1922. 1 June 1920 (SECOND SESSION.)

LEGISLATIVE ASSEMBLY.

## NEW SOUTH WALES.

# AUSTRALIAN MUSEUM.

(REPORT OF THE TRUSTEES FOR THE YEAR ENDED 30TH JUNE, 1920.)

Presented to Parliament pursuant to Act flo. 61, 1902, Sec. 10.

Printed under No. 1 Report from Printing Committee, 20 July, 1922.

To His Excellency the Governor,— The Trustees of the Australian Mu. Sixty-sixth Report, being for the year ended The office of Crown Trustee, which had Mr. H. H. B. Bradley, was filled by the appoin Dr. T. Storie Dixson, M.B., Ch.M., Pres Board for the year 1920.	30th J been va atment of sident of	une, 19 cant si of Mr. J i the Me	20. nce t ame edica	che deat s McKe l Board	th on 2 rn, on t	3rd No 5th Dec elected	vember Presi	er, 1918, 6, 1919. dent of the
Sir James Burns and Mr. W. H. Hargr.	aves rec	eived le	ave o	of abser	ice for	part of	the ye	ar.
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The following is a list of the Trustees during the year:—	s, with	records	of	their a	ttenda	nces at	Boar	d Meeting
C C	rown T	rustee.						
James McKern, Esq. (since 5th Decen	ber, 19	19)				***	***	7
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His Honor the Chief Justice	***	***					***	et nl
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The Auditor-General						y		13
The President of the Medical Board (I								13
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The Hon, the President of the Legisla			***	***	***		***	Col Handy
The Crown Solicitor The Surveyor-General and Chief Surveyor-	over a	***	***	***	***	***	***	-12
*Mr. R. T. Ball, late Secretary for Pub	lie Wor	re and 7	Minis	ter for	Railwa			L. Dow
*Mr. A. G. F. James, late Min ster for	Public I	nstruct	ion	CCL TOL .				
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Prof. W. A. Haswell, M.A., D.Sc., F.F.	1.D. C	***	***	***	***		***	6
Prof. T. W. E. David, B.A., C.M.G., I		•••	***	***			***	4
Prof. J. T. Wilson, M.B., Ch.M., F.R.S		***	***	***				10
W. H. Hargraves, Esq	TD M	ROST		***				5
Colonel R. E. Roth, C.M.G., D.S.O., V		LUNDON						5
Eric Sinclair, Esq., M.D Colonel The Hon. Sir James Burns, K	CMG	MIC		***				4
J. R. M. Robertson, Esq., M.D., C.M.					***			10
Ernest Wunderlich, Esq		444	***			4.00		7
G. H. Abbott, Esq., B.A., M.B., Ch.M.	I							6
		***		***				2
J. Vernon, Esq The Right Hon, D. Levy, LL.B., M.L	.A					***	444	2

#### 2. SECTIONAL COMMITTEES.

During the year the Trustees appointed the members of the Finance Committee to be also a Publicity Committee, for the purpose of making the Museum better known to its owners the public, and suggested to the Committee that, in addition to methods to be by them decided, it take steps by press notices and otherwise to invite with frequency the attention of the public to the advantage and treasures of the Museum and for the step of the of the Museum, and for the continuance of interest therein by judicious change, and by rearrangement of the Museum so that the present unexhibited specimens may be displayed in the Museum, or elsewhere by

The other Committees, all of which meet monthly, are the House Committee, which deals generally with all matters affecting the Staff of the Museum and other matters assigned to it by the Trustees, such as structural improvements, alterations and additions; and the Scientific and Publication Committee, which controls the publications of the Museum, the acquisition of collections and books, and makes periodical inspection of the contents of the Museum.

The members of these Committees and their attendance during the year are as follows, the President of the Board (Dr. T. Storie Dixson) when present, being Chairman ex officio of each Committee :-

Finance and Publicity Committee-			House Committee—		
Mr. Wunderlich (Chairman)		8	Mr. Coghlan (Chairman)	***	8
Dr. Dixson		1	Dr. Dixson		12
Mr. McKern (since 6th May)		2	Professor Haswell		7
Mr. Hargraves		7	Mr. Hargraves		6
Colonel Roth (resigned 22nd M		1	Dr. Robertson		9
Sir James Burns	110	5			
Dr. Robertson	y	1			
Scient	ific and	Publicati	ion Committee—		
Professor Wilson (Chairman)		3	Professor Haswell		8
Professor David		4	Dr. Sinclair		7
Dr. Abbot		6			

#### 3. STAFF.

It is with the deepest regret that the Trustees report the death of their valued Director, which occurred rather suddenly at his country home during the Christmas vacation. Mr. Robert Etheridge had been associated with the Museum for a long term of years, first as one of the scientific staff, and afterwards as Executive Officer. During his period of office the buildings were greatly extended and the collections largely increased. For many years he was never absent from his office for more than a few days, and at the age of 73 he died in harness. His researches in Palæontology and Ethnology are highly esteemed both at home and abroad. An appreciative record of his career is being prepared for publication in the Museum "Records," a journal founded by him.

By a few weeks Mr. W. J. Rainbow predeceased his chief. This gentleman had been in charge of the Entomological department since 1896, and as a specialist in the study of spiders had a wide reputation. For some years his health gradually failed, and he passed away after a lingering illness. His cheerful and amiable disposition endeared him to his colleagues.

To fill the vacancy caused by the loss of Mr. Etheridge the Trustees invited by advertisement applications from Great Britain and the British Dominions for the Directorship, closing on 31st July. Meanwhile Mr. Hedley, the officer next in seniority, was placed in charge.

In recognition of the high reputation of Mr. G. A. Waterhouse as an authority on Entomology, he was elected Honorary Entomologist. His handsome gift of Lepidoptera to the Museum deserves special

In answer to advertisements several applications were received for the position vacated by the death of Mr. Rainbow. The Board decided to promote Mr. A. Musgrave, as from 1st June, to be Entomologist.

To fill the vacancy caused by the resignation of Mr. E. A. Briggs, the Board promoted Mr. R. W. Bretnall to be a First-class Assistant, and to take charge of the Lower Marine Invertebrata.

Mr. E. Le G. Troughton, Second-class Assistant, has been entrusted with the care of the Mammalia, as well as that of the vertebrate skeletons.

Mr. B. S. Lucas, Senior Carpenter, entered on extended leave prior to retirement on a pension, on 1st June. Mr. W. A. Cleary, Junior Librarian, resigned on 31st July, was succeeded by V. R. K. Reynolds, who resigned on 17th March, was succeeded by F. D. McCarthy on 29th March, 1920.

All the six officers who volunteered for military service have now resumed their former occupations, the last being Mr. Troughton, who came back to the Museum on 20th October, and Mr. Kingsley on 10th May.

Messrs. Percy H. Eldershaw and Arthur A. Livingstone were appointed as Scientific Cadets.

The last amending Act, which dealt with pensions and superannuation in the Government Service, was extended to include the Staff of the Museum. A Board appointed to administer the Act has enrolled our officers and collected pension levies, so that the scheme is now in operation.

This year the Museum employees each received an advance of £44 per annum, granted by the Government to compensate for the high cost of living.

During the year a Staff Committee, consisting of Mr. Hedley and Dr. Anderson, was appointed and made recommendations which were adopted by the Trustees. In one selection of applicants they had the assistance, at the desire of the Trustees, of Professor Haswell.

Following

Name and Office.		Date of first appointment in the Museum.	Date of appointment to present position.
Charles Hedley, Acting Curator		1 April, 1891	12 Jan., 1920
Charles Anderson, M.A., D.Sc., Mineralogist, Acting Assist. Cu	rator	00 T 1 1001	12 Jan., 1920
Allan R. McCulloch, Zoologist	*** ***	1 July, 1901	1 July, 1906
Wm. W. Thorpe, Ethnologist		0 0 4 7000	1 July, 1906
Reg. W. Bretnall, Zoologist		11 Feb., 1907	2 May, 1919
Anthony Musgrave, Entomologist		7 E-L 1010	1 June, 1920
T. Harvey Johnston, M.A., D.Sc., Hon. Zoologist		1 Jan., 1908	1 Jan., 1908
Edw. F. Hallmann, B.Sc., Hon. Zoologist		1 Jan., 1911	1 Jan., 1911
A. F. B. Hull, Hon. Ornithologist		7 Sept., 1917	7 Sept., 1917
A. G. Waterhouse, B.Sc., Hon. Entomologist		3 Oct., 1919	3 Oct., 1919
Ellis Le Geyt Troughton, Second-class Assistant		13 Jan., 1908	7 Mar., 1919
J. Roy Kinghorn, Second-class Assistant		1 Sept., 1907	7 Mar., 1919
F. A. McNeill, Second-class Assistant		18 May, 1914	7 Mar., 1919
Paray H Eldershaw Cadet		7 May, 1920	7 May, 1920
Asthur A Livingstone Codet	•••	7 May, 1920	
A Dainham Librarian	•••	13 July, 1902	
Too A Trimble Accountant and Secretary to Director		The Control of the Co	1 Oct., 1916
m A Mumbhy Clark	•••	1 July, 1909	1 Oct., 1916
P. D. McCarthy Tunior Librarian	***	1 May, 1911	1 Oct., 1916
I. W Woodhood Printer	*** ***	29 Mar., 1920	29 Mar., 1920
	***	27 Sept., 1897	27 Sept., 1897
Thos. A. Henson, Carpenter	255 255	1 May, 1902	8 May, 1906
G. Chas. Clutton, Senior Articulator	111 211	25 April, 1904	1 May, 1913
Henry S. Grant, Senior Taxidermist	A440 966	5 Oct., 1909	22 Feb., 1918
Herbert Jackson, Junior Carpenter	•••	9 June, 1910	9 June, 1910
Joseph Kingsley, Junior Articulator	*** ***	21 July, 1913	21 July, 1913
J. H. Wright, Junior Taxidermist	***	13 May, 1908	1 July, 1917
H. O. Fletcher, Messenger	*** ***	6 Aug., 1918	6 Aug., 1918
John Cronin, Chief Attendant		5 July, 1909	5 July, 1909
Arthur Barnes, Senior do		— April, 1897	1 May, 1920
Robert Long, Attendant		3 April, 1894	8 Feb., 1897
J. T. Lee, do		11 Sept., 1905	5 April, 1909
T. Rochford, do		1 May, 1911	1 May, 1911
John Watson, do		8 May, 1914	8 May, 1914
T. Johnston, do		13 Dec., 1915	13 Dec., 1915
E. T. Hill, do		8 Oct., 1917	8 Oct., 1917
D. Massey, do		8 Dec., 1917	8 Dec., 1917
A. B. Welsh, do		4 Nov., 1918	4 Nov., 1918
Mrs. K. Fraser, do		1 April, 1889	1 April, 1889
Alexander Mackay, Night Watchman		13 Mar., 1915	13 Mar., 1915
Wallanda Wallanda da		11 Sept., 1915	5 Oct., 1917
Murdock Mackay, do	***	** police, 1919	0 000., 101,

#### 4. RESUMPTION OF PORTION OF SITE.

After a dispute existing since 1916, the Municipal Council of Sydney has arranged to compensate the Trustees for the William-street and College-street frontage resumed in 1916, of 371 feet frontage to William-street by a depth of 34 feet. The sum accepted is £5,000, with annual interest at 4 per centum from the date of resumption. The amount is grossly inadequate, but as the alternative was costly litigation at the expense of the taxpayer, this loss in value was accepted as the lesser of two evils.

#### 5. NECESSITY FOR EXTENSION OF BUILDINGS.

The necessity for additional accommodation is urgent and much valuable possessions of the State remain stored for want of exhibition space.

#### 6. Proposed Addition to Site.

Mr. James, late Minister for Public Instruction, made a minute some time prior to leaving office, that if the William-street Public School were closed, as was his intention, that part of the land should be added to the Museum area. One of the early plans for the Museum buildings included the public school site.

## 7. Museum Exhibition in Country Towns.

It was decided recently by the Trustees that, to provide for the public of the State generally greater facility for viewing and studying the resources of the Museum, arrangements should be made whereby parcels of specimens should be placed on view in local centres.

#### 8. LIBRARY.

During the year the Library acquired by purchase and exchange 346 volumes, independent of loose parts and reprints, which are detailed in Appendix II, Additions to the Library. A selection from the Library of the late Director forms a notable part of the year's increase; this includes a series of classified reprints, the fruit of many years' accumulation. As in former years, economy has been exercised both in binding and in purchasing. New exchanges with learned institutions have been arranged and others are

in course of negotiation. Since the Department of Trade and Customs approved of the importation of scientific and educational publications from ex-enemy countries, steps have been taken to procure this literature, which is much needed.

#### 9. ATTENDANCE OF VISITORS.

On Mondays, when galleries are closed to the general public, students are given special facilities for study. An angle of the Ethnological room has been furnished as a cosy corner for ladies and children. Two drinking fountains have been installed for the use of visitors. The largest attendance for a single day exceeded 4,000.

			Summ	aru.			
Year.		*		,	Week-days,	Sundays.	Total.
1913-1914 (1	st July t	o 30th Jun	ic)		104,830	49,313	154,243
1914-1915	,,	- ,,	•••		109,922	46,611	156,533
1915-1916	,,	"		093555	125.978	52,669	178,647
1916-1917		"			133,645	52,399	186,044
1917-1918	27				140,977	59,920	200,897
1918-1919	33	,,,			142,977	63,520	206,497
1919-1920	"	"			145,058	52,490	197.548
1010-1040	23	22	***	***	110,000		

#### 10. Exhibits.

In accordance with the plan of the Board to popularise the Museum by installations attractive to the general public, scenic groups have been devised. One represents an Antarctic coast, the painted background showing a vista of water lane hedged by floes and distant icebergs. In the foreground, a Weddell and a Crab-eating Seal are grouped round a breathing hole. Attendant on these are a party of Emperor and Adelie Penguins in characteristic attitude, while a Skua gull looks round seeking what it may devour. This stands in the main hall near the entrance, facing the Lion group. The latter has been embellished a painted background of appropriate scenery.

In continuation of this policy a fine series of plaster casts of Hawaiians is in preparation, with a view

to presenting a Polynesian family engaged in domestic vocations.

#### 11. Guide-Books.

The Board planned the preparation of a series of popular official Guide-books to the exhibits, taking each subject separately. It was hoped that the educational value of the Museum would be thus enhanced. Considerable progress has been made with the undertaking, but interruption, due to the death of the Director, has delayed the appearance of the books.

#### 12. LECTURES.

Popular Science Lectures were continued as usual in the Museum Lecture room. The numerous and appreciative audience that regularly attend indicate that a public want is satisfied by our programme. Subjects and speakers were arranged this year as follows:

1919—10 July—"In Search of Sponges," A. R. McCulloch.

24 July—"Common Objects by the Sea Shore," E. A. Briggs, B.Sc.

14 August-" Australian Petrels," A. F. Basset Hull.

14 September—"Crystals," C. Anderson, D.Sc.

9 October—"Birds and their Relation to Plants, Mostly Australian," A. G. Hamilton, 13 November—"The Beginning of Life," E. A. Briggs. B.Sc. 1920—6 April—"Mesopotamia: The Land and the People," L. Harrison, B.Sc., B.A.

13 May—"The Balance of Nature," C. T. Musson, F.L.S. 24 June—"Pond Life," F. L. Grutzmacher, F.C.S.

The lecture delivered by the President (Dr. Thomas Storie Dixson) on 10th June, 1919, entitled "The Australian Museum: Its Origin, Growth and Work," was published in pamphlet form during the year.

13. CURATORIAL WORK.

Spirit House (Mr F. A. McNeill in charge).—The space in the isolated and fireproof building, devoted to specimens preserved in alcohol, is fast filling up; 180 feet of shelving added this year covers almost the last vacant space. Many fungus-infected formaline tanks have been siphoned out, cleaned, the contents washed, and refilled. The large collections which arrived during the year have been put away and catalogued. The Mollusca and Porifera have received a general overhaul, having been re-sorted, spaced, and placed in fresh receptacles. Evaporation has been kept in check. All the shelving has been

re-indexed, and a classification devised for the ordering and control of specimens.

\*\*Mammals\*\* (Mr. E. Le G. Troughton in charge).—As Mr. Troughton did not return from Military Service till October, 1919, and has also been absent collecting in South Australia for four and a half months, most of the routine duty was carried out under the direction of the late Director. All the large Mammalia exhibited in the gallery were taken out, fumigated, cleaned, and placed on new stands. On returning them to their places labels were renovated as required. The foreign and Australian Bats were similarly treated, being replaced on stands of grass and rockwork. An Australian Fur Seal (Otaria cinerea) was mounted and added to the series on exhibition.

As usual much material of value and interest has been received from Taronga Zoological Park. Mr. Harry Burrell, who was studying the breeding habits of the Monotremata, presented us with a fine

series of the young of the Platypus and a young Echidna.

A cast of a Bottled-nosed Dolphin (Tursiops catalania), 9 feet in length, made by Mr. G. C. Clutton, has been coloured by Miss P. F. Clarke, and affords an admirable exhibit. Stuffed skins of such animals shrink, wrinkle, and drip with oil, so that a cast presents a life-like appearance unattainable in the

From Mr. Troughton's tour we derived skins and skulls of Kangaroo, Wallaby, Phalanger, Echidna and Rats from Kangaroo Island, also skins, skulls and spirit specimens of bats, and a large series of rats from Kangaroo Island, Eyre's Peninsula and Farina, Central Australia. Foxes and wild cats are destroying the native animals so seriously that the need of obtaining such specimens while they may yet be had becomes more and more important.

Skeletons (Mr. E. Le G. Troughton in charge). - The skeleton of the Dolphin, the body of which

was cast and coloured, was also prepared.

To improve definition, the background of the Osteological gallery was painted dead black. Against this the bones stand out more clearly than before. The specimens were twice removed from the cases and cleaned.

A popular Guide to this department was prepared by the late Director.

Birds (Mr. A. F. Basset Hull, Honorary Ornithologist; Mr. H. S. Grant in charge).-Some progress was made in re-labelling the gallery exhibits. Both the exhibited and the large stored collection have been regularly overhauled and disinfected, so that the collection is maintained clean and in good order. Since the series on exhibition are already crowded, it has not been possible to show any additions to the Bird collection.

A fine series of Birds of Paradise, including the King, the Four-Wired, Hunstein's Magnificent, and the Red-plumed, were received from the Zoological Gardens. Mr. C. H. Gorrick presented the rare Red-chested Quail, and Mr. W. Dixson the New Zealand Kiwi.

Among the nests and eggs which reached us were the elaborate structures, with examples of the different stages, built by the South African Weaver Bird. In another case the Black-backed Magpie had used such uncongenial material as fencing wire to build a nest.

For several months Mr. Grant and his Assistant, Mr. Wright, were engaged on the preparation of

the Antarctic beach scene already described.

Reptiles and Amphibia (Mr. J. R. Kinghorn in charge).—Forty-eight specimens were presented to this department. Exhibits have been increased by the addition of a carapace and plastron of the Hawksbill Turtle, prepared by Mr. Clutton, to show the relative positions of the various plates and shields used in classification. Drawings of skulls of certain snakes, accompanied by descriptions, were introduced to explain the difference in dentition between various poisonous and non-poisonous forms. A large specimen of the Green Turtle was coloured and renovated.

Several weeks were spent in the preparation of a popular illustrated gallery guide to this section,

and drawings were made for similar guides written by Mr. Etheridge and Mr. Rainbow.

Publication.—R. Etheridge, "Note on the Galapagos Tortoise formerly at Gladesville"; Rec. Austr. Mus., xii, 1919, p. 337.

Pisces (Mr. A. R. McCulloch in charge).—The rearrangement of the reference collection of Fishes under the decimal system was completed during the year by Mr. F. A. McNeill, so that it is now possible to refer to any of its contained 15,000 specimens within a few minutes. The history and other data concerning each has been written in full on catalogue cards which are arranged on the same principle. A number of the families have been revised and their identifications checked, particular among which is the large group of Gobies.

Considerable changes have been effected in the exhibited collection, and a number of coloured casts

have replaced preserved specimens in bottles.

The collection has been enriched by two very valuable additions. The first consists of a number of fishes collected in New Zealand by Mr. C. Hedley, which not only include many species hitherto unrepresented on our shelves, but also a valuable series for comparison with Australian representatives. The second is a large collection of some thousands of fishes, mostly from freshwater, presented by the General Manager of the State Trawling Industry, which is quite the most representative collection of our inland fishes hitherto brought together. This also includes types of some of the species described by Mr. Stead.

Some further work has been done in the preparation of another report upon the fishes collected

by the Federal Trawler "Endeavor," dealing principally with the sharks and rays.

The following ichthyological papers were published :-

"Some Australian Fishes of the Family Gobiidæ," Rec. Austr. Mus., xii, 10, 1919, pp. 193-291-A. R. McCulloch and J. Douglas Ogilby.

"Check List of the Fishes of New South Wales," Austr. Zoologist, i, 7, 1919, pp. 217-227 -A. R. McCulloch.

Mollusca (Mr. C. Hedley in charge; Mr. J. K. Allan, Assistant).—After the transference of Mr. Hedley to Administrative work, consequent on the death of the Director, the care of the Mollusca was undertaken by Mr. Bretnall, with the assistance of Miss Allen. Her efforts have been principally centred on the sorting of the bulk collection, especially the Cox collection. The reference collection is now being re-classified; Australian Pelecypoda are revised and indexed generically; other groups will be dealt with in turn. The space allotted to Mollusca is now fully occupied and the question of future expansion is a pressing one. The spirit collection of Cephalopoda has been sorted over and rearranged by Mr. McNeill.

The registration of receipts amounted to 2,581 entries, and included 2,152 shells from North-West Australia, New Britain, and neighbouring islands, collected and presented by Captain W. Burrows, R.A.N.; 352 species from the Great Barrier Reef, presented by Mr. A. R. McCulloch; thirty-six Japanese shells presented by Mr. C. Hedley; seventeen rare Tasmanian species, including authors' co-types, received from Mr. W. L. May; and a series of Victorian shells received in exchange from Mr. C. Gabriel.

Published papers of this department were :-

"Onchidiide from Australia and the South-western Pacific Islands," by R. W. Bretnall; Rec. Austr. Mus., xii., 1919, pp. 303-328, pl. xxxviii.

"A Review of the Australian Tun Shells," by C. Hedley; Rec. Austr. Mus., xii, 1919, pp. 329-336, pls. xxxix-xliv.

Crustacea (Mr. F. A. McNeill in charge). -- For some time little attention had been paid to the Decapod Crustacea which were revised this year. About half the collection is now classified, checked, and card catalogued. Both the gallery and cabinet collections have been overhauled and disinfected. A large specimen of the Giant Japanese Crab, having a span of 10 feet 5 inches from claw to claw, presented by Mr. W. E. Shaw, has been placed in the gallery, also a fine example of the Spiney Lobster, coloured from life. Prominent among the acquisitions of the year is a series collected by the "Endeavor," and described by Miss Rathbun of the United States National Museum. Many

Many valuable specimens are contained in a large collection presented by Mr. D. G. Stead. A freshwater shrimp, apparently new to science, was collected in the Nepean River, New South Wales, by Mr. McCulloch. Several additions to the carcinological fauna of the State resulted from a search made by Mr. Kinghorn of the beach at Trial Bay.

Lower Marine Invertebrates (Mr. R. W. Bretnall in charge).—The duplicate collection of the Mollusca was transferred to a cellar in the main building, and the space in the iron shed thus vacated was utilised for the reception of the Echinodermata. This group has been rearranged and partly catalogued, while the Sponge collection has been re-spaced and arranged, but has to await cataloguing until further determination can be accomplished. The collection of Corals was checked with the rough catalogue and will receive further attention. The dry series of Polyzoa was completely overhauled and micro. mounts were prepared for comparison with the collections in Melbourne. Mr. Bretnall spent a fortnight studying the McGillivray and other collections at the National Museum, Melbourne, and named there a large number of species partly from the "Endeavor" collections and partly from our own. Research was carried out for the Railway Commissioners for the eradication by poison of marine growths choking water channels at the White Bay Power House. Ostreiculturists from Port Hacking were given a series of demonstrations in microscopy in connection with their occupation.

To the official popular guides Mr. Bretnall contributed chapters on the Lower Crustacea.

Insects and Spiders (Messrs. W. J. Rainbow and A. Musgrave in charge).—The lingering illness and death of Mr. Rainbow interrupted the work of this department. The preparation of a popular guide to the collections under his official care was the last service that this officer rendered to the institution.

Mr. Musgrave, who had acted for many years as assistant in the entomological branch, was promoted by the Board to succeed him. A large collection of spiders was catalogued and stored. Both the Cabinet and the Gallery collections were periodically overhauled and disinfected. Two cabinets were made on the premises for the accommodation of a part of a magnificent collection of Australian Lepidoptera, which Mr. A. G. Waterhouse is presenting to the Museum. A large collection of Australian Coleoptera was presented by Mr. Frank H. Taylor. The Imperial Bureau of Entomology forwarded a most useful series of named exotic Diptera. Mr. G. H. Hardy gave holotypes and paratypes of Diptera recently described by him, while Dr. E. Ferguson transferred to our care the types of Tabanidæ created by Miss M. Henry and himself. Other donations of interest were from Dr. Illingworth, Mr. H. J. Carter, and Mr. A. Musgrave.

During his travels in South Australia, Mr. Troughton procured over three hundred specimens of insecta and arachnida, many of which are new to our collection. Noteworthy among these is a new species of Nycteribid, a bat parasite of which only one other kind has been found in Australia.

Publication is represented by a paper written by Mr. G. H. Hardy, a volunteer worker, entitled "Notes on the Flies of the Genus Pelecorhynchus," Roc. Austr. Mus., xiii, 1920, pp. 33-39, pl. ix.

Ethnology (Mr. W. W. Thorpe in charge).—The Ethnological collections, both stored and exhibited, have received the usual attentions. An extra shelter was provided for a number of carved trees. A series, illustrative of the Solomon Island culture, has been laid out in a large table case and an upright floor case. An early phase of European civilisation is recalled by replicas from the Reindeer period of the Dordogne caves in France. As a temporary display, a set of Tugeri implements, shown as "A Headhunter's Outfit," filled a gap.

By purchase and exchange, a variety of interesting additions were obtained from Australia, New Zealand, and the South Sea Islands. From the Auckland Museum an ancient canoe prow and Maori spades were received. A series of "Toas" or direction indicators were added from Central Australia, and Papua was represented by a collection from Maty Island, contributed by Captain W. Burrows, R.A.N.

Early in the year the Australian chapter of the official guide to the ethnological department was written, and now awaits publication.

The services of the Ethnologist were largely utilised by the late Director in research work at the Public and Mitchell Libraries. Other duties devolving on him are the registration of fossils, casts, photographs, and the like. One of the two cadets is engaged alternately in the ethnological and in the mineralogical departments.

The New Guinea Government collection continues to be housed and cared for.

"List of Hieroglyphical Signs and Words in the Funerary Inscription of Neter-Nekht," by A. Rowe, Rec. Austr. Mus., xii, 1919, pp. 293-301.

Numismatics (Mr. W. W. Thorpe in charge).—The coin, medal, and token collections have been maintained in good order. Progress has been made with the classification of a large collection of Chinese and other Oriental coins which have been packed away for twenty years. Coins have been identified for visitors desiring information. Donations were received from the Deputy Master of the Sydney Mint, the Minister of Munitions, and Mr. A. B. Welsh.

Palæontology (Mr. W. W. Thorpe in charge).—A number of casts of Carboniferous fossils, prepared from Professor McCoy's types in the Sedgewick Museum, have been received.

A paper on Queensland fossils was completed by the late Director, and after his death was sent to the Government Geologist of Queensland for publication.

Mineralogy (Dr. C. Anderson, in charge).—The gallery and store collections are in a satisfactory condition. The latter were revised and catalogued to facilitate reference to specimens.

In company with Mr. D. A. Porter, the Mineralogist obtained some fine stilbite from Garawilla, near Gunnedah; axinite and albite from the Moonbi Ranges; vesuvianite and the rare colourless garnets from Bowling Alley Point. Choice specimens of New England minerals were received in exchange from Mr. George Smith. Mr. T. W. Steel presented a fine series of Phosphates from Ocean and Pleasant Islands Other donations were presented by Messrs. W. T. Watkin Brown, Arthur Combe, and D. A. Porter, and Mrs. Hubert Kelly.

Publication was represented by "Mineralogical Notes No. X," by Dr. Anderson, Rec. Austr. Mus., xiii, 1920, pp. 1-31, pls. i-vii.

## 14. COLLECTING, &c.

A week in January was spent by Mr. Kinghorn collecting marine fauna on the North Coast of New South Wales; he succeeded in obtaining an interesting series.

Dr. Anderson spent the end of December and part of January in the field. Under the guidance of Mr. D. A. Porter he visited several localities in New England, including Gunnedah, Moenbi, and Nundle, New South Wales. He gathered there an interesting collection of gems and minerals, and studied their occurrence in the matrix.

The first quarter of 1920 was spent by Mr. Troughton collecting in South Australia. In company with Mr. Charles Hoy, of the United States National Museum, he visited Central Australia, Kangaroo Island, and Eyre's Peninsula. The far interior was spoilt for collecting by the prevailing drought, but profitable work was done in the coastal districts. A large series, amounting to 280 vertebrates and 1,180 invertebrates, was gathered. These have not yet been exhaustively determined, but some species new to science have been detected, and others are rarities not previously contained in the Museum collections. Not the least of the advantages gained from the tour was the professional training which our officer enjoyed from association with a naturalist of such wide experience as Mr. Hoy.

from association with a naturalist of such wide experience as Mr. Hoy.

In May, Mr. Bretnall visited the National Museum, Melbourne, taking a large collection of Polyzoa, partly the property of this Museum and partly "Endeavor" material belonging to the Commonwealth. By the kind help of the Director and officers of that institution he was enabled to identify a number of difficult species. The information thus obtained will be used in the preparation of Mr. Bretnall's report on the "Endeavor" collection.

15. FINANCIAL.
Statement of Receipts and Expenditure for the year ended 30th June, 1920.

				Endow- ment Account.		Public Account.		Tot	als.				Endow- ment Account.	Public Account.	Tot	als.	1
Balance from la	at yea	r		£ 8. 1,720 4	d. 2	£ s. d.	.	£,720	s. 4	d. 2	Salaries— Director, and Assistant Curator	-	£ s. d.	£ s. d.	£	5.	d.
Statutory Endowment		***		1,000 0	0		1	000,1	0	0	First-class Scientific Assistants Second-class Scientific Assistants Clerical Staff Mechanics			1,500 1 9 839 0 9 987 6 9 1,776 18 3			
Parliamentary Appropriation Salaries Contingencies		ns		:::::		8,949 0 0 1,590 0	0	0,539	0	0	Overtime and Sundays			2,436 0 5 438 17 9	8,878		
Basic Wage Increase						863 6		863			Building and Maintenance—				438	17	9
Special Account	***	***	***			7 7	8	7			Repairs			127 8 5 298 3 6	425	11	11
Sales of Publications- Records Post Cards Nest and Egg Catal Catalogues	ogue	:::		6 0 3 6 1 25 4 0 18	7					1	Superannuation— Trustees' Contributions Employees'			818 4 4 179 4 11	997	9	3
Miscellaneous-	***	""	***	0.0				35	10	9	Insurance			165 0 11	165	0	11
Fines Miscellaneous	:::	:::	:::	0 10 2 14			8	3	4	0	Statutory and Additional Endow- ment— Working Expenses		847 10 7	390 7 9	1,000		
Interest— Reserve Account War Loan Peace Loan	::	:::	***	33 16 37 10 21 0	0			92	6	2	Insurance Cases. Tools and Plant Catalogues (Pub. "Records," &c. Books and Bookbinding Preservation of specimens Purchase of specimens Collecting and travelling "Guide," Preparation of Miscellaneous		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	7 7 11 35 16 10 1 9 3 9 3 4 51 14 7 1 14 6	2.039	3	11
							11				Peace Loan		400 0 0		400	0	0
							1				Refund of Unexpended Balances		******	4 17 2	4	17	-
											Balance		911 17 4	*****	911	17	
				2,851 5	1	11 409 14	4	14 260	19	5	Company of the Compan	£ :	2,851 5 1	11,409 14 4	14,26	0.19	

\* Examined and found correct,-

N. BLACK,

Senior Inspector of Public Accounts, 5th August, 1920.

The Common Seal of the Museum was hereunto affixed by order of the Board, this 27th day of September, 1920,

T. STORIE DIXSON, President. CHARLES HEDLEY, Acting Curator.

16. 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. 1-62. 1853-1917.

II.—Catalogues.

3. Catalogue of the Minerals and Rocks in the Collection of the Australian Museum, by G. Krefft.

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.

Descriptive Catalogue of the Nests and Eggs of Birds found breeding in Australia and Tasmania, by A. J. North. 1889. (See also Special Catalogue I.)

 Descriptive Catalogue of the Sponges of the Australian Museum, by R. von Lendenfeld. 1888.
 Catalogue of the Fishes in the Australian Museum. Part I, Palaiethyan 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, Gesteropoda (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.

2. Lord Howe Island: Its Zoology and Physical Characters, by R. Etheridge, Junr., and Others.

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, 1917-20; vol. xiii, part 1, 1920.

## VIII.—Miscellaneous Publications.

- 1. List of Old Documents and Relics in the Australian Museum, 1884. Reprinted with additions.
- 2. Descriptive List of Aboriginal Weapons, Implements, &c., from the Darling and Lachlan Rivers, by K. H. Bennett. 1887.

3. Notes for Collectors. 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.
- 6. List of Duplicate Books and Pamphlets available for exchange in the Library of the Australian Museum. Prepared by S. Sinclair, Secretary and Librarian, 1900.
- 7. Report of a Visit to Certain European Museums in 1911, by Charles Anderson. 1912. With Notes on a Report by C. Anderson, &c., by R. Etheridge, Junz. 1912 (for private circulation 8. Report on Museum Administration in the United States, by Charles Hedley. 1913 (for

private circulation only).

9. Rules to be observed in Writing Papers for the "Records" and "Memoirs." Revised edition. 1913 (for use of the Staff of the Museum).

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.

District Co.	ADDI	11000 10	THE LIBRARY.	
Reg. No.	Books.	How acquired,	Reg. No. Books.	How acquired.
19764 19757	PART I.—AUTHORS.  ADAMS, Andrew L. Notes of a Naturalist in the Nile Valley and Malta 1 vol. 8vo. Edinburgh, 1870.  AINSWORTH, William F. A Personal Narra-	Purchased	19790 BRIGHAM, Wm. T. Report of a Journe, around the World to study Matters relatin to Museums. (Occasional Papers of the Bernice Pauahi Bishop Museum, vol. v. No. 5).	
19758	tive of the Euphrates Expedition. Vols. I-II. 2 vols. 8vo. London, 1888.  ALDER, Joshua. A Catalogure of the Mollusca	Purchased	1 vol. 8vo. Honolulu, 1913 19712 BROOKES, Samuel. An Introduction to th Study of Conchology, including observa tions on the Linnean Genera	3
	of Northumberland and Durham. (From the Transactions of the Tyneside Naturalists' Field Club).  1 vol. 8vo. London, 1848.	Presented	1 vol. 4to. London, 1815 19749 BROWN, J. Macmillan. The Dutch East sketches and pictures. 1 vol. 8vo. London, 1914	
19751	ANDERSON, Robert E. The Story of Extinct Civilisations of the East. 1 vol. 8vo. London, 1896.	Purchased	19686 CHENU, J. C. Bibliotheque Conchyliologique Ser. I, T.I.; Ser. II, T.I. In 2 vols. 8vo. Paris, 1845-46	2810
19815	ANGELIN, N. P. Palæontologia Scandinavica. P.I. Crustacea Formationis Transitionis. Fasc. 1-11. 1 vol. 8vo. Holmiae, 1878.	Purchased	by 19856 COLONIAL AND INDIAN EXHIBITION, 1886. A Descriptive Catalogue of the	C. Hedley
19836	— Fragmenta Silurica e dono Caroli Henrici Wegelin. Opus studio Nicolai Petri Angelin Inchoatum edendum curavit G Lindström.  1 vol. 4to. Holmiac, 1880.		Rocks, Minerals, and Fossils, illustrative of the Geology, Mineralogy, and Mining Re- sources of Victoria (Australia). I'vol. 8vo. Melbourne, 1886 19857 — Handbook and Catalogue of the Wes	Purchased
19583	BAIRD, Spencer F. Spencer Fullerton Baird, by William Healey Dall. 1 vol. 8vo. Philadelphia, 1915.	i mer	Indies and British Honduras. 1 vol. 8vo. London, 1886	
enanco :	BALFOUR, John E. Introduction to the study of Palæontological Botany. 1 vol. 8vo. Edinburgh, 1872.		1 vol. 8vo. London, 1886 19859 ——London. Catalogue of the Exhibits in th	
	BARRETT, Charles. In Australian Wilds, the gleanings of a Naturalist. 1 vol. 8vo. Melbourne, 1919. BARROIS, Charles Faune du Calcaire	Purchased	Queensland Court. 1 vol. 8vo. Brisbane and London, 1886. 19551 COMSTOCK, John H. The Wings of Insect	
13041	D'Erbay (Loire Inferieure). Contribution a L'Etude du Terrain Dévonien. I vol. 4to. Lille, 1889.	Purchased	1 vol. 8vo. Ithaca, 1918 19713 CONCHOLOGY. Rudiments of Conchology	
19835	BATHER, F. A. Triassic Echinoderms of Bakony. (Resultate der Wissenschaftlichen Erforschung des Balatonsees. I. Band, I. Teil, Pal. Anhang.). 1 vol. 4to. Budapest, 1909.		Intended as a familiar introduction to the science, with explanatory plates and references to the collection of shells in the Britis Museum. By the author of "The Geographical Present." A new and improved	
	BERNARD, Felix. Eléments de Paléontologie. 1 vol. 4to. Paris, 1895.		edition. 1 vol. 8vo. London, 1837	Presented
19860 19861	BERTRAND, C. Eg., and RENAULT, B. Album Photographique des Préparations de l'Algue du Kerosene shale de la Nouvelle Galles du Sud (Reinischia australis).  2 vols. 8vo. Lille, 1894.	Purchased	19779 COOPER, W. R. An Archaic Dictionary: Bio graphical, Historical, and Mythological from the Egyptian, Assyrian, and Etruscan Monuments and Papyri. 1 vol. 8vo. London, 1876	
19621 19622	BEYSCHLAG, F., J. H. J. VOGT, and P. KRUSCH. (S. J. Truscott, transl.) The deposits of the useful minerals and rocks, their origin, form, and content in three	7-29	19635 COSSMAN, M., and A. PEYROT. Conchologic 19637 neogenique de Vaquitaine. Tome 1-11 (Plates). In 2 vols. 4to. Bordeaux, 1909-14	in column
19814	volumes Vols. I-II.  2 vols. Svo. London, 1914–1916. BIGSBY, John J. Thesaurus Devonice-Car-	Purchased	Tome III. Texte. 1 vol. 8vo. Bordeaux, 1917-19 19638 DANISH INGOLF EXPEDITION.	E-110
19813	boniferus. The Fauna and Flora of the Devonian and Carboniferous Periods. 1 vol. 4to. London, 1878 ——Thesaurus Siluricus. The Flora and Fauna	Purchased	Vol. 1. Wandel, C. F. Report of the Voyage 2. Knudsen, M., Hydrography. 1899. 3. Boeggild, O. B. The Deposits of th	
	of the Silurian Period, with Addenda. (From recent acquisitions).  1 vol. 4to. London, 1868.	Purchased	Sea-bottom; 4. Wandel, C. F. Current-bottles. 1900 19639 Vol. 11. Lütken, Chr. The Ichthyologies	
	BOUTELL, Charles. Arms and Armour in Antiquity and the Middle Ages	Purchased	Results; 2, Jungersen, Hector F. E. On the Appendices Genitales (Claspers) in the	
19684 19685	BOSC, L. A. G. Histoire Naturelle des Coquilles, contenant leur description, les moeurs des animaux qui les habitent et leurs usages. Tomes 1-v. 2 vols. 8vo. Paris, 1836.	Purchased	Greenland Shark, Somniosus micro cephalus (Bl. Schn.), and othe Selachians. 1899. 3. Bergh, R. Nudibranchiate Gasteropods 1900.	
19617	BOYNE, William. Tokens issued in the Seven- teenth Century in England, Wales, and Ireland by corporations, merchants, trades- men &c. described and illustrated by		<ol> <li>Jensen, Adolf S. The North-Europea and Greenland Lycodinæ. 1904.</li> <li>Jensen, Adolf S. Lamellibranchiata Part I. 1912.</li> </ol>	
19682 19683	1 vol. 8vo. London, 1858.  BRAUNS, Reinhard. Mineral Kingdom, translated, with additions by Leonard J.  Spencer		19640 Vol. III. I. Meinert, Fr. Pycnogonida. 1899 2. Hansen, H. J. Crustacea Malacostracea I. 1908. 3. Hansen, H. J. Crustacea Malacostracea	
19577A	2 vols. 4to. Esslingen, 1912.  BREHM, A E. Brehm's Zoological Atlas.  1 vol. Fol London, n.d.	Presented	(II). 1913. 4. With, Carl. Copepoda. I. 1915. 5. Hansen, H. J. Crustacea Malacostracea	
ntrolivanti	by	C. Hedley	(HI). 1916.	

Reg. No.	Books,	How acquired.	Reg. No.	Books.	How acquire',
19641	Vol. iv. 1. Mortensen, Th. Echinoidea. 1903. 2. Mortensen, Th. Echinoidea. II. 1907. 3. Ritter-Záhony, R. von. Chaetognaths.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	19842	ETTINGSHAUSEN, Constantin von. Beit- räge zur Kenntniss der Tertiarflora Australiens. Zweite Folge. (K. Akad., Wiss. Denkschr. Math. Naturw. Kl. Bd. LIII, 1886.)	
9642	<ol> <li>Ditlevsen, Hj. Annelids. I. 1917.</li> <li>Vol. v. 1. Jungersen, Hector F. E. Pennatulida. 1904.</li> </ol>		Name of Street,	Beiträge zur Kenntniss der Tertiärflora Australiens. (K. Akad. Wiss. Denkschr.	
and	2. Mortensen, Th. Ctenophora. 1912. 3. Carlgren, Oskar. Ceriantharia. 1912. 4. Carlgren, Oskar. Zoantharia. 1913. 5. Broch, Hjalmar. Stylasteridæ. 1914. 6. Broch, Hjalmar. Hydroida (I). 1916. 7. Broch, Hjalmar. Hydroida (II). 1918. 9. Kramp, P. L. Medusæ Part I. Reptomedusæ. 1919.	and a		Math. Naturw. Kl. Bd., XLVII, 1883.)  Die Genetische Gliederung der Flora Australiens. (K. Akad. Wiss. Denkschr. Math. Naturw. Kl. Bd., XXXIV, 1875.)  Uber die Blattskelette der Loranthaceen. (K. Akad. Wiss. Denkschr. Math. Naturw. Kl. Bd., XXXII, 1871.)  Die Genetische Gliederung der Flora Australiens. (K. Akad. Wiss. Denkschr. Math.	
9745	Vol. vi. 1. Lundbeck, Will. Hommorrhapidæ and Heterorrhaphidæ. 1902. 2. Lundbeck, Will. Desmacidonidæ (pars). 1905.	tales	Touches	Naturw. Kl. Bd., XXXIV, 1875.) Beiträge zur Kenntniss der Fossilen Flora von Parschlug in Steiermark. (K. Akad. Wiss. Denkschr. Math. Naturw. Kl. Bd.,	
Unque y	3. Lundbeck, Will. Desmacionde. 1910. In 6 vols. 4to. Copenhagen, 1899–1919.	Presented		XXXVII, 1877.)  Beiträge zur Erforschung der Phylogenie der Pflanzenarten. (K. Akad. Wiss.	
19769	DARWIN, Charles. Journal of Researches into the Natural History and Geology of the Countries visited during the voyage of H.M.S. "Beagle" round the World, under the command of Captain Fitzroy, R.N. Second Edition. Corrected with			Denkschr. Math. Naturw. Kl. Bd., xxxvIII, 1877.) Beiträge zur Erforschung der Phylogenie der Pflanzenarten. (K. Akad. Wiss. Denskchr. Math. Naturw. K. Bd., xxIII, 1880.) in 1 vol. 4to. Wen, 1875–1886.	
	additions. 1 vol. 8vo. London, 1845.	Purchased	19731	FAUNA OF BRITISH INDIA, including Ceylon and Burma Edited by	
19754	DAWSON, Robert. The present state of Australia	Purchased	To side	A. E. Shipley, assisted by Guy A. K. Marshall. Coleoptera, Chrysomelidæ. (Hispanæ and Cassadinæ) by S. Maulk.  1 vol. 8vo. London, 1919.	
19753	DEMMIN, Auguste. Weapons of War 1 vol. 8vo. London, 1870.	Purchased	19884 19885	FRENCH ARMY SURGEON, A. Untrodden Fields of Anthropology: Observations on the	
9866 9882	DICTIONNAIRE Classique d'Histoire Natur- elle, par Messieurs Audouin, Isid. Bourdon, Ad. Brongniart, de Candolle, Tomes 1-XVII.			esoteric manners and customs of semi- civilised peoples; being a record of thirty years' experience in Asia, Africa, and America, Vols. I-II.	
959 <b>7</b> 9612	DICTIONNAIRE Universel d'histoire naturelle dirigé par M. C. d'Orbigny. Tomes 1-XIII. Atlas, Tomes 1-III. 16 vols. 8vo. Paris, 1861.		19837	2 vols. Svo. Paris, 1896. FRITSCH, Dr. Ant., and Jos. KAFKA. Die Crustaceen der Böhmischen Kreideformation.  1 vol. 4to. Prag, 1887.	
19786 19788	D'ORBIGNY, Alcide, Prodrome de Paléon- tologie Stratigraphique Universelle des Animaux Mollusques and Rayonnés Faisant Suite au Cours Elémentaire de	Them:	19619 19626	FERGUSON, James. Rude Stone Monuments in all countries; their ages and uses. 1 vol. 8vo. London, 1872. FINSCH, Otto. Die Papageien. Bd. 1-11.	
	Paléontologie et de Geologie Stratigra- phiques, Vols. I-III. 3 vols. 8vo. Paris, 1850 and 1852.	Dunckand	19628	1867. 3 vols. 8vo. Leiden, 1867-68.	Purchased
19812	DYBOWSKI, Wladislaw Naleez. Mono- graphie der Zoantharia sclerodermata- rugosa aus der Silurformation Estlands,	rurenased	19709 19711	FISCHER von Waldheim, Gotthelf. Zoog- nosia tabulus synopsis illustrata Edition tertia Vol. 1. 1 vol. 4to. Mosquæ, 1813.	Destate
	Nord-Livlands und der Insel Gotland., nebst einer Synopsis aller Palæozoischen Gattungen dieser Abtheilung und einer Synonymik der dazu gehörigen, bereits		19740- 19741	Vols. II-III. 2 vols. 8vo. Mosquæ, 1813. FITZSIMONS, F. W. The Natural History of South Africa. Mammals. Vols. I-II.	
	bekannten Arten (Arten Naturk. liv Ehstu, Kurlands (I) V). 1 vol. 8vo. Dorpat, 1873. 1	Purchagal	19558	2 vols. Svo. London, 1919. GEIL, Wm. Edward. Ocean and Isle. 1 vol. Svo. Melbourne, 1902.	
9810	Another copy—Differently paged.	Purchased	19572	GESNER. Conrad. Icones animalium quad- rupedum viviparorum. quæ in historiæ	
9811	Die Chaetetiden der Ostbaltischen Silur- formation.  1 vol. Svo. Dorpat, 1878.	Purchased		animalium Conradi Gesneri. Libro I et II. Describuntur, cum nomenclatoris singulorum lattinis, græcis, italicis,	
9690 9691	EHRENBERG, C. G. Symbolae Physicæ, seu Icones et descriptiones Corporum Naturalium novorum aut minus Cogni- torum in		AIG-II	gallicis, et germanicis plerungue, et aliarum quoque lingarum, certis ordinalis digestæ. Editio secunda (Tiguri, 1560).  Appendix Historiæ, Quadrupedum vivi-	
9844	2 vols. La Fol. Berolini, 1828-45. ETHERIDGE, Sen., Robert. Fossils of the British Islands Stratigraphically and Zoologically, arranged. Volume I.	Purchased		parorum and oviparorum Conradi Gesneri Tigurini. (Tiguri, 1554.) Nomenclator aquatilium animantium. Icones Animalium Aquatilium in mari	
9819	1 vol. 4to. Oxford, 1888. 1 ETHERIDGE, Junr., Robert and Robert Logan JACK. Catalogue of Works, Papers, Reports and Maps on the Geology.	Purchased		and dulcibia aquis degentium plusquam DCC. cum nomenclaturis laturis, Greeis, Italicis, Hispanicis, Gallicis Germanicis, Anglicis (Tiguri, 1560). In 1 vol. Fol. Tiguri, 1554–1569.	Purchase
	Palæontology, Mineralogy, Mining and Metallurgy, &c., of the Australian Con- tinent and Tasmania. 1 vol. 8vo. London, 1881.	Purchasad	19829	GIGLIOLI, Enrico H. La Collezione Etnografica, Geograficamente Classificata. Parte I. Australasia. Parte II. Antico	
19820		Purchased		e Nuovo Continente. 2 vols. 8vo. Firenze, 1911-1912.	Purchase

Reg. No	Books.	How acquired.	Re . No.	Books.	How acquired
19795	GILL, Thomas. A Brief Sketch of the Coinage and Paper Currency of South Australia. 1 vol. 8vo. Adelaide, 1912.	Purchased	19834	LINDSTROM, G. On the Silurian Gastropeda and Pteropoda of Gotland. (Kongl. Srenska VetenskapAkad. Handl. Bd. XIX, No. 6).	
19801	GOULD, George M. An Illustrated Dictionary of Medicine, Biology and Allied Sciences. 1 vol. 4to. London, 1894.	Purchased	19823- 19828	l vol. 4to. Stockholm, 1884. LYDEKKER, Richard (Editor). The Royal Natural History. Vols. 1-v1.	
19569	GRONOVIUS, L. T. Bibliotheca Regni Animalis atque Lapidei, seu Recensio Auctorum et Librorum		19613 -	6 vols. 8vo. London, 1893–1896.  The Sheep and its Cousins. 1 vol. 8vo. London, 1912.	
19629 19630	1 vol. 8vo. Lugduni Batavorum, 1760 HARTMANN, A. Repertorium op de Liter- atur betreffende de Nederlandsche	Presented	19570	MACGILLIVRAY, William. A History of the Mollusca of the counties of Aberdeen, Kincardine, and Banff; to which is appen-	
15050	Kolonien, I. Ost Indië, 1866–1893. II. West-Indië, 1840–1893. (1895) Iste Ver- flog, 1894–1900 (1900). 2de, Verfolg,		1000	ded an account of the Cirripedal Animals of the same district.  1 vol. 8vo. London, 1843.	
	1901-1905 (1906) continued by W. J. P. J. Schalker and W. C. Muller. 3de. Verfolg, 1906-1910. (1912) 1911-1915		19747	MAHAFFY, J. P. The Empire of the Ptolemies. 1 vol. 8vo. London, 1895. MANN, John F. Eight Months with Dr. Leich-	
19623	(1917). In 2 vols. Svo. s'Gravenhage, 1895–1917 HEERES, J. E. The part borne by the Dutch in the Discovery of Australia, 1606–1765, by J. E. Heeres Pub- lished by the Royal Dutch Geographical		19849	hardt, in the years 1846-47.  I vol. 8vo. Sydney, 1888.  MEYER, A. B. Studies of the Museums and Kindred Institutions of New York City, Albany, Buffalo, and Chicago, with notes on some European Institutions. (U.S. National Museum, Reports, 1903).	Purchased
19575	Society in commemoration of the XXVth Anniversary of its Foundation. 1 vol. Fol. Leiden and London, 1899. HEWLETT, R. Tanner. A Manual of		19596	1 vol. 8vo. Washington, 1905. MEYER, H. A., und K. MOBIUS. Die Hinter- kiemer oder Opisthobranchia der Kieler Bucht.	
	bacteriology, clinical and applied, 6th Edition.  1 vol. 8vo. London, 1918.  HÖHNEL, Ludwig von. Discovery of Lakes		19766- 19767	1 vol. Fol. Leipzig, 1865. MITRA, Rájendrálala. Indo-Aryans: Con- tributions towards the Elucidation of their Ancient and Mediæval History. Vols. 1-11.	
19791 19792	Rudolf and Stefanie, a Narrative of Count Teleki's Exploring and Hunting Expedition in Equatorial Africa in 1887-		19800	2 vols. 8vo. London, 1881.  MORRIS, Henry (Editor). A Treatise on Human Anatomy.	Purchased
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