

1930-31.

NEW SOUTH WALES.

AUSTRALIAN MUSEUM.

(ANNUAL REPORT OF THE TRUSTEES FOR THE YEAR ENDED 30th JUNE, 1931.)

TO HIS EXCELLENCY THE GOVERNOR,

The Trustees of the Australian Museum have the honour to submit to your Excellency their seventy-seventh Annual Report, being that for the year ended 30th June, 1931.

As in previous years use has been made of the Museum as an information bureau. Various Government departments, educational institutions, and members of the general public have sought and obtained assistance and information on divers matters, and specimens and lantern slides have been lent to teachers and others for instructional and lecture purposes. Some details will be found in the body of the Report under suitable headings.

1. TRUSTEES.

Dr. G. A. Waterhouse, elected to the office of President on the 11th July in succession to Sir Charles Rosenthal (resigned), did not seek re-election in December, when Mr. F. S. Mance was elected President for the year 1931.

Professor W. J. Dakin, D.Sc., Challis Professor of Zoology in the University of Sydney, was, on the 8th August, 1930, elected to the Board to fill the vacancy caused by the resignation of Sir Charles Rosenthal.

Twelve months' leave of absence from 12th September, 1930, was granted to Professor Burkitt, M.B., B.Sc.

The death of Mr. O. C. Beale occurred on 16th December, 1930, as the result of a motor accident. Mr. Beale had been a Trustee since 5th September, 1924, and his genial personality, business experience, and energy, had made him a valued member of the Board. To fill the vacancy Mr. F. W. Marks, F.C.A. (Aust.), was elected on 13th March, 1931.

The Trustees invited Professor J. T. Wilson, M.D., F.R.S., a former member of the Board, to represent the Museum on the occasion of the Jubilee Celebration of the opening of the British Museum (Natural History), London.

A list of the Trustees will be found in Appendix A.

2. STAFF.

Claims and counter claims for new awards for the officers of the Museum were discussed at conferences between representatives of the Trustees and of the Public Service Association. At the conferences the Trustees had the assistance of Mr. W. E. Kinsella and Mr. W. Wurth, Inspectors of the Public Service Board. During the year matters relative to awards and interpretations came before the Conciliation Committee, with special reference to the engagement of casual labour and overtime. At the request of the Trustees the organisation and work of the Museum was the subject of a special report by Messrs. Wurth and Scott, Inspectors of the Public Service Board. Suggestions contained in the report were carefully considered by the Trustees, and certain alterations were made in consequence.

Mr. E. Le G. Troughton, Zoologist in charge of mammals and skeletons, was absent on extended leave for a period of twelve months, and resumed duty on 27th February, 1931. During his absence he visited thirty-six Museums in Europe, America, and elsewhere, specially studying Australian mammals, and matters of group display. Mr. H. O. Fletcher, Assistant in Palaeontology, was invited by Sir Douglas Mawson to accompany the "Discovery" on her second Antarctic trip, and, being granted leave of absence, was with the expedition from 15th November, 1930, to 1st April, 1931.

Mr. K. A. Hindwood was on 12th December, 1930, appointed an Honorary Ornithologist.

Lists of the staff and of honorary officers will be found in Appendices B and C.

3. HONORARY CORRESPONDENTS.

Captain D. L. Comtesse was elected an Honorary Correspondent in terms of By-law VII, in recognition of his services as a collector of marine specimens, especially shells, for the Museum.

A list of Honorary Correspondents appears in Appendix D.

4. FIELD WORK.

Mr. T. Hodge-Smith, Mineralogist and Petrologist, made a collecting trip to Central Australia from September 12th to December 8th, 1930, bringing back a collection of mineralogical, petrological, zoological and ethnological specimens, numbering about 450. Towards the cost of this trip, which was made without expense to the Trustees, private benefactors contributed an amount of £39 14s.

In December-January Messrs. A. A. Livingstone and W. Boardman were granted leave in conjunction with recreation leave to visit the Great Barrier Reef, where they secured a series of marine invertebrates and fishes.

The Director, accompanied by Messrs. G. C. Clutton and J. Kingsley, paid a short visit to Bulli in February, 1931, in order to exhume the skeleton of a false killer whale stranded there in October, 1929.

In May-June, 1931, Messrs. T. Iredale and G. P. Whitley were granted official leave to visit the Capricorn Group, Great Barrier Reef, where they made collections for the Museum.

5. GROUP EXHIBITS.

The Bird of Paradise Group is nearing completion, and the construction of a Platypus Group is projected.

6. LIBRARY.

During the year the library acquired 428 volumes by exchange, presentation, and purchase, besides numerous parts and reprints. The library, as evidenced by these figures, continues to expand, and the question of shelving becomes more acute. Additional cases have been placed in various sections, which has alleviated local congestion.

An important accession was an edition of Blainville's "Mannel de Malacologie et Conchologie," 1825-27, presented by Mrs. M. J. Waterhouse through her son, Dr. G. A. Waterhouse, Trustee. This volume presented some interesting variations not shown in other copies already in the library.

Dr. Eland Shaw, just prior to his regrettable decease, presented his library relating to the Blattidae. This is a particularly valuable collection, the result of many years' garnering during his researches.

A number of new exchanges have been entered into, and binding has been maintained. Mr. F. D. McCarthy has added considerably to the catalogue.

The librarian, Mr. W. A. Rainbow, has continued to devote a considerable portion of his time to editorial work and the supervision of the printing of publications. Much assistance has been granted to students, investigators, and the press.

7. PUBLICATIONS.

During the year, volume XVII, parts 9, 10, and volume XVIII, parts 1-4 of the "Records" were issued and distributed, and the usual quarterly numbers of the Museum Magazine were published.

8. LECTURES, &C.

Popular Science Lectures and School Lectures in the Museum have been continued, and as far as funds would allow Extension Lectures were delivered to organisations outside. Prior to the School Lectures, small parties of pupils were conducted round the Museum.

The total attendance at Museum lectures during 1930-31 was as follows:—

	Attendance.
14 Evening Lectures	3,449
9 School Lectures	2,462
2 Extension Lectures	260
4 Other lectures in the Museum	368
68 Unofficial lectures	6,270

The use of the Lecture Hall was granted to the Anthropological and Microscopical Societies to hold their regular meetings and to the Linnean Society for the Fletcher Memorial Lecture.

Details of lectures and attendances will be found in Appendix E.

9. BUILDINGS AND EQUIPMENT.

During the year, the Department of Public Works has attended to all necessary repairs and maintenance of the building. The Lecture Hall was provided with lamps and fire extinguishers in compliance with the requirements of the Public Halls Act. The storage sheds continue to be a source of trouble owing to the ravages of white ants and general dilapidation. Every precaution has been taken to safeguard the collections contained in these sheds, but until the present temporary structures are replaced by buildings of a more substantial character they will continue to cause anxiety.

A new entomological cabinet was ordered and delivered during the year.

10. FINANCIAL, &C.

The Trustees continue to exercise economy in the disbursement of funds voted by Parliament, and only necessary expenditure was incurred during the year. A statement of receipts and expenditure and revenue account for the year is shown in Appendices H. and I.

11. PUBLIC ATTENDANCES.

The number of visitors reached a total of 269,436, a decrease of 8,995 on last year's figures.

Statistics of attendances for the years 1920-1931 are appended:—

	Week-days.	Sundays.	Total.
1920-1921	159,576	63,016	222,592
1921-1922	151,544	62,889	214,433
1922-1923	145,271	57,600	202,871
1923-1924	180,474	69,037	249,511
1924-1925	168,880	70,478	239,358
1925-1926	207,128	69,745	276,873
1926-1927	208,617	79,316	287,933
1927-1928	204,437	75,895	280,332
1928-1929	207,899	76,496	284,395
1929-1930	209,685	68,746	278,431
1930-1931	204,609	64,827	269,436

12. GENERAL.

Frequent requests are made for loans of exhibits for teaching or display purposes. During the year small collections of ethnological interest were lent to Ascham School, to Kindergarten Colleges, and to other educational bodies. Exhibits of zoological, ethnological and geological specimens were shown at the Bushland Exhibition, organised by the Rangers' League in September, 1930, and on the occasion of the opening of Science House in May, 1931. Loans have also been made for various window displays and kindred purposes.

The Museum now possesses a large collection of lantern slides on natural history subjects, and these are in great demand by lecturers. During the year, slides have been lent to Professor W. J. Dakin and Dr. E. A. Briggs, University of Sydney, Mr. A. S. Le Souef, Taronga Park Zoo, the Australian Gaslight Co., Mr. Price Conigrave, Mr. Robert Turner, Mr. R. A. Falla, Dr. W. W. Ingram, and many others.

13. THE COLLECTIONS.

Mammals (E. Le G. Troughton in charge).—During Mr. Troughton's absence on long service leave, Mr. H. S. Grant, Senior Taxidermist, carried out essential routine under the supervision of Mr. J. R. Kinghorn.

While abroad Mr. Troughton, besides studying modern methods of storage, preparation and display, paid special attention to the collections of Australasian mammals in foreign museums, particularly the type specimens. He devoted considerable time to the collection of types in the British Museum, comparing them with a study series of Australian Museum specimens taken over for that purpose. The Mjöberg collections from Western Australia and Queensland, described by Professor Lonnberg, were examined at Stockholm, and the collections made by Carl Lumholtz and Knut Dahl, which formed the subject of Collet's important papers on our mammals, were studied at the Oslo University Museum. At the Berlin Museum the types of the many New Guinea forms described by the late Professor Paul Matschie were studied and discussed with Dr. Ernst Schwarz. Additional types of Australasian mammals were examined at the Paris and Genoa Museums.

Donations received represented the usual variety and interest and included a representative collection of marsupials, rodents, and bats from Groote Eylandt, North Australia, presented by the Rev. H. E. Warren; a series of bats from Mr. James M. Nicol, Tanna, New Hebrides; a specimen of the Long-fingered Striped Possum, *Dactylopsax* (the first to be received), and a rare feather-tailed marsupial mouse were collected by Captain E. J. Hillman and presented by Mr. J. Black. An interesting series of indigenous mice (*Pseudomys*), from Alice Springs, Central Australia, were sent in by Mr. R. Barlow, and, as in previous years, many fine donations were received from Mr. A. S. Le Souef, and the Taronga Park Trust. A collection of mounted bats and marsupials were received from the Technological Museum.

By exchange we received an interesting series of bats from Mr. Luther Little, Los Angeles, U.S.A., and a small collection from the Basle Natural History Museum, Switzerland. Specimens of a rare wallaroo were purchased with the assistance of Mr. A. S. Le Souef.

The usual overhaul and fumigation of the exhibited and stored specimens was carried out during the year, and over 400 specimens were skinned, preserved, and filled out. Many gallery labels were replaced. Considerable re-arrangement and spacing out of the study skins and skulls were carried out, and card indices were revised, consequent on the transfer of the mammal collection to a new storage room.

Assistance and facilities have been afforded to many students and workers, and material has been lent to, and examined for the Melbourne, Queensland, South Australian, and Hobart Museums. Advice on various matters has been sought by the Chief Secretary's and the Agricultural Departments, and by Mr. F. N. Ratcliffe while investigating the flying fox pest for the Council for Scientific and Industrial Research. Many inquiries regarding supposed ambergris samples have been attended to, and there has been an increase in public inquiries, personal and written, regarding various matters relating to mammals.

Skeletons (E. Le G. Troughton in charge).—During Mr. Troughton's absence abroad this department was attended to by the articulators and taxidermists, under the supervision of Mr. Kinghorn.

Noteworthy donations included the skeleton of an aborigine from the sand dunes at Murrumbidgee, New South Wales, presented by Mr. C. Greenwell, and several human crania from other sources. From the Taronga Park Trust we received skeletons of a cuscus from New Guinea, a Tasmanian Devil (*Sarcophilus*), and a seal from Bass Strait, besides a number of bird skeletons. The most important acquisition was the complete skeleton of a False Killer Whale (*Pseudorca crassidens*), which was identified by Mr. Troughton in 1929, and was then buried in sand on Bulli Beach to await disinterment.

Over 100 skeletons and skulls, including those of a large giraffe, were prepared and cleaned, and over 150 human crania were overhauled and repaired where necessary. The exhibited and stored osteological specimens were cleaned, disinfected and kept in order.

Birds (J. R. Kinghorn in charge).—Acquisitions totalled over two hundred, exclusive of small collections which were received and transferred to other institutions without being registered. Twenty new specimens were mounted for exhibition and 180 new skins added to the reference collection. Sixteen exhibits in the gallery were restored, and fifteen mounted specimens were renovated and made available for school collections.

The basement store, which was overcrowded with old specimens removed from the gallery, was completely overhauled with the assistance of Mr. W. Barnes, Assistant Taxidermist; specimens beyond repair were destroyed, and from the remainder a reserve collection was formed, thirty specimens being forwarded to the East Sydney Technical College for the use of Art students and others.

From the Technological Museum a collection of mounted birds was received, of which some were retained for the reserve collection, others being forwarded to the Fairfield and Cabramatta Public Schools.

The foreign section of the bird collection is now receiving attention; specimens in the gallery drawers have been completely catalogued and spaced out in the drawers formerly occupied by mammal skins.

A small special collection of cage birds is being prepared, and will include species of which importation is prohibited.

The reference collection of birds now occupies twenty cabinets of 440 drawers and 224 drawers underneath gallery cases.

The collection of eggs has been overhauled and arranged preparatory to classification and cataloguing. The duplicate egg collection, Australian and foreign, was checked and re-organised by Mr. Barnes under the supervision of Mr. Kinghorn, and a useful reference collection of Australian eggs has been prepared; this contains a complete series of the eggs of the available species, arranged according to the R.A.O.U. official Check-list of the Birds of Australia.

The members of the Art classes of the East Sydney Technical College are regular visitors to the Museum, and the Lecture Hall and specially selected mounted birds are placed at their disposal.

Mr. Kinghorn has attended to matters in connection with the export and import of birds, and has examined many shipments by dealers, aviculturists, and Taronga Zoological Park.

A report on the distribution of the starling throughout the Commonwealth is being prepared on behalf of the Department of Agriculture, but the evidence on hand is of a contradictory and confusing character, and some time will elapse before the report can be finalised.

Reptiles and Batrachians (J. R. Kinghorn in charge).—During the year over two hundred specimens were acquired, mainly as single donations by various donors. Exchanges were made with the Natural History Museum, Basle, Switzerland, and with the University of Michigan. Mr. T. Hodge-Smith, Mineralogist, collected a number of lizards and frogs in Western Queensland, and a series of snakes, lizards, and frogs were received from Groot Eylandt, Gulf of Carpentaria, collected by the Rev. H. E. Warren and the mission staff.

The Australian section of the spirit reference collection is now in excellent order and work is proceeding on the foreign species.

The reptile gallery exhibits have been overhauled, and several old casts were replaced by new ones.

A detailed examination of several groups of snakes and lizards was made for other Museums in Australia, where no herpetologist is employed. A thorough examination and scale counts of about forty specimens of carpet and diamond snakes were made for Mrs. Stull Davis, Research Associate, Museum of Comparative Zoology, Harvard, U.S.

An exhibit of snakes and snake venom was made at the Exhibition held by the Rangers' League and four short lectures on the treatment of snake bite were given by Mr. Kinghorn in the lunch hour during the Exhibition.

Fishes (G. P. Whitley in charge).—Acquisitions have consisted mainly of donations, including a large collection from the Ellice Group, presented by Mr. D. C. Kennedy; Queensland fishes by Mr. Melbourne Ward; locally dredged fishes by Captain D. L. Comtesse; and specimens from the aquarium by the Trustees of Taronga Park Zoological Gardens. From the estate of the late Thomas Steel we received a large collection of fish otoliths, and numerous donors have presented smaller series of fishes or single specimens. Noteworthy donations were some new species from New Zealand, a seven-gilled shark from Manly, a series of young *Galaxias* from the Blue Mountains, and some teeth of a basking shark.

The "running exchange" with the Queensland Museum continues to add choice specimens to our collection, and by exchange with the American Museum of Natural History, New York, we received a paratype of *Rhadinocentrus rhombosomoides*, the only specimen in an Australian collection. Other exchanges were with the Auckland Museum and with Dr. J. D. T. Hardenburg, Batavia, from whom we received a collection of anchovies.

Collections made by members of the staff included species from North-west Australia, collected by Mr. A. A. Livingstone; from the Capricorn Group, Great Barrier Reef, by Messrs. A. A. Livingstone and W. Boardman; from Brisbane and Sydney districts by Messrs. T. Iredale and G. P. Whitley.

The exhibited and stored collections are in good order and well catalogued. Various casts have been added to the gallery and casts of a group of oceanic angler fishes will shortly be placed on exhibition.

Part of a collection of scombroid fishes has been received back from Japan, work on them having been suspended owing to the unfortunate death of Dr. K. Kishinouye. The bulk of our collection of soles is still in the hands of M. P. Chabanaud, of the Paris Museum. Some lampreys were forwarded to Dr. Burlet of Utrecht for anatomical study, and a specimen of *Oxyotus* has been lent to the British Museum (Natural History.) A complete catalogue of our South Sea and New Guinea fishes has been supplied to Mr. H. W. Fowler, Academy of Natural Sciences, Philadelphia, with whom a large exchange of fishes from these regions is planned.

Research work has been carried out on the collections made at Low Isles and the Capricorn Group, and a revision of the Australian Leiognathidae has been prepared. Considerable progress has been made with the "Genera Piscium," an index to all the known generic names of fishes, and a review of the Australian lancelets has been recently completed.

A survey of Bottle and Glass Rocks and of Long Reef and various Sydney beaches was carried out in collaboration with other members of the staff in connection with the preparation of the Handbook to the Marine Fauna of Sydney, to be issued by the Royal Zoological Society of New South Wales.

Measurements, photographs, and other data of a swordfish, Mako shark, and a sunfish, large fishes caught near Sydney, were obtained in the field. In May, 1931, Mr. Whitley accompanied the Hayter-Embury Expedition to the North-west Islet, Great Barrier Reef, as collector and lecturer; on the return journey a stay of a few days was made in Brisbane, where specimens in the Queensland Museum were studied.

From time to time fishes have been identified for and information afforded to Mr. T. C. Roughley, Economic Zoologist, Technological Museum; the University of Sydney; Taronga Park Aquarium; the Department of Development and Migration, Melbourne; State Fisheries Branch, Sydney; New Zealand Government Trade and Tourist Commissioner, Sydney; the Customs Department, Sydney; Mr. Zane Grey (through Mr. E. F. Pollock). A large collection of Leiognathidae and a series of miscellaneous fishes were identified and reported upon for the Queensland Museum, Brisbane, and information regarding sharks was given to Dr. Coppleson, Sydney, for a forthcoming work on sharks attacking man.

Insects and Arachnids (A. Musgrave in charge, K. C. McKeown and Miss N. B. Adams, Assistants).—The total acquisitions number 3,950, of which 2,926 were presented, 666 collected, 225 purchased and 133 received by exchange. The chief donations were made by Dr. K. K. Spence, Sydney; Mr. J. Macqueen, Milmerran; Rev. A. J. Barrett, Bombala; Miss K. English, Yass; Mr. C. E. Hart, Solomon Islands; Mr. H. M. Stephens, Sydney. An exchange of ants was arranged with the South Australian Museum, and a collection was made in Western Queensland and Central Australia by Mr. T. Hodge-Smith, Mineralogist. A number of Western Australian spiders were purchased from Miss A. E. Baisjou.

The principal work of the department has consisted in identifying and giving information to the public on the large numbers of insects and spiders submitted. During the year the Australian and exotic Diptera in the collection have been revised and re-labelled. The Australian Coleoptera collection is also being revised, brought up to date, and expanded into new cabinets.

Dr. G. A. Waterhouse, Honorary Entomologist, has completed the preliminary arrangement of the Waterhouse Collection of butterflies, all the specimens from the G. Lyell collection that were used to illustrate "The Butterflies of Australia" having been incorporated. The rarer specimens from the collection of Mr. Frank H. Brown have been presented to the Museum and have been reset and generally improved in condition.

The butterflies are now housed in 160 drawers and the work of registration has been commenced and will proceed as time permits. Miss Adams has assisted Dr. Waterhouse in this work.

Conchology (T. Iredale in charge; Miss J. Allan, Assistant).—Acquisitions number 4,119, the majority being presented. A large collection of land shells made by Sydney W. Jackson was purchased by Miss Allan and presented to the Museum.

Great assistance has been given in connection with the dredgings made in the harbour by Captain D. L. Comtesse and Messrs. E. T. Nash, H. S. Mort and W. L. Dingeldei, while our correspondents, the Rev. P. Hubbard and Mr. E. W. Bardwell, have continued their collecting activities.

The collections have been kept in order but the lack of adequate storage facilities is severely felt, although a little improvement will be gained by removing the glass tablets upon which specimens have been mounted in the past. The spirit collection has been rearranged by Miss Allan and the specimens brought into good order.

Check lists of Australian Mollusca are being kept up to date, and a new illustrated Check-list of New South Wales shells is projected. A survey of the beaches of Sydney and district has been carried out, and visits were made to Long Reef, Bottle and Glass Rocks, Curl Curl, and other places in connection with the preparation of a Handbook to the Marine Fauna of Sydney.

During a visit by Mr. Iredale to North West Islet, Capricorn Group, Great Barrier Reef, a good collection of Mollusca was made, and the opportunity was taken to make an ecological study of the locality.

As in previous years assistance has been afforded to the Veterinary Research Branch of the Department of Agriculture in connection with liver fluke investigations, and to the Railway Department in reference to tank pollution. Investigation into the ravages of marine borers has been continued and brought to a conclusion. Mr. T. C. Roughley, Economic Zoologist, Technological Museum, sought co-operation in the determination of oysters, and a complete taxonomic report on the oysters of Eastern Australia was furnished.

The nudibranch molluscs having long been neglected, Miss Allan has undertaken their investigation, and has worked out and prepared illustrations of the various species.

Marine Invertebrates, &c. (F. A. McNeill in charge; A. A. Livingstone and W. Boardman, Assistants). Many acquisitions have been received during the year, including donations to Crustacea and Echinodermis by Rev. R. Bourne, Broome, Western Australia; and collections made by Mr. E. H. Rainford, Bowen, Queensland, and Mr. R. Gaskell, Solomon Islands, both of whom have added considerably to the collections of Asteroidea. Several collections of oligochaetes were presented by Messrs. E. M. Embury, J. C. Wiburd, C. E. Witherford, and the Rev. A. J. Barrett. In December and January Messrs. Livingstone and Boardman collected extensively in the Capricorn Group, Great Barrier Reef, when members of the Hayter-Embury Expedition. Several visits were paid to the Sow and Pigs reef, Port Jackson, resulting in the collection of an extensive series of larval and post-larval stages of a Xanthid crab (*Pilumnus vestitus*), which was found to undergo direct development, a feature not hitherto recorded in the family Xanthidae.

The deep-sea corals collected by the F.I.S. "Endeavour" were received back from Dr. J. E. Hoffmeister, United States National Museum, who has examined and prepared a report on the collection. A large collection of Crustacea was received by exchange with the United States National Museum, and the named series of Medusae was returned by Dr. Stiasny, Leyden Museum, Holland.

The spirit collections of Coelenterata and Echinodermata have been overhauled and re-arranged as part of a general plan of revision of the spirit and dry collections in the department. Arrangements have been made for the transfer of the dry specimens from their present unsatisfactory housing in the storage sheds to better quarters in the main building.

The gallery exhibits have been kept in order and provision has been made for exhibition of new material in Asteroidea and Vermes.

Numerous inquiries have been attended to, verbally or by correspondence, and assistance and information has been rendered to the Technological Museum, the State Fisheries, and the Department of Agriculture.

In collaboration with Mr. T. Iredale, Conchologist, and Mr. R. A. Johnston, Harbour Trust, Mr. McNeill has continued the work on marine boring organisms in Sydney Harbour.

Ethnology (W. W. Thorpe in charge).—Donations received during the year include a collection of stone axes by Mrs. S. Mitchell; Tasmanian and New South Wales flakework by Mr. J. S. Falkinder and the Rev. A. J. Barrett respectively; a general collection of Pacific material by Dr. Harold Browne; a fine pair of stencilled hand-marks by Mr. Roy Mackenzie, Mangrove Mountain, New South Wales; aboriginal stone axes by Mr. George McAndrew, Shellharbour, New South Wales; a large series of stone adzes, netted bags, and other material from the Aitape district, Mandated Territory, New Guinea, by Mr. G. A. V. Stanley; flakework from the coast of New South Wales by Mr. Thorpe, and from Murrumbidgee, New South Wales,

by Mr. C. Greenwell. By exchange we received a collection of flakework, Wilcannia District, New South Wales, from Mr. K. M. Cobb, and a series of neolithic stone implements from the National Museum, Copenhagen. Collected specimens include a series of stone implements from Mangrove Mountain and Norah Head, New South Wales, by Mr. Thorpe, and weapons and flakework from Western Queensland and Central Australia by Mr. T. Hodge-Smith.

The gallery collections are in good order. New installations include the Falkinder collection of Tasmanian stone implements; a series of aboriginal flakework to show the evolution of the industry; a skull cast of Pekin man (*Sinanthropus pekinensis*); a fine example of a carved tree from Boggabilla, Moree district, New South Wales.

Numismatics (W. W. Thorpe in charge).—Donations of modern coins were received from Mr. J. Berkouch and Mr. W. K. Hastings; a series of British silver coins and a set of the new issue from Dr. Egmont Schmidt.

The coins on view in the entrance hall have been regularly changed to give the public an opportunity of inspecting a larger series of coins, tokens, and medals.

Applications for identification of, and information regarding coins and tokens are steadily increasing.

Palaontology (C. Anderson in charge; H. O. Fletcher, Assistant).—Additions received during the year included a collection of beautifully preserved trilobites from the Templeton River, near Mt. Isa, Queensland, by Mr. T. V. Harvey; a series of British invertebrate fossils by Mr. T. S. Douglas; a nearly complete femur of *Diprotodon optatum* from Merriwa, New South Wales, by Mr. J. R. Kinghorn; part of the mandible and some teeth of *Diprotodon optatum*, from Cooma Creek, near Bunyan, New South Wales, by Mr. J. S. K. Hassell; part of the mandible of *Nototherium*, from the Darling Downs, Queensland, by Mr. Carl Zoeller; a collection of shark's teeth (*Lamna* and *Odontaspis*), Richmond district, North Queensland, by Dr. Lyle Taylor.

The collections recently purchased from Mrs. S. Mitchell and from Mr. C. F. Lascron have now been registered and catalogued, including over 4,000 entries. The cataloguing and sorting of the general collection of fossils is progressing. The early Palaeozoic material has been catalogued and re-arranged by Mr. Fletcher, who has also made progress with the preparation of a catalogue and index to the literature of Australian invertebrate palaontology.

A new exhibit of considerable interest is a restored head of the gigantic extinct Australian lizard *Varanus (Megalania) priscus*. This was reconstructed from specimens in the Museum collection, the modern goanna, to which *Megalania* was related, being used as a guide. The head was modelled by Mr. J. Kingsley, Assistant Articulator, and coloured by Miss E. A. King.

The palaontological collections have now assumed large proportions and, as storage had become difficult, a new set of storage racks has been erected in the room formerly occupied by the printer; sufficient space is now available to enable the palaontological collections to be centralised, which will greatly facilitate work in this department.

Mineralogy (T. Hodge-Smith in charge; R. O. Chalmers, Assistant).—The total number of registrations for the year is 1,088. The most important donation was a large collection of minerals presented by the family of the late W. H. Yates. This includes some fine examples of molybdenite in masses and flakes, a 10 lb. slug of native bismuth, and calcite pseudomorphous after molybdenite. Other donations included a splendid group of calcite crystals from Broken Hill, by the Zinc Corporation Ltd.; pyromorphite from Mt. Isa, Queensland, by Mr. T. V. Harvey; a large sheet of mica (3 feet by 2) from Hart Range, Central Australia, by the Mica Corporation of Australia Ltd. As in previous years valuable material was obtained by exchange with Mr. M. Mawby, Broken Hill, including some fine specimens of a new find of the rare tungstate of lead (stolzite). A general collection was purchased from Mrs. S. Mitchell, including marshite and other species from Broken Hill, and some fine zcolites from various localities in New South Wales.

During a three months' collecting trip to Central Australia Mr. Hodge-Smith collected a series of minerals, including among other species chalcocite, fluorite, pyrolusite, dolomite, sphaerocobaltite, cerussite, beryl, garnet, tourmaline, apatite, and pyromorphite. Laboratory work on these specimens is now in progress.

During the year there has been great activity in the search for gold, and much time has been spent in giving advice to prospectors.

A new method of exhibiting large and showy specimens has been adapted, resulting in a great improvement in display.

Petrology (T. Hodge-Smith in charge; R. O. Chalmers, Assistant).—The accessions totalled 243 rocks and 204 micro-slides. Portions of the Cranbourne siderite and an etched slice of the Mt. Edith siderite were obtained by exchange with the British Museum (Natural History). A portion of the Karoonda aerolite, which fell 2½ miles east of Karoonda, South Australia, November 25th, 1929, was presented by Professor Kerr Grant, through the South Australian Museum, Adelaide. These additions bring the total number of falls to 109, of which 37 are Australian.

From Central Australia Mr. Hodge-Smith brought back 139 rocks, mainly representative of the Pre-Cambrian of the Hart Range. Mr. H. O. Fletcher, while accompanying the British, Australian and New Zealand Antarctic Research Expedition, collected a series of rocks from MacRobertson, Adelie, and Enderby Lands, Antarctica.

The lack of storage facilities greatly hampers the work of this department, many specimens still awaiting incorporation in the collection when storage is available.

The Common Seal of the Museum was hereunto affixed by order of the Board, this second day of December, 1931.

F. S. MANCE,
President.
W. T. WELLS,
Secretary.

APPENDIX A.

TRUSTEES OF THE AUSTRALIAN MUSEUM AT 30TH JUNE, 1931.

Crown Trustee—

Mr. James McKern.

Statutory—

His Honor the Chief Justice.

The Hon. the Colonial Secretary.

The Hon. the Attorney-General.

The Hon. the Colonial Treasurer.

The Auditor-General (Mr. J. Spence).

The President of the Medical Board (Dr. T. Storie Dixon).

Appointed—

The Hon. the President of the Legislative Council.

The Crown Solicitor.

The Surveyor-General and Chief Surveyor (Mr. H. B. Mathews, B.A.).

The Hon. the Secretary for Public Works and Minister for Railways.

The Hon. the Minister for Education.

Elective Trustees—

Dr. J. R. M. Robertson, F.R.G.S., F.G.S.

Dr. G. H. Abbott, M.B., Mast. Surg.

Mr. E. C. Andrews, B.A., F.G.S.

Mr. G. M. Blair.

Dr. C. Gordon MacLeod, M.B., Ch.M.

Dr. G. A. Waterhouse, B.E., F.E.S.

Mr. F. S. Mance.

The Hon. F. E. Wall, M.D., M.L.C.

Professor A. N. Burkitt, M.B., B.Sc.

Mr. H. M. Hawkins.

Professor W. J. Dakin, D.Sc.

Mr. F. W. Marks, F.C.A. (Aust.).

APPENDIX B.

STAFF OF THE AUSTRALIAN MUSEUM AT 30TH JUNE, 1931.

Director C. Anderson, M.A., D.Sc.

Administrative Staff—

Secretary W. T. Wells, A.I.A.V.

Clerks J. A. Trimble.

J. S. Rolfe.

Stenographer Miss G. E. Johnstone.

Scientific Staff—

Anthropology W. W. Thorpe, Ethnologist, Numismatist.

Zoology *J. R. Kinghorn, Ornithologist, Herpetologist.

E. Le G. Troughton, Mammalogist.

A. Musgrave, Entomologist.

K. C. McKeown, Assistant.

Miss N. B. Adams, Assistant.

F. A. McNeill, Lower Invertebrates.

A. A. Livingstone, Assistant.

W. Boardman, Assistant.

T. Iredale, Conchologist.

Miss C. M. J. Allan, Assistant.

G. P. Whitley, Ichthyologist.

Mineralogy T. Hodge-Smith, Mineralogist, Petrologist.

R. O. Chalmers, Cadet.

Palaeontology *H. O. Fletcher, Assistant Palaeontologist.

Library Staff—

Librarian W. A. Rainbow.

Assistant Librarian F. D. McCarthy.

Preparatorial Staff—

Articulator G. C. Clutton.

Assistant Articulator J. Kingsley.

Taxidermist H. S. Grant.

Assistant Taxidermist J. H. Wright.

*W. Barnes.

Mechanical Staff—

Chief Mechanic T. A. Henson.

Assistant Mechanic H. Jackson.

Attendants and General Staff—

Chief Attendant T. A. Murphy.

Senior Attendant J. Watson.

Attendants A. Mackay.

E. T. Hill.

*D. Massey.

A. B. Welsh.

E. G. Morris.

W. A. Medway.

H. W. Stein.

J. McIver.

Miss G. Barnes.

Night Attendants F. L. Haylings.

T. Glazebrook.

Yardman Labourer C. Jackson.

APPENDIX C.

HONORARY STAFF OF THE AUSTRALIAN MUSEUM AT 30TH JUNE, 1931.

Professor T. Harvey Johnston, M.A., D.Sc., Hon. Zoologist.
 Edw. F. Hallmann, B.Sc., Hon. Zoologist.
 A. F. Basset Hull, Hon. Ornithologist.
 G. A. Waterhouse, D.Sc., B.E., Hon. Entomologist.
 H. J. Carter, B.A., Hon. Entomologist.
 E. A. Briggs, D.Sc., Hon. Zoologist.
 W. S. Dun, Hon. Palaeontologist.
 H. Leighton Kesteven, D.Sc., M.D., Hon. Zoologist.
 Melbourne Ward, Hon. Zoologist.
 Geo. A. Thomas, Hon. Archaeologist.
 K. A. Hindwood, Hon. Ornithologist.

APPENDIX D.

HONORARY CORRESPONDENTS OF THE AUSTRALIAN MUSEUM AT 30TH JUNE, 1931.

Mr. R. E. Baxter.	Sir Samuel Hordern.	Dr. G. A. Waterhouse.
Mr. H. Burrell.	Dr. C. Phillips.	Hon. Sir Alfred Meeks.
Captain D. L. Comtesse.	Dr. R. H. Pülleine.	Miss Eadith Walker.
Sir Hugh Denison.	Sir Arthur Rickard.	Mr. R. R. Dangar.
Mr. Robert Dixon.	Mr. E. H. Rainford.	Mr. R. H. Dangar.
Mr. William Dixon.	Mr. George Robertson.	Mr. James Burns.
Mr. C. E. Hart.	Mr. T. E. Roie.	Mrs. M. J. Waterhouse.
Mr. Anthony Hordern.	Mr. Melbourne Ward.	

APPENDIX E.

LECTURES DELIVERED DURING THE YEAR ENDED 30TH JUNE, 1931.

Popular Science Lectures.

Date.	Subject.	Lecturer.	Attendance.
1930.			
10 July	"Rambling in Many Climes"	T. Iredale	333
24 "	"Black Australia"	Professor A. R. Radcliffe-Brown	266
14 Aug.	"Plant-like Animals"	W. Boardman	218
28 "	"Fishes in Fact and Fancy"	G. P. Whitley	251
2 Sept.	"Life in the Antarctic"	H. O. Fletcher	268
11 "	"Wild Life on an Irrigation Area"	K. C. McKeown	210
25 "	"The Australian Fauna"	Dr. C. Anderson	230
9 Oct.	"Scenic New Zealand"	E. C. Andrews	302
23 "	"Queer Creatures"	J. R. Kinghorn	195
1931.			
23 Apr.	"Snakes of Australia"	J. R. Kinghorn	152
14 May	"Some Early Australian Insect Collectors"	A. Musgrave	163
28 "	"Butterfly Stories"	Dr. G. A. Waterhouse	183
11 June	"The World of Parasites"	W. Boardman	295
25 "	"Attack and Defence in the Insect World"	K. C. McKeown	253
14 Lectures.		Total	3,419

School Lectures.

1930.			
8 July	Fishes	G. P. Whitley	302
22 "	"	"	235
5 Aug.	Shore Life	W. Boardman	256
19 "	"	"	217
2 Sept.	Reptiles	J. R. Kinghorn	262
1931.			
5 May	Insects	A. Musgrave	240
9 June	Birds	J. R. Kinghorn	346
16 "	"	"	301
30 "	Fishes	G. P. Whitley	303
9 Lectures.		Total	2,462

Extension Lectures.

1930.			
17 Sept.	"With Net and Trawl in our Ocean Depths" (Excelsior Club, Hurstville.)	G. P. Whitley	160
9 Dec.	"The Great Barrier Reef" (Parramatta Congregational Y.P. Institute.)	T. Iredale	100
		Total	260

Other Lectures in the Museum.

1930.			
24 Sept.	"Australian Aborigines" (Students—Teachers' College.)	W. W. Thorpe	200
1931.			
26 Feb.	"Prehistoric Animals" (Sydney Kindergarten Training College.)	Dr. C. Anderson	34
5 Mar.	"Achievements of Prehistoric Man" (Sydney Kindergarten Training College.)	W. W. Thorpe	34
23 June	"Our Feathered Friends" (Girl Guides.)	J. R. Kinghorn	100
		Total	368

APPENDIX E—continued

Unofficial Lectures.				
Date.	Subject.	Lecturer.	Attendance.	
1930.				
— Sept.	Four Lectures on Birds and Snakes (Rangers' League Exhibition.)	J. R. Kinghorn	240	
— Oct.	Economic Ornithology (Royal Zoological Society, N.S.W.)	"	25	
— Nov.	Snakes and Snake Venom (Boys' Club, Longueville.)	"	100	
1931.				
— Mar.	General Natural History (Boys' Club, Longueville.)	"	100	
— June	Our Feathered Friends..... (St. Paul's, Chatswood.)	"	150	
1930.				
2 July	Coral Pools and Fishes of Lord Howe Island (Royal Zoological Society, N.S.W.)	G. P. Whitley	30	
16 Dec.	Fishes of the Continental Shelf (Royal Zoological Society, N.S.W.)	"	30	
1931.				
22-27 May ...	Four Lectures to Members of the Hayter-Embury Barrier Reef Expedition.	"	400	
1930.				
2 Dec.	" Wild Life on an Irrigation Area " (Naturalists' Society of N.S.W.)	K. C. McKeown.....	50	
11 July	Ramblings in Many Climes (Girls' Progressive Society.)	T. Iredale	60	
29 „	Depths of the Sea (International Accountants' Corporation.)	"	100	
18 Aug.	Living on a Volcano (Aquarium Society of N.S.W.)	"	25	
7 Oct.	Captain Cook's Naturalists (Naturalists' Society of N.S.W.)	"	50	
1931.				
13 Jan.	Life on the Kermadecs..... (Girls' Progressive Society.)	"	30	
9 Apr.	Living on a Volcano (Legacy Club.)	"	30	
22-27 May ...	Four Lectures to Members of the Hayter-Embury Barrier Reef Expedition.	"	400	
29 June	Depths of the Sea (Girls' Progressive Society.)	"	30	
4 „	Marine Borers (Microscopical Society of N.S.W.)	F. A. McNeill	35	
Dec., 1930- Jan. 1931.	Nine Lectures to Members of the Hayter-Embury Barrier Reef Expedition.	A. A. Livingstone	800	
1930.				
23 Sept.	The Great Barrier Reef (Amateur Fishermen's Association.)	W. Boardman	120	
25 „	The Great Barrier Reef (Balmoral Beach Club.)	"	70	
17 Oct.	The Great Barrier Reef (Bush Walkers' Club.)	"	80	
29 „	The Great Barrier Reef (Kooroorra Club.)	"	150	
21 Nov.	Animal Camouflage (Young Men's Christian Association.)	"	60	
Dec., 1930- Jan., 1931.	Ten Lectures to Members of the Hayter-Embury Barrier Reef Expedition.	"	900	
1931.				
18 Feb.	Nature's Realm by the Shore (Balmoral Beach Club.)	"	70	
28 „	Nature's Realm by the Shore (Bush Walkers' Club.)	"	107	
19 May	The Great Barrier Reef (Forum Club.)	"	10	
9 June	Nature's Realm by the Shore (Baptist Young People's Guild, Bankstown.)	"	175	
1930.				
2 Sept.	Aborigines of Australia (Naturalists' Society of N.S.W.)	W. W. Thorpe	58	
9 „	The Maori of New Zealand (Feminist Club.)	"	31	
24 Oct.	Aboriginal Art (Society of Arts and Crafts.)	"	130	
18 Nov.	The Australian Aborigines (Australian Board of Missions' Exhibition.)	"	400	

APPENDIX E—continued.

Unofficial Lectures—continued.

Date.	Subject.	Lecturer.	Attendance.
1931.			
21 Jan.	The Australian Aborigines (Scoutmasters' Camp, National Park.)	W. W. Thorpe	27
12 June	The Maori of New Zealand (Workers' Educational Association.)	"	355
1930.			
12 Aug.	The Orkney Islands (Geographical Society of N.S.W.)	C. Anderson	150
21 "	Natural History Museums (Royal Society of N.S.W.)	"	50
16 Sept.	The Orkney Islands (Anthropological Society of N.S.W.)	"	42
1931.			
3 Mar.	The Australian Fauna (Feminist Club.)	"	40
13 Apr.	The Australian Fauna (Younger Feminists.)	"	30
1930.			
2 July	Antarctica (Royal Zoological Society of N.S.W.)	H. O. Fletcher	450
28 Aug.	Antarctica (Seventh Day Adventists' Church Society, Stanmore.)	"	80
68 Lectures.		Total	6,270

APPENDIX F.

SCIENTIFIC PAPERS AND ARTICLES PUBLISHED OR PREPARED DURING THE YEAR.

- "Three New Bats of the Genera *Pteropus*, *Nyctimene*, and *Chaerephon* from Melanesia." E. Le G. Troughton. *Proc. Linn. Soc. N.S. Wales*, LVI, 3, 1931.
- "Five New Generic Names for Australian Fishes." G. P. Whitley, *Austr. Zool.*, VI, 3, 1930.
- "New Names for Australian Fishes." G. P. Whitley, *Austr. Zool.*, VI, 4, 1931.
- "Studies in Ichthyology, No. 5." G. P. Whitley. *Rec. Austr. Mus.*, XVIII, 4, 1931.
- "The Fishes of National Park." G. P. Whitley, for *Handbook to the National Park*.
- "Fishes." G. P. Whitley, for *Handbook to the Marine Fauna and Flora of the Sydney District*. (Roy. Zool. Soc., N.S. Wales.)
- "Fishes of Low Isles." G. P. Whitley, for *Brit. Mus. Repts. of the British Barrier Reef Expedition*.
- "Some Fishes of the Family *Leiognathidae*." G. P. Whitley, for *Mem. Queensland Mus.*
- "The Evolution of the Anamniota." H. L. Kesteven, *Rec. Austr. Mus.*, XVIII, 4, 1931.
- "Contributions to the Cranial Osteology of the Fishes, No. 7." H. L. Kesteven, *ibid.*, II.
- "The History of Australian Entomological Research." A. Musgrave, *Austr. Zool.*, VI, 3, 1930.
- "The Waterhouse Collection of Butterflies." A. Musgrave, *Austr. Mus. Mag.*, IV, 4, 1930.
- "Some Common Spiders of the Sydney District." A. Musgrave, *ibid.*, IV, 5, 1931.
- "The H. M. Stephen Collection of Mayflies." A. Musgrave, *ibid.*, IV, 7, 1931.
- "Obituary of Dr. Eland Shaw." A. Musgrave, *ibid.*, IV, 7, 1931.
- "Bibliography of Australian Entomological Literature." A. Musgrave, for *Austr. Zool.*
- "Nature Rambles at Trial Bay." A. Musgrave and G. P. Whitley, *Austr. Mus. Mag.*, IV, 5, 1931.
- "Description and Records of Fulgoroidea from Australia and the South Pacific Islands, No. 1." F. Muir, *Rec. Austr. Mus.*, XVIII, 2, 1931.
- "Ants' Cows and Cow-sheds." K. C. McKeown, *Austr. Mus. Mag.*, IV, 5, 1931.
- "Joadja Memories." K. C. McKeown, *ibid.*, IV, 7, 1931.
- "Hints on the Preservation of Insects and Spiders." Nancy B. Adams, *ibid.*, IV, 5, 1931.
- "Australian Molluscan Notes, No. 1." T. Iredale, *Rec. Austr. Mus.*, XVIII, 4, 1931.
- "Queensland Molluscan Notes, No. 2." T. Iredale, *Mem. Queensland Mus.*, X, 1, 1930.
- "The Waterhouse Collection of Shells." T. Iredale, *Austr. Mus. Mag.*, IV, 4, 1930.
- "Obituary of John Brazier." T. Iredale, *ibid.*, IV, 4, 1930; *Nautilus*, XLIV, 1931; *Journ. Conch.*, XIX, 1931.
- "Notes on Some Desert Snails." T. Iredale, *Vict. Nat.*, XLVII, 1930.
- "A New *Amphidromus* from Burma." T. Iredale, for *The Nautilus*.
- "Mollusca." T. Iredale and Joyce K. Allan, for *Handbook to the Marine Fauna and Flora of the Sydney District*. (Roy. Zool. Soc. of N.S. Wales.)
- "Sea Slugs." Joyce K. Allan, *Austr. Mus. Mag.*, IV, 5, 1931.
- "Marine Piling Investigation in Port Jackson." F. A. McNeill, T. Iredale, and R. A. Johnson, for publication by the Sydney Harbour Trust.
- "Crustacea." F. A. McNeill, for *Handbook to the Marine Fauna and Flora of the Sydney District*. (Roy. Zool. Soc. of N.S. Wales.)
- "On a New Asteroid from Queensland." A. A. Livingstone, *Rec. Austr. Mus.*, XVIII, 4, 1931.
- "On the Restriction of the genus *Ferdina* Gray." A. A. Livingstone, *Austr. Zool.*, VI, 4, 1931.
- "Asteroidea of Low Isles." A. A. Livingstone, for *Brit. Mus. Repts. of British Barrier Reef Expedition*.
- Descriptions of various groups for the *Handbook to the Marine Fauna and Flora of the Sydney District*. A. A. Livingstone. (Roy. Zool. Soc. of N.S. Wales.)

APPENDIX F—continued.

SCIENTIFIC PAPERS AND ARTICLES PUBLISHED OR PREPARED DURING THE YEAR—continued.

- "Two New Species of the genus *Notoscolex* (*Oligochaeta*).¹" W. Boardman, *Rec. Austr. Mus.*, XVIII, 4, 1931.
 "Rock and Goose Barnacles." W. Boardman, *Austr. Mus. Mag.*, IV, 6, 1931.
 Description of various groups for the *Handbook to the Marine Fauna and Flora of the Sydney District*. W. Boardman (Roy. Zool. Soc. of N.S.W.)
 "Studies in Australian Athecate Hydroids, No. III." E. A. Briggs, *Rec. Austr. Mus.*, XVIII, 1, 1930.
 "Fresh-water Sponges from Australia and New Zealand." N. Gist Gee, *ibid.*, XVIII, 2, 1931.
 "The Waterhouse Collections—Ethnology." W. W. Thorpe, *Austr. Mus. Mag.*, IV, 4, 1930.
 "Palaeontological Notes, No. 3." C. Anderson for *Rec. Austr. Mus.*
 "Restored Head of a large Extinct Australian Lizard." C. Anderson, *Austr. Mus. Mag.*, IV, 5, 1931.
 "Trilobites." C. Anderson. *ibid.*
 "A-trouting We Will Go." C. Anderson, *ibid.*, IV, 6, 1931.
 "The Teeth of Reptiles." C. Anderson, *ibid.*, IV, 7, 1931.
 "The William Hatfield Yates Collection of Minerals." T. Hodge-Smith, *ibid.*, IV, 6, 1931
 "Mineral Collecting in Central Australia." T. Hodge-Smith, *ibid.*
 "Lake Burrill and How Our Coastal Lakes are formed." F. D. McCarthy, *ibid.*, IV, 7, 1931.

APPENDIX G.

Schedule of Specimens acquired during the year ending 30th June, 1930:—

Registration Mark.	Department.	Donation.	Exchange.	Purchase.	Prepared.	Collection.	Total.
	Vertebrata—						
M.	Mammalia	208	10	3	...	1	222
O.	Aves	142	...	...	...	6	148
R.	Reptilia	148	35	...	...	20	203
I.	Pisces	477	33	...	...	32	542
S.	Skeletons	13	...	...	...	...	13
		988	78	3	...	59	1,128
	Invertebrata—						
C.	Mollusca	3,712	14	...	...	393	4,119
K.	Insects and Arachnida	2,926	133	225	...	666	3,950
P.	Crustacea	96	475	...	...	17	588
J.	Echinodermata	52	...	...	...	43	95
U.	Polyzoa .....	...	...	...	...	5	5
W.	Vermes	85	...	...	...	56	141
Y.	Hydroida .....	...	...	...	...	7	7
Z.	Sponges and Foraminifera ...	9	...	...	...	3	12
G.	Other Invertebrata	21	...	...	...	45	66
		6,901	622	225	...	1,235	8,983
	Geological—						
F.	Fossils	100	...	4,411	...	62	4,573
D.	Minerals	792	74	55	...	167	1,088
DR.	Rocks	70	3	23	...	142	238
		962	77	4,489	...	371	5,899
	Ethnological, etc.—						
E.	Ethnological.....	1,474	117	42	...	172	1,805
H.	Historical	1	...	...	1	...	2
N.	Numismatical	94	...	...	...	...	94
		1,569	117	42	1	172	1,901
	Miscellaneous—						
AM.	Micro. Sections .....	...	...	...	204	...	204
L.	Cast ^s	1	...	4	6	...	11
T.	Moulds .....	...	...	...	8	...	8
V.	Photo. Negatives.....	...	...	...	99	...	99
VV.	Lantern Slides	1	...	17	113	122	253
B.	Photographs.....	25	...	...	...	...	25
	Films .....	...	...	34	...	...	34
		27	...	55	430	122	634
	Summary.						
	Vertebrata	988	78	3	...	59	1,128
	Invertebrata	6,901	622	225	...	1,235	8,983
	Fossils, Minerals and Rocks ...	962	77	4,489	...	371	5,899
	Ethnological.....	1,569	117	42	1	172	1,901
	Miscellaneous	27	...	55	430	122	634
		10,447	894	4,814	431	1,959	18,545

APPENDIX H. THE AUSTRALIAN MUSEUM.

Summarised Statement of Net Receipts and Payments for the Year ended 30th June, 1931.

RECEIPTS.				PAYMENTS.			
	£	s.	d.		£	s.	d.
To Balance brought forward 1st July, 1930			244 14 9	By Salaries—			
Treasury (Consolidated Revenue Fund)—				Scientific Administration	6,941	10	11
Appropriation (Item)	19,509	16	0	Office Administration	1,691	2	11
Statutory Endowment	1,000	0	0	Library Administration	840	14	10
			20,509 16 0	Preparators	1,907	1	6
Sales of Publications			444 11 10	Mechanics	680	6	7
Sales of Printing Plant, Casts, &c.	30	0	5	Attendants and Labourer	3,514	1	10
Less Refunds	24	0	0				
			6 0 5	Total Salaries	15,574	18	7
Donations			43 0 10	Overtime	893	15	11
Interest on Investments			43 2 6	Temporary Assistance	207	15	3
Miscellaneous Receipts	36	17	8				16,676 9 9
Less Refunds	31	6	6				
			5 11 2	Subsidiary Staff Charges—			
				Workers' Compensation Insurance Premium	96	2	3
				Employers' Contribution under Superannua-			
				tion Act	904	18	2
				Pension	52	0	0
							1,053 0 5
				Expenses in Connection with Buildings—			
				Insurance Premiums	295	12	10
				Materials for Minor Repairs	9	6	10
				Maintenance, Lawns and Grounds	47	4	0
							352 3 8
				Transport Expenditure—Travelling Expenses			7 14 7
				General Expenditure—			
				Postal and Telegraphic Services	99	10	5
				Books, Periodicals, and Papers	614	0	3
				Freight and Cartage	61	3	7
				Bookbinding	254	17	11
				Photography and Slides	23	17	6
				Fees to Lecturers	49	7	0
				Minor Replacements and Additions of Plant,			
				&c.	135	6	8
				Purchase of Natural History Specimens, &c.	334	16	3
				Purchase and Construction of Storage Racks,			
				&c.	35	11	7
				Stores, Stationery, and Sundry Services	563	10	1
				Publicity and Advertising, Magazine, Lec-			
				tures, &c.	109	8	0
				Expenses—Collecting Tour, Central Australia	34	4	10
				Publications—Magazine, Publication and Dis-			
				tribution	408	10	8
							2,724 4 9
							20,813 13 2
				Balance at 30th June, 1931			483 4 4
			£21,296 17 6				£21,296 17 6

I certify that the books and accounts of the Australian Museum have been examined for the year ended 30th June, 1931, as required by Section XI of the Australian Museum Act, 1902, and that in my opinion the above summarised Statement of Receipts and Expenditure is correct and in agreement with such books and accounts.

(Signed) JOHN SPENCE,
Auditor-General.

APPENDIX I. THE AUSTRALIAN MUSEUM. REVENUE ACCOUNT.

Dr.

Period 1st July, 1930, to 30th June, 1931.

Cr.

Dr.				Cr.			
	£	s.	d.		£	s.	d.
To Scientific Administration—				By Interest—			
Scientific Staff, Salaries, Overtime, Stores, and				Funds Invested—			
Services	7,741	19	0	Sydney City Council Deposit	8	12	6
Articulators	644	9	10	New South Wales Government Funded Stock	22	0	0
Taxidermists	1,248	15	0	Commercial Banking Co., Ltd., Fixed Deposit	12	10	0
Collecting Specimens	7	14	7				43 2 6
Preservation of Specimens	41	13	8	Sales of Publications—			
Freights and Charges—Specimens, &c.	60	12	10	Museum Magazine	252	4	6
Photography and Slides	132	8	7	Museum Postcards	58	2	8
			9,877 13 6	"Records" and other Publications	8	15	3
Office Administration—Office Staff, Salaries, &c.	1,776	12	10				319 2 5
			1,776 12 10	Donations			3 18 1
Publicity	25	12	5				366 3 0
General Expenses	83	17	2	Balance			19,769 18 3
Stationery	20	12	6				20,136 1 3
Postages and Telegrams	78	8	7				
Insurances	391	15	1				
			600 5 9				
Library Administration—Salaries, &c., Book-							
binding and Sundries	1,210	2	11				
			1,210 2 11				
General Administration—							
Artificers—Salaries, Stores, &c.	545	19	0				
Attendants—Salaries, Overtime, Assistance,							
&c.	4,397	1	3				
Working Expenses—Stores and Services	350	2	6				
Building Repairs and Maintenance	182	15	4				
Electric Fittings, Repairs and Maintenance	44	12	10				
			5,520 10 11				
Pensions	52	0	0				
			52 0 0				
Lectures—Fees and Expenses	161	19	3				
			161 19 3				
Depreciation—Furniture, Equipment, and							
Plant	207	4	3				
			207 4 3				
Publications—							
Magazine—Cost and Publishing and Dis-							
tributing	643	17	3				
Less Stocks on Hand	373	2	8				
			270 14 7				
Postcards—Cost and Distributing	271	11	3				
Less Stocks on Hand	236	15	2				
			34 16 1				
"Records"—Cost of Publishing and Dis-							
tributing			424 1 2				
			£20,136 1 3				£20,136 1 3