

1922.

(SECOND SESSION.)

LEGISLATIVE ASSEMBLY.
NEW SOUTH WALES.

AUSTRALIAN MUSEUM.

(REPORT OF THE TRUSTEES FOR THE YEAR ENDED 30TH JUNE, 1922.)

Presented to Parliament pursuant to Act No. 61, 1902, Sec. 10.

Printed under No. 14 Report from Printing Committee, 9 November, 1922.

TO HIS EXCELLENCY THE GOVERNOR,—

The Trustees of the Australian Museum have the honor to submit to your Excellency their Sixty-eighth Report, being for the year ended 30th June, 1922.

1. TRUSTEES.

There has been no alteration in the membership of the Board during the year.

The following is a list of the Trustees, with a record of their attendances at Board Meetings; there were eleven ordinary during the year:—

Crown Trustee.

Mr. James McKern	10
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Official Trustees.

Statutory—

His Honor the Chief Justice	—
The Hon. the Colonial Secretary	—
The Hon. the Attorney-General	—
The Hon. the Colonial Treasurer	—
The Auditor-General	8
The President of the Medical Board (Dr. T. S. Dixson, President)	9

Appointed—

The Hon. the President of the Legislative Council	—
The Crown Solicitor	—
The Surveyor-General and Chief Surveyor	—
Secretary for Public Works and Minister for Railways... ..	—
Minister of Public Instruction	—

Elective Trustees.

Prof. W. A. Haswell, M.A., D.Sc., F.R.S....	7
*Prof. Sir T. W. E. David, K.B.E., C.M.G., B.A., F.R.S.	2
Mr. W. H. Hargraves	7
Dr. Eric Sinclair	8
*Colonel The Hon. Sir James Burns, K.C.M.G., M.L.C.	6
Dr. J. R. M. Robertson	3
*Mr. Ernest Wunderlich	3
*Dr. G. H. Abbott, B.A.	3
Mr. J. Vernon	3
The Hon. D. Levy, B.A., LL.B., M.L.A.	3
Mr. J. J. Fletcher, M.A., B.Sc.	11
Mr. G. McRae	4

* Leave of absence for part of the year.

To facilitate the work of the Board, three Sectional Committees, elected yearly in December, meet monthly and make recommendations on matters coming within their purview. The House Committee deals generally with all questions affecting the staff, and such matters as structural improvements, alterations, and additions; the Scientific and Publication Committee controls the publications of the Museum and the acquisition and exchange of specimens and publications; the Finance and Publicity Committee supervises the finances of the institution and devises measures for the purpose of popularising the Museum and making its contents and educational advantages better known to the public.

The members of these Committees and their attendance during the year are detailed below; the President is *ex officio* a member of each committee. At the December meeting of the Board the membership of each committee was increased to five, and certain changes in personnel were made. Mr. Wunderlich (on leave of absence) was replaced by Mr. Coghlan as chairman of the Finance and Publicity Committee, which was strengthened by the addition of Mr. Vernon. Mr. McKern became Chairman of the House Committee in succession to Mr. Coghlan, and Mr. McRae was elected a member of the same committee. The members of the Scientific and Publication Committee were re-elected.

Finance and Publicity Committee—

Mr. Wunderlich (Chairman till Dec.)..	5
Mr. Coghlan (Chairman)	7
Dr. Dixon	2
Mr. McKern	12
Mr. Hargraves	8
Sir James Burns	5
Mr. Vernon	4

Twelve meetings were held.

House Committee—

Mr. Coghlan (Chairman till Dec.)...	1
Mr. McKern (Chairman)	5
Dr. Dixon	10
Professor Haswell	5
Mr. Hargraves	8
Dr. Robertson	6
Mr. McRae	4

Eleven meetings were held.

Scientific and Publication Committee—

Dr. Sinclair (Chairman)	8
Professor Haswell	8
Mr. Fletcher	11
Professor David	1
Dr. Abbot	4

Eleven meetings were held.

2. STAFF.

A number of changes have taken place during the year. Mr. R. W. Bretnall, Zoologist in charge of Lower Invertebrates, whose health was impaired by his war service, retired on break-down pension on 5th December, 1921, and Mr. F. A. McNeill was promoted to fill the vacancy. Mr. T. Hodge Smith commenced duty as Assistant Mineralogist and Petrologist on 18th July, 1921. Messrs. McNeill and Smith were promoted to be First-class Scientific Assistants on 3rd March, 1922. The Board was unsuccessful in obtaining a competent Palaeontologist, and decided to appoint two cadets. Messrs. G. P. Whitley and W. Boardman were selected, and commenced duty on 18th April, 1922. Acting-Professor L. Harrison, B.Sc., B.A., and Mr. E. A. Briggs, B.Sc., of the Biology Department, University of Sydney, were appointed Honorary Zoologists from 1st July, 1921. Attendant W. Barnes was transferred to the Taxidermist's shop on 1st June, 1922, and W. A. Medway was appointed to the Attendant staff in his place. A. C. Sawtell was appointed Junior Messenger on 9th May, but resigned on the 15th to enter the Public Service, and was succeeded by H. Doyle, who entered on his duties on 16th May. The Trustees regret to report that Attendant T. Rochford died on 23rd September, 1921, after ten years' service. To fill this vacancy Mr. E. G. Morris was appointed, and commenced duty on 10th October, 1921. Mrs. K. Fraser, Woman Attendant, entered on six months' leave prior to retirement. Mrs. Fraser has been a faithful servant of the Board for the long period of thirty-three years. Mrs. F. M. Smith succeeded Mrs. Fraser on 8th March, 1922, but resigned 27th June.

The following is a list of the Museum Staff as at 30th June, 1922 :—

Name and Office.	Date of first appointment in the Museum.	Date of appointment to present position.
Charles Anderson, M.A., D.Sc., Director	22 July, 1901	14 Feb., 1921
Charles Hedley, Principal Keeper of Collections and Conchologist	1 April, 1891	14 Feb., 1921
Allan R. McCulloch, Zoologist in charge of Fishes... ..	1 July, 1901	1 July, 1906
Wm. W. Thorpe, Ethnologist	9 Oct., 1899	1 July, 1906
Anthony Musgrave, Entomologist	7 Feb., 1910	1 June, 1920
J. Roy Kinghorn, Zoologist in charge of Birds, Reptiles, and Amphibia... ..	1 Sept., 1907	4 Feb., 1921
Ellis Le G. Troughton, Zoologist in charge of Mammals and Skeletons	13 Jan., 1908	4 Feb., 1921
F. A. McNeill, Zoologist in charge of Lower Invertebrates	18 May, 1914	3 Feb., 1922
T. Hodge Smith, Mineralogist and Petrologist	18 July, 1921	3 Mar., 1922
T. Harvey Johnston, M.A., D.Sc., Hon. Zoologist	18 Feb., 1908	5 Mar., 1909
Edw. F. Hallmann, B.Sc., Hon. Zoologist	9 June, 1909	1 April, 1912
A. F. B. Hull, Hon. Ornithologist	7 Sept., 1917	7 Sept., 1917
G. A. Waterhouse, B.Sc., Hon. Entomologist	3 Oct., 1919	3 Oct., 1919
H. J. Carter, B.A., Hon. Entomologist	2 July, 1920	2 July, 1920
L. Harrison, B.Sc., B.A., Hon. Zoologist	1 July, 1921	1 July, 1921
E. A. Briggs, B.Sc., Hon. Zoologist... ..	1 June, 1912	1 July, 1921

3. BUILDINGS AND GROUNDS.

4. ATTENDANCE OF VISITORS.

Summary.

5. EXHIBITS.

A section of the coin collection was this year placed on exhibition. It is not possible, owing to lack of space, to exhibit the whole collection, but it is hoped that by periodically changing the contents of the cases numismatists may from time to time be enabled to see the most interesting coins.

6. THE AUSTRALIAN MUSEUM MAGAZINE.

Three numbers of the magazine appeared during the year, and the demand for copies has steadily increased. The second number was increased from an edition of 1,000 to one of 2,000, and the fourth to 3,000 to enable specimen copies to be sent to public schools. Very gratifying reviews of the publication have appeared in "Nature," "The Museums Journal," "Natural History," and other periodicals.

7. LIBRARY.

During the year the Library acquired by purchase, exchange, and donation 208 volumes, irrespective of loose parts and reprints. As usual economy has been practised in the purchase and binding of volumes.

The damp condition of the basement, where the valuable collection of foreign serials, many of which are not represented in other Sydney libraries, are stored, is a continual source of concern. It is only by constant attention that the growth of moulds can be inhibited.

Considerable assistance has been rendered to research students, not only in this State, but also from other parts of the Commonwealth and New Zealand. Artists and designers have also made extensive use of the contents of the Library.

As in past years, the Librarian, Mr. W. A. Rainbow, has supervised the production of the Museum publications, and given valuable assistance in the work of editing.

8. LECTURES.

The series of popular lectures held during the year, was, as usual, well attended by the public; indeed, it is now the rule for the lecture room to be crowded well before the advertised hour, and more than once accommodation was insufficient for the audience.

Subjects and lecturers during the year were as follows:—

- 1921—7 July—"Australian Marsupials and why they are worth protecting," Dr. W. K. Gregory.
- 14 July—"Monotremes and Marsupials," L. Harrison, B.Sc., B.A.
- 11 August—"Snakes and Snake Venom," J. R. Kinghorn.
- 8 September—"Lord Howe Island: a South Sea Tragedy," A. R. McCulloch.
- 13 October—"Ants and Ant Communities," A. Masgrave.
- 10 November—"Primitive Man," L. Harrison, B.Sc., B.A.
- 1922—22 March—"Extermination of Vermin: Prevention of Plague and other Insect-borne Diseases," Dr. J. S. Purdy.
- 13 April—"The Story of the Hookworm," Dr. W. A. Sawyer.
- 11 May—"Life in Past Ages," Dr. C. Anderson.
- 8 June—"Australian Reptiles," J. R. Kinghorn.

Under the auspices of the Royal Australasian Ornithologists' Union, Captain S. A. White delivered, on 7th October, a lecture entitled "The Economic Value of our Birds."

The Trustees, desiring to extend the scope of these popular lectures to embrace suburban and country centres, instituted during the year "The Australian Museum Extension Lectures," and the first address of the series, entitled "Lord Howe Island: A Naturalists' Paradise," was delivered by Mr. A. R. McCulloch at the Railway Institute, Devonshire-street, Sydney, on 11th April. The President, Dr. T. Storie Dixon, gave a brief preliminary address on the aims and work of the Museum.

9. COLLECTING.

A vigorous campaign of field collecting has been pursued during the year in conformity with the policy of the Board. Messrs. E. Le G. Troughton and J. H. Wright made an extended trip, lasting for about two months, along the East-West Railway line in South and Western Australia and southwards to Albany, and secured a large and valuable general collection, including a number of rare mammals. During the last fortnight they were joined by Mr. H. S. Grant, who, with Mr. Wright, later proceeded to the Recherche Archipelago, Western Australia, with an expedition organised by Mr. A. F. Basset Hull, Honorary Ornithologist, on behalf of Mr. H. L. White; they were successful in collecting a number of seals, birds, and native rats, besides a number of invertebrates. The Trustees desire to express their indebtedness to Messrs. Anthony Hordern and A. S. Le Souef, who generously assisted the East-West Expedition with a grant from the Hordern-Le Souef Research Fund, and to Mr. H. L. White, who kindly invited the Trustees to send two officers to the Recherche Archipelago with his party.

A well-equipped expedition was sent to Lord Howe Island in January to obtain specimens and sketches for the purpose of making a number of group exhibits in the Museum. This party consisted, besides Mr. A. R. McCulloch, the leader, of Miss P. F. Clarke, artist, Messrs. E. Le G. Troughton, G. C. Clutton and W. Barnes. They secured over 100 birds and a large collection of fishes, corals, and other invertebrates, and numerous sketches and photographs, which will be utilised in the construction of two bird groups and a coral group. This expedition was largely financed by donations from Messrs. A. E. and O. Phillips, Sir James Burns, Trustee, and Sir Hugh and Mr. William Dixon, to whom the Trustees tender their grateful thanks. Thanks are also due to the Lord Howe Island Board of Control for their cordial co-operation.

Mr. A. Musgrave spent a fortnight collecting in the Upper Chichester Valley, New South Wales, where he secured a number of mammals and insects, and Mr. J. R. Kinghorn accompanied the members of the Royal Australasian Ornithologists' Union in their annual camp-out at Wallis Lake, Tuncurry, New South Wales.

Mr. T. Hodge Smith spent two weeks at Sheep Station Gully, Bowling Alley Point, near Nundle, New South Wales, investigating the origin of the garnets occurring in the Great Serpentine Belt, and preparing a detailed map of the area. A large series of rocks and minerals was collected by Mr. Smith and Mr. D. A. Porter, who accompanied him and gave valuable assistance.

On three occasions during the year two members of the Museum staff were privileged to accompany the State trawler "Goonambee" on one of its cruises, during which our officers, Messrs. F. A. McNeill, A. A. Livingstone, and H. O. Fletcher, secured valuable collections of marine organisms. Since the lamentable loss of the F.I.S. "Endeavour," the State trawlers furnish our only means of making offshore collections, and the Trustees deeply appreciate the courtesy of Mr. E. B. Harkness, C.M.G., Under-Secretary, Chief Secretary's Department, Mr. A. P. Summergreene, manager State Trawling Industry, and Captain Flett, of the "Goonambee," in allowing our officers to make these trips.

10. CURATORIAL WORK.

Mammals (Mr. E. Le G. Troughton in charge).—Amongst donations received during the year were a number from the Taronga Zoological Park Trust, including a "Drill" (*Papio leucophaeus*) and other monkeys, a fine Sea Leopard (*Oymorhina leptonyx*), captured at Dee Why, New South Wales, two antelopes, a wombat, and a number of kangaroos and possums. Other donations included several ring-tailed possums, possibly representing a new species, and several smaller marsupials by Mr. H. L. White; the rare Humboldt's Woolly Monkey (*Lagothrix lagotricha*) and foreign carnivores by Mr. E. S. Joseph; a collection of marsupials and rodents from stations on the Trans-Australian Railway by Mr. A. S. Le Souef; bats, rats, and marsupials from the Chichester River, New South Wales, by Mr. N. W. Cayley; a valuable and interesting collection of skins, skulls, and spirit specimens of native rats and marsupials from Tasmania (collected by Mr. H. Burrell), by Messrs. A. S. Le Souef and Burrell. A skin and skull of a recently described sub-species of D'Alberti's Phalanger (*Pseudochirus albertisi coronatus*) was acquired by purchase; this Papuan species, described in 1874, was not previously represented in the collection.

A successful collecting expedition to South and Western Australia, in charge of Mr. Troughton, assisted by Mr. J. H. Wright, and, during the final fortnight, by Mr. H. S. Grant, obtained 108 mammals, including a series of the rare and interesting "Honey Mouse" (*Tarsipes spenserae*), and specimens of the Banded Ant-eater (*Myrmecobius fasciatus*), and a number of marsupials, bats, and rats, many of which were not, or only poorly, represented in the collections. Photographs of living mammals and other subjects were secured and a valuable series of field notes. Four seals and a number of rats were collected by Messrs. H. S. Grant and J. H. Wright on an expedition to the Recherche Archipelago, South-West Australia, led by Mr. A. F. Basset Hull. Mr. A. Musgrave secured a number of interesting marsupials and rodents while collecting on the Upper Chichester Valley, New South Wales.

One hundred and seventy-six mammals were skinned and treated by the taxidermists.

Six lecturettes were given to mixed classes of blind children on Australian animals. Specimens were selected and arranged for various visiting lecturers. Mr. A. S. Le Souef has been frequently assisted with information and data, and Mr. A. H. S. Lucas, M.A., B.Sc., was supplied with a list of species described since 1909.

Skeletons (Mr. E. Le G. Troughton in charge).—The crania of the sub-family Potoroinæ (rat kangaroos, &c.), and of a section of the Macropodidæ (wallabies) were sorted, many corrections being made. A complete skeleton of a Western Australian aboriginal, presented by Dr. F. A. Rodway, is the only one from that State in the collection. The cannon bone of a horse, round which a piece of wire had become fixed and embedded, was presented by Mr. E. C. Watson, and is the subject of an article in the *Museum Magazine*.

One hundred skulls and several skeletons were cleaned and prepared by the articulators, providing valuable material for study and exchange.

Birds (Mr. J. R. Kinghorn in charge; Mr. H. O. Fletcher, Assistant).—During the year 841 specimens of birds and eggs were added to the collection, 663 presented, 172 collected, and 6 exchanged. Among the donations were 500 eggs of sea birds by the Australasian Antarctic Expedition Committee, 100 eggs of American birds by Mr. A. F. Basset Hull, and 60 skins of Birds of Paradise by the Department of Customs. Out of the total number collected about 70 were obtained by Messrs. Troughton, Grant, and Wright in South and Western Australia, and over 100 were secured at Lord Howe Island by the Museum party led by Mr. A. R. McCulloch.

Since Mr. Kinghorn assumed charge of the department in May, 1921, great progress has been made in the cataloguing and arranging of the collection. Over 12,000 catalogue cards have been written, and all the Australian birds in the reference and duplicate collections are now card indexed, so that one can ascertain in a few minutes exactly what species are in the collection and where they are stored. Mr. Kinghorn speaks very highly of the excellent work Mr. H. O. Fletcher has done in assisting to put the collection in order.

In September the Annual Conference of the Royal Australasian Ornithologists' Union was held in the Museum, and owing to the advanced condition of the catalogue it was possible to supply them with much necessary information. Mr. Kinghorn also attended the annual camp-out of the Union at Wallis Lake, Tuncurry, New South Wales.

Numerous letters of inquiry have been attended to, and many students and others have had information supplied to them. Several articles have been written for the *Museum Magazine*, and a paper written in collaboration with Mr. N. W. Cayley has just been completed; it deals with the status of several sea birds belonging to the Procellaria group.

The gallery collections have been thoroughly attended to by Messrs. H. S. Grant and J. H. Wright, with the assistance of Mr. W. Barnes, who ably carried out the duties of the taxidermists during their absence on collecting expeditions.

Reptiles and Amphibians (Mr. J. R. Kinghorn in charge).—Additions number 705, being an increase of 598 over last year's acquisitions. Of the total number 567 were presented, including a valuable collection of 400 specimens presented by Mr. J. J. Fletcher, M.A., B.Sc., Trustee. Specimens to the number of 138 were collected by Messrs. Troughton, Grant, and Wright in South and Western Australia, including several rare, and a few species apparently new. The spirit collections have received the attention necessary for their good condition, and the catalogue has been carefully checked.

Two parties of school teachers were conducted round the Museum, and lectorettes were given in the Reptile and Bird galleries. Many letters of inquiry have been answered, and over a hundred visitors have been attended to. A short article was written for the *Museum Magazine* by Mr. Kinghorn, who also delivered two lectures on reptiles in the lecture hall.

Fishes (Mr. A. R. McCulloch in charge; Cadet G. P. Whitley, Assistant).—The space available for the storage of the reference and duplicate collections having become filled to its utmost capacity, additional shelving was provided in a new spirit-room. By transferring the invertebrates from the old spirit-house to these new shelves we have been able to expand the bottle collection of vertebrates, and so to incorporate several miscellaneous collections, including a large lot received from the Fisheries Department, into their proper positions. This expansion, so long needed, will greatly expedite future work on the group.

The need for a good supply of suitable bottles is very great, and now presents the greatest obstacle to the advancement of the collections.

Our Queensland fishes have been considerably enriched by several consignments received from Mr. E. H. Rainford, while another valuable lot was collected at King George Sound, Western Australia, by a party under the leadership of Mr. E. Le G. Troughton. A number of highly interesting fishes, including some large and little known rays, were collected by members of the staff, who have been permitted to accompany the State trawlers at different times; while the unique collection of Antarctic fishes gathered together by the Australasian Antarctic Expedition was presented to this Museum by the Printing of Records Committee of the Expedition.

A number of very interesting casts have been prepared for exhibition in the galleries, including a Ribbon-fish (*Trachipterus jacksonensis*), and three Lung-fishes (*Neoceratodus forsteri*). The latter are to be arranged in a group to represent the natural conditions of these remarkable fishes. Another method of exhibiting fishes, by combining the skin with a plaster cast, has proved very satisfactory, and a number of such specimens are being prepared for exhibition in a coral-pool group.

The following papers have been published:—

"Check List of the Fishes and Fish-like Animals of New South Wales, Part 3," *Austr. Zoologist*, ii, 3, 1922, pp. 86-130, pls. xxv-xliii.

"Notes on, and Descriptions of Australian Fishes, No. 2," *Proc. Linn. Soc. N.S. Wales*, xli, 4, 1921, pp. 457-472, pls. xxxvii-xli.

"Notes and Illustrations of Queensland Fishes, No. 2," *Mem. Qld. Mus.*, vii, 3, 1921, pp. 164-178, pls. viii-xi.

Insects and Arachnids (Mr. A. Musgrave in charge; Cadet T. G. Campbell, Assistant).—During the year considerable time has been spent in writing labels for the gallery collection, and at the same time revising and rearranging the specimens there exhibited. In addition, the cabinet collections have been overhauled and revised, and the purely routine work of registering, cataloguing, and intercalating the large collections received from various sources into the general collection, has taken up a great amount of time.

Numerous donations were received during the year, the largest being that of portion of the G. A. Waterhouse collection of Indo-Australian Rhopalocera. To house this collection additional cabinets were required, and two were purchased. These will hold only about a quarter of the specimens that Mr. Waterhouse intends to present to the institution. Large collections of Australian Diptera were received from Dr. E. W. Ferguson (Sydney), Prof. T. Harvey Johnston (Queensland), and Mr. G. H. Hardy respectively. To Mr. H. J. Carter we are again indebted for many representatives of Australian Coleoptera, including paratypes of species described by him. The Trustees gratefully acknowledge the receipt of a large collection of parasitic insects and arachnids from the Wellcome Bureau of Scientific Research, London.

A large collection of Australian Bees, identified by Mr. H. Hacker, of Brisbane, Queensland, was purchased from Mr. G. H. Hardy.

Collections of miscellaneous insects made in the vicinity of Sydney were presented to the Museum by Mr. Musgrave and Cadet Campbell.

In answer to a request by Prof. Yngve Sjöstedt, of Stockholm, to be allowed to examine the Acridiidae in our collection, the specimens were forwarded to him, and have since been returned.

A collecting trip to the Upper Chichester Valley, New South Wales, was made during the year for the purpose of collecting the insects in that district. A large collection of insects was made by a party to Lord Howe Island, under the leadership of Mr. A. R. McCulloch, and we are indebted to one of the residents of the island, Mr. R. Baxter, for much valuable assistance in securing specimens for the Museum.

Mollusca (Mr. C. Hedley in charge; Miss J. Allan, Assistant).—Among donations received during the year were seven species, not previously in the collection, from Umveta River mouth, Zululand, South Africa, presented by Mr. H. W. Bell Marley. Eighty-three species of Hawaiian shells were received in exchange with Mr. C. F. Mant of Honolulu, and a series of Patagonian Mollusca from the Museum of Buenos Ayres, South America.

An interesting collection of shells, both marine and terrestrial, was gathered in Western Australia by an expedition to the Recherche Archipelago, under the leadership of Mr. A. F. Basset Hull.

The Hargreaves Collection of Foreign Shells exhibited in the Bird room has been renovated, the written labels replaced by print, and the entire series re-arranged so as to be more accessible to visitors. A large section of the Australian bivalves has been checked and registered by Miss Allan, and the Species Catalogue is almost completed.

A lengthy paper, illustrated by fifteen plates, in which the Australian members of the marine gasteropods of the family Turridae are revised, has been completed by Mr. Hedley, and is now in the press.

Marine Invertebrata (Mr. F. A. McNeill in charge; Cadet A. A. Livingstone, Assistant).—All the acquisitions of the year have been card-catalogued and put away in their respective collections. The checking and classifying of the collections in the spirit-house, gallery, and dry store, has nearly reached finality, with the result that complete card catalogues are now in existence for all but three of the many groups concerned. All gallery and dry store collections have been regularly fumigated, and many additions intercalated in the former, together with descriptive labels.

Two exchange collections have been despatched during the year. One of these included forty-two species of local Decapoda, sent to the Bernice P. Bishop Museum, Honolulu, Hawaii, in return for a much-wanted series of the commoner Hawaiian species. The other included twenty-one species of Echinodermata, sent to Dr. T. Odhner, of Stockholm, in exchange for which we received a valuable series of 127 specimens. Many consignments of Amphipoda and Isopoda have been sent to Prof. C. Chilton, Canterbury College, New Zealand, who has been good enough to append his identifications to the various species, and so enriched our reference collections to an appreciable extent. The report on a section of the Decapoda collected by the F.I.S. "Endeavour" has been received for publication from Miss M. J. Rathbun, and was accompanied by the specimens concerned. Work has been started on the distribution of this material to the various museums of the Commonwealth, and the manuscript and illustrations are now ready for the printer. A huge amount of Australasian Antarctic Expedition material has been presented during the year by the Printing of Records Committee of the Expedition. This includes the following worked and named collections:—Polychæta, returned by Prof. W. B. Benham, of New Zealand; Echinodermata, returned by Prof. René Kœhler, of Paris; Porifera (calcareous), returned by Prof. A. Dendy, of England. Other donations include many consignments of tropical species from Mr. E. H. Rainford, of Bowen, Queensland, who has diligently collected in our interests for some time past; and a collection of Decapoda from Lord Howe Island, secured by Messrs. McCulloch and Troughton of the Museum staff.

The following articles were published in the *Australian Museum Magazine* :—

"Quaint Crustaceans," by F. A. McNeill, vol. i, No. 2, pp. 57-9;

"Peculiar Agencies of Animal Distribution," by F. A. McNeill, vol. i, No. 3, pp. 88-9.

Ethnology (Mr. W. W. Thorpe in charge; Mr. H. O. Fletcher, Assistant).—The chief donations received during the year were :—A collection of aboriginal weapons from Western Australia, by Dr. F. A. Rodway; Nigerian metal ornaments, by Mr. James C. Law; Chinese gambling and opium outfits, by Senior-Sergeant P. Charlton; a massive clam-shell implement from Walpole Island, by Mr. A. C. Mackay; a large cane-work "idol," Western Papua, by Mr. H. G. A. Harding; a fine series of Egyptological specimens by Messrs. E. and A. Wunderlich; carvings from the Admiralty Islands, Bismarck Archipelago, by Dr. V. M. Coppleson; weapons and implements from South Australia, by Mrs. Daisy M. Bates; crocodile carving and shell ornament, Solomon Islands, by Mr. Harry Wickham; bullroarers and other objects from British Papua, by Mr. A. P. Lyons.

By purchase, from Mr. T. J. Denham, we acquired a miscellaneous collection from the late German Solomon Islands, and a number of South Sea spears, including eight from St. Matthias, Bismarck Archipelago, were purchased from Mr. J. R. Lawson.

A number of Victorian aboriginal axes and flaked implements were obtained by exchange with Mr. A. S. Kenyon and the National Museum, Melbourne.

The cleaning of the exhibited collection and re-lining of cases was completed early in September. This work was followed by interior cleaning of table and floor cases.

The reception, cleaning, disinfecting, cataloguing, and storing of the large Thurnwald collection from New Guinea was the work of several weeks. This is now housed with, but separate from, the Papuan Official Collection in the basement store.

The chief ethnographical installations during the year comprised a table case of small objects from the Solomon Islands; Chinese opium and gambling implements and materials; a set of "King" spears from the Solomon Islands; a case of Egyptological specimens. Mr. H. O. Fletcher assisted two days per week.

Palæontology (Mr. W. W. Thorpe in charge).—The principal gifts were :—Jaws and teeth of extinct ancestors of the horse, from Nebraska and Wyoming, United States of America, by the American Museum of Natural History, New York; remains of *Miolania* from Lord Howe Island, by Mr. R. V. Hines, and from Walpole Island, by Mr. A. C. Mackay; vertebrae of *Cimoliosaurus*, Nottingham Downs, Queensland, by Mr. G. Milburn.

A number of silicified corals and gasteropods were collected near Ooldea, South Australia, by Messrs. E. Le. G. Troughton and J. H. Wright.

A reduced model and a femur of the gigantic dinosaur *Camarasaurus* was received by exchange with the American Museum of Natural History.

Numismatics (Mr. W. W. Thorpe in charge).—As donations we received a small collection of current foreign coins from Mr. W. Quee, and a number of Turkish coins from Mr. K. F. Andersen. Three military medals, two in duplicate, were presented by the Secretary, Department of Defence, Melbourne. Many visitors have called bringing coins for identification during the year.

Minerals and Rocks (Mr. T. H. Smith in charge).—Over 450 specimens were registered during the year, of which more than half were acquired by the purchase of the collection of Mr. C. D. Ryder. This collection consisted of minerals chiefly from New South Wales, Queensland, and Tasmania. As usual, we have acquired valuable material by exchange with Mr. Inspector George Smith, of the Department of Mines. Mr. D. A. Porter has again presented a number of minerals from the New England District, New South Wales.

During the year a number of descriptive labels have been added to the gallery.

Two weeks were spent at Sheep Station Gully, Bowling Alley Point, New South Wales, investigating the origin of the grossularite garnet occurring in the Great Serpentine Belt. A detailed map of the area under review was made, and about ninety rock specimens were collected. Much laboratory work has yet to be done. Unfortunately the work is being delayed by the difficulty of procuring slides and the lack of a suitable microscope. A short visit of a few hours' duration was made to the Railway Quarry, Ardglenn, New South Wales, where a number of interesting specimens were collected.

In the laboratory a number of chemical analyses have been carried out, as well as crystallographical measurements and petrological determinations. The result of this work will be embodied in the next "Mineralogical Notes."

The

The following paper was published :—

⁶ "Mineralogical Notes, No. xi," by C. Anderson, *Rec. Austr. Mus.*, xiii, 5, 1922, pp. 201-212.

Spirit-house Collections (Mr. F. A. McNeill in charge; Cadet W. Boardman, Assistant).—Advance in this section has been largely held back through shortage of bottles; in the absence of larger stocks the proper distribution of collections is impossible. The evaporation of spirit from the bottles has been kept in check through the efforts of Cadet A. A. Livingstone, who has diligently attended to the collections in this regard. The large slate vats have been subject to periodical inspections and the contained formalin preservative kept up to strength. No fungus growths are now present. The overcrowding of the collections, felt so acutely last year, has now been completely overcome. Advantage has been taken of the extra space afforded by the provision of another spirit-house, and most of the invertebrate collections are now stored in these new quarters. This move will allow of greater facility in the proper systematic cataloguing and distribution of the reference material—a matter at present receiving the greatest attention. Much work has been done in the preparing for despatch of collecting materials for use by the Museum employees, and others interested in the work of the institution.

II. FINANCIAL.

Statement of Receipts and Expenditure for the year ended 30th June, 1922.

	Endow- ment Account.	Public Account.	Totals.		Endow- ment Account.	Public Account.	Totals.
	£ s. d.	£ s. d.	£ s. d.		£ s. d.	£ s. d.	£ s. d.
Balance from last year ...	511 16 2		511 16 2	Salaries—			
Parliamentary Appropriations—				Director, and Principal Keeper of			
Salaries ... ..	.....	13,329 7 11		Collections ... ..	.....	1,397 3 7	
Contingencies ... ..	.....	2,104 3 7	15,433 11 6	First-class Scientific Assistants	.....	2,534 4 2	
				Cadets and General Assistants	.....	895 18 4	
Statutory Endowment	1,000 0 0		1,000 0 0	Clerical Staff ... ..	.....	1,238 19 11	
Resumption Account	1,160 4 1		1,160 4 1	Mechanics ... ..	.....	2,039 13 2	
				Attendants ... ..	.....	3,081 12 10	11,187 12 0
Sale of Publications—				Contingencies—			
Records	0 0 9			Overtime and Sundays ... ..	.....	435 17 6	435 17 6
Post Cards	1 1 9			Insurance ... ..	.....	259 1 0	259 1 0
Nest and Egg Catalogue	4 9 5			Pensions ... ..	.....	208 0 0	208 0 0
Catalogues	0 3 6			Building and Maintenance—			
Memoirs	2 5 0			Cases ... ..	.....	383 19 2	
Magazine	209 11 0		217 11 5	Repairs ... ..	.....	57 1 11	441 1 11
Magazine Advertisements	28 10 0		28 10 0	Superannuation—			
Miscellaneous—				Trustees' Contributions ... ..	.....	1,604 7 2	2,143 9 9
Donations towards Collecting Trips	180 0 0			Employees' Contributions ... ..	.....	539 2 7	
Miscellaneous	13 19 0		193 19 0	Statutory and Additional Endow- ment—			
Interest—				Working Expenses	438 16 4	564 6 10	
Seventh War Loan	25 0 0			Purchase of Specimens	47 17 0	0 10 0	
Peace Loan	20 0 0			Catalogues, Publishing of—			
Reserve Account	18 5 7		63 5 7	Magazine	480 9 11	21 19 11	
Transfer Reserve to Endowment	465 0 0			Records	71 12 8	.....
Transfer Salaries to Endowment	4 6 0		469 6 0	Purchase of Books and Bookbinding	254 3 8	31 3 6	
				Preservation of Specimens	62 1 3	56 11 2	
				Publicity and Advertising	35 4 6	50 10 2	
				Tools and Plant ... ..	.....	.....
				Collecting and Travelling	398 10 6	.....
				Miscellaneous	20 15 0	33 8 7	2,568 1 0
				Installation of Electric Light	382 16 3	.....	382 16 3
				Transfer from Reserve Account	465 0 0	.....	465 0 0
				Balance	987 5 2	.....	987 5 2
£ 3,644 12 3	15,433 11 6	19,078 3 9		£ 3,644 12 3	15,433 11 6	19,078 3 9	

List of Investments :—

of Investments :—	£	s.	d.
Seventh War Loan, at 5 per cent.	500	0	0
Peace Loan, at 5 per cent.	400	0	0
Fixed Deposit Bank of New South Wales, at 4 per cent.	5,000	0	0

Examined and found correct.—

P. W. SMITH.

18th July, 1922.

Inspector of Public Accounts.

The Common Seal of the Museum was hereunto affixed by order of the Board, this 22nd day of September, 1922.

T. STORIE DIXSON, President.
C. ANDERSON, Director. (L.S.)

12. APPENDICES.

The following Appendices are attached, viz.:—

1. List of the Publications of the Australian Museum.
2. Catalogue of the Additions to the Library.

APPENDIX I.

List of available publications of the Australian Museum :—

I.—Annual Reports.

Nos. 28–33, 1881–6; 36–44, 1889–1897; 46–65, 1899–1919; 67, 1921.

II.—Catalogues.

4. Catalogue of the Australian Birds in the Australian Museum, by E. P. Ramsay. Part I, Accipitres, 1876. Part II, Striges, 1891. (Second edition, revised by A. J. North, 1898.) Part III, Psittaci, 1891. Part IV, Halcyones, 1894.
6. Catalogue of the Library of the Australian Museum, 1883. With two Supplements.
7. Catalogue of a Collection of Fossils in the Australian Museum. With Introductory Notes by F. Ratte, 1883.
9. Descriptive Catalogue of the General Collection of Minerals in the Australian Museum, by F. Ratte, 1885.
10. Catalogue of Echinodermata in the Australian Museum, by E. P. Ramsay. Part I, Echini, 1885. Second edition, 1890.
13. Descriptive Catalogue of the Sponges of the Australian Museum, by R. von Lendenfeld, 1888.
14. Catalogue of the Fishes in the Australian Museum. Part I, Palæiethyan Fishes. By J. Douglas Ogilby, 1888.
15. Catalogue of the Marine Shells of Australia and Tasmania, by J. Brazier. Part I, Cephalopoda, 1892. Part II, Pteropoda, 1892. Part III, Gasteropoda (Murex), 1893.
16. Catalogue of Australian Mammals, with Introductory Notes on General Mammalogy, by J. Douglas Ogilby, 1892.
17. Descriptive Catalogue of the Tunicata in the Australian Museum, by W. A. Herdman, 1899.

III.—Special Catalogues.

1. Nests and Eggs of Birds found breeding in Australia and Tasmania, by A. J. North. Vol. I, 1901–1904. Vol. II, 1906–1909. Vol. III, 1910–1912. Vol. IV, 1913–1915.

IV.—Monographs.

1. Australian Lepidoptera and their Transformations, by A. W. Scott, with Illustrations by his daughters, Mrs. Morgan and Mrs. Forde, Vol. I, 1864. Vol. II, edited and revised by Mrs. Forde and A. S. Olliff, 1890–98.

V.—Memoirs.

1. History and Description of the Skeleton of a new Sperm Whale in the Australian Museum, by W. S. Wall, 1851.
3. The Atoll of Funafuti, Ellice Group: Its Zoology, Botany, and General Structure, based on Collections made by C. Hedley, 1896–1900.
4. Scientific Results of the Trawling Expedition of H.M.C.S. "Thetis," off the Coast of New South Wales, in February and March, 1898. 1899–1914.

VI.—Records.

The Records contain descriptions of specimens, accounts of expeditions, and other results of the scientific work of the Museum Staff.

Vol. iii, 1897–1900; vol. iv, 1901–3; vol. v, 1903–5; vol. vi, 1905–8; vol. vii, 1908–10; vol. viii, 1910–13; vol. ix, 1912–13; vol. x, 1913–15; vol. xi, 1916–17; vol. xii, 1917–21; vol. xiii, Nos. 1–5, 1920–22.

VIII.—Miscellaneous Publications.

1. List of Old Documents and Relics in the Australian Museum, 1884. Reprinted with additions, 1890.
2. Descriptive List of Aboriginal Weapons, Implements, &c., from the Darling and Lachlan Rivers, by K. H. Bennett, 1887.
4. Hints for the Collectors of Geological and Mineralogical Specimens, by F. Ratte.
5. Hints for the Preservation of Specimens of Natural History, by E. P. Ramsay, 1891. 4th edition.
10. List of Museum Publications prepared and arranged by S. Sinclair, Secretary and Librarian, assisted by W. A. Rainbow, Assistant Librarian, 1916.

APPENDIX II.
ADDITIONS TO THE LIBRARY.

Reg. No.	Books.	How acquired.	Reg. No.	Books.	How acquired.
PART I.—BOOKS.					
20214	AMEGHINO, Florentino. Obras Completas y Correspondencia Científica de . . . Dirigida por Alfredo J. Torcelli. Vol. I. Vida y Obras del Sabio. II. Primeros Trabajos Científicos. 1 vol. 8vo. La Plata, 1913-1914.	Presented	20110	WAGNER, Woldemar. L'Industrie des Araignées. Description Systématique des constructions des araignées de la région médiane de la Russie (Principalement de leur Rétrécissement, du nid et des cocons). Classification des Araignées d'Après les particularités de leur Industrie et sa valeur pour la Philogénie de cette classe. La Nature de l'Activité psychique des araignées dans le choix de l'emplacement, des matériaux et de l'Architecture pour leurs constructions. Fluctuations, déviations et variations des instincts. La marche du développement progressif des instincts nidificateurs et les facteurs, qui déterminent sa direction générale. Recherches de Woldemar Wagner. (Mémoires l'Acad. Imper. Sciences de St. Pétersbourg, VIIe Série, Tome XLII, No. 11.) 1 vol. 4to. St. Petersburg, 1894.	Presented
20078	ANGELIN, N. P. Iconographia Crinoideorum in Stratis Succie Siluricus Fossilum . . . cum tabulis xxix, 1878.	Purchased	20200	WALL, Frank. Ophidia Taprobanica or the Snakes of Ceylon. 1 vol. 8vo. Colombo, 1921.	Presented
20210	BOITARD, M. Le Jardin des Plantes description et Mœurs des Mammifères de la Ménagerie et du Muséum Histoire Naturelle. Paris. 1842.	Purchased	20977	WESTWOOD, Joh. Ob. Revision Insectorum Familæ Mantidarum, specibus novis aut minus cognitis descriptis et delineatis. 1 vol. Fol. London, 1889.	Purchased
20101	COSSMAN, M. Essais de Paléontologie comparée. Livr. 11-12. 1 vol. 8vo. Paris, 1918-1921.	Purchased	PART II.—PERIODICALS.		
20084	CRICK, George C. Collected Papers. 1 vol. 8vo. 1889-1916.	Presented	COMMONWEALTH OF AUSTRALIA.		
20282	EHRlich, L. Origin of Australian Beliefs. 1 vol. 8vo. Vienna, 1922.	Presented	20283	AUSTRALASIAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE. Report of the Fifteenth Meeting of the . . . held in Melbourne, January, 1921. Hobart Meeting. 1 vol. 8vo. Melbourne, 1921.	Presented
20085	FAUNA OF BRITISH INDIA, including Ceylon and Burma. Edited by Sir Arthur E. Shipley, assisted by Guy A. K. Marshall. Mollusca III. Land Operculates, by G. K. Gude. 1 vol. 8vo. London, 1921.	Purchased	COMMONWEALTH OF AUSTRALIA. Historical Records of Australia, Series III. Despatches and Papers relating to the Settlement of the States.		
20291	FLATTELY, F. W., and C. L. WALTON. The Biology of the Seashore, with an Introduction by J. Arthur Thomson. 1 vol. 8vo. London, 1922.	Purchased	20083	Vol. II, Tasmania, 1812-1819.	
20081	GROTH, P. Chemische Krystallographie. Teil V. (Schluss) Aromatische Kohlenstoffverbindungen mit mehreren Benzolringen Heterocyclische Verbindungen. 1 vol. 8vo. Leipzig, 1919.	Purchased	20117	„ III, Tasmania, January-December, 1820.	
20114-5	GUINCHARD, J. (Editor). Sweden, Historical and Statistical Handbook, by Order of the Swedish Government. Second edition. English issue. Part I. Land and People. Part II. Industries. 2 vols. 8vo. Stockholm, 1914.	Presented	20191	„ IV, Tasmania, 1821, to December, 1825.	
20382	JOHNSTON, T. Harvey. Collected Papers, Nos. 1-35. 1909-1918. 1 vol. 8vo. Various, 1909-1918.	Presented	20283	„ V, Tasmania, December, 1825-March, 1827.	
20211	MARTENS, Eduard von. Die Landschnecken. (Die Preussische Expedition nach Ost. Asien. Amtlichen, Quellen, Zoologischer Theil, 1867.) 1 vol. 8vo. Berlin, 1867.	Purchased	Northern Territory, 1823-1827.		
20108-9	MARTIN, K., und A. WICHMANN. Beiträge zur Geologie Ost-Asiens und Australiens. Band III. Martin. Paläontologische Ergebnisse von Tiefbohrungen auf Java. 1tes. Heft. Vertebrata, Crustacea. 1883. 2tes und 3tes. Heft. Gasteropoda. 1884. 4tes heft und 5tes. Scaphopoda, Lamelli-branchiata, Brachiopoda, Vermes, Echinoidea. 1885. (Sammlungen des Geologischen Reichsmuseum in Leiden. Nos. 6-8, 11-12.) Band IV. Heft I. Martin. Ueberreste vorweltlichen Proboscidea von Java und Banka. 1884. Heft 2. Martin Fossile Säugethierreste von Java und Japan. 1887. (Sammlungen des Geologischen Reichsmuseum in Leiden. Nos. 10, 13.) In 2 vols. 8vo. Leiden, 1883-1887.	Purchased	20192	Series IV, vol. I. Legal Papers, Section A, vol. I. In 5 vols. 8vo. Sydney, 1921-22.	Presented
20079	PAMPHLETS. 8vo. Series, vol. CXIII. Mineralogy, vol. VII. Vol. CXIV. General Zoology, vol. V.		20193	COMMONWEALTH BUREAU OF CENSUS AND STATISTICS. Official Year-book of the Commonwealth of Australia, No. 14, 1921. Containing authoritative Statistics for the Period 1901-1920, and Corrected Statistics for the Period 1788 to 1909. 1 vol. 8vo. Melbourne, 1921.	Presented
20201	PERRIER, Edmond. Les Explorations Sous-Marines. 1 vol. 8vo. Paris, 1886.	Presented	NEW SOUTH WALES.		
20098	STAVORINUS, J. S. Voyages par le cap de Bonne-Espérance dans l'Archipel des Moluques, de 1768 à 1771 et de 1774 à 1778. Traduits du Hollandais, par H. J. Jansen. Seconde édition. Tome second. 1805. 1 vol. 8vo. Paris, 1895.	Purchased	20096	AGRICULTURE, DEPARTMENT OF. Some Useful Australian Birds, by Walter W. Froggatt. 1 vol. 8vo. Sydney, 1921.	Presented
			20284	GEOLOGICAL SURVEY. Memoir, Geology, No. 8. The Geology of the Broken Hill District, by E. C. Andrews. 1 vol. 8vo. Sydney, 1922.	Presented
			20119-23	LINNEAN SOCIETY OF NEW SOUTH WALES. Proceedings, vols. XLI-XLV, 1916-1920. 5 vols. 8vo. Sydney, 1916-21.	Presented
			20086	PUBLIC LIBRARY OF NEW SOUTH WALES, MITCHELL LIBRARY. Australasian Tokens and Coins, by Dr. Arthur Andrews. 1921. 1 vol. 8vo. Sydney, 1921.	Presented
			20156	YEAR BOOK. Official Year Book of New South Wales, 1920. 1 vol. 8vo. Sydney, 1921.	Presented

Reg. No.	Books.	How acquired.	Reg. No.	Books.	How acquired.		
QUEENSLAND.			BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.				
20135	QUEENSLAND MUSEUM. Memoirs, vols. iv-vi. 1915-1918. 1 vol. Svo. Brisbane, 1915-1918.	Presented	20268	Annual Report for 1919, Bournemouth meeting, September 9-13th.	Presented		
20111-2	QUEENSLAND UNDER-SECRETARY FOR MINES. Annual Reports . . . for the years 1919-1920. 2 vols. Fol. Brisbane, 1920-1921.		20269	Annual Report for 1921, Edinburgh meeting, September 7-14th. 2 vols. Svo. London, 1920-22.			
20133-4	ROYAL SOCIETY OF QUEENSLAND. Proceedings. Vols. xxiv-xxviii, 1913-1916, Index to Volumes i-xxv. Vols. xxix-xxxii, 1917-1920. 2 vols. Svo. Brisbane, 1913-1920.	Presented	20099	BRITISH MUSEUM (NATURAL HISTORY). The British Museum, Historical and Descriptive, by D. Masson. 1 vol. Svo. Edinburgh, 1850.	Presented		
SOUTH AUSTRALIA.			20204	— Catalogue of the Fossil Bryozoa (Polyzoa) in the Department of Geology . . . Cretaceous Bryozoa (Polyzoa), Vol. iii, Cribrimorphs. Part I, by W. D. Lang. 1 vol. Svo. London, 1921.	Presented		
20133-1	ROYAL SOCIETY OF SOUTH AUSTRALIA. Memoirs. Vol. i. 1899-1913. Vol. ii. 1901-1912. 2 vols. 4to. Adelaide, 1899-1913.	Presented	20203	— Handbook of Instructions for Collectors, issued by . . . Fourth edition. London, 1921. 1 vol. Svo. London, 1921.	Presented		
20127-9	— Transactions and Proceedings. Vols. xli-xxliii. 3 vols. Svo. Adelaide, 1918-1919.		20092	BRITISH MUSEUM. Handbook to the Ethnographical Collections. 1 vol. Svo. London, 1910.	Presented		
TASMANIA.			20145	LINNEAN SOCIETY OF LONDON. Transactions. Second series. Vol. xvii, Zoology. The Percy Sladen Trust Expedition to the Indian Ocean in 1905 under the leadership of Mr. J. Stanley Gardiner. Vol. vi. 1 vol. 4to. London, 1914-21.	Presented		
20123	ROYAL SOCIETY OF TASMANIA. Papers and Proceedings for the years 1915-1918. 1 vol. Svo. Hobart, 1916-1919.	Presented	20197	LIVERPOOL BIOLOGICAL SOCIETY. Proceedings and Transactions. Vol. xxxv, 1920-21. 1 vol. Svo. Liverpool, 1921.	Presented		
VICTORIA.			20138	NATURE. Vols. 102-107. 1918-21.	Purchased		
FIELD NATURALISTS' CLUB OF VICTORIA. Victorian Naturalist. Vols. xxxii-xxxiii, 1915-17. " xxxiv-xxxv, 1917-18. " xxxvi-xxxvii, 1919-1920. 3 vols. Svo. Melbourne, 1916-1921.			20140-4	6 vols. 4to. London, 1918-21.			
20292	NATIONAL MUSEUM OF VICTORIA. Guide to the Ethnological Collection exhibited in the . . . by Sir Baldwin Spencer. Third edition. 1 vol. Svo. Melbourne, 1922.	Presented	20091	ROYAL SOCIETY OF LONDON. Philosophical Transactions, Series B. Containing Papers of a Biological Character. Vol. 210. 1 vol. Svo. London, 1921.	Presented		
20124-5	ROYAL SOCIETY OF VICTORIA. Proceedings. Vols. xxvii-xxxi. 1915-1919. 2 vols. Svo. Melbourne, 1915-1919.	Presented	20199	— Year-Book, 1922. 1 vol. Svo. London, 1922.	Purchased		
20107	VICTORIA DEPARTMENT OF MINES. Reports of the Mining Surveyors and Registrars for the quarters ended 31st December, 1876, 30th June, 1882, 31st December, 1882, and Reports of the Mining Registrars for the quarter ended 30th September, 1889. 1 vol. Svo. Melbourne, 1876-1889.		20148-9	TRING MUSEUM. Novitates Zoologicae, a Journal of Zoology in connection with the . . . Vols. xxvi-xxvii, 1919-20. 2 vols. 4to. Tring, 1919-20.	Presented		
WESTERN AUSTRALIA.			20196	YEAR-BOOK of the Scientific and Learned Societies of Great Britain and Ireland: A Record of the Work done in Science, Literature, and Art during the Session 1920-21. Thirty-eighth Annual Issue. 1 vol. Svo. London, 1921.	Purchased		
20105	GEOLOGICAL SURVEY. Bulletin, No. 29. A Report upon the Geology, together with a Description of the Productive Mines of the Cue and Day Dawn Districts, Murchison Goldfield. Part II, with Maps and Plates, by Harry P. Woodward. 1 vol. Svo. Perth, 1907.	Presented	20195	ZOOLOGICAL RECORD, The. Volume the lvi, being Records of Zoological Literature relating chiefly to the year 1919. 1 vol. Svo. London, 1921.	Purchased		
20132	ROYAL SOCIETY OF WESTERN AUSTRALIA. Journal and Proceedings. Vols. i-iii. 1914-1917. 1 vol. Svo. Perth, 1916-1918.		20146-7	ZOOLOGICAL SOCIETY OF LONDON. Proceedings of the General Meetings for Scientific Business, 1919-1920. 1 vol. Svo. London, 1919-20.	Presented		
DOMINION OF NEW ZEALAND.			BRITISH DOMINIONS.				
20194	NEW ZEALAND OFFICIAL YEAR BOOK, 1921-22. Thirtieth issue. 1 vol. Svo. Wellington, 1922.	Presented	India.				
20116	NEW ZEALAND BOARD OF SCIENCE AND ART. Manual No. 2. Wild Life in New Zealand. Part I, Mammalia, by Geo. M. Thomson. 1 vol. Svo. Wellington, 1921.		20283	GEOLOGICAL SURVEY OF INDIA. Memoirs, Vol. xlviii. Geological Notes on Mesopotamia, with special reference to Occurrences of Petroleum, by E. H. Pascoe. Calcutta, 1922. 1 vol. Svo. Calcutta, 1922.		Presented	
20103	NEW ZEALAND GEOLOGICAL SURVEY. Reports of Geological Explorations during 1870-71, with Maps and Sections. 1 vol. Svo. Wellington, 1871.	Presented	20159	GOVERNMENT OF BARODA. Report to the . . . on the Marine Zoology of Okhamandal in Kattiarwar, by James Hornell. Part II. With Supplementary Reports on Special Groups by other Authors. 1 vol. Fol. London, 1916.		Presented	
20155	NEW ZEALAND INSTITUTE. Transactions of the . . . Vol. lxi. New issue. 1921. 1 vol. Svo. Wellington, 1921.		20163	INDIAN MUSEUM. Records. Vol. vii, 1912.		Presented	
UNITED KINGDOM.			20164	" xi, 1915.			
20136-8	ANNALS AND MAGAZINE OF NATURAL HISTORY, including Zoology, Botany, and Geology. Ninth series. Vols. v-vii, 1920-1921. 3 vols. Svo. London, 1920-21.	Purchased	20165	" xii-xiii, 1916-17.			
			20166	" xiv-xv, 1918.			
			20167	" xvi, 1919.			
			20168	" xix-xx, 1920.			
			20198	MADRAS FISHERIES DEPARTMENT. Bulletin No. 12. Madras, 1921. 1 vol. Svo. Madras, 1921.			

Reg. No.	Books.	How acquired.	Reg. No.	Books.	How acquired.
Wisconsin.			HOLLAND.		
	WISCONSIN GEOLOGICAL AND NATURAL HISTORY SURVEY.			KONINLIJKE NATUURKUNDIGE VER- EENIGING IN NED. INDIE.	
20157	Bulletin No. 55, Soil Series No. 27. Soil Survey of Northern Wisconsin. 1919.		20103	Het Idjen-Heegland, monografie II. Die Geologie en Geomorphologie van den Idjen-door Dr. G. L. L. Kemmerling. Analyse van merkwaardige watersoorten op het Idjen-Heegland door Dr. H. W. Wondstra. 1 vol. 4to. Batavia. Presented	
20158	Bulletin No. 58, Educational Series No. 6. The Geography and Economic Development of South-eastern Wisconsin. 1921. 2 vols. Svo. Madison, 1921. Presented		20102	MINISTER VAN KOLONIEN. Rapport be- treffende een voorloopig onderzoek naar den toestand van de Visscherij en de Industrie van Zeeproducten in de Kolonie Curacao, ingevolge het Ministerieel Besluit van 22 November, 1904. Uitgebracht door Prof. J. Boeke. Tweede Gedeelte. Inbound. 1. Report on the Fishes collected by Dr. J. Boeke, in the Dutch West Indies, 1904-1905, with comparative notes on marine fishes of Tropical West Africa, by J. Metzelaar. 2. Stalk-eyed Crustaceans of the Dutch West Indies, collected by Dr. J. Boeke, 1904-1905, by Mary J. Rathbun. 3. Isopod Crustaceans of the Dutch West Indies, by Harriet Richardson. In 1 vol. 4to. s'Gravenhage, 1919. Presented	
AUSTRIA.					
	WIENER ENTOMOLOGISCHE MONAT- SCHRIFT.				
20087	Bands I-II. Verantwortliche Redacteure: Julius Lederer und Ludwig Miller. 1857- 1858.				
20088	Bands V-VI. 1861-1862.				
20089	Bands VII. 1863. 3 vols. Svo. Wien, 1857-1863. Presented				
GERMANY.					
20090	GEGENBAURS MORPHOLOGISCHES JAHRBUCH. Band XLIX.				
20118	" " L. 2 vols. Svo. Leipzig, 1919. Purchased				

Sydney: John Spence, Acting Government Printer—1922.

[1s. 1d.]