

1923.
(SECOND SESSION.)

LEGISLATIVE ASSEMBLY.
NEW SOUTH WALES.

AUSTRALIAN MUSEUM.

(ANNUAL REPORT OF THE TRUSTEES FOR THE YEAR ENDED 30 JUNE, 1925.)

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

(Printed under No. 1 Report from Printing Committee, 13 October, 1926.)

TO HIS EXCELLENCY THE GOVERNOR,—

The President and Trustees have the honor to submit the Seventy-first Annual Report of the Australian Museum and take the opportunity of therein setting out in a concise manner the salient features of the work of the financial year 1924-25.

This report includes the report of the Secretary and reports of the Director and officers in charge of the Scientific Departments of the Museum, which reveal in detail the activities and functions of the several branches. These various reports, embodying as they do the results obtained in the year under review, indicate the progress of the Museum and serve to show that the work of the Museum was maintained as effectively as possible during the past year, taking into consideration the curtailment of much new and progressive work in view of the financial needs of the Institution.

The Australian Museum may claim to have reached a high state of efficiency, for although its primary duty is to preserve the objects confided to its care, yet its higher responsibilities necessitate the objects being put to their full and proper use in the dissemination of knowledge. The great task to which the Museum has directed itself from the first has been to extend the boundaries of education, and the Australian Museum has come to be recognised as a conspicuous factor in the advancement of learning, not only in our own State but in the prominent countries of the world possessing scientific institutions.

Of those institutions entirely dependent upon Government support, patronage or alliance, the Australian Museum is the oldest in Australia.

Founded in 1836 the Museum has now functioned continuously for ninety years.

The time has arrived when the present galleries and storage space are discovered to be totally insufficient for Museum purposes. In the meantime in their present crowded and inadequate state the work of the Museum is being sustained in as high a degree of efficiency as in the circumstances is possible.

I. TRUSTEES.

Mr. Octavius C. Beale was elected a Trustee on the 1st August, 1924, filling the vacancy caused by the death of Mr. John Vernon, which occurred on the 14th June, 1924.

It is with every sense of profound regret that record is made of the deaths of Mr. W. H. Hargraves and Dr. Eric Sinclair.

Mr. W. H. Hargraves was elected a Trustee on the 1st October, 1901, and continued to serve actively on the Board of Trustees and in Committee to the date of his death, which occurred at Stanmore on the 9th April, 1925. He had devoted himself with zeal and unselfish effort to all that made for the advancement of the Museum and his service is regarded as of lasting value.

Dr. Eric Sinclair, Inspector-General of Mental Hospitals, was elected a Trustee on the 4th December, 1906. His death occurred suddenly on the 19th May, 1925. His services in the work and interests of the Museum, both in Board and Committee, were of a high order and his thoughtful counsel and guidance are losses both to the Museum and to the State.

Mr. Richard Hind Cambage, C.B.E., F.L.S., was elected a Trustee on the 5th June, 1925, to fill the vacancy on the Board caused by the death of Mr. Hargraves.

In the terms of Trustees' By-Law V, the Hon. D. Levy forfeited his seat on the Board by non-attendance at the meetings during a period of six consecutive months. This vacancy was declared by the President in Board meeting held on the 5th June, 1925.

Two seats on the Board remained vacant at the 30th June, 1925.

Dr. T. Storie Dixon was on 5th December, 1924, re-elected President for the year 1925, being the seventh successive year he has held this office.

Board Meetings.

During the year eleven ordinary meetings and three special meetings of the Board have been held, at which the attendance of the Trustees is recorded as follows:—

<i>Crown Trustee.</i>								<i>Ordinary.</i>	<i>Special.</i>
James McKern	...	...	...	...	...	...	...	7	2

Official Trustees.

Dr. T. Storie Dixon, President of the Medical Board (President)	...	11	3
F. A. Coghlan, Auditor-General	...	11	3
H. A. Chesterman, Surveyor-General	...	6	1

Elective Trustees.

W. H. Hargraves. Died 9th April, 1925	...	5	1
Dr. Eric Sinclair. Died 19th May, 1925	...	3	...
Dr. J. R. M. Robertson	...	7	2
E. Wunderlich	...	5	2
Dr. G. H. Abbott	...	2	2
Hon. D. Levy, M.L.A.	...	3	1
J. J. Fletcher	...	11	3
Sir William Vicars	...	3	...
Major-General Sir Charles Rosenthal	...	3	...
Professor L. Harrison	...	7	2
E. C. Andrews. Elected 4th July, 1924	...	3	1
Octavius C. Beale. Elected 5th September, 1924	...	6	1
R. H. Cambage. Elected 5th June, 1925.	...	...	...

Leave of absence (four months) was granted Mr. McKern from 5th December, 1924.

Leave of absence (twelve months) was granted Mr. E. Wunderlich from January, 1925.

Leave of absence (one month) was granted Sir Charles Rosenthal from 30th May, 1925.

House Committee.

The House Committee held one special meeting and eleven ordinary meetings during the year. Its work covered recommendations in respect to all matters pertaining to staff appointments and government, maintenance of buildings, plant and equipment, &c. The Committee gave consideration to questions arising in connection with exhibits, improvements in exhibits, the opening of the Museum on Mondays, and many other matters which are set out more fully in the General Report.

The attendance of members at Committee meetings is recorded as follows:—

	<i>Ordinary.</i>	<i>Special.</i>
Dr. T. Storie Dixon, President, 1924-25	10	1
Mr. Jas. McKern, Chairman, 1924-25. (On leave December, 1924—April, 1925)	3	...
Mr. F. A. Coghlan, 1924-25	10	1
Dr. J. R. M. Robertson, 1924-25	8	1
Mr. J. J. Fletcher, 1924	4	...
Sir William Vicars, 1924	2	...
Mr. E. C. Andrews, 1925	4	1

Finance and Publicity Committee.

The Finance and Publicity Committee held twelve ordinary meetings during the year. Accounts totalling £7,573 12s. 7d. were reviewed and authorised for payment.

Consideration was given to the subject of Extension Lectures, fifteen being approved and recommended, whilst endorsement was made to the broadcasting of Nature stories to children through the services of Messrs. Farmer & Co., Ltd.

Thoughtful review was directed to affairs connected with the Museum Magazine, and the Trustees' interests in regard to this publication were closely watched. Fuller details of the Committee's recommendations are embodied in the main report.

The attendance of members at Committee meetings is recorded as follows :—

Dr. T. Storie Dixon, President	...	...	...	...	...	...	...	...	5
Mr. E. Wunderlich, Chairman, 1924. (On leave January-December, 1925)	...	...	...	...	...	...	...	...	6
Mr. F. A. Coghlan, Chairman, 1925	...	...	...	...	...	...	...	...	11
Mr. Jas. McKern, 1924-25. (On leave, December, 1924-April, 1925)	...	...	...	...	...	...	...	...	6
Mr. W. H. Hargraves, Died 9th April, 1925	...	...	...	...	...	...	...	...	4
Mr. J. J. Fletcher, 1925	...	...	...	...	...	...	...	...	5
Mr. O. C. Beale, 1925	...	...	...	...	...	...	...	...	6

Scientific and Publication Committee.

The Scientific and Publication Committee held ten ordinary meetings during the year, the June meeting having lapsed through absence of a quorum.

The Trustees' lectures held within the Museum have been carefully reviewed in regard to subjects and attendances. These lectures include the Popular Science (Evening) Series and the School Lectures. In addition special lectures to the children of the Deaf and Dumb and the Blind Institution, Business Colleges, and talks to school pupils have been governed thoughtfully by this Committee.

The Committee's deliberations were directed particularly to such matters as exchange of specimens and publications, purchase of specimens and publications of all headings concerning the scientific interests of the Museum. Statistics relative to lectures are furnished in the General Report.

The attendance of members at Committee meetings is recorded as follows :—

Dr. T. Storie Dixon, President	...	...	...	...	...	...	...	...	3
Dr. Eric Sinclair, Chairman, 1924	...	...	...	...	...	...	...	...	8
Professor L. Harrison, Chairman, 1925	...	...	...	...	...	...	...	...	6
Dr. G. H. Abbott, 1924-25	...	...	...	...	...	...	...	...	7
Mr. J. J. Fletcher, 1924-25	...	...	...	...	...	...	...	...	9
Sir Charles Rosenthal, 1924-25	...	...	...	...	...	...	...	...	3

2. VISITORS.

Day by day it becomes clearer that the Australian Museum is destined to play for Australia a most interesting role in all that concerns the study of its Fauna, Ethnology, and Geology. Probably its best teaching is its silent teaching, "every thoughtful visitor to the Museum gets out of it as much as he chooses, or to be more exact, as much as he is capable of assimilating." More than that, the Museum is ready to waken his mind to raise questions itself, to open, as it were, windows offering new vistas, broadening his mental horizon in every way.

During the year the Museum Halls have been opened as usual to the public on all week-days (except Mondays) and Sundays, including public holidays. On Anzac Day, 25th April, the Museum was closed until 2 p.m.

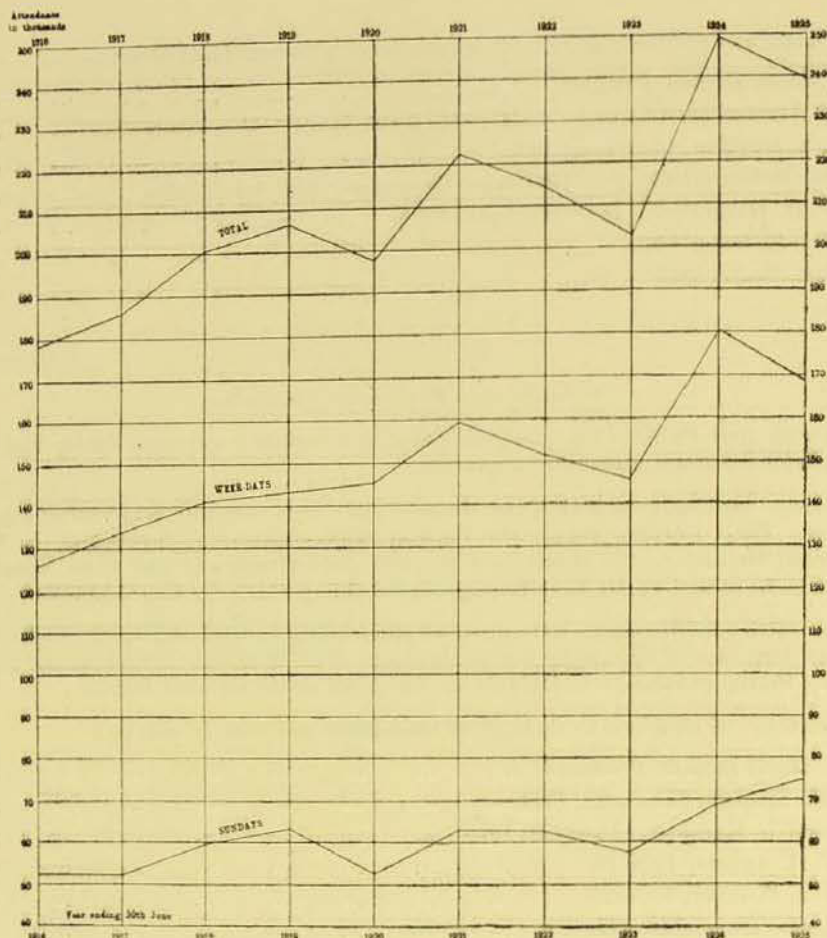
Large numbers have visited the galleries, especially classes of school children from the city and nearby suburbs, and it is gratifying to again report that the attendance of visitors to the galleries has been maintained, which strikingly indicates the growth of popular interest in the Museum.

It is now proposed that from the 1st July, 1925, the Museum shall be opened to the public on Mondays. This has been found necessary in consequence of the number of visitors and members of the public seeking admittance on that day. The practice of closing the Museum to the public on Mondays is one of old standing, and a simple rearrangement of staff disposal will permit of the change being effected without involving extra expense.

The number of visitors on week-days totalled 168,880, and on Sundays 70,478, in all 239,358.

The following statistics of attendances from the years 1914-1915 are submitted :—

				Week-days.	Sundays.	Total.
1914-1915 (1st July to 30th June)	...	...	...	109,922	46,611	156,533
1915-1916	"	"	...	125,978	52,669	178,647
1916-1917	"	"	...	133,645	52,399	186,044
1917-1918	"	"	...	140,977	59,920	200,897
1918-1919	"	"	...	142,977	63,520	206,497
1919-1920	"	"	...	145,058	52,490	197,548
1920-1921	"	"	...	159,576	63,016	222,592
1921-1922	"	"	...	151,544	62,889	214,433
1922-1923	"	"	...	145,271	57,600	202,871
1923-1924	"	"	...	180,474	69,037	249,511
1924-1925	"	"	...	168,880	70,478	239,358



3. LECTURES.

Public Education in the Museum.

The policy of the Trustees to aid the public and citizens to become more generally acquainted with Natural History has been persistently followed up by means of lectures, demonstrations, and gallery talks. The lectures during the year comprised:—

- (a) Popular Science Lectures in the Museum Lecture Hall for adults.
- (b) Nature Study Lectures to teachers and pupils of the Public Schools and Business Colleges in the Museum Lecture Hall.
- (c) Extension Science Lectures delivered in the city, suburbs, and country centres.
- (d) Lectures and talks in the Museum to the pupils of the New South Wales Deaf and Dumb and Blind Institution.
- (e) Talks to pupils of High Schools.

These lectures were originally planned to bring the citizens into closer touch with the Museum and its work, and in the case of the lectures to school pupils, the result has been to take the Museum to the schools and to bring the schools to the Museum.

It must be borne in mind that the Lecture Hall has seating accommodation for 250 persons, and figures now submitted indicate only too clearly that the Trustees' work is sadly hampered through lack of accommodation. In many instances applications for admission were greatly in excess of the capacity of the hall, and the public have had to be refused admittance owing to the risk attaching to overcrowding.

In all cases the lectures have been illustrated by means of lantern slides, cinema films, and specimens. The increase in attendance at the lectures proves that the Museum lecture work is of direct importance. Altogether forty-eight lectures have been given to a total attendance of 9,259 persons.

The following details of lectures are furnished:—

Popular Science Lectures.

Subject.	Lecturer.	Attendance.
1. "Lord Howe Island—the Madeira of the Pacific"	A. Musgrave	352
2. "Nests of Some Australian Birds"	"	374
3. "Nests of Some Australian Birds"	J. R. Kinghorn	334
4. "Nature the Master Sculptor"	"	248
5. "Nature the Master Sculptor"	T. Hodge Smith	212
6. "Beginnings of Life"	E. A. Briggs	285
7. "Conquering the Cannibal"	"	239
8. "Non-Marsupial Mammals of Australia"	E. le G. Troughton	201
9. "Cave-land"	Dr. C. Anderson	279
10. "Birds in Relation to Agriculture"	J. R. Kinghorn	105
11. "Meteorites"	T. Hodge Smith	158
12. "The Role of Insects in War and Peace"	Dr. Harvey Sutton	305
13. "Evolution of the Horse"	W. S. Dun	275
14. "Beasts and Birds through a Camera"	E. F. Pollock	270

3,637

School Lectures.

	Subject.	Lecturer.	Attendance.
1.	"Mammals"	E. le G. Troughton	152
2.	"Seashore" (attended by Minister)	J. R. Kinghorn	217
3.	"	F. A. McNeill	145
4.	"Reptiles"	J. R. Kinghorn	167
5.	"	"	275
6.	"Insects"	A. Musgrave	329
7.	"Fishes"	J. R. Kinghorn	138
8.	"	"	129
9.	"Seashore"	F. A. McNeill	59
10.	"	"	96
11.	"Birds"	J. R. Kinghorn	78
12.	"	"	257
13.	"	H. O. Fletcher	145
14.	"Insects"	T. G. Campbell	156
15.	"	A. Musgrave	242
16.	"Shells"	T. Iredale	150
17.	"	W. Boardman	87
			2,822

Lectures to Pupils of the Deaf and Dumb and the Blind Institution.

4th June—"Birds," Mr. J. R. Kinghorn	Blind Pupils	8
	Deaf and Dumb	24
	Teachers	3
10th June—"Australian Aborigines," Mr. W. W. Thorpe	Blind Pupils	8
	Teacher	1
		44

The lecture delivered on 4th June was enhanced by the assistance of Mr. Andrew Stannars, who furnished entertaining and instructive illustrations of bird calls, which were a source of delight to the blind children and others privileged to hear the calls.

Extension Lectures.

Place.	Subject.	Lecturer.	Attendance.
1. Harden	"The Romance of Gold-mining in New South Wales."	T. Hodge Smith	50
2. Cowra	"	"	120
3. Epping	"Ants and Ant Communities"	A. Musgrave	50
4. Turramurra	"The Value of Birds to Man"	J. R. Kinghorn	280
5. Sydney (Department of Education).	"Our Feathered Friends"	"	120
6. Werris Creek	"The Romance of Gold-mining in New South Wales."	T. Hodge Smith	80
7. Bondi	"Lord Howe Island"	A. Musgrave	100
8. Sydney (Farmer & Co., Ltd.).	"Our Feathered Friends"	J. R. Kinghorn	400
9. Balgowlah	"	"	300
10. Cowra	"Who's Who among the Reptiles"	"	150
11. Broken Hill	"Nature the Master Sculptor"	T. Hodge Smith	70
12. Malvern	"Our Feathered Friends"	J. R. Kinghorn	100
13. North Sydney	"The Geological History of Sydney"	T. Hodge Smith	80
14. Sydney (Y.M.C.A.)	"Some Australian Reptiles"	J. R. Kinghorn	100
15. Sydney (Royal Colonial Institute).	"Lord Howe Island"	A. Musgrave	200
16. Turramurra	"Who's Who among the Reptiles"	J. R. Kinghorn	250
			2,450

Nature Stories Broadcasted by Messrs. Farmer & Co., Ltd., in "Children's Hour Talks."

Subject.	Prepared by.	Date.
1. "Fishes"	A. R. McCulloch	24 July, 1924
2. "The Honey Mice of Western Australia."	E. le G. Troughton	25 " 1924
3. "The Pill-maker Crab"	F. A. McNeill	30 " 1924
4. "Butterflies"	A. Musgrave	2 Aug., 1924
5. "Praying Mantis"	G. P. Whitley	9 " 1924
6. "Birds and their Nests"	J. R. Kinghorn	28 " 1924
7. "A Brave Cockatoo"	F. A. McNeill	5 Sept., 1924
8. "Billy, the Penguin"	J. R. Kinghorn	5 " 1924
9. "The Cuckoo's Secret"	H. O. Fletcher	9 " 1924
10. "A Seaside Ramble"	From Mr. Grutzmacher's Lecture, per Museum Magazine.	17 " 1924
11. "The Clever Defeat of Mr. Crane"	J. R. Kinghorn	14 Oct., 1924
12. "A Seaside Ramble"	From Mr. Grutzmacher's Lecture, per Museum Magazine.	1 Nov., 1924
13.	"	13 " 1924
14.	"	10 Dec., 1924
15. "The Incubator Bird"	T. Iredale	15 April, 1925
16. "The Playground Bird"	"	11 May, 1925

The School Lectures.

The School lectures are centered on the plan to bring the Museum into closer touch with the school children and teachers, and the syllabus arranged under the supervision of the Chief Inspector of Schools closely correlates with the Nature Study work done in the class rooms. The objects are to increase the knowledge of Nature and to acquaint the pupils with the Museum collections, so that the collections may be used to full advantage.

The question of the Government meeting the cost of lectures promoted by the Trustees was brought to the attention of the Minister for Education by the Hon. D. Levy, M.L.A., but the late Minister, although in sympathy with this phase of the Museum work and appreciating its value, was unable to make any provision on the Estimates to meet the additional expenditure involved under this heading.

It is pleasing to record the following extract from a letter to the Director by Mr. H. D. McLelland, Chief Inspector of Schools, under date 12th June, 1925:—

"Personally I regarded the subject of Nature Study as second to none in educative value, and I can assure you that all the more thoughtful teachers appreciate fully the assistance now being given by the Museum to our schools. I hope that each year will add to the number of those to whom your lectures are giving a bias toward some form of science study."

The Trustees appreciate this endorsement furnished by one best in a position to gauge the worth of this Museum service to the oncoming citizens of our State.

The Trustees readily co-operated with the Department of Public Instruction in its broadcasting lectures to schools, and Mr. Kinghorn addressed the schools from the Broadcasting Parlors on 10th December, 1924, his subject being "Snakes and Snake Venom."

Classes of children from the Institution for the Deaf and Dumb and the Blind were also brought to the Museum, and the Blind by handling the specimens were able to closely follow the lecturer, and the Deaf and Dumb pupils readily grasped every point of the "Talk" by sight conversation, translated through their teachers.

The lectures, however, represent a heavy item of expenditure, and their cost to the Trustees has reached during the past year the amount of £245 4s. 7d., irrespective of the cost of lantern slides.

4. THE STAFF.

During the year Mr. A. R. McCulloch, Senior Scientific Assistant, found it incumbent to apply for extended leave of absence in consequence of ill-health, and twelve months' extended leave was granted. In his absence the work of his branch was performed by his Assistant, Mr. G. P. Whitley.

Mr. T. Iredale was appointed Conchologist (on probation). He had previously been engaged as a temporary assistant in this Department, and his full appointment will tend undoubtedly to a strengthening of the staff resources.

Miss G. E. Johnstone was appointed Stenographer on 18th August, 1924, and her work throughout has been of important assistance to the administrative section.

Generally the staff have realised that an undertaking of the nature of the Australian Museum requires the watchful care of those charged with its supervision, and have manifested every interest in its operations, growth, and success.

At a special meeting of the House Committee held on the 27th January, 1925, the salaries of the staff were reviewed and the Board of Trustees adopted the Committee's recommendation in respect to increases in staff salaries.

Presidential Address.—At the opening Board Meeting of the year, February, 1925, Dr. T. Storie Dixon, President, submitted to the Trustees his presidential address, in which he stressed the hope for forward work during the year.

Extension of the Museum Buildings.—From time to time the subject of the extension and completion of the Museum buildings has been brought forward in Trustees' reports, but nothing in the way of structural additions has been attempted since 1909.

At one time all specimens held were displayed, and persons unfamiliar with modern Museum methods possibly still have the idea that these exhibits include all of the Museum's collections. Such is far from being the case, and actually the specimens on exhibition constitute only a portion, and in many instances an insignificant portion, of our collection. It seems desirable that this fact should be made clear. Our storage facilities are now altogether inadequate and unsuitable for the duplicate and exchange material, and the spaces for the accommodation of study collections call for immediate extension.

Publicity.—The Press has most courteously published at times various items of public interest which have been furnished from the Museum, and the thanks of the Trustees are tendered for the co-operation and assistance afforded by the daily papers in respect to lecture reports, Museum articles and reviews. From these is gathered some small idea of the work accomplished. Record cannot be kept of the numerous daily calls for information sought from the Scientific Staff. This "Information" work is encouraged and is one of the most important phases of the work of the officers of the Museum. No person, young or old, is denied a courteous hearing and a very great deal of the time of the officers is taken up in answering questions asked by visitors and sought by correspondents from all over the world.

The Trustees are again giving consideration to the question of the issue of a popular guide to the exhibits in the galleries, and if funds permit this much needed adjunct will soon be a realised fact.

THE AUSTRALIAN MUSEUM MAGAZINE.

The Magazine is a popular illustrated publication of the Trustees, published quarterly, for lovers of Nature, and supplies scientifically accurate information free of technical difficulties. The Magazine has now reached Part 7 of Vol. II, and the Trustees can regard with pleasure the growing public interest in each number.

In view of the desirableness of extending the usefulness of the Magazine, arrangements have been entered into with Messrs. Angus & Robertson Ltd., to undertake the distribution of the Magazine,

This arrangement will take effect as from the 1st July. The issue will be increased to 4000 copies per part, and it is confidently expected that excellent results will ensue from the idea.

Realising the value of the Magazine as an educational factor in the schools, the Trustees after supplying State Schools, distributed gratis copies to the headmasters of Public Schools in the adjoining States, and supplied these as follows:—

Victoria	...	...	...	...	...	641	copies.
Queensland	...	...	...	...	...	325	"
South Australia	...	...	...	...	...	177	"
West Australia	...	...	...	...	...	96	"
Total						1,266	

In addition a distribution of 500 gratis copies was made to members of the medical profession with a request that the copy be placed on the table of their Waiting Rooms.

Altogether 3418 copies of the Magazine were distributed gratis during the year, in order that the Magazine should become thereby more widely known.

The Trustees also had printed 35,000 Magazine publicity slips; these were supplied to publishing houses and leading booksellers in the States for their use in enclosure with correspondence. Each of these efforts to bring the Magazine more prominently to the notice of the public, has produced pleasing results in the form of more general inquiry and subscriptions. It is safe to claim, that the Museum Magazine as an aid to nature-study is without an equal, and it is hoped with the concurrence of the Hon. the Minister of Public Instruction to yet have it placed in the hands of all nature-study teachers in the schools of our State.

In order to further make known the value of the articles appearing in the Magazine, permission was granted to Messrs. Farmer & Co., Ltd., to use the Magazine articles as and when desired for purposes of their broadcasting talks.

Educational.—Consideration during the year was given by the Trustees to the subject of having prepared standard lectures to be printed and furnished with appropriate slides for the use of schools. It was, however, recognised that although this Museum service is greatly availed of in the States of America and is a feature of Museum work there, it could not be readily carried out owing to lack of lantern and screen facilities in this State.

Photography and Collection of Slides.—One of the most valued possessions and adjuncts in the educational side of the Museum is in its collection of 2,448 lantern slides.

These slides prepared by the staff are in many series most delicately and faithfully coloured, and can be claimed to be without parallel in the States. Within themselves they form a valuable library, and for lecture purposes are indispensable.

While the work of photography is of a routine nature, the large number of prints furnished by this section indicates the extent of the researches of the Museum. Altogether 4,016 negatives have been registered, and with the lantern slides have been brought under a system of classification and cataloguing. The following tabulation sets forth the work of this section during the past year:—

Slides made during year	...	...	...	...	...	...	...	406
Negatives registered	...	...	...	...	...	...	...	103
Prints made	...	...	...	...	...	...	...	2,358

Micro Slides of Rock Sections.—In September the Trustees decided to have an assistant specially trained to conduct the work of cutting Micro-slides of rock sections. The assistant entrusted with the work, J. Kingsley, completed 263 slides during the period to 30th June. These slides if purchased outside the Museum would represent a cost of £32 17s. 6d.

Appeal.—In concluding this report no better lines can be used than those contained in an article by Professor Henry Fairfield Osborn, President of the American Museum of Natural History:—

"The old Museum idea was that of a sanctuary or refuge, a safe deposit vault for curious, rare or beautiful objects, which otherwise might be lost or destroyed. The curator was a keeper, not a teacher. The growing Museum influence is largely due to what may be called the 'New Museum Idea,' viz., that the Museum is not a conservatory, but a progressive, educational force. That it has a teaching quality or value peculiar to itself. That the Museum succeeds if it teaches; fails partially if it merely amuses or interests people, and fails entirely if it simply mystifies."

It is claimed for the Australian Museum that it has acted as a teacher to the total of 239,358 visitors to its galleries during 1924-25; that it did not stop to merely interest and amuse; and therein it has succeeded.

The Trustees are particularly earnest in their determination that the Museum shall be recognised as a progressive educational force, devoted in its every phase to the betterment and well-being of the citizens of our State.

In *The Daily Telegraph* of September 18th, Mr. Ernest Wunderlich, Trustee, made a strong appeal to the citizens of New South Wales to co-operate with the Trustees in placing the Museum upon the plane it should occupy in such a city as Sydney. Appeal was specially made to our public-minded and public-spirited leaders for funds to permit of the Museum's expansion, and so place it on a level with Museums in other parts of the world.

MUSEUM NEEDS.

The immediate needs of the Museum embrace—

The early completion of the building as planned fifty-six years ago.

Additional endowment funds to enable it to continue the work it is now doing.

New halls in order that the public may study and enjoy the valuable material which of necessity is now in storage.

Active support and interest in its service to schools and the public.

Benefactions from public-spirited citizens to further its work of research, exploration and education.

LIBRARY.

During the year the library acquired 264 volumes by purchase and exchange, besides loose parts and reprints as detailed in Appendix II, "Additions to the Library."

The growth of the library accentuates the problem of finding shelf space. During the previous year a number of volumes were transferred to the Board Room, which made it possible to rearrange portion of the cases in the library proper and allow for expansion. The need for an increase in library accommodation cannot be emphasised too strongly, overflows are now spread in many directions—Board Room, basement, corridors, and Palaeontological Gallery. The departmental divisions are also congested, particularly in the Entomological and Conchological Sections.

The portion of the library housed in the basement continues to be a matter of concern. It is only by constant attention that it is maintained in approximately good condition.

The amount voted for bookbinding was duly expended, and an appreciable advance was made in overtaking arrears, though much yet remains to be done. It is desirable that these arrears should be overtaken as soon as possible, for many of our volumes are of great value and receive considerable handling; they require binding not only to facilitate their use, but also to preserve them for the future.

As in previous years, assistance has been freely rendered to students and investigators, and similar help has been afforded to the press, particularly in the direction of illustrations.

FIELD WORK.

From 28th October to 3rd November, Mr. A. Musgrave, Entomologist, was collecting at Mount Tambourine, Southern Queensland, and from this exceedingly rich district he obtained nearly one thousand specimens of insects and spiders, besides millipedes and other forms.

On 24th November a party proceeded to Port Hacking and, accompanied by Mr. W. H. Glover, of Lillipilli, in his launch, went up the north-west arm to the site of two aboriginal rock shelters. These were excavated, and one nearly complete skeleton was obtained and portions of four others, besides a number of stone axes, bone awls, pounding stones and flakes. Thanks are due to Mr. Glover for his cordial assistance and for his offer to assist in future explorations of ancient aboriginal camps in this locality.

Mr. T. G. Campbell accompanied a University party led by Professor Launceot Harrison, which was engaged from 16th January to 13th February on a biological survey of Barrington Tops, and was successful in securing a considerable number of specimens comprising mammals, reptiles, molluscs, crustacea and insects. The snakes included some fine examples of *Denisonia superba*, far exceeding in size any previously represented in the Museum collection.

Preliminary trips to Gunnamatta Bay, Port Hacking, yielded such interesting and important results that it was decided to engage in systematic collecting on the extensive flats accessible at low tide. These flats are the breeding ground of a large and varied invertebrate fauna which is ordinarily found only in deeper water. By kind permission of the State Fisheries, Chief Secretary's Department, a Museum party consisting of Messrs. Iredale, Livingstone and Fletcher, was allowed to occupy the Fish Hatchery buildings at Gunnamatta Bay from 9th to 13th March, and succeeded in collecting a large series of molluscs, echinoderms, crustacea, alcyonaria, and other invertebrates. Observations were also made of breeding habits and distribution, and many interesting photographs were obtained. On account of the importance of the results achieved, the Trustees have approached the Chief Secretary with a view to obtaining the use of the hatchery buildings for an extended period as a Marine Biological Station, and negotiations with that end in view are now proceeding. The Trustees are greatly indebted to the Chief Secretary and Mr. A. W. Wood, Officer in Charge of State Fisheries, for the facilities afforded to the Museum officers during their visits to Gunnamatta Bay. Mr. H. O. Fletcher, of the Museum staff, kindly placed his car at the service of the Trustees, and thus contributed considerably to the success of the undertaking.

On the 13th June, Mr. W. W. Thorpe, Ethnologist, visited Newcastle and explored the beaches south of Merewether and a locality near Mayfield, where aboriginal flaked implements occur in considerable numbers. He was accompanied by Messrs. D. F. Cooksey and C. W. Loch, who have taken great interest in the occurrences, and secured a representative series of specimens from both localities. The specimens from Mayfield, found on the bank of an old channel of the Hunter River, are of particular interest on account of their undoubted antiquity; they include an implement of "Aurignacian" type, hitherto unknown from Australia. We are indebted to Messrs. Cooksey and Loch for their valuable assistance to Mr. Thorpe during his visits to the district.

CURATORIAL WORK.

Ethnology (W. W. Thorpe in charge; H. O. Fletcher, part-time assistant).—Donations of special interest received during the year include an outrigger canoe, weapons from Aua (Durour) Island, and two large carvings from New Zealand, presented by Mr. H. C. Cardew; inlaid canoe, drum, stone mortars, and implements from the Solomon Islands, by Mr. N. S. Heffernan; collection of South Sea material purchased for the museum by Mr. Robert C. Dixon; tattooed Maori head, and a number of Australian, Tasmanian, and Pacific stone implements presented by Mr. Thomas Steel, F.L.S.; stone axes from the Bogan River, New South Wales, by Mr. W. S. Dun; New Hebridean spears by Mr. F. T. Huthnance; stone axes from New Caledonia by Mrs. L. M. Roth; some old Fijian spears by Mr. T. F. H. Mackenzie; aboriginal weapons from the Daly and Fitzmaurice Rivers, Northern Territory, by Mr. T. Styles.

By exchange we received a number of Polynesian stone implements from the Otago University Museum; aboriginal stone implements from Mr. A. S. Kenyon; Veddah relics from the Colombo Museum. Specimens acquired by purchase include native regalia from the Banks Group, aboriginal weapons from the collection of the late Harry Stockdale, an assassin's knife from Persia.

During this year the gallery collection was thoroughly overhauled and cleaned by Messrs. W. Barnes and E. G. Morris. The Maori and Moriori stone implement exhibit was rearranged, following suggestions by Mr. H. D. Skinner, M.A., of the Otago University Museum, and information gathered by Mr. Thorpe during a visit to the Dominion.

A composite cast of a Papuan native was prepared by Messrs. G. C. Clutton and J. Kingsley for the "Ravi" exhibit. This striking exhibit has been placed temporarily in a wall case pending the encasing of the Ravi. A small series illustrating the material culture of Aua (Durour) Island, some "Pre-Melanesian" stone objects from the Solomon Islands, a large fish-figure from New Ireland, a baked Maori head, and two casts of trephined Peruvian skulls were added to the exhibited series.

The Aboriginal Group so generously presented by Mr. E. Wunderlich, F.R.A.S., Trustee, and entrusted to Mr. G. Rayner Hoff for execution, is now nearing completion, and the Trustees hope to have it installed early during the coming year.

The following papers and articles by Mr. Thorpe have been published during the year or are in the press:—

- "Bronze and Ivory Figures from Burmah," *Aust. Mus. Mag.*, ii, 3, 1924.
- "Some New Guinea Cultural Influences found amongst the Aborigines of Australia." (Read before the Aust. Assoc. Adv. Sci., Adelaide, August, 1924.)
- "Heliolithic Evidence in Australia, Tasmania, and New Guinea, and Traces of other Superior Cultures." (Read before the Aust. Assoc. Adv. Sci., Adelaide, August, 1924.)

Mammals (E. le G. Troughton, in charge).—The mammals registered during the year reached the total of 255, which is a record for the department. This result is due to the encouragement afforded to private collectors in the way of information and equipment, and to individual effort on the part of the Staff. Donations included a fine series of the Spectacled Fruit Bat (*Pteropus conspicillatus*) by Dr. W. E. J. Paradise, secured on a cruise by H.M.A.S. "Geranium" in Queensland waters; four species of Solomon Island bats by Mr. C. E. Hart; a large collection of bats, representing eleven species, and a large rat (*Uromys sapientis*) by Mr. N. S. Heffernan, Solomon Islands; an interesting series of seals, rodents and marsupials by Mr. A. S. le Souef; a fine specimen of the Giant Ant-eater (*Myrmecophaga jubata*); a seal, Stick-nest rats and marsupials from the Taronga Park Zoological Trust; several interesting bats from Misses J. and E. Hosie, Messrs. L. Abrahams, R. Stein, W. H. B. Gaden, and bats and marsupials from Mr. T. V. Sherrin.

By exchange with the American Museum of Natural History we received a spirit specimen of the rare South American marsupial (*Canolestes fuliginosus*), and a series of skins and skulls of American mammals. A fine series of thirty skins and skulls of Ceylonese bats was received by exchange with the Colombo Museum.

The Fruit Bat Group commenced last year was successfully completed, and has attracted much favourable attention. The setting, lighting and roofing of the Lion Group has been entirely remodelled and the animals renovated, resulting in a marked improvement. This will be enhanced when a screen is erected on the Antarctic case to eliminate the severe reflections which now mar the display. The interior of the Bear Case was repainted, the animals cleaned, and an extra fitting installed to raise the Polar Bear to a more commanding position and to accommodate two Polar Bear cubs. The interior of the cases in the section of foreign mammals was repapered and painted, and all the ungulates were removed and reconditioned; washing with a special solution was effective in restoring brilliance to the skins. The customary systematic disinfecting of the gallery and other collections was carefully carried out by the taxidermists.

Three hundred and fifty skins were treated by the taxidermists, who continued the work of removing skulls and filling out the skins to facilitate study and comparison. Coincident with the identification of acquisitions, old collection material has been renamed or identification checked, the advance in this respect enabling the spirit collection to be re-sorted according to genus and species. We have to thank Mr. H. A. Longman, Director of the Queensland Museum and the Committee of Management of the Macleay Museum for the loan of specimens in connection with research work in the department.

The following papers and articles by Mr. Troughton were published:—

- "Singular Nesting Site of Birds on the Nullarbor Plain," *The Emu*, xxiii, 3, 1924.
- "Captain Cook's Kangaroo," *Aust. Zoologist*, iii, 8, 1925 (with Tom Iredale).
- "A Revision of the Genera *Taphozous* and *Saccolaimus*," *Rec. Aust. Mus.*, xiv, 4, 1925.
- "The Honey-eating Marsupial Mice of Australia," *Aust. Mus. Mag.*, ii, 4, 1924.
- "The Fruit Bats or 'Flying Foxes' of Australia," *Aust. Mus. Mag.*, ii, 5, 1925.
- "Some Strange African Fruit Bats," *Aust. Mus. Mag.*, ii, 6, 1925.

Skeletons (E. le G. Troughton, in charge).—Donations included a fine series of human and marsupial crania by Mr. Thomas Steel, and useful study crania by the Director and Mr. H. O. Fletcher. From the American Museum of Natural History we received eight skulls of American mammals.

The articulators prepared and cleaned several skeletons and over ninety skulls.

The cases in the Osteological Gallery and the various stored collections were cleaned and disinfected.

Birds (J. R. Kinghorn, C.M.Z.S., in charge; H. O. Fletcher, part-time assistant).—During the year 154 birds, 8 nests and 52 clutches of eggs were added to the collection. Mr. P. A. Gilbert presented a number of clutches of valuable eggs; Mr. C. E. Hart, birds from the Solomon Islands; Mr. T. V. Sherrin, some rare and interesting birds, and Mr. Arthur Kidman several cases of mounted birds. The latter were renovated by the taxidermists and provided with printed labels, so that the groups could be used for loan purposes. These are now on loan to the Technical College at Broken Hill, under arrangement with the Technological Museum, Sydney.

The gallery collection is being overhauled by Mr. W. Barnes under the direction of the taxidermist, the wall cases being repaired and repainted. About 70 new skins were prepared, four groups restored, 50 mounted specimens and 118 skins renovated. Mr. Fletcher has continued his work of rearranging the bird collection, and has in addition completely catalogued the egg collection.

A report on the food of the Stubble Quail was furnished to the Chief Secretary in response to his request that certain investigations should be carried out. This report was later released for publication and has appeared in several of the pastoral magazines and daily papers.

Numbers of Art Students have made use of the gallery exhibits during the year.

Assistance was given to the State Advisory Committee, Customs Department, and to the Chief Secretary's Department in connection with bird protection and export, shipments being examined from time to time.

The following papers and articles appeared during the year:—

"Notes on the Golden-shouldered and Hooded Parrots," A. S. le Souef and J. R. Kinghorn. *The Emu*, xxiv, 1, 1923.

"Re-discovery of the White-backed Wren" (*Malurus leucenotus*, Gould), J. R. Kinghorn and Tom Iredale, *The Emu*, xxiv, 1, 1924.

"Notes on a trip to Upper Colo," J. R. Kinghorn, *The Emu*, xxiv, 2, 1924.

"Our Feathered Friends or Birds in Relation to Agriculture," J. R. Kinghorn, *Aust. Mus. Mag.*, ii, 3, 1924.

"Notes on two Pigeons of the Genus *Globicera*," J. R. Kinghorn, *The Emu*, xxiv, 4, 1924.

"The Home of Birds," J. R. Kinghorn, *Aust. Mus. Mag.*, ii, 6, 1925.

Reptiles and Amphibians (J. R. Kinghorn, C.M.Z.S., in charge; H. O. Fletcher, part time-assistant).—During the year 488 specimens were added to the collections. Of these over 400 were presented, and about 25 collected at Barrington Tops by Mr. T. G. Campbell, cadet. Among the more important donations were some 115 specimens by Mr. N. S. Heffernan and 15 by Mr. C. E. Hart, Solomon Islands. Mr. Thomas Steel presented a valuable collection of about 200 specimens, and from Mr. J. J. Fletcher, Trustee, we received 40 frogs in addition to the large number previously presented by him. Dr. A. F. D'Ombra presented 15 specimens collected at Somersby, Gosford, and Dr. W. E. J. Paradise presented some rare and interesting forms from Northern Australia.

The amphibian collection in the spirit house was completely rearranged, and the reptilian collection overhauled by Mr. H. O. Fletcher. The casts exhibited in the gallery were attended to by Mr. G. C. Clutton, Articulator, and a damaged cast of a black snake was replaced by a new one.

Mr. Kinghorn has published the following papers during the year:—

"A Short Review of the Lizards belonging to the Genus *Lialis* Grey," *Rec. Aust. Mus.*, xiv, 3, 1924.

"Snakes and Snake Venom," *Roy. Agric. Soc. Ann.*, 1924.

"Reptiles and Batrachians from South and South-west Australia," *Rec. Aust. Mus.*, xiv, 3, 1924.

Two papers on reptiles are ready for publication.

Fishes (A. R. McCulloch, in charge; Cadet G. P. Whitley, assistant, in charge for part of the year during the extended absence of Mr. McCulloch through illness).—The ichthyological collection has again been greatly enriched by large numbers of fishes collected in Queensland and presented by Surgeon-Lieutenant W. E. J. Paradise of H.M.A.S. "Geranium" and by Mr. E. H. Rainford of Bowen, whose work in the interests of the Museum is hereby gratefully acknowledged. To the State Fisheries; the Technological Museum; Mr. C. W. Mulvey, Manager of the New State Fish and Ice Company; Mr. G. McAndrew of Shell-harbour, the Trustees are indebted for many donations of interesting New South Wales fishes. Other specimens have come to hand from Tasmania (through Professor T. T. Flynn, Mr. H. Lovett and Dr. Paradise), Lord Howe Island (Mr. R. E. Baxter), New Guinea (Mr. E. A. Briggs, M.Sc.), Hawaii (Mr. D. G. Stead) and the Solomon Islands (Mr. N. S. Heffernan). We have been fortunate in securing examples of the rare freshwater fish (*Rhadinocentrus ornatus*) from Mrs. C. A. Messmer and Mr. H. E. Finckh.

A fine example of the deadly Stone Fish (*Synanceja horrida*) from Thursday Island was presented by the Director of the Division of Tropical Hygiene, Townsville, and a coloured cast of the fish is now on exhibition in the gallery. Casts are being prepared of the Eagle Ray (*Myliobates australis*), and of the Angel Shark (*Squatina australis*), and will be exhibited in due course. Life-like casts, coloured from fresh specimens, are more attractive than preserved specimens, and the addition of more and more coloured casts is improving the gallery of fishes considerably.

Two specimens of the Lung-fish (*Neoceratodus forsteri*) were received from Mr. H. A. Longman, Director of the Queensland Museum, for exchange purposes, and we are also indebted to him for supplying us with much valuable information concerning the types of rare fishes in the collection of the Queensland Museum.

As in previous years, information on various subjects connected with the study of fishes has been supplied to workers in other institutions and to the public. A valuable report on the Flat-fishes collected by the Federal Trawler "Endeavour" is expected shortly from Mr. J. R. Norman of the British Museum, and Dr. Johannes Schmidt, of the Carlsberg Laboratory, Copenhagen, has been supplied with specimens and information in connection with his work on freshwater eels. As a result of this co-operation Dr. Schmidt will be enabled to identify our collection of *Anguilla*.

For the purposes of a paper on Flat-fishes a number of specimens were obtained on loan from the Macleay Museum, University of Sydney, and our thanks are due to the Committee of Management of the Museum for that privilege.

The following papers and popular articles have been written during the year:—

- "Some Little-known Australian Flat-fishes," A. R. McCulloch and G. P. Whitley, *Rec. Aust. Mus.*, xiv, 4, 1925.
- "Contributions to the Cranial Osteology of the Fishes, No. 1, *Tandanus tandanus* Mitchell," H. Leighton Kesteven, D.Sc., M.D., Ch.M., *Rec. Aust. Mus.*, xiv, 4, 1925.
- "A List of the Fishes recorded from Queensland Waters," A. R. McCulloch and G. P. Whitley (in the press).
- "Fishes and the Movies," A. R. McCulloch, *Aust. Mus. Mag.*, ii, 3, 1924.
- "Stoats and Weasels," A. R. McCulloch, *Aust. Mus. Mag.*, ii, 3, 1924.
- "A Museum Collector in Papua," A. R. McCulloch, *Aust. Mus. Mag.*, ii, 5, 1925.
- "Stone Fishes and the Art of Camouflage," A. R. McCulloch, *Aust. Mus. Mag.*, ii, 5, 1925.
- "Raining Fishes," A. R. McCulloch, *Aust. Mus. Mag.*, ii, 6, 1925.
- "Parasitism in some of the Lower Animals," G. P. Whitley, *Aust. Zoologist*, iii, 8, 1925.
- "Stranded Seafarers," G. P. Whitley (in the press).

A report by Mr. McCulloch on some of the Fishes collected by the "Endeavour" is still waiting publication.

Insects and Arachnids (A. Musgrave, F.E.S., in charge; Cadet T. G. Campbell, assistant).—Many important donations were received during the year, among which may be mentioned five collections of Solomon Island insects, presented by Mr. C. E. Hart, Guadalcanar, and Mr. N. S. Heffernan, Ysabel. Other generous donors have been Dr. E. W. Ferguson (types of Australian Diptera), Dr. W. E. J. Paradise (insects from Islands of the Queensland Coast), Mr. J. Clark (paratypes of Australian ants), Mr. F. W. Shepherd (insects from Broken Hill), Mr. P. Gilbert (collection of beetles), Mr. A. M. Lea (large collection of Australian insects). While on a holiday in Queensland Mr. Musgrave collected about a thousand insects and arachnids which he has presented to the Trustees, and Mr. T. G. Campbell has enriched the collection by a number of insects secured by him near Sydney.

During the year Messrs. Musgrave and Campbell made short official collecting trips to places in the vicinity of Sydney, and Mr. Musgrave made extensive entomological collections at Mount Tambourine, South Queensland, where he was assisted by a resident, Mr. C. Geissman. Mr. Campbell formed one of a party led by Professor L. Harrison, which made a biological survey of Barrington Tops; on this trip a number of valuable specimens were secured for the Museum collections.

Revision and re-arrangement of the gallery exhibits has proceeded during the year. Among new exhibits a model illustrating the habits of the Sand-wasp has been installed. This we owe to the interest and courtesy of Mr. F. Danvers Power, A.R.S.M., who supplied a cast of the burrow and the necessary data for the construction of the exhibit, which was prepared by Messrs. G. C. Clutton and J. Kingsley.

The principal work of the Department has been the identification, registration and labelling of the large collections received, and the preparation of reports on the specimens. The cabinet collections of Diptera, Hemiptera, Formicidae and certain families of moths have been revised and catalogued. Much time has been spent in preparing and forwarding to specialists material for comparison and identification, and we are greatly indebted to the following for valuable assistance:—

- Mr. Morgan Hebard, Philadelphia (Orthoptera); Dr. Jefferis Turner, Brisbane (Heterocera);
- Mr. J. Clark, Perth (Formicidae); Dr. E. W. Ferguson, Board of Health, Sydney (Diptera);
- Mr. W. E. China, British Museum (Hemiptera); Dr. Eland Shaw, Queensland (Blattidae);
- Mr. G. Hill, National Museum, Melbourne (Termitidae).

During August Mr. Musgrave was granted leave of absence to attend the Adelaide meeting of the Australasian Association for the Advancement of Science, and he took the opportunity of examining the entomological collections in the National Museum, Melbourne, and the South Australian Museum, Adelaide.

The following papers and articles have appeared during the year:—

- "Australian Nycteribiidae," A. Musgrave, *Rec. Aust. Mus.*, xiv, 4, 1925.
- "The Dodd Collection," A. Musgrave, *Aust. Mus. Mag.*, ii, 3, 1924.
- "A Naturalist on the Nepean River," A. Musgrave, *Aust. Mus. Mag.*, ii, 5, 1925.
- "The Animal Life of the Nepean River," A. Musgrave, *Aust. Mus. Mag.*, ii, 6, 1925.
- "A Visit to the Barrington Tops Plateau," T. G. Campbell, *Aust. Mus. Mag.*, ii, 6, 1925.
- "Australian Platypezidae (Diptera)," A. L. Tonnoir, *Rec. Aust. Mus.*, xiv, 4, 1925.

Mollusca (T. Iredale, in charge; Miss C. M. J. Allan, assistant).—The accessions number 4,719, the greater number of which were presented. Among the donations was a fine series from the Richmond River district, presented by Mr. A. O'Sullivan, specimens from the North Coast of Australia by Dr. W. E. J. Paradise, while Messrs. G. McAndrew, E. H. Rainford, T. Steel and A. E. J. Thackway contributed many interesting specimens as in former years.

The preparation of a card catalogue of the collection is under way, but the work is hampered by the inconvenient storage arrangements that obtain at present. It is highly desirable that the Conchological Collections, now housed partly in a room and passage on the top floor, partly in the basement, should be brought together into one room, so as to facilitate reference. The selection of representative gallery exhibits and the preparation of descriptive labels is proceeding, so as to make the collections more attractive to the public.

Assistance has been rendered to Dr. H. Burton Bradley, who is engaged in the study of the black disease in sheep. The freshwater snails involved have been determined for Dr. Bradley, and also for Mr. A. C. Mackay, Research student, Sydney University, who is studying the fluke disease in sheep. These demands have entailed a review of the whole of the freshwater snails of Australia.

Mr. Iredale has undertaken and nearly completed a study of the Australian Cassids, and in conjunction with Mr. C. Hedley, Honorary Conchologist, is engaged in the preparation of a reference list of the land shells of Australia.

During the year the following papers and articles by Mr. Iredale have been published:—

- "Results from Roy Bell's Molluscan Collections," *Proc. Linn. Soc., N. S. Wales*, xlix, 3, 1924.
- "A Monograph of the Australian Loricates," Part III, *Aust. Zool.*, iii, 7, 1924. (With A. F. Basset Hull.)
- "A Monograph of the Australian Loricates," Part IV, *Aust. Zool.*, iii, 8, 1925. (With A. F. Basset Hull.)
- "Mollusca from the Continental Shelf of Eastern Australia," *Rec. Aust. Mus.*, vol. xiv, 4, 1924.
- "Museums of the Past," *Aust. Mus. Mag.*, ii, 3, 1924.
- "Extinct as the Dodo," *Aust. Mus. Mag.*, ii, 4, 1924.
- "Fairy Wrens," *Aust. Zoologist*, iii, 7, 1924.

Lower Invertebrates (F. A. McNeill, in charge; Cadets A. A. Livingstone and W. Boardman, assistants).—The large number of acquisitions dealt with during the year, amounting to about 4,544 specimens, has entailed much work in sorting, registering and cataloguing, and has to a certain extent retarded other activities of the Department.

The chief donations received were those presented by Mr. N. S. Heffernan (Solomon Islands), Dr. W. E. J. Paradise, Mr. J. J. Fletcher (trustee), Mr. G. McAndrew, Mr. W. H. Wooster and Mr. Thomas Steel.

Mr. Heffernan has presented a fine series of crustacea which have greatly enhanced the value of our reference collection, which formerly contained but scanty material from the Solomons.

From Dr. Paradise we have received a representative series of echinoderms and crustacea from the Great Barrier Reef. The echinoderms have been forwarded to Dr. Lyman Clark, Museum of Comparative Zoology, Cambridge, Massachusetts, for examination and checking, and our thanks are due to this eminent authority for his voluntary service. Work has now commenced on the final sorting of the named collection preparatory to the publication of a list and descriptive notes. A number of bryozoa collected by Dr. Paradise are of exceptional interest. These form the subject of a report by Mr. Livingstone now awaiting publication. The last consignment received from Dr. Paradise contained some rare barnacles, which have been forwarded to Dr. H. A. Pilsbry, Philadelphia, for examination and report.

Mr. Fletcher has generously presented his large and valuable collection of oligochaetes, including many types and other specimens which formed the basis of his numerous contributions to the literature of the group. These have been carefully registered, labelled and catalogued.

As in previous years, we have received interesting marine specimens from Mr. G. McAndrew of Shell-harbour, a very industrious and skilful collector.

For forty years Mr. W. H. Wooster has been collecting bryozoa and he has now presented to the Trustees his large collection, comprising about 1,000 mounted specimens in addition to unmounted bulk material. This valuable donation contains many specimens which have been examined and named by experts working at the group.

The specimens presented by Mr. Steel are mostly rare or aberrant species in various groups. A representative set of land planarians, on which Mr. Steel is a recognised authority, is included in the donation, forming the residue of the main type collection already presented by this generous donor.

By exchange with the Colombo Museum we have received a collection of decapoda from Ceylonese waters, and from the United States National Museum a series of American amphipoda and isopoda in return for Australian forms. From the Natural History Museum of Balderas, Mexico, we have received by exchange a collection of Central American decapoda.

The collection of fresh-water shrimps of the family Atyidae, which was sent to Dr. Jean Roux, of Basel, Switzerland, in 1923, has now been returned, and will form the nucleus of our named collection of this family. Dr. Roux has submitted a report on the specimens, which will be published in the *Records*. In return for the duplicates retained Dr. Roux has presented a named collection of New Caledonian Atyidae. Dr. G. Stiasny, of Leiden, Holland, has just published a report on the Scyphomedusae from Port Jackson which were forwarded to him in 1922. This work has enabled us to name the duplicate set retained by us, and has added much to our knowledge of this neglected group. Dr. Stiasny is now engaged on an examination of the balance of our Scyphomedusae and Ctenophora.

Our collection of Sphaeromidae and Isopoda parasitic on fishes has recently been assembled, listed and despatched to the South Australian Museum for examination by Messrs. Hale and Baker, who are now working on these forms and propose to prepare reports on them.

The work of checking, re-arranging and card-cataloguing the collection of Vermes is now completed, and its value as a means of reference is greatly increased thereby. This class of work has been seriously delayed in the past by the lack of suitable bottles and storage space, and now that a small amount of these two essentials has been made available similar work on other groups will proceed. On account of the extra space required for the proper arrangement of the Vermes it was found necessary to transfer the entire spirit collection of mollusca to a new set of shelves in the glassware store.

The following papers were published:—

"Studies on Australian Bryozoa, No. 2," A. A. Livingstone, *Rec. Aust. Mus.*, xiv, 4, 1925.

A paper "Studies in Australian Carcinology, No. 2," F. A. McNeill, is now ready for publication.

Palaeontology (The Director and W. W. Thorpe, in charge).—The principal donations included post-Tertiary mollusca dredged at a depth of about seventy fathoms off the coast of New South Wales, presented by Mr. C. W. Mulvey, Manager, New State Fish and Ice Company; *Meiolenia* bones from Lord Howe Island, presented by Messrs. A. R. McCulloch, R. V. Hines and G. Nicholls; various bones of *Diprotodon*, Mullaley, New South Wales, presented by Mr. John Sevil.

During the year the following paper and article were published:—

"Notes on the Extinct Chelonian genus *Meiolenia*, with a record of a New Occurrence," C. Anderson, *Rec. Aust. Mus.*, xiv, 4, 1925.

"The Largest Marsupial," C. Anderson, *Aust. Mus. Mag.*, ii, 4, 1924.

Minerals and Rocks (T. Hodge Smith, in charge; Cadet C. M. G. Friend, assistant).—Over 1,390 specimens have been added to the collection during the year. The most important addition is a large collection of Broken Hill minerals obtained by purchase. This collection contains, amongst others, fine examples of Anglesite, Cerussite, Azurite, Marshite, Cupro-plumbite, Dyscrasite, Embolite, Iodyrite, Mimetite and Pyromorphite. We are indebted to Sir Hugh Dixon for a donation towards the purchase of this valuable collection. When Mr. Hodge Smith was at Broken Hill in connection with this purchase, he collected specimens of Wulfenite, Manganhedenbergite and a number of rock samples. A very fine collection of Canadian minerals was obtained by exchange with the Royal Ontario Museum, Canada. A number of specimens of native lead from Mungana, Queensland, was secured by purchase; this is a new record for this rare mineral. The following species not previously represented have been added to the collection:—Yttro-cerite, Goongarite, Hollandite, Camssellite, Inyoite, Ulexite, Howlite, Kermesite, Mordenite, Skutterudite, Rammelsbergite, Hatchettolite, Ellsworthite, Temiskamite, Dumortierite, Bentonite, and Manganhedenbergite.

Portion of a new aerolite was presented by Dr. W. Macgillivray of Broken Hill; it was obtained from Elsinora Station, 46 miles north-west of Wanaaring, New South Wales. The description and analysis of this aerolite will appear in the *Records of the Australian Museum* at a later date.

The work of consolidating the various duplicate collections into one large duplicate collection has again occupied much time and is now almost completed. Rocks have been separated from minerals and entered in a separate register, all the rocks in the collection having been re-registered. Most of this work has been carried out by Mr. Friend.

The following papers have been published:—

"Evidence of a Negative Movement of the Strand Line of 400 feet in New South Wales," T. Hodge Smith and Tom Iredale, *Journ. Roy. Soc., New South Wales*, lviii, 1924.

"The Story of a Rock dredged from the Sea," T. Hodge Smith, *Aust. Mus. Mag.*, ii, 4, 1924.

"Radium and the Life of the Earth," T. Hodge Smith, *Aust. Mus. Mag.*, ii, 4, 1924.

Numismatics (W. W. Thorpe, in charge).—Donations of special interest include British bronze coins by Mrs. E. D. Gray and Miss K. E. Harbutt; New Zealand copper tokens by Mr. J. Kenderdine; current coins of British Africa and the Belgian Congo by Mr. C. Hedley.

The contents of the coin cases near the main entrance have been regularly changed, and many coins and tokens have been identified for members of the public.

ACQUISITIONS.

1st July, 1924, to 30th June, 1925.

Department.	No. of Specimens.					Total.
	Donation.	Exchange.	Purchase.	Collection.	Prepared.	
<i>Vertebrates</i> —						
Mammals	198	44	1	11	.....	254
Birds	208	.....	.....	11	.....	219
Reptiles	547	.....	1	47	.....	595
Fishes	147	2	.....	511	.....	660
Skeletons.....	44	9	.....	.....	.....	53
<i>Invertebrates</i> —						
Mollusca	3,540	222	1	768	.....	4,531
Insects and Arachnida	2,940	26	85	1,268	.....	4,319
Crustacea	829	177	28	147	.....	1,181
Lower Invertebrates	3,206	6	.....	151	.....	3,363
<i>Geological</i> —						
Fossils	154	1	.....	10	.....	165
Minerals	104	108	1,200	37	.....	1,449
<i>Ethnological, &c.</i> —						
Ethnological	405	95	38	137	.....	675
Historical	2	.....	.....	.....	.....	2
Numismatical	62	13	.....	.....	.....	75
<i>Miscellaneous</i> —						
Micro Sections .....	.....	.....	.....	.....	Reg. 74	74
Casts and Moulds	1	9	.....	.....	19	20
Negatives .....	.....	.....	.....	.....	103	103
Lantern Slides .....	.....	.....	.....	.....	406	406
Photographs	2	.....	.....	.....	.....	2
	12,389	712	1,354	3,008	602	18,155

The Common Seal of the Museum was hereunto affixed by order of the Board, this thirteenth day of October, 1925.

(L.S.) T. STORIE DIXSON, President.
W. T. WELLS, Secretary.

APPENDICES.

- I. Statement of Receipts and Expenditure for the year ended 30th June, 1925.
 II. Statement of Revenue Account for the year ended 30th June, 1925.
 III. List of the Publications of the Australian Museum.
 IV. Catalogue of the Additions to the Library.

APPENDIX I.

THE AUSTRALIAN MUSEUM.

STATEMENT of Receipts and Expenditure for the Year ended 30th June, 1925.

Receipts.	Endow- ment Account.	Public Account.	Totals.	Expenditure.	Endow- ment Account.	Public Account.	Totals.
£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
To Balances brought forward from last year :—				By Salaries—			
Petty Cash	10 0 0			Director and Principal Keeper of Collections		962 2 0	
Advance Account	25 0 0			Secretary		650 0 0	
Reserve Account	316 11 5			Clerical Staff		931 10 6	
Endowment Account (Commercial Banking Co. Account)	33 8 2			1st Class Scientific Assistants		3,410 10 0	
			384 19 7	Librarian		440 0 0	
Treasury appropriations :—				Cadets and Assistants		1,423 7 8	
Salaries		14,537 0 0		Temporary Assistants		15 19 6	
Contingencies		2,557 12 8		Preparators and Mechanics		2,499 2 0	
			17,094 12 8	Attendants		3,113 19 0	
Statutory endowment	1,000 0 0			Superannuation—Trustees' Contributions		1,230 16 6	13,446 10 8
Sale of publications :—			1,000 0 0				1,230 16 6
Magazine subscribers	372 5 0			Contingencies—			
Other publications	2 19 6			Overtime and Sunday pay		451 3 4	
Magazine advertisements	206 0 0			Book-binding		299 19 6	
Miscellaneous :—			375 4 6	Building, Repairs, & Maintenance—			
Discounts on drafts	7 13 9			General repairs	368 7 10		
Exchange and sundry	3 15 8			Gallery exhibits	9 18 6		
Kanemitsu & Co., re specimen	4 7 6			Electric fittings and repairs	29 0 9		
Refund of salaries overpaid	1 4 10			Fixtures and fittings	68 7 6		
Refunds for overpayments and charges	26 13 2			Insurance		475 14 7	
Donations	88 13 4			Pensions		242 0 6	
Interest :—			26 13 2	Compensation Allowance		158 11 3	
City Council deposit	47 1 10					65 0 0	1,692 9 2
Reserve Account	10 3 1			Statutory, Additional Endowment, and Special Advance :—			
Commonwealth Peace Loan	20 0 0			Stores—Working expenses and supplies :—			
Transfer—City Council—			88 13 4	Artificers	31 2 6		
Deposit to Endowment Account	1,416 0 0			Working expenses	223 2 0		
Reserve Account to Endowment Account	316 11 5			Printer	2 13 3		
			77 4 11	Scientific administration	38 10 8		
State Superannuation Board :—				Articulators	7 18 7		
Refund of contributions	3 16 3			Taxidermists	21 17 10		
		501 0 5		Micro-slide Training Fees, &c.	32 1 9		328 4 10
Treasury Insurance Board :—			1,732 11 5				32 1 9
Rebate on Insurance premiums	62 1 10			Freights, cartages and charges	102 18 5		
			504 16 8	Collecting specimens	17 8 4		
			62 1 10	Preservation of specimens	164 7 5		
				Purchase of specimens	189 11 3		
				Photography and slides	50 6 2		
							524 11 7
				Library, books and service	412 18 9		
							412 18 9
				Cadets, training fees	26 5 0		
							26 5 0
				Electric light and gas	158 7 7		
				General expenses	98 3 11		
				Stationery	105 8 5		
				Telephones	46 16 4		
				Publicity	5 16 0		
				Lectures	200 19 7		
							615 11 10
				Electric fittings and installation	174 4 3		
				Gallery exhibits	31 7 6		
				Loose plant	42 17 6		
				Office furniture	44 17 6		
				Office equipment	6 13 6		
				Scientific equipment	89 5 5		
							389 5 8
				Magazine publication and distribution	564 18 2		
				Magazine advertising	114 10 6		
				"Records" publication and distribution	384 4 8		
							1,063 13 4
				Magazine subscriptions, re Angus and Robertson, &c.	52 8 5		
				Advertisement Refund	2 0 0		
				Treasury—Refund of salaries overpaid	1 4 10		
				Donations, &c., refunded	14 7 6		
				Superannuation—			
				Refund to Treasury		501 0 5	
				Refund to Treasury		3 16 3	
				Workmen's Compensation—Refund to Treasury		62 1 10	
				Services prior to 30th June, 1924		5 5 0	
				William-street improvements		694 1 6	
				Transfer—Reserve to Endowment Account		316 11 5	
				Balance—Endowment Account (Commercial Banking Co.)		119 13 7	
				Advance Account		25 0 0	
				Petty cash		10 0 0	
							154 13 7
			£ 21,569 19 10				£ 21,569 19 10

Examined and found correct.

6th August, 1925.

(Sgd.) JAMES S. CAMPBELL,
Senior Inspector of Public Accounts.

APPENDIX II. THE AUSTRALIAN MUSEUM.

REVENUE ACCOUNT.

Period 1st July, 1924, to 30th June, 1925.

	Salaries and Overtime.	Superannuation.		Cadets' Training Fees.	Stores and Supplies.	Micro- Slide Cutting.	Book- binding.	Purchases, Services and Expenses.	Debit Total.
		Employees' Contri- bution.	Trustees' Contri- bution.						
Scientific Administration—	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Director	874 13 10	197 16 6	262 12 4	26 5 0	38 10 8				
Principal Keeper of Collections	59 13 6								
First-class Scientific Assistants	3,277 7 9								
Cadets and Assistants	1,225 12 0								
Overtime	80 2 6								
Micro-slide cutting	5,517 9 7	197 16 6	262 12 4	26 5 0	38 10 8	32 1 9			6,042 14 1
Articulators	31 4 0								83 5 9
Taxidermists	560 1 0	34 15 6	44 10 6		7 18 7				647 5 7
Collecting Specimens	867 12 10	43 19 8	50 1 0		24 17 10				986 11 4
Preservation of Specimens					164 7 5			17 8 4	17 8 4
Freights and Charges (Exchange of Specimens)								102 0 11	102 0 11
Photography and Slides								50 6 2	50 6 2
Office Administration—	6,976 7 5	276 11 8	357 3 10	26 5 0	235 14 6	32 1 9		169 15 5	8,073 19 7
Secretary and Clerical Staff	1,492 10 2	89 0 4	110 4 4						1,691 14 10
Publicity								154 6 0	154 6 0
General Expenses								97 9 1	97 9 1
Stationery					105 8 5				105 8 5
Telephones								49 19 2	49 19 2
Insurances (Fire, Glass and Workmen's Compensation)								242 0 6	242 0 6
Electric Light and Gas								176 13 3	176 13 3
Building Maintenance and Repairs								368 7 10	368 7 10
Electric Fittings and Repairs								32 0 9	32 0 9
Working Expenses					208 12 11				208 12 11
Library Administration	575 3 2	24 16 10	32 17 2		9 15 0		299 19 6		942 11 8
General Administration—	9,011 0 9	390 8 10	500 5 4	26 5 0	359 10 10	32 1 9	299 19 6	1,290 12 0	12,143 4 0
Artificers	605 19 8	20 0 10	51 4 10		30 2 11				707 8 3
Printing Office	285 17 10	48 10 8	156 0 0		2 13 3				494 1 9
Attendants	3,279 5 1	161 1 0	523 6 4						3,963 12 5
Pensions	13,216 3 4	620 1 4	1,230 16 6					158 11 3	17,208 6 5
Compassionate Allowance								65 0 0	65 0 0
Lectures—Overtime	44 5 0								
Fees to Lecturers								123 18 0	123 18 0
Services and Expenses								73 8 3	241 11 3
	13,260 8 4	620 1 4	1,230 16 6	26 5 0	592 7 0	32 1 9	299 19 6	1,711 9 6	17,773 8 11

MUSEUM MAGAZINE ACCOUNT.

Dr.	£ s. d.	Cr.	£ s. d.
Publication and distribution, Vol. II, parts 3-6	592 10 5	Forward	17,773 8 11
Advertising	116 18 3	Sales	331 17 6
		Advertisements	198 0 0
		Publicity Account	149 10 9
		Balance	0 0 5
	£ 679 8 8		£ 679 8 8

PUBLICATIONS (OTHER) RECORDS, &c.

Publication and distribution of "Records"	284 4 8	Sales	2 19 6
		Balance	381 5 2
	£ 384 4 8		£ 384 4 8
Forward	£ 18,154 14 6	By Interest Account, Interest on Investments	83 0 6
		Stocks on hand—	
		Artificers Account	21 13 0
		Articulators Account	0 11 0
		Taxidermists Account	9 9 0
		Photography and Slides Account	3 1 0
		General Expenses Account	2 15 0
		Stationery	59 14 0
		Scientific administration	18 3 0
		Working expenses	20 18 9
		Preservation of specimens	25 8 2
			171 12 11
		Balance to Capital Account	254 13 5
	£ 18,154 14 6		17,900 1 1
			£ 18,154 14 6

APPENDIX III.

List of Available Publications of the Australian Museum :—

I.—Annual Reports.

Nos. 28-33, 1881-86; 36-44, 1889-97; 46-69, 1899-1923; 70, 1924.

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 Ledenfeld, 1888.
14. Catalogue of the Fishes in the Australian Museum. Part I, Palæicthyan 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. Oliff, 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. 1-6, 1920-23, vol. xiv, Nos. 1-4, 1923-25.

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.

IX.—The Australian Museum Magazine.

Vol. i, Nos. 4-10, 1922-23; vol. ii, Nos. 1-7, 1924-25.

APPENDIX IV.
ADDITIONS TO THE LIBRARY.

Reg. No.	Books.	How acquired.	Reg. No.	Books.	How acquired.
PART I.—AUTHORS.			21516	Collected Papers. In 1 vol. 4to. Various, 1883.	Presented by J.S.P. Ramsay.
21372	ABEL, O. Grundzüge der Palaeobiologie der Wirbeltiere. 1 vol. 8vo. Stuttgart, 1911.	Purchased	21332	HOLMES, A. Petrographic methods and calculations with some examples achieved. 1 vol. 8vo. London, 1921.	Purchased
21491	[ARGENVILLE, A. J. D.d.] L'Histoire Naturelle Eclaircie dans deux de ses parties principales la Lithologie et la Conch-Conchyliologie, dont l'une Traite des Pierres et l'autre des Coquillages. 1 vol. 4to. Paris, 1742.	Presented by Mr. T. Iredale.	21391	HORNE, G., and A. AISTON. Savage Life in Central Australia. 1 vol. 8vo. London, 1924.	Purchased
21374	BAUDON, Le A. Monographie des Succinees Francaises, [with] Supplements 1-2, 1877-79: Monographie des Succinees Francaises, Paris, 1881. (Extracts from "Journal de Conchyliologie"). In 1 vol. 8vo. Paris, 1877-81.	Presented by J. J. Fletcher.	21427	HUTTON, F. W. and J. DRUMMOND. The Animals of New Zealand. 4th edition, revised and enlarged. 1 vol. 8vo. New Zealand, 1923.	Purchased
21376	BLYTH, E. Collected papers on Natural History. 1 vol. 8vo. Various. [1850-60].	Presented by J. J. Fletcher.	21371	HUXLEY, T. H. The Crayfish: an introduction to the Study of Zoology. 1 vol. 8vo. London, 1880.	Purchased
21534	BUCKNILL, C. E. R. Sea Shells of New Zealand. 1 vol. 4to. Wellington, &c. n.d.	Purchased	21533	IMMS, A. D. A General Textbook of Entomology, including the Anatomy, Physiology, Development and Classification of Insects. 1 vol. 8vo. London, 1925.	Purchased
21369	BUTLER, E. A. A Biology of the British Hemiptera-Heteroptera. 1 vol. 4to. London, 1923.	Purchased	21378	JEFFREYS, J. G. Collected Papers on Conchology. in 1 vol. 8vo. Various, 1860-84.	Presented by J. J. Fletcher.
21518	CENTENNIAL INTERNATIONAL EXHIBITION, MELBOURNE, 1888-89. Report by the Honorable R. Burdett Smith, C.M.G., M.L.C., Executive Commissioner for the . . . with appendices and views of New South Wales Court. 1 vol. 8vo Sydney, 1890.	Presented by Mr. J. S. P. Ramsay.	21387	JOHANNSEN, A. Manual of Petrographic Methods. 1 vol. 8vo. New York, 1914.	Purchased
21426	CHARLTON, W. K. Parliamentary Government in New South Wales (a brief sketch), 25th August, 1824, to 25th August, 1924. 1 vol. 8vo. Sydney, 1924.	Presented by Mr. C. Hedley.	21333	KERR, J. G. Text-book of Embryology, Vol. II. 1 vol. 8vo. London, 1919.	Purchased
21373	CLARK, W. Collected Papers on British Marine Testaceous Molluscs. 1 vol. 8vo. Various. 1849-57.	Presented by J. J. Fletcher.	21334	KINGSLEY, J. S. Outlines of Comparative Anatomy of Vertebrates. 2nd edition, revised. 1 vol. 8vo. London, n.d.	Purchased
21519	COLONIAL AND INDIAN EXHIBITION, LONDON, 1886. Reports on the Colonial Sections of the Exhibition, by H. Trueman Wood. 1 vol. 8vo. London, 1887.	Presented by Mr. J. S. P. Ramsay.	21370	LEE, A. B. The Microtometist's Vade-Mecum, 8th edition. 1 vol. 8vo. London, 1924.	Purchased
21536	COX, J. C. A Monograph of Australian Land Shells. 1 vol. 4to. Sydney, 1868.	Presented by Mr. C. Hedley.	21520	LOVÉN, S. On Pourtalesia, a Genus of Echinoidea (K. Svenska Vet. Akad., Handl., XIX, 7, (1883). 1 vol. 4to. Stockholm, 1883.	Presented by Mr. J. S. P. Ramsay.
21477	DIGGLES, S. Diggles's Ornithology of Australia. 1 vol. Fol. n.d.	Presented by A. M. Davidson.	21388	MACFARLANE, J. M. The Evolution and Distribution of Fishes. 1 vol. 8vo. New York, 1923.	Purchased
21375	FRAUENFELD, G. R. von. Collected Papers on Entomology. 1 vol. 8vo. Wien, 1863-72.	Presented by Mr. J. J. Fletcher.	21513-14	MELBOURNE INTERNATIONAL EXHIBITION, 1880. The Official Catalogue of the Exhibits, with introductory Notices of the Countries exhibiting. Vols. I-II. 2nd ed. of first issue. 2 vols. 8vo. Melbourne, 1880.	Presented by Mr. J. S. P. Ramsay.
21428	FROGGATT, Gladys H. The World of Little Lives. 1 vol. 8vo. Australia, 1924.	Presented by Publisher.	21519	Ogilby, J. D. Catalogue of the Fishes of New South Wales, with their principal Synonyms. 1 vol. 4to. Sydney, 1886.	Presented by Mr. J. S. P. Ramsay.
21476	GOULD, John. The Dates of Publication of some of the Zoological Works of the late John Gould, F.R.S. Compiled by F. H. Waterhouse, A.L.S. 1 vol. 8vo. London, 1885.	Presented by Mr. T. Iredale.	21535	PALLARY, P. Catalogue de la Faune Malacologique d'Egypte. (Mem., Inst. Egyptien, VI, 1, 1909.) 1 vol. 4to. Le Caire, 1909.	Presented by Mr. C. Hedley.
21515	GREAT INTERNATIONAL FISHERIES EXHIBITION, LONDON, 1883. Official Catalogue, first edition. 1 vol. 8vo. London, 1883.	Presented by J.S.P. Ramsay.	21377	PAMPHLETS, 8vo. series, vol. CXVI, Mollusca V. 1 vol. 8vo. Various.	Presented
			21512	PARIS UNIVERSAL EXHIBITION, 1878. Report of Her Majesty's Commissioners for the . . . of 1878, to . . . Vol. II. 1 vol. 8vo. London, 1880.	Presented by Mr. J. S. P. Ramsay.
			21429	PHILIP, G. Philip's New World Atlas. 1 vol. Fol. London. n.d.	Purchased
			21335	PONTING, H. G. The Great White South or with Scott in the Antarctic, being an account of experiences with Captain Scott's South Pole Expedition and of the nature life of the Antarctic. 1 vol. 8vo. London, 1923.	Purchased
			21532	STEP, E. Go to the Ant; a popular account of the natural history of Ants in all Countries. 1 vol. 8vo. London, 1924.	Purchased
			21402-03	TRYON, G. W. and H. PILSBRY. Manual of Conchology, vols. XXIV-XXV. In 2 vols. 8vo. London, 1916-20.	Purchased

Reg. No.	Books.	How acquired.	Reg. No.	Books.	How acquired.
PART II.—PERIODICALS.					
INTERNATIONAL.					
21478	CONGRES GEOLOGIQUE INTERNATIONAL. Comptes Rendus de la XIIIe session, en Belgique, 1922. Faso. 1-2.		21545-72	ANNALS OF PHILOSOPHY, or Magazine of Chemistry, Mineralogy, Mechanics, Natural History, Agriculture, and the Arts. Edited by Thomas Thomson and others. Vols. I-XXVIII.	
	1 vol. 8vo. Liege, 1924. Purchased			28 vols. 8vo. London, 1813-26.	Purchased
AUSTRALASIA.					
COMMONWEALTH OF AUSTRALIA.					
COMMONWEALTH BUREAU OF CENSUS AND STATISTICS.					
	Historical Records of Australia. Series I.			BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.	
21368	Vol. XX, February, 1839-September, 1840.		21485	Report of the XCIIInd meeting (XCIVth year), Toronto, August 6-13th, 1924.	
21392	XXI, October, 1840-March, 1842.			1 vol. 8vo. London, 1925.	Purchased
21431	XXII, April, 1842-June, 1843.		21522	Handbook of Canada. Issued by the Local Committee on the occasion of the meeting of the . . . at Toronto, August, 1924.	
21537	XXIII, July, 1843-September, 1844.			1 vol. 8vo. Toronto, 1924.	Purchased
	In 4 vols. 8vo. Melbourne, 1924-25 Presented			BRITISH MUSEUM (NATURAL HISTORY).	
21396	Official Year Book of the Commonwealth No. 17, 1924.		21433	The Bombyliidae of the Ethiopian Region based on material in the . . . by Mario Bezzi.	
	1 vol. 8vo. Melbourne, 1924. Presented			1 vol. 8vo. London, 1924.	Presented
ROYAL AUSTRALASIAN ORNITHOLOGISTS' UNION.					
21451	Index to vols. I-XX of the Emu.		21449	The Ibis, 11th series, Vol. V, 1923.	
	1 vol. 8vo. London, 1922. Purchased		21450	VI, 1924.	
				2 vols. 8vo. London, 1923-24.	Purchased
NEW SOUTH WALES.					
FISHERIES, DEPARTMENT OF.					
21504	Report of the Royal Commission appointed on the 8th January, 1880, to inquire into and report upon the actual state and prospect of the Fisheries of this Colony.		21408	Transactions, 1923.	
	1 vol. 8vo. Sydney, 1880. Presented by J. S. P. Ramsay.		21411	1924.	
				2 vols. 8vo. London, 1923-24.	Purchased
21505	The Fisheries Act, 1881, and the Regulations and Proclamations thereunder . . .			ENTOMOLOGICAL SOCIETY OF LONDON.	
	1 vol. 8vo. Sydney, 1882 Presented by J. S. P. Ramsay.			Transactions, 1923.	
21506	Fisheries of the Colony. Report of the Commissioners of Fisheries up to 31st December, 1888.			1924.	
	1 vol. Fol. Sydney, 1889.			2 vols. 8vo. London, 1923-24.	Purchased
ROYAL SOCIETY OF N.S.W.					
21503	Transactions for the year 1867. vol. I.		21407	Vols. LVIII-LIX, 1922-23.	
	1 vol. 8vo. Sydney, 1868. Presented by J. S. P. Ramsay.			In 1 vol. 8vo. London, 1922-23.	Purchased
21430	Year Book. The Official Year Book of New South Wales, 1923.			ENTOMOLOGISTS' MONTHLY MAGAZINE.	
	1 vol. 4to. Sydney, 1924. Presented			Vols. LVIII-LIX, 1922-23.	
				In 1 vol. 8vo. London, 1922-23.	Purchased
SOUTH AUSTRALIA.					
SOUTH AUSTRALIAN ORNITHOLOGIST.					
21448	Vols. I-IV, 1914-19.		21409	ENTOMOLOGY, IMPERIAL BUREAU OF.	
	1 vol. 8vo. Adelaide, 1914-19 Purchased			Bulletin of Entomological Research—	
				Vol. XIII, 1922-23.	
TASMANIA.					
FISHERIES, ROYAL COMMISSION ON.					
21507	Report of the Commissioners, together with General and Critical Observations on the Fisheries of the Colony; Classified Catalogue of all the known species . . .		21410	XIV, 1923-24.	
	1 vol. Fol. Tasmania, 1883. Presented by J. S. P. Ramsay.			In 2 vols. 4to. London, 1922-24.	Purchased
DOMINION OF NEW ZEALAND.					
NEW ZEALAND INSTITUTE.					
21425	Transactions and Proceedings, vol. LV (new issue).		21401	MALACOLOGICAL SOCIETY OF LONDON.	
	1 vol. 8vo. Wellington, 1924. Presented			Proceedings, Vols. XIV-XV, 1920-23.	
				1 vol. 8vo. London, 1920-23.	Purchased
PAPUA.					
21538	ANTHROPOLOGY REPORT No. 5. The Natives of the Purari Delta, by F. E. Williams.		21399	NATURE, Vol. CXII, July-December, 1923.	
	1 vol. 8vo. Port Moresby, 1924 Presented		21400	CXIII, January-July, 1924.	
				2 vols. 4to. London, 1923-24.	Purchased
UNITED KINGDOM.					
London.					
ANNALS AND MAGAZINE OF NATURAL HISTORY.					
21397	9th series, vol. XII, 1923.		21432	RAY SOCIETY.	
21398	XIII, 1924.			The British Charophyta, by James Russell and G. R. Bullock-Webster. Vol. II, Chæreæ. Issued for the year 1923.	
	2 vols. 8vo. London, 1923-24 Purchased			1 vol. 8vo. London, 1924. Purchased	
				ROYAL GEOGRAPHICAL SOCIETY.	
				Proceedings and Monthly Record of Geography.	
			21492	New Monthly Series—	
				Vol. XI, Nos. 2-12, 1889.	
			21493	XII, 1-8, 1890.	
			21494	XIII, 1-2, 4, 7-9, 11, 1891.	
			21495	XIV, 1-12, 1892.	
				In 4 vols. 8vo. London, 1889-1892.	
				The Geographical Journal, including the Proceedings of the . . .	
			21496	Vol. I, Nos. 1-6, Jan.-June, 1893.	
			21497	II, Nos. 1-6, July-Dec., 1893.	
			21498	III, Nos. 1-4, 6, Jan.-June, 1894.	
			21499	IV, Nos. 1-6, July-Dec., 1894.	
				In 4 vols. 8vo. London, 1893-94.	Presented by J. S. P. Ramsay.
			21422-23	The Geographical Journal, Vols. LXI-LXII, 1923.	
				In 2 vols. 8vo. London, 1923.	Presented
				SCIENTIFIC AND LEARNED SOCIETIES OF GREAT BRITAIN AND IRELAND.	
			21484	The Year Book of the . . . a record of the work done in Science, Literature and Art during the session 1923-24 by numerous Societies and Government institutions.	
				41st Annual Issue.	
				1 vol. 8vo. London, 1924.	Purchased
			21395	ZOOLOGICAL RECORD, Volume the Fifty-ninth, being records of zoological literature relating chiefly to the year 1922.	
				1 vol. 8vo. London, 1924.	Purchased

Reg. No.	Books.	How acquired	Reg. No.	Books.	How acquired.
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21521	Proceedings and Transactions— Vol. XXXVIII, session 1923-24. 1 vol. 8vo. Liverpool, 1924. Presented		21325	Smithsonian Miscellaneous Collections, Vol. LXXIV, No. 1. Smithsonian Mathe- matical Formulae and Tables of Elliptic Functions, by E. P. Adams and R. L. Hippisley. 1 vol. 8vo. Washington, D.C., 1922. Presented	
LIVERPOOL MARINE BIOLOGY COM- MITTEE.			UNITED STATES GEOLOGICAL SURVEY.		
	L.M.B.C. Memoirs on typical British Marine Plants and Animals. Vol. XXIV, <i>Aplysia</i> , by N. B. Eales, 1921.		21523-28	Mineral Resources, 1916, 1-2, 1917, 1-2, 1918, 1-2. In 6 vols. 8vo. Washington, D.C., 1917-21. Presented	
21366	XXV, <i>Asterias</i> , by H. C. Chad- wick, 1923.		UNITED STATES NATIONAL MUSEUM.		
21367	2 vols. 8vo. Liverpool and London, 1921-23. Presented		21465-66 } 21475 }	Bulletins, Nos. 120-125, 1922-23.	
21539	The Marine Biological Station at Port Erin (Isle of Man), being the XXth Annual Report of the . . . 1 vol. 8vo. Liverpool, 1906. Presented		21467-68	In 3 vols. 8vo. Washington, D.C., 1922-23. Presented Proceedings, Vols. LXI-LXII, 1922-23. 2 vols. 8vo. Washington, D.C., 1922-23. Presented	
IRELAND.			21324	Report on the progress and condition of the . . . for the year ending June 30, 1923. 1 vol. 8vo. Washington, D.C., 1923. Presented	
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21500	Cunningham Memoirs, Nos. V-VI. 1 vol. 4to. Dublin, 1890.	Presented by J. S. P. Ramsay.	CALIFORNIA STATE MINING BUREAU.		
21501	Proceedings, 3rd Series, Vol. I, 1888-91. 1 vol. 8vo. Dublin, 1889-91.	Presented by J. S. P. Ramsay.	21381	Bulletin, No. 92. 1 vol. 8vo. Sacramento, 1923. Presented	
21502	Transactions, Vol. XXIX, Pts. 3-16. 1 vol. 4to. Dublin, 1888-91.	Presented by J. S. P. Ramsay.	UNIVERSITY OF CALIFORNIA.		
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ONTARIO, MINISTER FOR EDUCATION.			21462-64	Publications in Zoology, Vols. XX, XXII, XXV, 1919-24. 3 vols. 4to. Berkeley, 1919-24. Presented	
21386	Thirty-fourth Annual Archaeological Report, 1923. 1 vol. 8vo. Toronto, 1924. Presented		CONNECTICUT.		
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21479	Proceedings and Transactions, 3rd Series, Vol. XVIII, Meeting of May, 1924. 1 vol. 4to. Ottawa and London, 1924. Presented		21469-72	Bulletin, Nos. 22-34, 1915-23. In 4 vols. 8vo. Hartford, 1915-23. Presented	
India.			YALE UNIVERSITY.		
MADRAS FISHERY DEPARTMENT.			21385	Lectures on Cauchy's Problems in Linear Partial Differential Equations, by Jacques Hadamard. 1 vol. 8vo. New Haven, 1923. Presented	
21389	Bulletin No. XVII. Fishery Reports for 1923. 1 vol. 8vo. Madras, 1924. Presented		ILLINOIS.		
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21499	Agriculture Year Book, 1923. 1 vol. 8vo. Washington, D.C., 1924. Presented		AGRICULTURE, STATE BOARD OF.		
AMERICAN ETHNOLOGY, BUREAU OF.			21383 } 21482 }	Sixty-first and Sixty-second Annual Reports to the Secretary of the . . . and Thirty- Fifth and Thirty-sixth Annual Reports of the Experiment Station, from July 1, 1921, to June 30, 1923. 2 vols. 8vo. Lansing, 1923-24. Presented	
21489	38th Annual Report of the . . . to the Secretary of the Smithsonian Institution, 1916-17. 1 vol. 4to. Washington, D.C., 1924. Presented		MICHIGAN ACADEMY OF ARTS, SCIENCE AND LETTERS.		
21322	Bulletin, 80, Mandan and Hidatsa Music, by F. Desmore.		21327 21384	Papers, Vol. II, 1923. III, 1924. 2 vols. 8vo. New York, 1923-24. Presented	
21323	81, Excavations in the Chama Valley, New Mexico, by J. A. Jeancon. 2 vols. 8vo. Washington, D.C., 1923. Presented		UNIVERSITY OF MICHIGAN. MUSEUM OF GEOLOGY.		
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21541	Bulletin, vol. XXXIX, 1923-24. 2 vols. 4to. Washington, D.C., 1924. Presented		NEW JERSEY.		
21542	Report of the United States Commissioners of Fisheries for the fiscal year 1923, with appendices. 1 vol. 8vo. Washington, D.C., 1924. Presented		NEW JERSEY STATE MUSEUM.		
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21326	Report of the Librarian of Congress for the fiscal years ending June 30, 1923, and 1924.		NEW YORK.		
21540	2 vols. 8vo. Washington, D.C., 1923. Presented		AMERICAN MUSEUM OF NATURAL HISTORY.		
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21487	Annual Report of the Board of Regents . . showing the operations, expenditures and conditions of the Institution for the year ending June 30, 1922. 1 vol. 8vo. Washington, D.C., 1924. Presented				

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21321) 21531) 21544)	Handbook series, Nos. 9-11. 3 vols. 8vo. New York, 1923-24.	Presented	MUSEUM D'HISTORIE NATURELLE DE PARIS.		
21393	A Bibliography of Fishes, by Bashford Dean. Vol. III. 1 vol. 8vo. New York, 1923.	Presented	21362-65	Nouvelles Annales, 3rd Serie, Tomes I-IV, 1832-35. 4 vols. 4to. Paris, 1832-35.	Purchased
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21486	Memoir No. 16. 1 vol. 4to. Albany, 1923.	Presented	GERMANY.		
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21390	. . . fusionnée avec l'association Scientifique de France (fondée par Le Verrier, en 1864). Reconnues d'utilité publique. Conférences, Compte-rendu de la 46e session, Montpellier, 1922. 1 vol. 8vo. Paris, 1923.	Presented	21452	Zoologische Mededeelingen, Deels IV-VI, 1918-22.	Presented
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