5,672	6,787
Jurisprudence	436	503
Medicine ; surgery ; pathology	419	465
Microscopy	12	19
Mineralogy ; metallurgy	208	239
Natural philosophy	816	848
Numismatics ; medals ; heraldry	104	122
Philology ; epigraphy	1,492	1,865
Photographs	225	247
Physiology	327	365
Public health	62	72
Religion	1,976	2,068
Sport and games	252	312
Travels ; voyages	235	265
Vernacular languages	73	108
Port St. George Gazette (other than current issues)	1,274	1,365

16. UNIVERSITY LIBRARY.—The total number of readers during the year was 8,402 as against 6,456 in 1915-16, and 11,213 volumes were consulted as against 9,076 in the previous year.

The privilege of taking books on loan from the Library against a deposit of Rs. 20 was claimed by 133 University readers as against 91 in 1915-16, and 3,778 volumes were consulted in this way as against 2,699 in the previous year.

A Supplementary Catalogue of Books under Authors' Names, brought up to the end of 1916, was published at the end of the year.

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

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

APPENDIX A

DONATIONS, 1916-17.

- Assistant Archaeological Superintendent for Epigraphy, Southern Circle—
A set of five copper plates belonging to the reign of the Eastern Chālukyan King Chālukya-Bhima I, from Kistna district.
A set of five copper plates belonging to the reign of the Eastern Chālukyan King Vishnuvardhana V (Vishamasiddhi), from Guntūr district.
A set of three copper plates belonging to the reign of the Eastern Chālukyan King Vishnuvardhana III, from Guntūr district.
- Assistant Superintendent, Archaeological Survey, Indian Museum, Calcutta—
Twenty-eight copper coins of the later Chahamana Princes of Narwar, found in the territory of His Highness the Maharaja Sindhia of Gwalior.
- Bengal Government—
Twelve Bengal silver coins of Shams-ud-din Ilias, Sikandar-bin-Ilias and Ghias-ud-din Azam, found in the Khulnā district.
Rupees of Muhammad Shah and Alamgir II, found in the Khulnā district.
- Bobbili, The Maharaja of, G.C.I.E.—
Pheasant tailed Jacana (*Hydrophasianus chirurgus*).
- Bower, Mr. G. N.—
Avocet (*Recurvirostra avocetta*), Kottapatam, Guntūr district.
- Browne, M.A., Rev. C. H.—
Russell's Viper (*Vipera russelli*), Perambūr.
- Cammie, B.A., B.L., Bar-at-Law, Mr. L. A.—
Slings used by boys watching fields in Gōdāvari Agency Tracts.
Articles used in sorcery by Māppillas.
Seventeen copper coins (Muhammadan dubs), from Nimmalagūdem, Gōdāvari district.
- Campbell, Mr. H. N. C.—
Stone-Curlew (*Oedinenus scolopax*), Singaperumalkōil, Chingleput district.
- Central Provinces, Director of Agriculture—
Two rupees of Farrukhsiyar, found in the Betul district.
Rupee of Akbar II, found in the Saugor district.
- Chatterton, Mr. F.—
Green Turtle (*Chelone mydas*), Madras.
- Corporation of Madras—
Japanese Bear (*Ursus arctus*).
Asiatic two-horned Rhinoceros (*Rhinoceros sumatrensis*).
Black swan (*Chenopus atrata*), Australia.
Leopard (*Felis pardus*).
Young and adult specimens of Black Bear (*Melursus ursinus*), South India.
Demoiselle Crane (*Anthropoides virgo*).
Pea-hen (*Pavo cristatus*), partial albino, from Baroda State.
- Director of Industries, Madras—
Series of exhibits connected with the manufacture of pencils made from the wood of pencil cedar (*Juniperus procera*) of East Africa.
Slats and pencils made from the woods of *Givotia rottileriformis* and *Gmelina arborea*.
- Director, Zoological Survey of India, Calcutta—
Fresh-water lamellibranch shells.
Lamellidens marginalis, subsp. *corrianus* (Lea), Madras.
Parreyisia corrugata (Müll.), Gadur, Nellore district.
Parreyisia corrugata, var. *nagaporensis* (Lea), Nellore district.
Parreyisia wynegungaensis (Lea), Gōdāvari River.
Nodularia caeruleus (Lea), Pimpri, S. India.
Lamellidens marginalis (Lam.), Kurnool district.
Corbicula regularis, Prime, S. India.
Corbicula striatella, Desh. S. India.
Veloria delicatula, Preston, Cochin backwater, near Ernakulam.
- Dwane, Mr. H. M.—
Tussa silk Moth (*Antheraea paphia*), Madras.
- Fernandez, Mr. J. O.—
Nest of the Purple-rumped Sun-bird (*Arachnechthra zeylonica*), from the Museum compound.
- Fraser, The Hon'ble Mr. Gordon—
Krait (*Bungarus candidus*), Madras.
- Ghatalah, Mr. M. H. P.—
Chrysalises (*Euplexa core*), Banganapalle, Kurnool district.
- Gibson, Dr. F. Maitland—
Fish (*Macrones cavasius*, *Macrones keletius*, *Barbus dorsalis*, *Barbus vittatus*), from the Corporation Water-works, Madras.

- Hannington, I.C.S., Mr. F.—
Collection of Butterflies, Coorg.
- Health Officer, Corporation of Madras—
Scorpion (*Palamneus swammerdami*), Madras.
- Johnston, Mr. R. H. A.—
Pieces of allanite, Trichinopoly.
Specimen of molybdenite in quartz, South India.
Fragments of apatite stained with molybdenite ore, South India.
- Kanakasabhapati, Mr. R.—
Abnormal seedlings of coconut, Travancore.
- Lokanatha Pillai, Mr. M.—
Snake (*Macropisthodon plumbicolor*), Kuppam, North Arcot district.
- May, Mrs. K.—
Russell's Viper (*Vipera russelli*), Madras.
- Masilamani, B.A., A.N.C.S., A.R.S.M., Mr. E.—
Prehistoric beads (agate, quartz, etc.), found in Travancore.
Travancore minerals:—
Graphite crystals, Velland.
Garnet, Tadagamalai.
Phlogopite mica, Pallapallam.
Mica monazite pegmatite, near Thadicanconum.
Monazite from mica monazite pegmatite, near Thadicanconum.
Monazite, Tadagay hills.
Pyrrhotite, Tadagamalai.
Zircon, Keelcolam.
- Narasinga Rao, M.A., Mr. T. V.—
Egg-case of Mantis on a grass (*Aristida setacea*), Madras.
- Organs, Mrs. F. K.—
Scorpion (*Palamneus swammerdami*), Madras.
- Pieris, C.C.S., Mr. P. E.—
Masses of Chōdaganga Deva and Nissanka Malla of Ceylon.
- Ross, Mr. T. M.—
Eggs of Pond Tortoise (*Geomyda trijuga*), Madras.
- Royal Asiatic Society, Bombay Branch—
Two rupees of Muhammad Akbar II, found in the Kaira district.
A gold padma tanka of Sri Rama, found in the West Khāndesh district.
Two gold coins of Jagadekamalla, found in the East Khāndesh district.
Rupee of Aurangzeb.
- Salvation Army Tata Silk Farm, Bangalore—
Series of exhibits connected with the manufacture of silk.
- Scott, Mrs. A.—
Mantis (*Gongylus* sp.), Madras.
- Shanmukham, Mr. V.—
Scorpion with young ones (*Buthus tamulus*), Madras.
- Smith, Rev. R. M. Langdale—
Great Indian Spider (*Pacilotheria regalis*), Vellore.
- Stoney, Mr. R. F.—
Spider (*Gasteracantha* sp.), Nilgiris.
Millipede, Nilgiris.
Coffee Locust (*Aularches miliaris*), Cochin.
Moth (*Himantopterus caudatus*), do.
An operculate land-shell, do.
- Subba Rao, Mr. K.—
Spider (*Herennia ornaticissima*), Kodukūr, South Arcot district.
- Sundara Raj, M.A., Mr. B.—
Lizard (*Chersia dorsalis*), Anantapur.
Lizard (*Hemidactylus giganteus*), Anantapur.
Eggs of doves, Chittoor.
Carapace of Fresh-water Turtle (*Chitra indica*), from the Coleroon lower anicut, Tanjore district.
Toad (*Bufo melanostictus*), Madras.
Young turtles (*Trionyx leithii*) from Tungabhadra river, Kurnool district.
Eggs of two species of Tern and of the small Indian Pratincole (*Glareola lactea*), Kurnool district.
Eggs and nest of Spotted-billed Duck (*Anas pacilorhyncha*), Sarvepalli, Nellore district.
- Superintendent, Archeological Survey, Southern Circle.—
Stone images of Nagini, Sūrya, a saint and a mukhalinga, from the ruined Saivite temple at Jōti, Cuddapah district.

- Krishna image from the Krishna temple at Vijayanagara, Hampi ruins, Bellary district.
- Tinnevely, the Collector of—
Dutch challee, Tiruchendūr, Tinnevely district.
- Tuke, Deaconess—
Snake (*Lycodon auticus*), Madras.
- United Provinces, Government of—
Five rupees of Ghāzi-ud-din Haidar and Nasir-ud-din Haidar, found in the Hardoi district.
Benares rupee of the East India Company, found in the Benares district.
Copper coin of Islam Shah, found in the Pilibhit district.
Three silver coins of Farrukhsiyar and Muhammad, found in the Meerut district.
Three rupees of Farrukhsiyar, found in the Farrukhabad district.
Twenty-five silver coins of Aurangzeb, Farrukhsiyar, Shah Alam, Jahāndār and Muhammad Shah, found in the Fatehpur district.
Nine bronze coins of Hasan Shah of Jaunpur, found in the Ghazipur district.
Ten rupees of Shah Alam II, found in the Banda district.
Six rupees of Shah Jahān, Aurangzeb and Farrukhsiyar, found in the Gorakhpur district.
Four rupees of Shah Alam II, found in the Allahabad district.
Seven copper coins of Firoz III, found in the Farrukhabad district.
Rupee of Nasir-ud-din Muhammad of Delhi, found in the Moradabad district.
Four rupees of Sher Shah, Islam Shah and Akbar, found in the Jaunpur district.
Two rupees of Shah Alam II, found in the Allahabad district.
Copper coin of Husen Shah of Jaunpur, found in the Sultanpur district.
- Walker, Mr. A.—
Moth (*Actias selene*), Madras.
- Walker, Mr. G. K.—
Myrmeleonid fly, Madras.
Common Sand-Grouse (*Pteroclorus ezatus*), Arkonam.
- Wardha, the Sub-Divisional Magistrate (Arvi Tahsil) of—
Two rupees of Aurangzeb, found at Mouza Pandwadi, Wardha district.

APPENDIX B.

Classified List of Expenditure of the Government Museum, Connemara Public Library, and the Marine Aquarium, during the year 1916-17.

GOVERNMENT MUSEUM AND CONNEMARA PUBLIC LIBRARY.

	Actuals, 1916-17. RS.	Revised estimate, 1916-17. RS.
Salaries—		
Superintendent	10,350	10,875
Local allowance	525	
Total	10,875	10,875
Permanent establishment, Government Museum—		
Zoological assistant, herbarium-keeper, archaeologi- cal assistant, head clerk, second clerk, third clerk, writer, assistant writer, senior and second taxidermists and 31 peons—41 persons	10,481	10,600
Permanent establishment, Connemara Public Library— Sub-librarian, three attendants and three peons	3,204	3,200
Total, Establishment	13,685	13,800
Allowances—		
Travelling allowance	439	400
Supplies and Services—		
Cost of specimens purchased on tour		
Objects of interest and coins purchased at head- quarters.	1,701	
Fittings, furniture, etc.	1,990	
Cost of books and publications	923	7,545
Lithographic plates	Nil.	
Charges for feeding live animals	230	
Cost of indented Europe stores and freight	552	
Electric lights and fans	232	
Total, Supplies and Services	5,628	7,545
Contingencies—		
Purchase and repair of furniture	182	
Cleaning charges	404	
Rents, rates and taxes	6,590	10,400
Office expenses and miscellaneous	2,123	
Pay of menials	975	
Total, Contingencies	10,274	10,400
Total, Government Museum and Connemara Public Library	40,901	43,020

MARINE AQUARIUM.

	Actuals, 1916-17. RS.	Revised estimate, 1916-17. RS.
Permanent establishment, Marine Aquarium—		
Head-keeper, second-keeper, third-keeper and two door-keepers—5 persons	948	950
Total, Establishment	948	950
Supplies and Services—		
Food for animals	996	
Fittings, etc.	399	
Cost of locally-purchased stores	Nil.	1,530
Cost of indented Europe stores and freight	Nil.	
Total, Supplies and Services	1,395	1,530
Contingencies—		
Office expenses and miscellaneous	424	
Pay of menials	1,656	2,100
Total, Contingencies	2,080	2,100
Total, Marine Aquarium	4,423	4,580
Grand Total	45,324	47,600

Order—No. 968, Home (Education), dated 24th July 1917.

Recorded.

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

3. The Government note with satisfaction the successful continuance of the demonstrations to teachers in Madras schools by the Superintendent of the Museum, and to the pupils of the high schools in Madras City by the Museum assistants; also the increase in the number of readers in the Connemara Library.

(True Extract)

R. RAMACHANDRA RAO,
Secretary to Government.

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

Home (Edn) DEPARTMENT.

Government Museum

Government Museum
Recording with remarks the report on the
working of the ———, the Marine Aquarium and
the Coonemara Public Library for the year 1916-1917.

READ AGAIN G.O. No., dated 191

READ ALSO:—

C. No. 526B, From the S. G. M, No. 346, dated 7. 7 1917

ORDER

No. 968, dated 24-7, 1911

P. S.

Recorded.

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

3. [Here enter from H.E.'s note.]

I

The S. G. M.

u. D. P. J.

" Home (Mio) Sept

" Revenue Dept.

13. Accountant General

- " Director-General of Archaeology with (C.S.).

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20.7.11

23/1/1

Subject - Annual administration report
of the Govt. Museum, Marine Aquarium
and the Bonnemere Public Library.

1-16/6
CN 5868. From The Seppelt, Govt. Museum, No. 346,
dated The 17th July 1917.

For the U.S.

A draft order recording the
report is submitted for approval.

ved
17.7.17

JUL
18.7.17.

5

E. L. Harvey
20.7.17

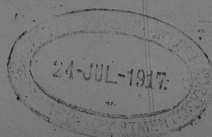
My 23/7/17

A. E.

24 JUL 1917

Please add -

"The Government sympathize with
satisfaction the successful continuance of the
demonstrations to teachers in teachers schools
by the Superintendent of the Museum, and to
the pupils of the high schools in Madras City by
the Museum assistants: also the increase in the
number of readers in the Bonnemere library."



[P. C. Harris]
24.7.17.

Issue with para 3 alone

Issued for No. 968 Home (Edu)
24.7.17

My 27/17

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(b)
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Brief subject. Home Dept. of the Govt. Museum etc.

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