## NEW SOUTH WALES.

# AUSTRALIAN MUSEUM.

(REPORT OF THE TRUSTEES, FOR 1882.)

Presented to Parliament, pursuant to Act 17 Vic. Ao. 2, sec. 9.

TO HIS EXCELLENCY THE GOVERNOR AND EXECUTIVE COUNCIL.

The Trustees of the Australian Museum, incorporated by the Act 17 Victoria No. 2, have the honor to submit to your Excellency in Council, in accordance with the 9th section of that Act, this their twenty-ninth Annual Report.

1. Throughout the past as in the previous year the Museum has been open to the public daily, with the exception of Mondays, on which it is closed for cleaning purposes; the hours having been on

week-days from 10 to 5 in winter and 10 to 6 in summer, and on Sundays from 2 o'clock until 5.

2. The increasing importance of the Australian Museum, and the growing interest of the public in it, are shown by the remarkable increase of 18,446 visitors during the past year; the attendance being 81,596 on week-days, as against 73,995 in 1881, and 52,505 on Sundays, as against 41,660 in 1881, the increase on week-days being upwards of 14 per cent., and on Sundays upwards of 26 per cent.

3. Many valuable and important additions have been made to the Museum by purchase and exchange. Numerous donations also have been received during the year. Particulars of these severally will be found in Appendices IV, V, and VI.

4. Several new show-cases have been fitted up, and specimens are in course of arrangement in them, but many more cases are required. The want of accommodation for the display of specimens is very much felt. Most of those acquired during the year have been unavoidably placed in store until

they can be properly exhibited.

5. Application has been made to the Government to consider the necessity of enlarging the Museum buildings. More room is urgently required, not only for purposes of exhibition, but for the office staff and workmen. The Trustees hope that in the course of the year 1883, provision will be made by the Government for rendering available for these purposes the apartments now occupied by the Curator and his family.

6. A catalogue of Australian Stalk- and Sessile-eyed Crustacea, prepared by Mr. Wm. A. Haswell, M.A., B. Sc., has been printed and distributed extensively among various Museums and Natural History Societies; and the work of cataloguing the whole of the Museum collections is being pushed forward as

rapidly as possible.

7. Many useful books have been added to the Library, necessitating a considerable addition of book-shelves. The work of arranging, classifying, and cataloguing the volumes is in progress, and will be

completed in a few months.

8. The most serious loss ever sustained by the Museum has occurred through the recent destruction of the Garden Palace-the large and varied collection of technological and ethnological specimens, sent there for exhibition, having been totally destroyed by the fire which consumed the building. The Technological Committee lost no time in commencing a new collection; and, having already obtained many ethnological specimens of great interest, they are taking steps to secure as many others as possible. This is a work which admits of no delay, as genuine ethnological examples from the islands are becoming scarcer every day, in consequence of the general spread of trade and civilization through the whole of Polynesia. Suitable accommodation for the display of the technological and ethnological specimens already in hand should at once, if possible, be provided.

9. The most important work carried on by the Trustees during the year has been the Exploration

of the Caves and Rivers of Australia. It was continued until the close of December at the Wellington Caves, where the bones of an immense Echidna, and of a large Struthian bird allied to the Emu, as well as some smaller animals of less note, hitherto unknown to science, have been discovered and added to the Museum. Numerous other fossil bones valuable for exchanges with foreign Museums have been obtained. The Exploration of Rivers was conducted by the Assistant Taxidermist in Queensland, where strong hopes of discovering some new ganoid fishes were entertained. A special report of this work, with a list of the

specimens procured, will be found in Appendices X and XI.

10. The old By-laws and Rules of the Museum, framed soon after the establishment of the Institution, had long been found unsuited to its enlarged state and wants. A new code therefore was, in the year 1881, compiled by the Trustees, and transmitted to the Minister in charge of this Department, for submission to your Excellency. Being eventually adopted, the By-laws and Rules were returned to the Trustees, approved of, on the 15th day of September last.

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11. On the 18th August last the Trustees had the painful duty imposed on them of communicating to the Government the very serious defalcations which they had discovered in the accounts of their late to the Government the very serious defalcations which they had discovered in the accounts of their late Secretary, amounting to no less than £555 in the whole—of which sum £240 was in the Technological Secretary, amounting to no less than £555 in the whole—of which sum £240 was in the Technological Secretary, amounting to no less than £555 in the whole—of which sum £240 was in the Technological Secretary, amounting to no less than £555 in the whole—of which sum £240 was in the Technological Secretary. Secretary, amounting to no less than £555 in the whole—of which sum £240 was in the Technological branch of the establishment. This gentleman, having very high testimonials, was selected in November, 1879, out of a large number of candidates; and, up to the time of the discovery mentioned, had discharged his duties with such efficiency and regularity that no suspicion whatever attached to him. The Trustees his duties with such efficiency and regularity that no suspicion whatever attached to him. The Trustees lost no time in putting the case in the hands of the police; and all available steps have been taken for his arrest, but as yet without success, as he immediately absconded, and the place to which he has escaped his arrest, but as yet without success, as he immediately absconded, and the place to which he has escaped has hitherto not been discovered. His successor is a gentleman of considerable attainments and undoubted integrity; but the Trustees have thought it right to obtain security from him (which has been given) in £1,000 for his fidelity. It may be added that, under the new rules, which were not in force in the late Secretary's time, defalcations of any kind will not be practicable.

12. The Trustees have with deep regret to record the death, during the year, of Dr. H. G. Alleyne. President of the Medical Board, an old and valued public officer, and useful fellow-worker as a Trustee of the Museum. His successor in office, Dr. Charles Mackay, takes his place. The Hon. W. A. Brodribb, M.L.C., was, early in the year, elected to fill the vacancy created by the absence of

J. R. Fairfax, Esq.

13. Annexed to this Report will be found the following Appendices:-

I. Annual balance-sheet.

II. Attendance of visitors.

III. Attendance of Trustees. IV. List of specimens purchased.V. Lists of exchanges.

VI. List of donations.

VII. List of specimens collected.

VIII. List of books acquired.

IX. Work done by Taxidermists.X. Report of the Exploration of Caves and Rivers.

XI. Lists of the principal specimens obtained at the Caves and Rivers.

The Common Seal of the Museum is affixed by order of the Board, this third day of April, 1883,

(L.S.)

ALFRED STEPHEN, Crown Trustee and Chairman.

S. SINCLAIR, Secretary.

APPENDIX I.

Balance-sheef of the Trustees of the Australian Museum for the year ending 31st December, 1882.

Receipts.	£	s.	d.	£	6.	d.	PAYMENTS.	£	8. (	1. £		. (
lance from 31 December, 1881	*****			1,609	15	9	Refunds to Treasury	*****		134	5	8
te Hon, the Colonial Treasurer— Curator Assistant Taxidermist Opening on Sundays Collection of specimens Purchase of specimens  ", large mammals ", cases ", bottles ", books Formation of catalogues Travelling expenses Exploration of caves and rivers Furniture Night-watchman Endowment for 1882 under Act of Incorporation Additional endowment.  Formation of a Technological Museum	100 500 500 100 600 100 100	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	000000000000000000000000000000000000000	7,750 4,300		- E	Curator's Salary Assistant Taxidermist's Salary Opening on Sundays Collection of specimens Purchase of specimens Purchase of specimens . , mammals . , cases . , bottles . , books Formation of catalogues Travelling expenses Exploration of caves and rivers Furniture Night-watchman Preparation for Fisheries Exhibition  General Salaries Lighting Postage, telegrams, &c. Taxidermist's materials Chemicals Stationery Customs, freights, &c. Ironmongery Insurance Timber Fuel Advertising Sundries	150 200 206 399 2 871 108 546 501 580 80 76 6 6 6 6 9 111 21 1 22 1 14 14 14 14 14 14 14 14 14 14 14 14 1	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	4,282	18	4 0
							Technological Museum	******		3,800 316		0
			100				Balance	******		£ 10,031 3,628		3 6
				13,659	10	0			-	€ 13,659	1	- 1

19th January, 1883.—Examined and found correct.

ROBERT HUNT.
PHILIP GIDLEY KING.

## APPENDIX II.

## ATTENDANCE OF VISITORS DURING 1882.

	Weekdays	Sundays
January	8,181	4,259
February	5,229	3,644
March	5,903	3,765
April	8,112	5,230
May	6,384	3,799
June	6,528	4,890
July	6,382	6,073
August	6,311	4,873
September	7.033	4,024
October	5,408	3,832
November	6,404	3,155
December	9,721	4,961
	81,596	52,505
Total	134,1	01

## APPENDIX III.

## ATTENDANCE OF THE TRUSTEES DURING 1882.

Official Trustees.	
His Honor the Chief Justice	0
The Honorable the Colonial Secretary	0
The Honorable the Attorney-General	0
The Honorable the Colonial Treasurer	5
The Auditor-General	0
The Collector of Customs	0
The Surveyor-General	0
The President of the Medical Board	5

Crown Trustee.  The Honorable Sir Alfred Stephen, C.B., K.C.M.G., M.L.C.	19
The Honorante ist The Elective Trustees.	22
J. C. Cox, Esq., M.D., F.L.S.  J. Belisario, Esq., D.D.S.  J. Description of Geology, Sydney	7
A Liversidge, Esq., F.R.S., Protessor St.	15 8
Alfred Roberts, Esq., M. B.C.S.	10
H. H. B. Bradley, Essl. Dante Master Royal Mint	17
Chas. Moore, Esq., P.L.S.	14
Alex, Stuart, Esq.	7 11
The Hon. P. G. King, M. L.C. The Honorable W. A. Brodribb, M.L.C.  Number of Board Meetings during the year	

## APPENDIX IV.

		APPENDIX	IV.
		LIST OF SPECIMENS P	URCHASED,
c	Ptilorhis paradisea.		Syngnathus intestinalis.
	Sericulus.		Platax sp.
	Psophodes.		Dascyllus aruanus.
	Orthonyx spinicaudis, juv.	3	Syngnathus intestinalis.
	Eopsaltria australis.		Novacula.
3	Acanthiza citreogularis,		Coris ap.
ĩ	Cisticola.	1	,, sp.
	Malurus.	8	
	Buceros ruficollis.		Genyoroge, Grammistes orientalis,
	Scythrops. Centropus atra alba, juv.		Acanthurus sp.
1			Zanclus cornutus.
	Corvus sp.	10	Naseus litralis.
	Cacatua.		Ephippium sp.
	Lorius hypoenachrous, Loriculus tener,	2	Chietodon sp. sp.
	Munia melana,	2 2	ss sp.
	Hirundo tahauteiæ.	2	,, sp.
	Pitta novæ-hiberniæ.	2	
	Dicrurus lemostictus. Piezorhynchus verticalis.	1	Chelmo longirostris.
2	Pachycephala melanura.		Monacanthus scriptus. Holacanthus semicircularis
2	Myzomela sclateri.		Saurus.
	Cinnyris corinna.		Caranx.
	Monarcha inornata. Calornis feedensis.		Platax.
	Haleyon albicilla.		Acanthurus, Percidæ,
	Ceyx sacradotus.		Apogon sp.
3	Tanysiptera nigriceps.		Upeneus sp.
1	Anous leucocapillus, ,, stolidus,	2	Tetrodon.
î	Sterna longipinnis.	2	Dascyllus sp.
2	Amaurornis moluccana,		Diagramma, Caesio,
1	Phlogenas johanne,		Holocentrus sp.
1	Ptilopus richardsii.	i	Antennarius sp.
4	,, eugeniæ, ,, johannis,	2	Diagramma.
1	Pomarea ujiensis.		Muræna,
2	Piezorhynchus vidua.	1 6	Amphisile scutata.
ï	Calyptorhynchus baudenii.	ĩ	Loligo.
î	Machterirhynehus. Myzomela chloroptera.	4	Erebophis sp.
1	Tephas.	8	Enygrus carinatus.
.1	Puffinus brevicaudus.	2	Dipsas sp.
11	Specimens of Antimony.	ı	Dendrophis solomonensis, Poisonous snake,
î	South Sea Canoe Wooden god,	. 1	Amphisbena.
1	Pterois.	2	Monitor,
1	Plectropoma semicineta.	1	Grammatophora.
4	Ostracion sp.	1	Gonodactylus graphurus Small Bat.
5	Jules sp. Coris semicineta.	i	Karabidion horridum,
1	Parrot-fish.	3	Zanelus cornutus.
2	Eel-tail-fish (small).		Platax sp.
1	Apogon sp. Eel.	1	Pterois zebra
î	Monacanthus sp.	1	Cheetodon sp.
2	Pterois zebra.	5	,, ephippium,
1	Scorpæna cyanicidium.	1	strigangulus
1	,, sp.	2	Chietodon mertensii
î	11 11	1	Antennarius sp.
1	Diodon.	1	Balistes aculeatus.
3	Serranus.	î	,, sp.
16	Balistes aculeatus.	1	Holacanthus sp.
2	Chetodon. Acronurus sp.	6	235
2	Sphyrnæa sp.	1	Upeneus sp.
z	Jules sp.	î	Serranus sp. Labriethys.
1	Zanclus cornutus	1	Dascyllus.
T.	Genyoroge sp. Fistularia,	1	Novacula.
	· iorutaria,		Acanthurus.
			Cæsio,

List of	Specimens purchased—continued.
4 Genyoroge.	1 Sillago sp.
1 Dascyllus, 1 Centropogon,	5 Pseudorhombus russellii.
1 Tetrodon.	2 Synaptura nigra. 12 Pseudorhombus russellii.
4 Engyrus carinatus.	1 Prussian carp.
1 Dipsas sp. 2 Sterna fuliginosa,	4 Arnoglossus bleekerii. 4 Synaptura nigra.
1 Anous cinereus.	5 Platypus.
1 Procellaria sp.	12 ,, (skeletons).
1 Limosa uropygialis, 1 Eurystomus pacificus,	1 Albatross, 1 Eclectus,
1 Haleyon sordidus,	2 Carpophaga rufigula.
1 Pachycephala gutturalis. 1 Cuculus flabelliformis.	2 Soles, Synaptura nigra. 1 John Dorey, Zeus Australis.
1 Anous stolidus.	1 Haplodactylus lophodon.
1 Platycephalus,	2 Large Yellow-tail, Caranx declivis.
1 Mugil. 2 Mugil sp.	1 Sillago ciliata. 1 Yellow-bellied Perch, Dules auratus.
2 Sillago.	1 Therapon macleayana,
2 ,, maculata, 1 Chrysophrys sarba,	1 Lotella grandis. 1 Pagrus unicolor.
1 ,, australis	2 Otolithus teraglin.
2 Caranx georgianus.	1 Anas castanea.
4 Gerres sp. 1 Arramphus,	2 Malachorhynchus membranaceus. 7 Barbed-headed Arrows.
2 Hemirhamphus regularis.	12 Long Arrows.
2 Sphyrena, 1 Belone.	2 Bows. 1 Club, plaited matting on handle.
1 Seriola.	1 ,, (neddie).
2 Therapon cuvieri.	3 Long-barbed spears.
1 Teuthis. 4 Monacanthus chinensis.	1 Shell, Voluta magnifica. 3 Boomerangs.
2 Triacanthus biaculeatus.	1 Waddie,
1 Pionias aruensis. 2 Apteryx owenii.	4 Stone Tomahawks. 4 Stones used for grinding seed.
2 Stringops habroptilus.	2 Stone used for drilling holes.
1 Callocephalon galleatum.	1 Collection of Coleoptera,
1 Cheiloscyllium furvum, 1 Saurida truculenta,	1 Samson Fish. 1 Sea Mullet.
1 Mugil grandis.	1 Plotus novæ-hollandiæ.
1 Cuscus orientalis, 1 Dactytoptila trivirgata,	2 Sand Flathead, Platycephalus sp. 1 Carp, Cheilodactylus fuscus.
1 Tallegallus fuscirostris.	4 Yellow-bellied Perch, Ctenolates aurea.
1 Grallina sp.	7 Oligorus macquariensis.
1 Head-dress of string and feathers of Set 5 Mugil.	riculus aureus. 4 Ctenolates. 7 Oligorus,
19 Jules sp.	4 Stone adzes.
5 Upeneoides. 6 Sphyræna,	3 Stone fragments. 6 Ocydromus australis. (Eggs.)
5 Lethrinus sp.	4 Sea gull's eggs.
11 Serranus, 9 Balistes,	2 Tern's eggs, 2 Duck's eggs.
6 Lethrinus.	1 Egg, Apteryx owenii.
13 Caranx.	1 Ptilopus ujiensis.
2 Naseus johnstonei. 8 Naseus sp.	1 Graucalus sp. 1 Diodon hystrix.
2 Tetrodon sp.	I Acanthophis antarcticus.
2 Aracana, 2 Stinging Rays,	1 Platypus. 2 Geoffroyius heteroclites.
1 Rhinobatus.	2 Trichoglossus massenæ,
1 Scorpæna. 2 Dog-fish.	2 Nasiterna finschii. 2 Ianthænas philippianæ.
7 Hemiramphus.	2 Carpophaga rufigula.
7 Scatophagus, 2 Labrichthys,	2 ,, pristinaria. 1 , brenchleyii,
5 Labrichthys sp.	2 Turacæna crassirostris.
2 Arius sp. 2 Parrot-fish.	1 Ptilonopus richardsii. 2 , johannis.
2 Parrot-fish. 9 Chætodon.	1 Macropygia rufocastanea.
7 Zanclus cornutus.	2 Halcyon salamonis.
8 , sp. 5 Coris sp.	2 Philemon sclateri. 3 Myzomela pulcherrima.
9 Fish (?).	2 Edoliasoma monotomus.
2 Labrichthys, 13 Fish (?).	2 Pachycephala chrystophora. 2 Pomarea ujiensis.
4 Lethrinus.	1 Dicrurus longirostris,
1 Sillago. 3 Balistes.	1 Sturnoides minor. 1 Eurystomus crassirostris.
3 Balistes. 2 Caranx.	2 Nycticorax manillensis.
1 Lethrinus,	1 Haliætus lencogoster.
6 Fish (?). 1 Rhipidura tenebrosa.	3 Astur versicolor. 1 Athene sp., juv.
1 Pterois zebra.	2 Haleyon albicilla.
3 Cladorhynchus pectoralis, 1 Plotus novæ-hollandiæ.	5 Edolisoma monotonus. 5 Sturnoides minor.
1 Erismatura australis.	1 Graucalus sublineatus.
2 Anas nævosa.	3 Dicrurus longirostris. 2 Nasiterna finschii,
1 Hieracidea orientalis. 1 Scorpsena cardinalis.	2 Nasiterna finschu. 2 Trichoglossus margueritæ.
1 Stone-axe Head,	4 , massenæ.
1 Heterodontus phillipi. 1 Leptoscopus maeropygus.	4 Geoffroyns hecterollites. 1 Carpophaga rufigula.
8 Enoplosus armatus.	1 Geophilus nicobaricus.
2 Girella tricuspidata. 8 Pseudorhombus russellii	3 Ianthanas philippana. 3 Chalcophaps stephani.
O 2 soudoffionious russeum	o Charlespanies are planting

List of Specimens purchased—continued.

4 Pagrus unicolor.
3 Platycephalus fuscus
2 Aulopus purpurissatus
8 Mugil peronii.
4 Mugil grandis.
3 Temnodon saltator.
3 Chrysophrys australis.
2 Temnodon saltator.
4 Gerres sp.
3 Enoplosus armatus.
2 Cheilodactylus fuscus.
4 Trigla kumu.
2 Upeneoides sp.
3 Sillago sp.
2 Lates colonorum.
1 Acronurus sp.
4 Cheilodactylus vittatus.
1 Therapon macleayana.
4 Girella simplex.
1 Lates colonorum.
2 Ctenolates flavescens.
1 Plectropoma cyanostigma
2 Chetodon strigatus.
2 Labrichthys sp.
2 Therapon cuveri.
2 Cossyphus gouldi.
1 Coris sp.
1 Hemiramphus sp.
1 Latris forsteri.
1 Olistherops brunneus.
1 Carcharodon sp., juv.
2 Rhinobatus granulatus.
1 Caranx declivis.
2 Zygena malleus.
1 Odontaspis americanus.
3 Synaptura.
2 Platycephalus fuscus.
6 Upeneus sp.
1 Platycephalus.

## APPENDIX V.

## LIST OF SPECIMENS RECEIVED IN EXCHANGE.

From Dr. J. C. Cox.
Collection of Mammals:—1 species—3 specimens.

From Mr. Bailey. Collection of Mollusca:—3 species—5 specimens.

From Mr. James Dall. Ethnological:—1 stone adze.

From M. Paul Bouvier, Shells:—14 species—20 specimens.

From M. F. Bouvier.
Small collection of Coleoptera:—120 specimens.

From Dr. Hector, Wellington Museum, N.Z. Birds: -2 species—2 specimens.

From Dr. J. H. Garnier. Collection of Birds:—128 species—170 specimens.

LIST OF SPECIMENS SENT AWAY IN EXCHANGE.

To the Royal Museum, Berlin (through Professor Bastian).

Ethnological:—77 specimens.

To Professor Ward, Rochester, New York, America.

Collection of Crustacea: —10 species—28 specimens.

Collection of Echinodermata:—39 species—158 specimens.

Collection of Fishes:—9 species—34 specimens.

Collection of Mollusca:—3 species—5 specimens.

(In spirits):—1 , , 20 ,

Collection of Mammals:—3 species—3 specimens.

Collection of Erick:—15 species—23 specimens.

Eggs:—4 Bird's eggs.

Birds in Spirits:—48 specimens for skeletons.

Casts of Australian Fossils:-

Radius of Diprotodon, from Darling Downs.

Fibula
Upper Incisors
, Nototherium, New South Wales.
Atlas vertebra of Diprotodon, from Queensland.
Portion of Marsupial bone, from Darling Downs.
Condyle of lower jaw of Diprotodon.

Femur of large Diprotodon, from Darling Downs. Humerus ,, 19

Ulna Tibia Portion of lower jaw ,, ,, rib

## To the Adelaide Museum, through Mr. Waterhouse.

## Ethnological Collection.

Chalk image. Head-scratcher. Wooden do. Paddle. Wooden spears

1 Ornamental gourd for holding lime.
2 Cocoa-nut Spoons.
9 Greenstone Adzes.
2 Greenstone Meri.
1 Flat-carved Baton. 1 Disc-shaped Club. 2 Stone Clubs. Oval-carved Baton, club-shaped. 3 Bows

1 Stone net-sinker. 3 Fern-beaters. Bundles of Arrows. 1 Drum, 1 Bamboo Pipe,

Flax-beater. Carved wood flat Baton. 4 Adzes. 6 Stone Axes. New Guinea Club of dark Greenstone.

> To Baron von Hügel. 2 Large Rails, "Ocydromus sylvestris."

## To the Hobart Museum, through James Barnard, Esq.

Collection of Foreign Birds:—94 species—108 specimens, Collection of Australian Birds:—99 species—121 specimens.

To A. J. Campbell, Esq. Bird's Egg:—1 Egg, "Casuarius bennettii."

To the Japanese Museum.

Collection of Shells:—121 species—286 specimens. Collection of Crustacea:—34 species—73 specimens.

To R. Hungerford, Esq.

Collection of Shells:—102 species—235 specimens.

M. Paul Bouvier.

Collection of Shells :- 27 species-59 specimens.

# To the Berlin Museum, through Professor Reuleaux.

Collection of Echinodermata:—Dry Spems.—14 species—43 specimens.
Spirit ,, 11 species—55 specimens.

## To Dr. J. C. Cox.

Collection of Mollusca:—2 specimens of Oysters.

6 ,, Helicarion sophiæ. 6 ,, Helicarion sophiæ.

1 Fossil Bulimus, from Lord Howe Island.

## To the Brussels Museum.

Collection of Mammals:—Dry, 21 species—31 specimens.
Spirit, 14 species—29 specimens.
Collection of Birds:—29 species—45 specimens.
Collection of Skeletons:—9 species—13 specimens.
Collection of Fishes:—104 species—187 specimens.
Collection of Freshwater Fish:—11 species—36 specimens.
Collection of Crustacea:—47 species—235 specimens.
Collection of Echinodermata:—10 species—48 specimens.
Collection of Echinodermata:—10 species—51 specimens.
Collection of Reptiles:—22 specimens, 14 species—124 specimens.

To C. H. Hartmann, Esq.

Collection of Shells: -102 species -290 specimens.

To the Turin Museum, through Count Salvadori. Collection of Birds :-28 species-51 specimens.

# APPENDIX VI. LIST OF DONATIONS, 1882.

	LIST OF DONATIONS, 1882.	DONOR.
	MAMMALS.	
140.0	Pteropus poliocephalus	Mr. E. G. W. Palmer.
11	Pteropus poliocephalus	Mr. Thos. Chapman.
4		Mr. Chas. Moore.
1 1	Monkey—Macacus sp. Flying Squirrel—Belideus flaviventra	M. D. E. W. Loughnen
1 1	Flying Squirrel—Belideus naviventra White Rat—Albino of Mus decumanus	Mr. R. E. W. Loughnan, Dr. Ward.
1 1	White Rat—Albino of Mus decumanus  Black Rat—Mus rattus	Mr. K. H. Bennett.
		Mr. E. G. W. Palmer.
		Mr. J. Peate.
1 1	Black Rat—Mus rattus	Mr. John Living.
		Mr. H. Newcombe.
		Mr. Tidswell.
	Anteenmus aloipes Pteropus poliocephalus Black Rat—Mus rattus	Mr. Thos. Peate.
1	Black Rat—Mus rattus Flying Phalanger—Belideus breviceps	Mr. D. T. Bloomfield.
		Mr. M. Asher.
		Mr. Chas. Moore.
		Mr. Thos. Street.
1	A analysta rarramia	Mr. W. J. Bartlett.
	Native Rear Phageelaretes cineres	Mr. Dobson.
107	Musk Deer	Zoological Society, Moore Park.
100	Mongoose Hernestes sn	Messrs. Bradley, Newton & Lamb. Mr. C. H. Roberts.
100	Halmaturus ruticallis	Mr. Beacom.
100	White Opossum—Phalangista vulnina (albino)	Mr. D. Collis.
0	Portion of Pelvis of a Diprotodon	Lieut. Hemming, R.N.
2	Flying Foxes—Harpya	Diette Tremming, 11.11.
1	Platypus—Ornithorhynchus paradoxus Native Cat—Dasyurus maculatus.	Mr. A. Clarke,
0	Flying Mice—Acrobates pygmea	IIII III CIIIIICI
2 1	rlying stice—Acrobates pyginea	
	BIRDS.	AND
1	Parrot—Eclectus polychlorus	Lieut. Goldfinch, R.N.
1	Rail—Porzana palustris	Mr. James Seymour.
2	Eggs of Courier Diggons	Mr. L. W. Wetherill, junr.
1 /	Trichoglossus concinnus	Dr. J. C. Cox
		The second state of the se
4	Quail Eggs—Synoicus australis	Master G. Parslow.
1	Rosella Parrot—Platycercus pallidiceps	Mr. C. W. Camp.
1 :	Honey-eating Parrakeet—Trichoglossus concinnus	Mr. J. W. Wetherell, junr.
1	Black-cheeked Falcon—Falco melanogenys	Mr. A. T. Holroyd.
9	Goshawk—Astur approximans Ravens—Corone australis	Mr. J. Brown,
ĩ.	Tinnunculus cenchroides	Mr. K. H. Bennett.
î	Podargus strigoides	Mr. John Brown, Mr. Palmer,
1	Rollulus roulroul	Mr. Chas. Moore,
1 .	Aix galericulata	Mr. C. W. Camp.
2	Plovers—Eudromias viridis	Mr. J. A. Thorpe.
1	Boatswain-bird—Phäeton flavirostris	Messrs, Curcier & Adet.
1	Young Kestrel—Tinnunculus sp	Mr. Burnell.
1 .	Carrot—Unrysotis ochrocephalus	
- 1	Paicuncums frontatus &	Mr. R. Patterson,
1	Acanthogenys rufogularis	Mr. W. C. Brown,
	1 Ottal 2 da Stri Politica	Mr. Wright,
	Owl—Ninox boobook Eclectus polychlorus	Mr. James Taylor.
		Mr. Stringer.
1	Ocydromus sp.	Professor Liversidge,
		Mr. Thos. F. Coombes.
1	Amaurorius mordeana	
		Capt. J. M Donald.
		Mr. Stringer.
		Master R. Boyd.
9	Birds Loxia origiyara (albino) -2 0	Mr. Stringer.
ī	Sula australis, 9, 9.  Egg of Eurostpadus australis	Mr. J. A. Thorpe.
2	Melithreptus lunulatus	Hon. Jno. Lackey.
1	Bird	Mr. D. H. Campbell.
1	Pedionomus torquatus, & Rosella—Platycercus pallidiceps Emu—Dromaius australis	Mr. J. Stringer,
1	Rosella—Platycercus pallidiceps	Mr. Bailey.
1	Emu—Dromaius australis Dollar Bird—Eurystomus pacificus	Mr. W. Camp.
1	Dollar Bird—Eurystomus pacificus Ninox boobook	Mr. S. Cook.
1	Ninox boobook Nest with two eggs—Calamoherne austrolis	Master C. Burke.
9	Nest with two eggs—Calamoherpe australis Nests with eggs—Campephaga humeralis	Mr. H. Hackett.
- 1	White-eved Crow Covers and It	Mr. J. A. Thorpe,
- 1	Wood Swallow Artamus condide	o. z. rhorpe,
1	Rufous breasted Thielehead D. 1	M. I access
- 1	Rose Hill Perralant Distriction Control of the Cont	Mr. J. Stroud,
	White-fronted Falcon Falco to 1	Mr. A. Ol. 1
41.5	Albino Magnio Cympaghia, 13	Mr. A. Clarke.
3 0 11	Dollar Bird Furnataran was c	Mr. H. Gordon.
9	Gannet Sula	Mr. Gifford.
25	Petrols Procellaria	
1	Noddy—Anous Charadrius	
1	Charadrius Honey-eater—Myzomela	Lieut, Hemming, R.N.
	Honey-eater—Myzomela.	
40	Castaviae en	
1	Box Fish—Ostracion concatenatus	Mr. A. B. Cox.
111111	Plying Rish Recognition	Mr. Murray.
	Sheker Eigh Fohowsis -	Inspector Seymour.
7	Rays—Rhinobatus granulatus	Mr. Jno. Emmerson
		Mr. J. J. Josephson.
		A CONTRACTOR OF THE CONTRACTOR

	FISHES—continued,	DONOR.
3	Fishes Opisthognathus	Mr. J. Ireland.
- 1	Cat-fish—Cnidoglanis megastoma Box-fish—Aracana lenticularis	Mr. A. D. Taylor.
	Cestracion phillipii	Mr. Sl. Mountcastle.
1	jaw Galeocerdo rayneri	Mr. J. J. Josephson.
1	Trigla kumu Atypichthys strigata	Master W. Stephens.
2	Red Bream—Pagrus unicolor	Inspector Seymour.
1	Galaxias coxii Shark—Crossorhinus dasypogon	Mr. A. S. Wilson,
2	Cod-fish—Oligorus macquariensis.	Mr. F. Summers. Mr. K. H. Bennett.
1	Red Rock Cod—Sebastes sp	1
î	Box Fish—Ostracion cubicus.  Flounder—Rhomboidichthys pavo	Captain Braithwaite.
2	Herrings—Clupea sp	Mr. W. A. Haswell,
1	Flying Gurnard—Trigla polyommata	
1.	Parrot-fish—Labrichthys gymnogenys	Mr. John Douglas.
1	Aracana lenticularis. Pipe-fish—Syngnathus sp.	Mr. W. S. Reed, Mr. G. H. Barrow,
î	Box-fish—Aracana lenticularis	Mr. H. Ackland,
2	Sweeps—Scorpis aequipennis Caranx declivis.	D- 32 18215
î	Sphyrena obtusata	Dr. W. Williams.
1	Tetrodon—Tetrodon virgata	Mr. W. Wenham.
î	Pipe-fish—Fistularia serrata Sucker-fish—Echeneis remora	Miss Evans. Mr. Rice.
1	Egg and young of Heterodontus galeatus	Mr. G. H. Robinson,
3	Coris sp. nov. Box-fishes—Aracana lenticularis	Mr. H. Breakwell. Mr. Ireland.
1	Box-fish—Aracana lenticularis	Mr. Jas. O'Hara.
1	Flying Gurnard—Trigla kumu	Mr. J. W. Clarke, Mr. H. Vale,
1	Trachichthys jacksonensis	Mr. H. Codell.
14	Salmon Trout—Arripis salar	Inspector Seymour.
-1	Monacanthus ayraudi	Nimrod Fishing Club,
	Plectropoma annulatum Cossyphus unimaculatus	Trumou Fishing Citio,
1	Salarias sp.	Mr. W. R. Young.
	Plectropoma semicinetum Tetrodon sp.	Mr. Taylor. Mr. J. Dawson, senior.
1	Glaucosoma scapularis	
	White Travalley	Commissioners of Fisheries.
1	Pig-fish—Cossyphus unimaculatus	Mr. Martin Begg.
1	Loligo	Mr. Richd. N. Webster.
î	Ostracion cornutus	Mr. R. S. Taylor.
1	Lotella grandis Flying Gurnard—Trigla kumu	Dr. Reed. Mr. Geo. Taylor.
2	Striped Soles—Solea microcephala	Mr. Evans.
1	Plectropoma semicineta	Mr. H. Ackland, junior. Mr. W. Gardiner.
	Eñoplosus armatus	Mr. W. Evans.
1	Olistherops brunneus	Mr. Ed. Rice.
2	Flying Gurnard—Trigla kumu	Dr. J. C. Cox.
	Large Sun-fish—Orthagoriseus mola Amphisile sp.	Mr. Conelley. Mr. Geo. Thom,
- 1	Leather-jacket—Monacanthus ayraudi	Dr. Williams,
î	Ostracion concatenatus John Dorey—Zeus australis	Mr. F. W. Robinson, Hon. Wm. Macleay,
1	Shark—Heterodontus valeatus	Mr. Ireland,
1	" " phillipio"	Dr. W. Williams.
1	Dicotylichthys punctulatus	
V	REPTILES.	
3	Lizards—Lialia burtonii Snakes.	Mr. Jackson.
1	Death Adder—Acanthohis antarctica	Mr. Thos. Nagle.
1	Young Snake—Hoplocephalus curtus  Brown Banded Snake—Hoplocephalus curtus	Mr. C. Lewis, Mr. Ed. Hoken,
1	Diamond Spake—Morelia spilotes	Capt, J. Grandi.
1	Lizard—Phyllurus platurus Snake	Mr. Henry Grace. Mr. Jabez Joils.
1	Typhlops ruppellii	Mr. E. M. Hunt. Mr. P. R. Gowing.
î	Young Hoplocephalus variegatus	
1	Gecko-Phyllurus platurus	Mr. G. Whitlaw.
1	Diamond Snake—Morelia spilotes Geeko—Phyllurus platurus	Mr. W. Lucas.
1	,, Phyllurus sp. Green Lizard – Chloroscartes sp.	Mr. Riehd. Nancarrow. Mr. C. F. Sahl.
i	Brown Banded Snake—Hoplocephalus curtus	Mr. Jno. Purcell.
1 2	Lace Lizard—Hydrosaurus varius	Mr. J. Conlon.
5	Grammatophora barbata	
1	Hydrosaurus varius	NO. 10 TO THE PARTY
2	Hinulia taniata	Mr. K. H. Bennett.
23	Hinilia sp	
1	Tortoise-Chelodina longicollis	
	259—B	

		DONOR,
	REPTILES—continued,  Skull of large Luth—Dermatochelys coriaceus  Skull of large Luth—Morelia spilotes.	Mr. W. E. Shaw.
1	Skull of large Luth—Dermatochelys coriaceus Diamond suake—Morelia spilotes  Onio of coakes—do do	Mrs. A. King. Mr. Ebblewhite.
1	Diamond shake store do do do	Mr. A. Telfer.
1	Til Hammingmis	Mr. Morgan,
		The Secretary, Zool. Soc. N.S.W Mr. W. Harper.
1	Sea Turtle—Cheroma Andrelia spilotes	Mr. Davies.
		Mr. Abraham. Mr. Richd, N. Webster.
1	Diamond snake—Morena species	Dr. H. Blaxland,
1630	France Lamontvnastes unreade ***********************************	Mr. Thos. W. Platt.
- 10	Small snake—I VDBIOps sp	Mr. J. S. Sledge, Mr. J. H. Cardew,
- 1	Snake—Holiocephatus careas	Mr. G. H. Barrow.
1	Lizard—Pygopus teptdopus	Mr. Gazzard.
1	Do do do	Mr. H. Newcombe,
1	Do do do Lizard—Egernia cunninghamii Do —Pygopus sp.	Mr. A. Weary.
1	Do —Pygopus sp	Mr. A. J. Leeke, Mr. H. J. Ackland,
1	Lizard—Gramatophora cristata	Mr. Lea.
1	Gecko—Phyllurus inermis Brown snake—Hoplocephalus curtus	Mr. John Stuart. Mr. J. H. Shaw,
- 1	Black snake—Pseudechis porphyrmeds	Mr. J. W. Farrar,
1	Lizard—Pygopus lepidopus Black snake—Pseudechis porphyriacus	Mr. H. Melville,
		Mr. Chilicott. Dr. J. C. Cox.
1	Lizard—Hydrosaurus varius	Monsieur E, Lacomme,
1	Red-capped snake—Brachysoma diadema	Mr. J. D. Hamilton.
	MOLLUSCA.	
1	Onychoteuthis banksii	Captain Goddard, Mr. M. Asher,
1	Octopus	
6	Clordorn	Dr. H. B. Guppy.
	Eggs of a Cuttle-fish—Sepia sp. Large Dolabella—Dolabella rumphii	Mr. Granthy Fitzhardinge. Captain Gibson.
9	Pecter furnatus	Mr. W. Richardson,
1 2	Octopus Pinna	Mr. R. Cameron, The Rev. Mr. Gill.
	Trivia australis	
3	Do do	Mr. John Cummings,
1	Oyster—Ostrea edulis, var.	Mr. Bailey.
	Octopus species, 250 specimens freshwater shells	Mr. John Berch. Mr. J. A. Thorpe.
1	Octopus	Mr. R. Cameron.
1	Do	Mr. E. T. Foley.
4	ARACHNIDA.	
1	Spider—Nephila sp. Do —Gasteracanthus sp.	Mr. A. Clarke.
1	Do —Mygale sp.	Miss B. de F. Spencer, Mr. J. W. Bardsley.
1	Do —Gasteracanthus sp.	Mr. E. Burns.
î	Gasteracanthus sp. (black) Spider—Epeira	Master W. Stephens. Mr. Frank Diles,
1	Do —Tholia sp. Do —Tarantula delena	Mrs. Rogers.
		Master E. Ramsay.
10	CRUSTACEA. Freshwater prawns - Palaemon sp.	Master A. B. Cox.
		Mr. E. M. Stephens,
10	Several freshwater cray-fish Astropasis	Captain Braithwaite.
1	Tree-crab—Birgus latro Small collection of Countries	Mr. K. H. Bennett, Mr. Adet,
16	Crabs	Mr. Bailey.
5	Star-fish Cuttle-fish	Mr. Lindsay Thompson.
2	Phyllosoma—Dacus sp.	
1	Palinurus huegeli	Mr. Woodbridge, Mr. H. Newcombe,
	***************************************	Mr. Fitzhardinge.
6	ECHINODERMATA. Echini—Strongylocentrotus erythrogrammus Star-fish—Astropecten	
1	Star-fish—Astropecten.	Mr. Jabez Joils, Mr. J. Brazier.
		ens of Branchel.
4	Chrysplides of Collectory 11	Mr. R. Bousfield.
10	Regules 6 Represent the Antheres encalypti	Mrs. Selkirk.
		Master W. Stephens. Mr. J. Morrison,
1		Mr. A. Jackson.
	Podneauthus as	Mr. C. Fuller, Mr. W. H. Paterson.
1		Dr. H. Blaxland.
î	Do Trion 1	Mr. F. Schweigert, Mr. W. Bullerent
9	Locusta as	Mr. W. Bullerant. Master W. J. J. Baker.
1	Catagorillan	Mr. ——— Mr. Adet,
1	centipede	Mr. H. G. Ward.
	and the second s	Mr. Robt. Thain.

INSECTA—continued,	DONOR.
1 centipede	Miss Banning.
1 grub, larva of Anthera eucalypti	Mr. G. H. Barrow. Mr. Thos. W. Platt.
1 centipede, Heterostoma sulcidens	Mr. G. H. Barrow.
1 moth	Mr. J. Kirke.
1 beetle, longicorn	Mr. A. H. Phillips, Mr. W. Kloster,
Larvæ of Pielus swainsonii	Mr. V. Waleh.
1 Phasma	Mr. J. White.
1 Extatostoma tiaratum 1 moth, Zeuzera sp.	Mr. Sydney Hyland, Mr. J. Dalgarno,
Nest of a hornet	Mr. H. Green.
1 longicorn	Mr. J. P. Thompson.
2 scorpions	Master E. Ramsay, Mr. Wenholz,
1 phasma	Mr. Wennoiz.
GEOLOGICAL SPECIMENS AND FOSSILS.	
1 fine specimen of Dendritic markings	Mr. W. Blunden.
1 piece of iron pyrites from the Diamond fields in South Africa	Mr, A. W. Baker.
Portion of lower jaw of Diprotodon found in well-sinking near town of Molong,	Dr. Andrew Ross,
"Boree Hollow" about 22ft. from surface on level ground	Dr. Andrew Ross.
	Mr. H. L. Steel.
2 silicified rocks	
2 specimens—porphyritic basalt 1 specimen of coal from Labuan, Borneo	Prof. Liversidge.
Specimens of copper ore from New Guinea	Rev. J. King.
1 piece of iron pyrites from Queensland	
Specimen of Globigerina Oose from the Atlantic, 2,400 fathoms  1 block of obsidian or volcanie glass from the Admiralty Islands.	Mr. A. S. Milnes. Commander Maturin, R.N.
1 piece of Noble opal	Mr. J. Reedford.
1 piece of Noble opal Specimen of fossil from Hunter River Gold-fields—Vertebraria Portion of lower jaw of a Macropus	Hon, Alex, Stuart.
Brown homatite (iron ore) in heavy spar—sulphate of baryta	Mr. Wm. Monney. Mr. S. Hall.
Gypsum and white clay, found about 50 miles back from Wilcannia (on the Darling,	Mr. J. W. G. Cox.
N, side,)	N. C.W.
Collection of minerals (small).	Mr. Sullivan, Mr. H. J. Young.
" "	arr arr of a sauge
ETHNOLOGICAL AND HISTORICAL SPECIMENS.	
A stone hatchet from the Fish River	Mr. K. H. Bennett.
Siamese writing on pandamis leaves.	Mr. Sydney Burdekin.
A collection of implements used by blacks in Northern Queensland, nine stone implements and ten other articles	Mr. Dunlop.
plements and fen other articles	Mr. Bettridge.
1 Turkish ,,	Mr. Richardson.
1 coin (\(\frac{1}{2}\) franc)	Mr. Carl Fernsten.
1 Swedish coin (th of a penny)	Mr. H. A. Ferslev.
1 blunderbuss	Mr. H. Small. Mr. Carl Fernsten.
1 iron pipe from Sweden 2 stone tomahawks found at Balmain, 5 ft. below the surface of soil	Mrs. Jane Holland.
1 silver coin, Queen Elizabeth, 1582	Mr. H. R. Curlewis.
1 torch of resin and alcerite nuts from the Duke of York Islands	Dr. J. C. Cox. Mr. Sullivan.
1 stone tomahawk Small collection of Solomon Island native weapons	The Officers H.M.S. "Lark."
Small collection ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,,	Inspector Lloyd.
1 piece of silk cloth	Mr. C. Allport. Mr. Henry Small.
2 clubs	att, menty commit
ZOOPHYTES.	Mr. Jabez Joils.
A coral A large branching gorgonia	Rev. W. W. Gill, B.A.
Fresh-water sponge	Professor Liversidge.
Large piece of gorgonia	Dr. J. C. Cox. Mr. W. A. Haswell,
6 Virgularia sp	MI. W. A. Haswell.
ANNELIDA.	Make C Cale date
1 sea-worm—Eunice gigas	Master C. Sedgwick.
LIBRARY.	
A paper by Professor Owen on some fossil remains of a gigantic land-lizard-	M. T. T. Phan
Megalania prisca, from Australia	Mr. J. J. Fletcher.

## APPENDIX VII.

LIST OF SPECIMENS COLLECTED BY THE MUSEUM EMPLOYES.

By J. A. Thorpe, Taxidermist.

Collection of Birds:—32 species—64 specimens.

Collection of Fish:—1 species—1 specimen.

By A. Morton, Assistant Taxidermist.

Collection of Fish:—47 species—120 specimens.

Collection of Birds:—1 species—1 specimen.

By J. A. Thorpe and K. H. Bennett.

Collection of Birds:—17 species—47 specimens.

By J. A. Thorpe and J. Brazier (Port Stephens).

Collection of Fish:—15 species—24 specimens.
Collection of Birds:—10 species—17 specimens.
Collection of Mammals:—1 species—1 specimen.

By E. P. Ramsay, Curator.

Collection of Birds:—3 species—3 specimens, Collection of Sponges:—1 species, 1 specimen.

By H. Barnes, Articulator. (From Wellington Caves, N.S.W.) Collection of Fossils :-

Lower rami of Thylacoleo.
 Right lower rami of Thylacoleo.
 Ulna of Thylacoleo.
 Radius of Thylacoleo.
 Portion of pelvis of large Kangaroo.

Portion of radius of large Kangaroo.

Third toe-bone of Kangaroo. Right incisor of Kangaroo. Righ ficisor of Kangaros. Rib of Diprotodon. Ulna of Diprotodon. End of humerus of Wombat. Humerus of Thylacinus. Portion of ulna of Thylacoleo. Femur of Thylacoleo. Portion of pelvis of Thylacoleo.

Portion of lower jaw of Kangaroo, Procoptodon. Right upper incisor. Left upper incisor. 2 Ribs of Lizard. Portion of upper jaw of Kangaroo. Toe-bone of Kangaroo. Molar-tooth of Kangaroo.

Specimens obtained with the trawl in Port Jackson.

Sygnathus cinctus.

4 Diadema sp. 2 Lepidotrigla papilio. Hippocampus novæ-hollandiæ. Ostracion sp.

Lophorneites sp. nov. 3 Europhus sp. 2 Hypnos subnigrum. 2 Monacanthus sp.

Pelvis of Kangaroo.

Cnidoglanis sp.

## APPENDIX VIII.

## LIST OF BOOKS RECEIVED IN THE MUSEUM LIBRARY DURING 1882.

## 1. Periodicals.

Transactions of the Zoological Society, vol. xi, part 6. Proceedings of Zoological Society, 1876, part 1, 1881, part 4, 1882, parts 1, 2.

Transactions of the Linnean Society, Zoology, vol. ii, parts

3, 4. Transactions of the Entomological Society, 1881, parts 4, 5,

Transactions of the Entomological Society, 1881, parts 4, 5, 1882, parts 1, 2.

Journal of the Geological Society.

Proceedings of the Geologists' Association, vols. vi, vii. Geological Magazine, Nov., 1881, to Sept., 1882.

Annals and Magazine of Natural History, Dec., 1881, to Sept., 1882.

The Ibis, Oct., 1881, to July, 1882.

Nature, Nov., 1881, to Oct., 1882.

The Athenæum, Nov. and Dec., 1881.

Philosophical Magazine, Dec., 1881.
Comptes Rendu, 1881 and 1882 to Aug.
Journal des Conchologie, Tome xxi, xxii, No. 1.
Bulletin de la Societe Imperiale des Naturalistes, 1871, parts Bulletinde la Societe Importation 1, 2, 3.
1, 2, 3.
Zoologischer Anzeiger, Nos. 94 to 114.
Zeitschrift für Wissenschaftliche Zoologie, Aug. 1882.
Archiv für Naturgeschichte.
Mittheilungen aus der Zoologischen Station Zu Neapel,

New Zealand Journal of Science, 1882. Hewitson's Exotic Butterflies, 35 parts. British Museum Catalogues, (Sec. A B to 28, C to 11, D to 16, E to 9, F to 2, Books to 24.)

## 2. BOOKS PURCHASED.

Sowerby's Thesaurus Conchyliorum, vols. 1 to 4. La Bonité Voyage autour due Monde, 2 vols. J. C. Alber's Die Heliceen nach naturlicher Verwandt-

S. C. Alber's Die Heilceen nach naturitiener Verwandt-schaft.

Tryon's Land and Fresh-water Shells of N. America, part 4.

Reise der Novara, Zoologischer Theil, 6 vols.

Philosophical Transactions of Royal Society, vols. 171, 172.

Royal Cornwall Polytechnic Association, 1879, 1880, 1881. Geological Record, 1877. Annales des Sciences Naturelles, Tome 9, 10, 11 and 12. Schimper's Traité de Paléontologie vegetale, Tomes 1 to 3 and Atlas.

and Atlas.

Agassiz, Revision of Echini, 2 vols.

"Nomenclator Zoologicus.

"Monographies d'Echinodermes vivants et fossiles.

"Iconographie des Coquilles Tertiaires.

"Memoire sur les moules de Mollusques.

"Etudes critiques sur les Mollusques fossiles.

Bleekers Atlas Ichthyologique.

Hincks's British Polyzoa, 2 vols, and atlas.

"Hydroid Zoophytes, 2 vols, and atlas.

Dillwyn's Catalogue of Shells, 2 vols.

Donovan's Natural History of British Shells, 5 vols.

Zeitschrift für wiss Zoologie, Band 35, heft 1 to 4.

Dr. H. Falconer's Palæontological Memoirs, 2 vols.

and Cantley's Fauna Antiqua Sivalensis, parts 1 to 9.

Dr. O. Feistmantel's Die Versteinerungen der bömhischen Ablagerungen, i, iii. Siebold's Fauna Japonica-Piscos, Reptilia, Aves, Mammalia.

Day's Fishes of India and Burmah. Menke and Pfeiffer Malakozoologische Blätter, 8 vols. Perry's Conchology.
Pfeiffer's Monographia Helicium Viventum, 8 vols.
Ehler's Die Borstenwurner (Annelida Chastopada)
De Koninck's Fauna du Calcaire Carbonifere de la
Belgique.

Koninck's Fauna du Calcaire Carbonifere de la

De Koninck's Fauna du Calcaire Carbonifere de la Belgique.

De Koninck's Monographie du genre Productus.

Playfair's Fishes of Zanzibar.

Garrod's papers on Zoology.

Voyage of H.M.S. "Challenger," vol. i.

Marsh's Odontornithes.

Pfeiffer's Monographia Pneumonopomorum viventum, 4 vols.

Fauna and Flora des Golfes von Neapel—Monograph, iii.

Fauna and Flora des Golfes von Neapel—Monograph, and iv.

Voyage au Pol Sud, D'Urville, 24 vols, 5 atlases.
Gaubry's Le Monde Animal dans les Temps Geologique.
Bulletin della Società Adriatica di Scienzi naturali, vol. vii.
Symons's Monthly Meteorological Magazine, vol. xvii.
Archives of Dermatology, vol. vii. no. 1.
Geological and Natural History Survey of Canada, Reports
and Maps, 1879-80.
Catalogue of Birds in British Museum, vols. 1 to 5.
Geological Survey of Victoria, Decades, ii, iv, v, vi, vii.
Beiträge zur Kenntniss der Flussfische Sudamerikas, ii, iii.

, zur Kenntniss der Fische Afrikas.
Brogniart Vegetaux Fossiles.
Binney's Terrestrial Air-breathing Molluscs of U.S.
Quaterfages Histoire Naturelle des Annélés, 3 vols and
plates.

plates.
Palæontology of New York, vol. 1 to 4, part 1.

## 2. Books Purchased-continued.

2. Books Pur Pfeiffer's Novitates Conchologicae, 5 vols. in 3. Phillipi Abildungen und Beschreibungen neuer oder wenig gekannter Conchylien, 3 vols. Günther's Gigantic Land Tortoises. Rang aud Souleyet. Histoire Naturelle des Mollusques Pteropodes. Royal Society's List of Scientific Papers, 8 vols. Tryon's Manual of Conchology, vol. 3. Palæontographical Society's publications, vol. 36. Martin and Chemnitz Conchylien Cabinet, 3 vols. Bellow's French and English Pocket Dictionary. Agassiz Pourtalés and Lyman—Echini, corals, &c., col-lected in dredging expedition of U-S. str. "Blake" Sowerby—Conchological Illustrations.

Wood-Index Testaceologicus.

Wood—Index Testaceologicus.
Donovan—Naturalist's Repository, 5 vols,
Rowley's Ornithological Miscellany, 3 vols.
Tenniwin's Histoire Naturelle Generale des pigeons, &c.,
vols. 2, 3.
Duclo's Monograph du Genr Olive et Colombelle.
Index to Zoological Society's proceedings, 1861-80, 2 vols.
Bronn's Klassen des Thier Reichs, 6 vols.

Forbes and Hanley's History of British Mollusca and their shells, 4 vols.

Gassie's Faune Conchyliologique de la Nouvelle Caledoni.

Hermansen Indicis generum Malacozoorum, 2 vols.

Dunker Novitates Conchologicae.

Zoological Record, vol. 17.

## 3. BOOKS PRESENTED.

Transactions and Proceedings of the N.Z. Institute, 1881. Journal and Proceedings of the Royal Society of N.S.W.,

vol. xv. Transactions of the Highland and Agricultural Society of

Transactions of the Highland and Agricultural Society of Scotland, vol. xiv.

From the Indian Museum, Calcutta—
Monograph of the Asiatic Chiroptera and Catalogue of
Bats in the Indian Museum, Calcutta, 1876.
Catalogue of Mollusca in Indian Museum, 1877.
Hand List of ",", 1878.
Catalogue of Mammalia in ,, 1881.
Annual Report for 1881-2.

From Professor Liversidge—
The Minerals of N.S.W, by A. Liversidge.
From the Museum, Madras—
Report of Major Bidie to Government of Madras on the working of the Govt. Central Museum, 1881-82.
From Government of Victoria—
Natural History of Victoria, by Professor M'Coy, Decades 1 to 7.
From Department of Mines—
Mineral products of N.S. Wales.
From the Government Printer—
Fish and Fisheries of N.S.W., by Rev. J. E. Tenison-Woods.

## APPENDIX IX.

# LIST OF SPECIMENS CURED AND MOUNTED AND OTHER WORK DONE BY THE TAXIDERMISTS AND ARTICULATOR.

### MAMMALS.

Pteropus sp.
 Monkey, Macacus sp.
 Pteropus poliocephalus.
 Mus decumanus (albino).
 Armadillo, Tatusia peba.

1 Manatus americanus.
1 Pteropus poliocephalus.
1 Didelphis sp
1 Mus decumanus (albino)
1 Sloth Monkey, Nycticebus sp.

Mongoose, Herpestes griseus. Slow Loris, Nycticebus tardigradus, Seal, Tralophus cinereus. White opossum, Phalangista vulpina. Javan Deer. Water Rat, Hydromys chrysogaster. Large Seal. Dugong. 1 Phalangista vulpina (albino).

## BIRDS.

Limosa uropygialis.

Trichoglossus concinnus.
Trichoglossus pusillus.
Lobipes hyperboreus.
Esacus magnirostris.

Numenius uropygialis. Hiaticula.

2 Rhitidoceros ruficollis. 3 Sericulus melinus.

3 Eopsaltria capito.

2 ,, magnirostris 3 Ibis rubra. 1 Platycercus pallidiceps.

1 Rollulus sp.
1 Astur approximans.
3 Red Ibis—Ibis rubra.
1 Tinnunculus cenchroides.

1 Podargus strigoides.
1 Aix galericulata.
1 Porphyrio melanotus.
21 Birds.

Casuarius australis.
Casuarius bennettii juv.
Parrot, Chrysotis ochrocephalus.
Falcunculus frontatus.
Ocydromus sylvestris.

australis.

Carpophaga rufigula. Cacatua eos.

Large Ray—Raia pastinaca.
Young Shark—Galeocerdo rayneri.
Flying Gurnard—Trigla polioneata.
Large Shark—Galeocerdo rayneri.
Monocentrus japonicus.
Skull of Balistes.

,, Scorpona. Small Shark—Galeocerdo rayneri jur.

Crossorhinus dasypogon. Large Schnapper—Pagrus unicolor. Plectropoma ocellata.

Aracana lenticularis.

2 Java Sparrows (albino).

Anas punctata.
Emu, Dromaius novæ-hollandiæ.
Nycticorax caledonicus.
Sula australis.
Alcyone azurea.
Hiaticula sp.

2 Acanthogenys rufogularis. 2 Melithreptus lunulatus. 1 Anas punctata. 27 Birds skinned.

3 Cacatua eos.

Turnix varius.

Malacorhynchus.

Egialites bicincta.

Chalcophaps.

Hiaticula bicincta.

Artamus leucopygialis.

Areolus viridis.

Plotus novæ-hollandiæ.
 Ægialites bicineta.
 Birds skinned.

Group of sand plovers.

Gymnorhina tibicen.

Domestic pigeon.

Procellaria.

1 Anas supercilliosa. 5 Birds skinned and cured.

## FISHES.

1 Elaps saurus. 1 Cheiloseyllium furvum.

1 Cheiloscyllum furvum.
1 Mugil grandis.
4 Aracana lenticularis.
2 Sea Mullet, Mugil grandis.
1 Zeus australis.
1 Platycephalus fuscus.
2 Perch, Therapon macleayi.
2 Perch, Ctenolates auratus.
1 Flying Gurnard, Trigla kumu.
2 Girella simplex.
Girella elevata.

2 Girella simplex. 1 Girella elevata.

## FISHES-continued. Cossyphus unimaculatus. Synaptura nigra. Hypnos subnigrum. Anguilla australis. Temnodon saltator. Sciena antarctica. Seriola grandis. Hemirhamphus intermedius. Angel Shark, Squatina angelus Caranx declivis. Anguma austrans. Crossorhinus sp. barbatus. Heterodontus galeatus. Large Oligorus macquariensis. Crossorhinus sp. Heterodontus galeatus. Chrysophrys sarba. Teraglin, Otolithus teraglin. 1 Heterodontus galeatus. 2 Oligorus macquariensis. 2 Ctenolates auratus. 1 Serrannus sp. 2 Copidoglanis sp. 2 Large Sun Fish Orthagorieus, mola. 1 Small Sun Fish. 2 Temnodon saltator. Ctenolates flavescens. Sole, Synaptura nigra. Glaucosoma scapulare. Red Rock-cod. Caranx declivis. Zeus australis. Sillago ciliata. Monacanthus. Ceratodus forsteri. Kathetostoma. Oligorus macquariensis. Scorpæna. 1 Heterodontus philippii. REPTILES. 1 Turtle. 1 Small Sea Turtle. 1 Carpet Snake, Morelia variegata. 1 Large Boa (constrictor?) 1 Large Diamond Snake, Morelia spilotes. CRUSTACEA. 1 Palinurus hugelii jur. SKELETONS. Balistes flavomarginata. (head only). Mongoose. Skull of a Pig. Albatross, D. melanophrys. Eclectus polychlorus of. Plotus nove-hollandie Ostrich, Struthio camelus. 1 Pterois Zebra. 1 Pterois Zebra. 1 Mongoose, Herpestes griseus. 1 Platypus, set up. 5 , fleshed. 1 Skull of Lotella grandis. Aboriginal, from Wellington. 1 Delphinus sp. 1 Manatus americanus. CASTS AND MOULDS. 13 Stone clubs. 2 Tasmanian skulls. 9 Stone clubs. 21 Stone implements for Adelaide Museum. 8 Casts of head and other bones of extinct Saurians, &c., framed and mounted for exhibition. faces after death. Radius Diprotodon, Casts of Fossils. Mould of reptile's teeth, lent by Mr. Wilkinson. casts of same. Zygomatic arch Diprotodon. Radius Humerus 1 Model of gold nugget. Tibia 6 Casts of "," 16 Moulds of fossil bones from Wellington Caves, Femur Part of lower jaw 72 Casts from same. 3 Moulds of Wellington fossils. 1 Mould of fossil tooth, reptile's. Upper incisor ,, Condyle of lower jaw ,, Rib. 3 Teeth of Molotherum. PHOTOGRAPHS. 1 Negative of a Shark, half-grown, Galeocerdo rayneri. 4 Negatives of Kangaroo teeth (fossil) Negative of Galeocerdo jur. ,, and toes (fossils). 22 Fish. 1 Negative of large Pggrus unicolor. 3 Prints of Natives (males) of Bouganville Island Whalebone Whale. Seals for Mr. Scott's Catalogue. Prints of Negative of Olistherops brunneus. Negatives of Thylacoleo jaws (fossil). Temnodon saltator. \* 2 28 Prints of same. Negative of Solea sp. nov. Negative of Solea sp. nov. Seriola grandis. pelvis of Kangaroo (fossil). Negatives of upper jaw of Thylacoleo. Fossil Bones from Wellington. Fossils Wellington Caves. Whalebone Whale. Whale and Fish. 5 10 2 Negatives of Fish. 2 Negatives of Fish. 2 Porpoise, 3 Prints of Wellington Caves. 4 "small Whale from Manly. 3 "Porpoise, Delphinus. 2 Plans of proposed extension of Museum (mounted). 2 Negatives of hands of Seal. 2 "Sun-fish from Manly. 7 Tenmodon saltator and Calyonimus sp. 1 Negative of Lophonectes sp. 11 Prints of Fishes. 2 Negatives of Fish. 3 Negatives of Fish. 5 "Large Sun-fish. 6 Prints of Fish and large Sun-fish. 12 ', Fossis 10 ',' Fossis 20 Prints of ',' 26 ',' Wellington Fossils. 2 Negatives of Fish, Arripes salar. 1 Negative of Trachichthys sp. 1 ',' Cossyphus unimaculatus. 2 Negatives of Plectropoma annulatum. 1 Negative of Scapula of Echidna (fossil). 1 ',' Tibia of Emu ',' 1 ',' Echidna toes ',' 1 ',' teeth of Macropus ','

Insects.
1 Phasma sp. (Orthoptera).

## APPENDIX X.

## REPORT OF THE COMMITTEE ON THE EXPLORATION OF CAVES AND RIVERS.

To the Trustees of the Australian Museum,-

Gentlemen,
Your Committee entrusted with the Exploration of the Caves and Rivers of Australia have now to report that Your Committee entrusted with the Exploration of the Caves and Rivers of Australia have now to report that during the year 1882 the work of exploring the caves and searching for fossil remains was continued, under the supervision of the Curator. The Caves near Wellington have been extensively examined, new openings made, and new caves and unexpected extensions of old caves discovered. On one of his visits Mr. Ramsay remarks:—"I found the hole known as the Well quite dry, and at a depth of 27 feet I met with a ledge or shelf which extends in one direction about 14 feet by about 6 or 8 feet wide; this shelf runs under an archway for about 4 or 5 feet, and then another well-like hole is met with, containing water over 10 feet deep. I believe there are extensive caves leading from the well, but these could not be reached without pumping. I found the entrance of cave No. I to be nearly closed with debris, and fast filling up with soil falling from the surface. As the water had receded some considerable distance, I was enabled to get about 100 feet further than on previous occasions. The walls are slanting, leaning over to the centre, forming a \( \text{a shaped roof, almost at a right angle, underneath the apex of which stalactites are forming. The highest part of the roof is about 14 feet, from which it becomes lower till it reaches the water. Further exploration was impossible, the water here being 14 inches and the deposit of soft mud over 4 feet in depth."

Mr. Ramsay also mentions another cave yet unexplored which had been entered by one man, and was said to contain extensive chambers.

extensive chambers.

A little excitement was caused by the discovery in one of the hitherto unknown caves of two human skeletons, which were however the remains of whites, and not aborigines, and evidently the sole remaining record of some tragedy in the early days of the Colony. A few remains of aborigines have been met with here and there—mostly teeth, and toe and finger bones—but these are believed to be of recent origin.

A number of the original specimens obtained, and casts, photographs, &c., of others have been sent to Europe for

determination.

In the year 1881 the Richmond River was explored, the result of which has already been reported; and during 1882 the Committee turned its attention to the Burkekin and Mary Rivers, in Queensland.

An expedition under the charge of Mr. Alex. Morton, was fitted out and despatched to Townsville for this purpose.

The following is Mr. Morton's narrative of his proceedings :-

Gentlemen,

Gentlemen,
Acting under instructions I proceeded to the Burdekin River, Queensland, on 7th June, 1882, for the purpose of exploring the rivers and fresh-water lagoons, and securing specimens of the fishes found in those waters, and specially to search for any allied to the ganoid form, taking with me boat, nets, and all necessary appliances.

At Brisbane I presented the official letters with which I had been furnished: First to the Collector of Customs requesting that all my things might be exempt from duty; the request was granted. Second, to the Surveyor-General, who kindly gave me letters to the various surveyors in the northern district. Third, from the Minister of Usatice, Sydney, to the Minister of Works, Brisbane, asking that I might be supplied with a free railway pass. The Minister very kindly issued one for all the lines in Queensland for a period of six months. Fourth, from the Inspector-General of Police, Sydney, to the Inspector of Police, Brisbane.

I arrived at Townsville on the morning of the 14th June, but owing to the inadequate means of landing goods from the steamers it was not till the 17th that I had my goods put on shore. I found then that there would be no vessel leaving for the Burdekin River within ten days. My orders were to engage one or two Europeans as fishermen, but white labour being very scarce and wages high I found it was impossible to do so, and therefore took the advice of Messra, Aplin, Brown, & Co., who had been appointed my agents, to engage two Chinese fishermen. I was enabled to do this at 25s, per week and rations. I got stores ready for the camp and left Townsville on the 27th, in a small steamer for Plantation Creek, a branch of the Burdekin. I arrived there on the 29th, and pitched my camp on the banks of the creek. Plantation Creek is a tidal water, 10 miles long. We got the nets ready and set the tow line—a line with a number of hooks of various sizes attached—across the creek, but were not successful, owing to the great depth. Owing to the banks of Lillesmere Lag

taking all the bait.

After giving the lagoons a fair trial we made arrangements to move to the main stream. I found that the distance to the mouth of the river was by water about 35 miles, and by land about 18. Mr. Macmillan strongly advised me to go overland, and kindly placed at our disposal a team of eighteen bullocks to take the boat and camp, and land us about 15 or 20 miles from the mouth of the river, near the falls. After some very rough travelling we arrived at the part of the Burdekin where I had decided to pitch the camp. The Burdekin River at this place is about ‡ of a mile wide. The banks on the side where we were camped were about 20 feeth high, and when flooded the river rises to about 20 to 30 feet over them. The bottom is clear sand and gravel, with little food for fishes. We found the river at this place running too rapidly to fix the trammel net, and in only two or three places could we use the seine net. A very few varieties of fish were obtained here. From this we moved nearer the mouth of the river. At this part we obtained a very large collection of various salt-water specimens, as also two fine dugongs, male and female. After spending about six weeks in this district we left for Townsville, where I received instructions to proceed inland to try the head-waters of the Burdekin, and, finding that Adams would be sufficient assistance. I discharged the Chinamen.

where I received instructions to proceed inland to try the head-waters of the Burdekin, and, finding that Adams would be sufficient assistance, I discharged the Chinamen.

Leaving Townsville, we went by train to the crossing of the Burdekin, about 240 miles above tidal influence, and found the river running very rapid and strong; we used the trammel net, traps, and dynamite, and collected about a dozen species of fish. Two or three species are new, and one, Mr. Macleay says, is a new genus. On our return to Townsville I received instructions to take Adams, boat, and nets to Maryborough, and try the waters in that district. We arrived there on 28th October, and proceeded to the head-waters of the Mary River, where we jecured some fine specimens of Ceratodus and a few other varieties of fish, but could not find any trace of the ganoid form referred to in Mr. Ramsay's instructions. Leaving Adams here I went inland to Gayndah, where I had been informed one of the ganoid forms referred to had been obtained. At this place I met with an old resident, who for the last twenty-five years had been engaged in fishing. He informed me that he caught the rare fish Ompax spatuloides some two years back, but it was only once he had met with it. The river I found was not workable with nets, owing to its being covered with a mass of weed. I was informed the months of June, July, and August were the only months in which it could be worked successfully. While at this place I got the following interesting information from this man with regard to the breeding and spawning of the Ceratodus. He states that he found them going in pairs during the months of June, July, and August, and at a depth of from 6 to 8 feet. They make slight indentations on the bottom (mostly mud), in which they lay their spawn, the male and female fish lying on either side. When guarding their spawn he states they are not easily disturbed, and when disturbed they merely rise near the surface. He also states they frequent the same beds yearly. The spawn he descri

it and keeping the young for some two or three weeks. After spending a few days at Gayndah I returned to the camp on the Mary River, where I received a telegram to proceed to Frazer's Island, Wide Bay. I removed to Maryborough, and from there proceeded to Frazer's Island, where I remained about ten days, not getting a very large variety of specimens, and from there proceeded to Frazer's Island, where I remained about ten days, not getting a very large variety of specimens, on my return to Maryborough I received another telegram to return to Sydney, and bring back Adams and the boat. The Maryborough on the 12th December in the "Queensland," and transhipped to the "Quirang" at Brisbane, arriving at Sydney on the 19th, having been absent about six months.

The specimens collected during the trip are, a large collection of fresh-water fishes, an extensive collection of saltwater specimens, mollusca, tortoises, fresh-water shells, and sponges, numbering from 2,000 to 3,000 specimens, which water specimens, mollusca, tortoises, fresh-water shells, and sponges, numbering from 2,000 to 3,000 specimens, which have not all been determined as yet. Accompanying my report is a list of the specimens that are determined. In conclusion, I would suggest that the following gentlemen be thanked for the very great kindness and assistance. In conclusion, I would suggest that the following gentlemen be thanked for the very great kindness and assistance shown to me during the expedition, viz., Messrs. A. Macmillan, Graham, Young Bros., Burdekin district; and Messrs. Ramsay Bros., Maryborough district.

To the Trustees, Australian Museum, Sydney, 29th March, 1883.

The expenses connected with the explorations entrusted to your Committee have been defrayed by sums voted by Parliament, of  $\pm 600$  in 1881, and  $\pm 600$  in 1882.

The following is a summary of the outlay of this money:-£1,210 18 0

JAMES C. COX.
A. LIVERSIDGE.
C. S. WILKINSON.

## APPENDIX XI.

# LIST OF THE PRINCIPAL SPECIMENS OBTAINED AT THE WELLINGTON CAVES, 1882.

Portion of lower jaws of Wombat.
,, of scapula of Wombat
,, of Thylacine bones.

Pelvic bones of gigantic extinct Kangaroo (palorchestes sp.)
Portion of bones of large Lizard,
of large Emu.

of a gigantic Echidna.

nd a large number of other bones, duplicates of previous collections, and others not yet determined, viz., about thirty ecies of Mammals, Reptiles, and Birds, comprising about 10,000 separate bones.

## LIST OF THE PRINCIPAL FISHES COLLECTED DURING EXPEDITION TO QUEENSLAND.

## Fresh-water Specimens.

Ceratodus forsteri. Oligorus sp.
Belone krefftii.
Anguilla sp. Elotris apros.
Brisbania stageri. Chatoessus erebi. Lates nov. sp.

Canosilurus australis. Neosilurus hyrtili. Apogon nov. sp.
Therapon truttaceus.

,, sp. Aristes caviceps? Elops saurus. Lates?

probably new genera.
Tortoises, Shells—several species.

Salt-water specimens—a number of species have not yet been determined.

Chrysophrys sp. Sphyrcena sp. Mugil waigiensis, ,, sp.
Polynemus tetradactylus. Belone krefftii, Scatophagus sp. Drepane punctata, Platycephalus sp. Chatoessus erebi.

Caranx georgianus. Sillago ciliata. Hemirhampus sp. Monacanthus sp. Anguilla sp. Lates nov. sp. M. Peroni. M. Grandis, Thynnus sp.

1883.

## NEW SOUTH WALES.

# TECHNOLOGICAL, INDUSTRIAL, AND SANITARY MUSEUM.

(REPORT OF THE COMMITTEE OF MANAGEMENT FOR 1882.)

Presented to Parliament, pursuant to Act 17 Victoria, Ao. 2, section 9.

To His Excellency the Governor and Executive Council,-

The Trustees of the Australian Museum, incorporated by the Act 17 Victoria No. 2, have the honor to submit to your Excellency in Council, in accordance with the 9th section of that Act, this the Third Annual Report of the Committee of Management of the Technological, Industrial, and Sanitary Museum.

- 1. The business of the Museum has been conducted by the same Committee as in the previous year, namely, Mr. Alfred Roberts, M.R.C.S., E. (Chairman); Professor Liversidge, F.R.S.; and Mr. Robert Hunt, F.G.S., Deputy-Master of the Mint. Mr. J. H. Maiden has continued his work of classifying and arranging the Museum collections. On the 14th August the Acting-Secretary, Mr. C. R. Buckland, was dismissed, the secretarial work thenceforward devolving upon Mr. Maiden, who, on the 1st October, was appointed Curator and Secretary. This action was taken on it being discovered that Mr. Buckland (who also held the office of Secretary to the Australian Museum) had appropriated to his own use funds of this Museum to the extent of £240. Instructions were immediately given for his arrest, but up to the present time his whereabouts remains unknown.
- 2. It is with profound regret that the Committee report the almost total destruction of the Museum by the burning of the Garden Palace, the whole of the south-western portion of which it occupied. The heaviest of the iron specimens were alone saved, and many of these received considerable injury by the fire. A careful, but approximate estimate of the damage sustained by the Museum is £10,914 19s. 9d. It would be almost impossible to assess the money value of some of the collections, and their loss (especially that of the magnificent series of ethnological specimens) is irreparable.

The more important books and papers belonging to the Museum, kept in an iron safe manufactured in this city, were totally destroyed.

The Museum was in an advanced state of preparation, and would, in the ordinary course of events, have been thrown open to the public about the 1st December, 1882.

3. Immediately after the destruction of the Garden Palace, application was made to the Government for the unoccupied portion (affording a floor-space of 9,375 square feet) of the Agricultural Hall in the Outer Domain. The application having been acceded to, such specimens as had been recovered from the ruins of the Garden Palace were removed thither, and the task of re-forming the Museum commenced. Many specimens have already been received, and numerous exhibits from manufacturers and others have been promised. Much sympathy has been expressed by many contributors to the original collection, from whom numerous articles have already been received, while a large number have promised exhibits, which are expected to arrive shortly. The work of fitting up the Agricultural Hall for the reception of specimens and making arrangements for their display is being rapidly proceeded with, and the Committee hope that the Museum may be ready for the public about September next.

- 4. Circulars setting forth the aims and scope of the Museum and appealing for specimens have been prepared, and forwarded to manufacturers and others throughout the world.
- 5. The gentlemen whose names here follow have kindly consented to act as a British Committee for the purpose of securing specimens for the Museum:—The Honorable Sir Saul Samuel, K.C.M.G., Agent-General for the Colony; Dyce Duckworth, Esq., M.D.; M. Berkeley Hill, Esq., M.B.; J. H. Roberts, Esq., F.R.C.S.; and Mark H. Judge, Esq., A.R.I.B.A., Curator of the Parkes Museum of Hygiene. Through the exertions of this Committee twenty-three cases of selected exhibits have, up to the present, been consigned to the Museum, and more will doubtless follow.
- 6. The following revised synopsis of the proposed contents of the Museum has been circulated throughout the world:—

"This Museum is intended to occupy a similar position and fulfil the same purpose in this Colony which the South Kensington Museum, the Bethnal Green Museum, the Museum of Practical Geology, the Patent Office Museum, and the Parkes Museum of Hygiene do in London. To this end it is intended to collect together typical collections of all materials of economic value belonging to the animal, vegetable, and mineral kingdoms, from the raw material through the various stages of manufacture to the final product or finished article ready for use.

"It is intended that the following shall be more or less completely represented:-

- Animal products and specimens to show the methods followed in their preparation and manufacture, their uses for clothing, textile fabrics, domestic and ornamental purposes, their applications in pharmacy, dyeing, perfumery, &c.
- Vegetable products, from the raw material through the various stages of manufacture to the finished fabric or other article. This section will include gums, resins, oils, woods, fibres, tans, dyes, drugs, perfumes.
- 3. Waste products, whether of animal, vegetable, or of inorganic origin, with illustrations of their uses.
- 4. Foods, animal and vegetable, their constituents, and their adulterations. Dietary tables and information concerning the chemical composition, and other important particulars regarding the human foods of the world will be displayed.
- 5. Economic entomology. The specimens will be so arranged as to enable the public to discriminate between insects which are injurious to man and those which work for his benefit, and to show the insects in all stages of growth, and specimens of the materials which they have destroyed or injured. Where it is impossible to exhibit actual specimens, the life history of the insects in question will be illustrated as far as possible by models and diagrams.
- 6. Economic geological specimens, showing the ores of the metals, their manufacture and uses; mineral combustibles; building and ornamental stones; lithographic and other stones; clays, cements; substances employed in the manufacture of glass, pottery, porcelain; pigments of inorganic origin, &c. Architectural and building examples will be associated with this collection; also precious stones, and specimens to illustrate their artificial production and imitation. The uses of many of the specimens in this collection will be shown practically by incorporating them with the building itself in the form of pillars, doorways, window-sills, by laying down portions of the floor, steps, or inlaying the walls of the Museum.
- 7. Chemical and pharmaceutical products.
- 8. Educational apparatus and appliances, school fittings, books, maps, diagrams, &c.; collections of scientific apparatus and of specimens for high schools and colleges. A collection of this kind is of the greatest possible value to teachers, who can thus see and examine everything required in a school, and can directly compare the merits of the different books, fittings, and appliances as supplied by different makers and recommended by various authorities.
- Sanitary and hygienic appliances and systems, adapted to public works, domestic architecture, personal health, clothing, and habits of life.
- Mining, engineering, and machinery; models, plans, drawings, tools, machinery, and appliances. Metallurgical products.
- 11. Military and naval armaments, ordnance, fire-arms, &c. Models of ships of war and mercantile vessels.

- 12. Agricultural tools, appliances, and machinery; also soils, manures, &c. In this section will be included mineral fertilizing substances, e.g., gypsum, phosphate of lime, marls, shells coprolites, &c., not manufactured.
- 13. Specimens and series of specimens illustrative of miscellaneous manufactures.
- 14. Models, drawings, and descriptions of patents; special attention will be paid to those which are likely to prove of use in the Colonies, or which have been taken out in Australia.
- 15. Ethnological specimens.
- 16. Samples of historical furniture and of artistic workmanship in iron and other metals. Ceramics, pottery, and porcelain, &c. (exclusive of sanitary appliances).
- 17. Photographic, electrotype, plaster, and other reproductions of examples of art workmanship where originals are not to be obtained.
- 18. Exhibition catalogues, trade journals, price lists, and descriptions of new processes or industries. The information afforded to manufacturers, merchants, and tradesmen by a collection of this kind will be of incalculable value. A library and reading-room will constitute important adjuncts to the Museum.
- "Sanitary appliances and other apparatus will, wherever practicable, be exhibited in action.
- "Sufficient concise information will be attached to each exhibit or group to satisfy without wearying the visitor, a full description being given in the catalogues. The prices paid for specimens and their commercial value will be indicated whenever possible, as it is a matter in which visitors usually take very great interest. The value of gifts will never be affixed where donors express wishes to the contrary."
- 7. Advertisements soliciting donations to the Museum have been inserted in the following English, American, and Continental Journals:—"The British Trade Journal," "Journal of the Society of Arts," "The Scientific American," "The American Journal of Science," "Dingler's Polytechnisches Journal," "Moniteur des Interêts Matériels."

Kindly and sympathetic notices of the Museum have been observed in the literary columns of numerous leading journals.

8. The Committee beg to add to this their Report the following Appendices:—I. The Annual Balance-sheet; II. A List of Books purchased for the Museum Library; III. A List of Books and Periodicals acquired by donation; IV. A List of Specimens presented to the Museum; V. A List of Specimens, Apparatus, &c., purchased.

The record of attendance at meetings of the Committee was destroyed by fire. Each member of the Committee of Management has devoted much of his time and energy to the work of forming the Museum.

The Common Seal of the Museum is affixed by order of the Board, this third day of April, 1883.

ALFRED ROBERTS,
ARCHD. LIVERSIDGE,
ROBERT HUNT,

Members
of
Committee.

(L.S.) ALFRED STEPHEN,

Crown Trustee and Chairman.

J. H. MAIDEN, Curator and Secretary.

## APPENDIX I.

Balance-sheet of the Technological, Industrial, and Sanitary Museum, for the year ending 31st December, 1882.

RECEIPTS.  1882—December 31. To Receipts from the Trustees of the Australian Museum	3,800	3 1	By Salaries and wages	68 80 28 54 52 431 18 129 6 3 45	7 4 8 6 5 114 10 5 12 11 11 11 11 11 11 11 11 11 11 11 11	61677630204631 0018
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Particulars of this item can be given only from the date of the Garden Palace fire.

## APPENDIX II.

Last of Books purchased during 1882.

A Dictionary of Chemistry. 9 vols. (Watts.)
Elements of Chemistry. 3 vols. (Miller.)
A Treatise on Chemistry. 3 vols. in 4. (Roscoe and Schorlemmer.) A Manual of the Chemistry of the Carbon Compounds. (Schorlemmer.) Industrial Chemistry. (Payen, edited by Paul.) Introduction to Commercial Organic Analysis. Select Methods in Chemical Analysis. (Crookes.) Inorganic Chemistry. (Kemshead.)
Modern Organic Chemistry. (Wheeler.)
Description of the Chemical Laboratories at the Owen's College, Manchester. (Roscoe.)
Foods; their Composition and Analysis. (Blyth.) Food and its Adulterations. (Hassall.) Foods. [International Scientific Series.] (Smith.)
Wines and other Fermented Liquors. (Sheen.) Elementary Treatise on Natural Philosophy. (Deschanel; translated by Everett.)
Elementary Treatise on Physics. (Ganot; translated by Atkinson.)
Elements of Physics. (Arnott.) Constants of Nature. (Clarke.) The Spectroscope. (Lockyer.) Studies in Spectrum Analysis. (Lockyer.)
Studies in Spectrum Analysis. (Schellen; translated by the Misses Lassell.)
Principles of Mechanics. (Goodeve.)
Strength of Materials. (Anderson.) Railway appliances. (Barry.) Workshop Appliances. (Shelley.) Electro-metallurgy. (Gore.) A Treatise on Watch-making, past and present. (Nelthropp.) The Industrial Arts. (South Kensington Museum Hand-book.) Large Catalogue of Majolica in South Kensington Museum. Keramic Art in Japan. (Audsley & Bowers.)
Official Report on the Manufacture of Paper in Japan. (English Blue Book, 1871.) British Manufacturing Industries. 14 vols. (Stanford.)

Manual of Colours and Dye-wares. (Slater.)

A Dictionary of Terms. (Weale.)

A Catalogue of modern Works on Science and Technology. (Bartley.)

Waste Products and Undeveloped Substances. (Simmonds.) The Commercial Products of the Sea. (Simmonds.) Animal Products. Animal Products. (Simmonds.)
Economic Entomology—Aptera. (Murray.)
A general System of Botany. (Le Maout & Decaisne; translated by Mrs. Hooker.)
The Vegetable Kingdom. (Lindley.)
The Treasury of Botany. 2 vols. (Lindley & Moore.)
Botanical Dictionary. (Paxton.) (Simmonds.) The Plant. (Schleiden.)
Cryptogamic Botany. (Berkeley.)
Elements of Geology. (Lyell.)

Principles of Geology. 2 vols. (Lyell.) Hand-book of Geological Terms. (Page.)

Anthropology. (Topinard; translated by Bartley.) Biology. (Letourneau; translated by Maccall.)

Notes on Building Construction. 3 vols. (Rivingtons.)

Observations on the Construction of Healthy Dwellings, (Galton.)
The Plumber and Sanitary Houses. (Hellyer.)
French and English Dictionary. (Contanseau.)
German and English Dictionary. 2 vols. (Flügel.)
Italian and English Dictionary. 2 vols. (Millhouse.)

Science and Commerce; their influence on Manufactures.

Duties and Charges on Shipping in Foreign Ports. (Urquhart.) Collection of Revised Statutes of Ontario. (Kingsford.)

Repertorium der Technischen Literatur. (Schubarth.)

Lexicon der Farbwaaren und Chemikalienkunde. (Springmuhl.)

Anfangsgründe der Allgemeinen Zoologie. (Morse.) Report of H.M. Commissioners for the Paris Exhibition, 1878. 2 vols.

Hand-book to the British-Indian Section, Paris Exhibition, 1878. (Birdwood.)

Journal of the Franklin Institute, Philadelphia. Vols. c, c1, c11, c11, c11, c11, Bulletin du Musée de l'Industrie de Belgique. Tomes 59, 61-68.

Revue Scientifique. 3 vols., 1869-73.

Also, 243 publications from the Chevalier Jervis, Turin, Italy, comprising Exhibition literature, catalogues, reports, monographs, statistics, awards, &c., from the London International Exhibition of 1851 to the Turin Industrial Exhibition of 1872.

## APPENDIX III.\*

List of Books, &c., presented to the Museum during the year 1882.

1. From the Trustees of the Public Library, Museums, and National Gallery of Victoria, Melbourne:-

Australian Birds. (Chart.) Australian Snakes. (Chart.)

Barry, Sir Redmond-

1. Address on Opening of School of Mines, Ballaarat.

2. Address on Opening of Free Public Library, Ballaarat East.

3. Address to the Workmen employed in building the Great Hall of the Melbourne Public Library

4. Inaugural Address to the Members of the Victorian Institute.

5. Lecture on Architecture, Sculpture, and Painting.
Beilby, J. Wood. Reasons suggestive of Mining on Physical Principles for Gold and Coal.
Bleasdale, Rev. J. I. New Industries.

Castelnau, Count :-

On a new Ganoid Fish from Queensland.
 On several new Australian fresh-water Fishes.

3. The Ichthyology of Port Jackson. Notes on the Edible Fishes of Victoria.
 Researches on the Fishes of Australia.

Ellery, R. L. J., F.R.S. Results of Meteorology, &c. 5 vols. Exploration Committee of Royal Society of Victoria. Progress Reports and Final Report. Gold-fields of Victoria.

Hayter, H. H.:-

1. Notes on the Colony of Victoria. 2. Victorian Year-book. 6 vols.

McCoy, Professor:

Prodomus of the Palæontology of Victoria, Decades, 11-v1.
 Prodomus of the Zoology of Victoria, Decades, 1-v.

London International Exhibition of 1862:-

1. Official Catalogue, Fine Art Department. Industrial Department. Do.

Mueller, Baron von :-

1. Eucalypts of Australia, Dec., 1-viii.

Fragmenta Phytographiæ Australiæ. Vols. II-VIII, XI.
 Index Perfectus ad Caroli Linnæi Species Plantarum.

4. Introduction to Botanic Teaching.

Native Plants of Victoria.
 Papuan Plants.

7. Select Plants.

Neumayer

1. Discussion of Meteorological and Magnetic Observations. Results of Meteorological and Nautical Observations.
 Paris Exhibition, 1878. Report of the Victorian Commissioners.

Patent Office Publications:

Abstracts of Specifications relating to the Preservation of Food.
 Abstracts of Specifications of Patents, Ac. to Bu., 1854—66.
 Do do Metals, Pts. 1 and 2.

Patents and Patentees, 1854—66.
 Do do Indexes, 10 vols.

Do

Pearson.

<sup>\*</sup> Appendices III and IV are doubtless somewhat incomplete, owing to the destruction of all Museum records prior to September 22, 1882. It is particularly requested that omissions may be notified to the Curator.

Pearson, Charles H. Report on the state of Public Education in Victoria. Public Library, Museums, and National Gallery 1. Industrial Museum, Catalogue of Rocks. do Timbers. Lectures B, C, and D. Do 3. Do Reports and Papers. 4. Do 5. Do Rules and Regulations. 6. National Gallery, Catalogue of Pictures. Do do Statues. 8. Do do Ethnotypical articles.
9. Public Library, Catalogue of Books, 1880. 10. Reports of Trustees, 1870-1, 1871, 1872, 1875-81. Rosales, Henry. Essay on the origin and distribution of gold in quartz veins. Shillinglaw, J. J. Historical records of Port Phillip. Smyth, R. Brough. Aborigines of Victoria, 2 vols. Story, William. Essay on the Agriculture of Victoria. Victorian Government, Prize Essays, 1860. 2. A valuable collection of publications of the Geological Survey of India, from the Government of India, through H. B. Medlicott, Esq., M.A., F.R.S., Superintendent of the Survey. The donation consisted of upwards of one hundred volumes, and included, amongst other works:— Memoirs of the Geological Survey of India. Do do Palæontologica Indica. Records of the Geological Survey of India.

3. From the Council of the British Association for the Advancement of Science:— Twenty-one volumes of Reports of Meetings of the Association. 4. From the Council of the Mineralogical Society of Great Britain and Ireland:

The Mineralogical Magazine and Journal of the Society. 5. The following Calendars have been received: University of Durham College of Physical Science, Newcastle-upon-Tyne. University of Otago, New Zealand. Canterbury College, do School of Mines, Ballarat, Vietoria, together with numerous Reports, &c., referring to that 6. Large exhibits of Educational works have been received from the following firms:—
Messrs. W. and A. K. Johnston, Edinburgh; Messrs. George Philip and Son, London and Liverpool. 7. From the Government Printer, Sydney: Official Record of the Sydney International Exhibition, 1879. Select extra-tropical plants, by the Baron Ferd. von Mueller. Report on certain Museums for Technology, Science and Art, by Professor Liversidge, F.R.S. Estimates-in-Chief for 1883. 8. The Publishers of the following Journals have generously placed the Museum upon the free list:— American Monthly Microscopical Journal (New York). American Bookseller (New York). Boot and Shoe Trades' Journal. Bullettino Telegrafico (Rome).

Bookseller. British Trade Journal. Fireman.

> Ironmonger. Index Medicus (New York).
> Journal of Forestry.

Lumière Electrique (Paris). Library Journal (New York). Literary News (New York).

Metal.

Manufacturer and Builder (New York).

Martineau and Smith's Hardware Journal (Birmingham)
Publishers' Weekly (New York).
Paper-makers' Monthly Journal,
Paper-makers' Circular.
Plumber and Decorator.

Scientific American (New York). Symons's Monthly Meteorological Magazine. Telegraphic Journal and Electrical Review.

9. The Publishers of the following have been good enough to occasionally forward copies of their Journals

Colburn's United Service Magazine.
Druggists' Circular and Chemical Gazette (New York).

Engineering and Mining Journal (New York). Jeweller and Metal-worker.

Leather Trades' Circular.
Paper Consumers' Circular.
Textile Manufacturer (Manchester).

10. The Ironmonger, for the years 1880-1, bound in 4 volumes; also the Ironmongers' Diary and Text Book, for the years 1881-2-3, from the publisher of the Ironmonger.

## APPENDIX IV.\*

List of Donations of Exhibits received during 1882.

From the Patent Antiseptic Co., Edgware Road, London, W .:-

Model of the apparatus and sample of the disinfectants employed by the Company.

From Professor Barff, M.A., London, and George Bower, Esq., St. Neots, Hunts:

Four fine iron-castings, treated by the Bower-Barff "rustless-iron" process.

From Miss Blaxland, Sydney

Large Burmese stone idol.
From John Bell, Esq , Southwark, London, S.E., and Manchester and Glasgow:— A series of specimens (in case), illustrative of the uses of asbestos.

From Messrs. John Bolding & Sons, Grosvenor Works, South Molton-street, London, W :—
One water-waste preventer and flushing eistern.
One "National" eloset.

From Messrs. Chance Brothers, Soho Works, near Birmingham :-

Samples of the materials used, and series of specimens illustrating the manufacture of crown and sheet glass.

From Messrs. Doulton & Co., Lambeth Potteries, London, S.E.:

A series of specimens illustrative of the processes in the manufacture of an earthenware vase.

From J. E. Ellison, Esq., Leeds:

Samples (complete) of his patent "Conical Ventilators."

From R. Renton Gibbs, Esq., St. James's Works, Mill-street, Liverpool:—
One patent furnace for heating-apparatus.

One patent fire-grate, coil, and front.

From Messrs. Hayward Tyler & Co., 84 and 85, Upper Whitecross-street, London. E.C. :-

One Full-flushed valveless closet, complete, with basin, &c. From Messrs. Thee & Horne, 31, Aldermanbury, London, E.C.

Specimens of Balmain's patent "Luminous Paint," in water and oil, also sample of "Iron Paint." Life-buoy and board (framed and glazed), treated with the paint, to display its properties.

From the Executive Commissioner for Japan at the Sydney International Exhibition, 1879, through the

Honorable F. B. Suttor:

A large collection of specimens from Japan, comprising ethnological specimens, manufactures (furniture, paper, fish-hooks, artificial flowers, &c.), vegetable products in bottles, &c.

From the Director of the Royal Botanic Gardens, Kew, London:—

One case containing 102 economic botany specimens.

From Thomas Lloyd, Esq., Winchester:—
Three patent exhaust ventilators, model of ventilating shafts, with patent joint.

From Messrs. Mason Brothers, Sydney:

Samples of the first cotton and tobacco grown in the Solomon Islands,

From the Morgan Crucible Co., Battersea, London:—
The large and valuable exhibit of this Company at the Sydney International Exhibition, comprising plumbago and fire-clay crucibles, muffles, &c., &c.

From Messrs. Noble & Co., 2, Savage Gardens, Tower Hill, London, E.C.:

A large exhibit (with show-case complete) of "Malt Extract."

From Messrs. J. Purnell & Son, 15a, Kensington Place, Page-street, Westminster, S.W.:-

One patent water-waste preventer, complete.

From the Honorable the Minister for Public Instruction, Sydney:-

Nine cases containing the complete set of apparatus to illustrate Mr. Thomas Twining's "Science made Easy," Course of Lectures.

From the Honorable the Chief Secretary of South Australia:—

Twenty-five large photographs of public buildings in Adelaide.

From the Surveyor-General of South Australia:-

One case of maps and plans. From the Surveyor-General of New South Wales:—

A large number of maps (selected from those prepared in his Department), mounted complete.

From Messrs. Archibald Smith & Stevens, 48, Leicester Square, London, W.C.
Patent "Janus" door-springs, casement-fastening, sill-bar, buffer-spring, and door-stops. Specimen set of "Binate" lock-furniture and lock. Several of these specimens are fitted into wooden frames, and form complete working models.

From Thomas Twining, Esq., Penryn House, Twickenham, near London.

Show-cases, plans, bottles, trays, labels, and other approved appliances to facilitate the display of specimens. [Mr. Twining has, in the course of frequent and voluminous correspondence with the Curator, favoured him with most valuable hints, which he has not failed to take advantage of in the classification and arrangement of the Museum.]

From the Worcester Royal Porcelain Co. (Limited), Worcester: Samples of the materials used in the manufacture of porcelain.

Two fine pieces of porcelain.

The following have generously offered to replace their exhibits which were destroyed by the burning of the Garden Palace:—

John Corbett, Esq., M.P., Stoke Prior Salt-works, Worcestershire:-

A collection of varieties of manufactured salt.

Dr. William Davis, Cheltenham:

A collection of his educational works.

Conrad Icke, Esq., Wickham, Newcastle, N.S.W.:—

A collection of New South Wales ores, with samples of the metals extracted therefrom by the exhibitor

J. E. Fletcher, Esq., Collingwood, Nelson, New Zealand:— Samples of New Zealand timbers.

Herr

Herr F. Rammé, Hamburg :-

A collection of anatomical models in papier mâché.

Mrs. Henrietta Vansittart, Twickenham, London:

A model of the "Lowe-Vansittart" screw-propeller for steamships.

Messrs. J. C. Gostling & Co. (Limited), Gracechurch-st., London:— A series of specimens to illustrate the manufacture of Portland cement.

Messrs. George Philip & Son, London and Liverpool :-A collection of maps, atlases, and educational works.

Messrs. John Brinsmead & Sons, Wigmore-st., London:—

A History of the Pianoforte.

Messrs. Woollams & Co., High-st., Manchester-square, London, W.:-Samples of their manufactures for wall-decoration; also specimens of their non-arsenical

pigments.

Messrs. H. W. Caslon & Co., Chiswell-st., London, E.C.:—

Specimens of type, &c. The Patent Ball-Castor Co. (Limited), 218, Upper Thames-st., London, E.C.:—Samples of the patent ball-castors.

The Morgan Crucible Co., Battersea, London, S.W.:-Samples of the manufactures of the company

The Superintendent of the Geological Survey of India:-

Publications of the Survey; also Indian Geological Specimens.

The Surveyor-General of South Australia :-

Maps and plans.

Thomas Whiffen, Esq., Battersea, London:-Specimens of cinchona and other barks, together with samples of the alkaloids extracted therefrom.

## APPENDIX V.

List of Specimens, Apparatus, &c., purchased during the year 1882.

Diagrams of laboratory fittings in the South Kensington Museum.

Diagrams of blast-furnace, gas-works, glass-house.

Illustrations of the following manufactures:—Needle, pin, steel-pen, paper.

Set of Professor Willis's apparatus for teaching statics.

Air-pump; spectroscope, and other apparatus to illustrate lectures on "Light." Thirty-eight cases of chemicals and chemical apparatus.

Two hundred and eighty-seven dozen stoppered bottles (assorted).

Forty-four air-tight show cases, chiefly from South Kensington Museum patterns.

A collection of wool, hair, silk, &c., in seventeen glazed show-cases, from P. L. Simmonds, Esq.,

Fifty-five pieces of porcelain from the Worcester Royal Porcelain Co. (Limited). Forty-four pieces of art pottery from Messrs. Doulton & Co., Lambeth, London.

J. H. MAIDEN,

Curator.

# The Technological, Industrial, and Sanitary Museum of New South Wales.

This Museum is intended to occupy a similar position and fulfil the same purpose in this Colony which the South Kensington Museum, the Bethnal Green Museum, the Museum of Practical Geology, the Patent Office Museum, and the Parkes Museum of Hygiene do in London. To this end, it is intended to collect together typical collections of all materials of economic value belonging to the animal, vegetable, and mineral kingdoms, from the raw material through the various stages of manufacture, to the final product or finished article ready for use.

It is intended that the following shall be more of less completely represented: -

- 1. Animal products, and specimens to show the methods followed in their preparation and manufacture, their uses for clothing, textile fabrics, domestic and ornamental purposes, their applications in pharmacy, dueing, perfumery, &c.
- 2. Vegetable products, from the raw material through the various stages of manufacture to the finished fabric or other article. This section will include gums, resins, oils, woods, fibres, tans, dyes, drugs, perfumes.
- 2. Waste products, whether of animal, vegetable, or of inorganic origin, with illustrations of their utilization.
- 4. Foods, animal and vegetable, their constituents, with their adulterations. Dietary tables and information concerning the chemical composition and other important particulars regarding the human foods of the world will be displayed.
- 6. Sconomic entomology: the specimens will be so arranged as to enable the public to discriminate between insects which are injurious to man and those which work for his benefit, and to show the insects in all stages of growth, and specimens of the materials which they have destroyed or injured. Where it is impossible to exhibit actual specimens, the life history of the insects in question will be illustrated as far as possible by models and diagrams.
- 6. Seconomic geological specimens, showing the ores of the metals, their manufacture and uses; mineral combustibles; building and ornamental stones; lithographic and other stones; clays, cements; substances employed in the manufacture of glass, pottery, porcelain; pigments of inorganic origin, &c. Architectural and building examples will be associated with this collection; also precious stones, their artificial production and imitation. The uses of many of the specimens in this collection will be shown practically by incorporating them with the building itself in the form of pillars, doorways, window-sills, by laying down portions of the floor, steps, or intaying the malls of the Museum.

<sup>7.</sup> Chemical and pharmaceutical products.

- 3. Educational apparatus and appliances, school fittings, books, maps, diagrams, &e.; collections of scientific apparatus and of specimens for High Schools and Colleges. A collection of this kind is of the greatest possible value to teachers, who can thus see and examine everything required in a school, and can directly compare the merits of the different books, fittings, and appliances as supplied by different makers and recommended by various authorities.
- 9. Sanitary and hygienic appliances and systems, adapted to public works, domestic architecture, personal health, elothing, and habits of life.
- 10. Mining, engineering, and machinery; models, plans, drawings, tools, machinery, and appliances. Metallurgical products.
- 11. Military and naval armaments, ordnance, fire-arms, &c. Models of ships of war and mercantile vessels.
- 12. Agricultural tools, appliances, and machinery; also soils, manures, &c. In this section will be included mineral fertilizing substances, e.g., gypsum, phosphate of lime, marts, shells, coprolites, &c., not manufactured.
- 17. Specimens and series of specimens illustrative of miscettaneous manufactures.
- 14. Alodels, drawings, and descriptions of patents; special attention will be paid to those which are likely to brove of use in the Colonies, or which have been taken out in Australia.
- 18. Sthnological specimens.
- 16. Samples of historical furniture and of artistic workmanship in iron and other metals. Ceramics, pottery, and porcelain, &c. (exclusive of sanitary appliances).
- 17. Photographs, electrotype, plaster, and other reproductions of examples of art workmanship where originals are not to be obtained.
- 18. Exhibition catalogues, trade journals, price lists, and descriptions of new processes of industries. The information afforded to manufacturers, merchants, and tradesmen by a collection of this kind will be of incalculable value. A library and reading-room will constitute important adjuncts to the Museum.

Sufficient concise information will be attached to each exhibit of group to satisfy without wearying the visitor, a full description being given in the catalogues. The prices paid for specimens and their commercial value will be indicated wherever possible, as it is a matter in which visitors usually take very great interest. The value of gifts will never be affixed where donors express wishes to the contrary.

Sydney,

Elst January, 1885.

J. H. MAIDEN,

Curator and Secretary.

# LIST OF DONORS

TO THE

# TECHNOLOGICAL, INDUSTRIAL, AND SANITARY MUSEUM

## NEW SOUTH WALES.

The Governments of-

Bengal, Bombay, Central Provinces of India, Ceylon, Fiji, Madras, New South Wales, New Zealand, North West Provinces of India, South Australia, Straits Settlements, Tasmania, Victoria, Western Australia, Austria, and Hungary, Germany, Holland, Switzerland, and Japan.

The Right Honorable The Earl Granville, K.G. The Right Honorable The Earl of Dudley.

Messrs. Andrae & Gruneberg, Leopoldshall, Germany. Askania Act. Co., Leopoldshall, Germany. Associated Chemical Works, Leopoldshall, Germany. Messrs. O. F. Alsen & Son, Itzehoe, Germany.

L. Antoine & Son, Paris.

A. J. Arrowsmith & Co., London.

", Askham Bros. & Wilson, Sheffield. Australian Asbestos Co., New South Wales. Auckland Harbour Board, New Zealand. Ahmednagar Municipality, Bombay.

Messrs. Barron, Moxham, & Co., Sydney.

G. Botelberge & Co., Melle-lez-Gand, Belgium.

F. W. Breithaupt & Son, Cassel, Germany.

Burger & Heinert, Zwickau, Germany.
C. Brandauer & Co., Birmingham.
J. Brinsmead & Sons, London.
Bickford, Smith, & Co., Tuckingmill, Cornwall.
John Brown & Co. (Limited), Sheffield.
Bemrose & Sons, Derby.
Boing & Domesty, Company Joseph Bosisto, Esq., M.P., Melbourne. Herr T. F. Borgfeldt, Berlin.

British & Foreign Blind Association, London.
Professor Barff, M.A., London.
George Bower, Esq., St. Neots, Hunts.
Berthon Boat Co. (Limited), London.
Part of Libral, Co. London. Bay of Islands Coal Co., New Zealand. Captain Barrack, Fiji.

Bernard Birnbaum, Esq., London.

Miss Blaxland, Sydney. Charles Bowman, Esq., London.

M. Bottelier, Belgium.

Box's Patent Ball Castor Co. (Limited), London. The Proprietor Balmadies Coffee Estate, Madras.

John Bell, Esq., London. Messrs. John Bolding & Sons, London.

The British Association for the Advancement of Science.

Cesena Sulphur Co., Italy. Concordia Chemical Factory Co., Leopoldshall, Germany. The Proprietors of the Cootamundra and Chowdikadu Coffee Estates, Madras.

Hessrs, Christofle & Co., Paris.

F. C. Calvert & Co., Manchester.

T. & C. Clark & Co., Wolverhampton.

H. W. Caslon & Co., London.

Crowther & Mitchell, Western Australia.

Carew & Co., Shahjahanpur, Bengal.

Chance Bros., Birmingham.

G. Cochrane, Esq., Edinburgh.
John Corbet, Esq., M.P., Stoke Prior Salt Works.
H. W. Chisholm, Esq., Madras.

Messrs, Doulton & Co., London.

Dalmege, Reid, & Co., Ceylon.
De Jaiffe & De Vroye, Mazy, Belgium.
De Grauw, Aymar, & Co., New York.

M. Charles Delacre, Paris.

M. Charles Delacre, Faris.

Herr Alois Dessauer, Aschaffenburg, Bavaria.

James Dunnachie, Esq., Glasgow.

D. A. T. Dissanaike, Esq., Ceylon.

W. F. Dique, Esq., Madras.

Dr. Wm. Davis, Bristol.

Educational Supply Association, London. Messrs, Elliott Bros., Sydney. Heer B. H. Egberts, Dalfsen, Holland. The Proprietors, Ellembellary and Eliza Coffee Estates, Madras.

Friedrich's Smelting House, Leopoldshall, Germany.

Farnley Iron Co., Leeds.
Messrs. Thos. Farmer & Co., London.
Mrs. Franks, Sydney.

Herr Otto Fennel, Cassel, Germany.
T. E. Fisher, Esq., Fiji.
W. A. Fernando, Esq., Ceylon.
J. E. Fletcher, Esq., Collingwood, New Zealand.
J. Fountain, Esq., New South Wales.
J. Trant-Fischer, Esq., Sydney.
The Proprietor, Fairlands Coffee Estate, Madras.

Messrs. Goodlet & Smith, Sydney.

Joseph Gillott & Sons, Birmingham.

J. C. Gostling & Co. (Limited), London.

"Guthrie & Co., Singapore.
"Gilfillan, Wood, & Co., Singapore.
The Gospel Oak Iron Co., London.
The Proprietor of "The Graphic," London.
The Proprietors, Glenvans and Goatfel Coffee Estates, Madras.

Herr H. Gruson, Magdeburg, Germany.

M. Guerlain, Paris.

James Gardner, Esq., New South Wales.
The "Ginori" Manufactory, Florence.
The Geographical Bureau, Tokei, Japan.
Gist & Spiritus Fabriek de Nederlandsche, Delft, Holland. R. Renton Gibbs, Esq., Liverpool.

Hoffmann Patent Steam Brick Co., Melbourne. Health Society of New South Wales. Messrs. Hell & Sthamer, Schönebeck, Germany.

"Heyl Bros., Berlin.
"W. S. Holland & Co., Burlington, U.S.A.
"Hart & Roux, Sydney.
Capt. R. M. Hunter, Rockhampton.

H. L. Holmes, Esq., Fiji. Wm. Hennings, Esq., Fiji. Henry Hulton, Esq., Fiji. Captain Hill, Fiji.

The Proprietors, Hilgrove and Hallacarey Coffee Estates, Madras.

W. Hoey, Esq., Lucknow.

Herr Heitmann, Leipsic, Germany.

Harkort Bridge Co., Germany.
Hokianga Saw-mill Co., New Zealand.
Herr H. Herrenschmidt, New South Wales.
Messrs. Hayward, Tyler, & Co., London.

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Signor Ingoglia, Montevogo, Italy. C. Icke, Esq., New South Wales. Messrs. Ingram & White, New Zealand. The Proprietor, Inglewood Coffee Estate, Madras. The Publisher of "The Ironmonger," London. Messrs, Ihlee & Horne, London.

Herr Charles Jansky, Tabor, Bohemia. George Jennings, Esq., London. The Chevalier Jervis, Turin, Italy. S. Jacoby, Esq., Melbourne. La Société anonyme des Verreries nationales de Jumet, Belgium.

The Johns Manufacturing Co., New York. Messrs. W. & Λ. K. Johnston, Edinburgh.

The Director, Royal Botanic Gardens, Kew, London. Messrs. Kock & Reis, Antwerp. " A. Knös & Co., London. Heer G. W. Kieffer, Leeuwarden, Holland. Kali and Stein Salt Mine, Douglashall, Germany. Dr. G. King, Calcutta. The Proprietor, Kodanaad Coffee Estate, Madras.

Professor Liversidge, F.R.S., Sydney. Julius Levy, Esq., Sydney. Hon. R. B. Leefe, Esq., Fiji. Lithgow Valley Pottery Co., New South Wales. Messrs. Lindemann & Co., Stassfurt, Germany. Lobeck & Co., Dresden, Germany. Lloyd & Lloyd, Birmingham. G. & W. Leechman, Ceylon.

Herr N. F. Locfasz, Stassfurt, Germany. August Leonhardi, Dresden, Germany The Proprietor, Liddelsdale Coffee Estate, Madras. Thomas Lloyd, Esq., Winchester.

Messrs. Maigatter, Green, & Co., Leopoldshall, Germany.

Muller & Allihn, Leopoldshall, Germany, Mander Bros., Wolverhampton.

Marshall, Sons, & Co. (Limited), Gainsborough.
M'Leod Bros., Dunedin, New Zealand.
M'Evoy & Kelsall, Fiji.

Meyer & Henckel, Copenhagen. Morris, Wheeler, & Co., Philadelphia. Mae Brair Bros., Sydney.

Alexr. Macpherson, Esq., Brisbane. Herr F. Muller, Leopoldshall, Germany. H. M. Milton, Esq., Sydney. Mataura Paper-mill Co., Otago, New Zealand. Mataura l'aper-mili Co., Otago, New Zealand.
E. M'Caffrey, Esq., Queenstown, New Zealand.
G. M'Evoy, Esq., Fiji.
Hon, J. E. Mason, Fiji.
A. F. Mercier, Esq., Melbourne.
P. Magrath, Esq., Yass, New South Wales.
H. B. Medlicott, Esq., M.A., Calcutta.
Messrs, Mason Bros., Sydney,
The Morgan Crucible Co., London. The Morgan Crucible Co., London.

Messrs, C. Nette, Faulwasser, & Co., Leopoldshall, Germany, L. Nicolls, Esq., Robertsbridge, Sussex. Messra. Nettlefolds, Birmingham. The Curator, Nagpur Museum, India. The Proprietor, Nedimbaley Coffee Estate, Madras, Messrs, Noble & Co., London,

Société anonyme de la Fabrique de fer d'Ougrée, Belgium. Iron and Steel Works, Osnabrück, Germany. Oamaru Stone Co., New Zealand. Messrs. Oliver & Boyd, Edinburgh.

"Oppel & Co., Friedrichshall, Germany.
Charles O'Neill, Esq., Wellington, New Zealand.

Her Majesty's Commissioners of Patents. Messrs, A. & F. Pears, London. The Phosphor-Bronze Co. (Limited), London.
The Penang Sugar Estates Co. (Limited), Straits Settlements. Professor A. Pirz, New York, J. H. Peterson, Esq., Fiji. Messrs. G. Philip & Son, London and Liverpool.

Henry Patterson, Esq., Rylstone, New South Wales, Daniel De Pass, Esq., London. Messrs. Paterson, Simons, & Co., Singapore, Pfaff, Reichenbach, & Co., Melbourne. J. Purnell & Son, London.

M. J. Rasquin, Liege, Belgium. Herr F. Rammé, Hamburg. Royal Mine Inspection, Stassfurt, Germany. Messrs. H. H. Rischmeyer & Co., Hamburg. Reideburg & Moller, Hanburg. Reckitt & Sons (Limited), Hull. 11

Ryder Bros., Fiji. Roberts & Co., Coconada, Madras.

Jefferson Read, Esq., Birmingham.
E. Rudder, Jun., Esq., Macleay River, New South Wales.
The Rockhampton Committee, Melbourne International Exhibition, 1880.

The Rewa Plantation Co., Fiji. Alfred Roberts, Esq., M.R.C.S., E., Sydney. R. Hurry Row, Esq., Tanjore, Madras. Messrs, Relfe Bros., London. Religious Tract Society, London.

The Stassfurt Associated, Leopoldshall and Douglashall Salt Industry, Stassfurt, Germany. The Proprietors, New Stassfurt Salt-mines, Germany.

The Stassfurt Chemical Factory, Germany.

The Shotts Iron Co., Glasgow. La Societa Terra Bolari, Siena, Italy.

The Proprietor, Sussex Coffee Estate, Madras. Messrs. Schmidt, Devilley, & Co., Dampremy, Belgiam.
"Solvay & Co., Couillet, Belgiam.

C. Smith & Son, London.

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Stanes & Co., Madras. Schmedes, Erbslöh & Co., Melbourne. Stevens & Kyle, Albury, New South Wales.

Herr G. Schuppan, Berlin. D. Samuely, Brunn, Austria.

E. Stanford, Esq., London.
G. Sparagnapane, Esq., London. E. Stratton, Esq., Tamworth, New South Wales. The Surveyor General of New South Wales. The Surveyor General of South Australia. Messrs, Archibald Smith, & Stevens, London.

The Telegraph Construction and Maintenance Co. (Limited),

Messrs, Jas. Thompson & Co., Kendal. Thomas Twining, Esq., London, Hon, J. B. Thurston, Fiji, Messrs, Toch & Co., Belgium,

The Trustees, Public Library, Museum, and National Galley of Victoria, Melbourne.

Union Iron Co., Dortmund, Germany. J. Unite, Esq., London. The United Asbestos Co. (Limited), London.

Verreries de Mariemont, Belgium. Victorian Department of Mines, Melbourne. The Sanitary Engineering and Ventilation Co., London. Mrs. Henrietta Vansittart, London. Rouppe van der Voort & Lewin, s'Hertogenbosch, Holland

Washburn and Moen Manufacturing Co., Worcester, U.S.A. Union Iron and Wire Co., Hamm, Westphalia.

Worcester Royal Porcelain Co. (Limited), Worcester-Messrs, Wustenhagen & Co. Hecklingen, Germany. Thomas Webb & Sons, Stourbridge and Sydney. W. Woollams & Co., London. The Proprietor Waverley Coffee Estate, Madras. Thomas Whiffen, Esq., London. George Whitfield, Esq., Toodyay, Western Australia D. Waterston, Esq., Fiji.

Young's Paraffin Light and Mineral Oil Co. (Limited) Zimmer & Co., Stassfurt, Germany.

# J. H. MAIDEN.



The Technological, Industrial, and Sanitary Museum of New South Males.

The Museum has been placed on the Free List of the following Journals, to the publishers of which the thanks of the Committee of Management are due and tendered:—

American Monthly Microscopical Journal (New York). American Bookseller (New York). Boot and Shoe Trades Journal. Bullettino Telegrafico (Rome). Bookseller. British Trade Journal. Fireman. Ironmonger. Index Medicus (New York). Journal of Forestry. Lumière Électrique (Paris). Library Journal (New York). Literary News (New York). Metal Manufacturer and Builder (New York). Martineau and Smith's Hardware Journal (Birmingham). Publishers' Weekly (New York). Paper-makers' Monthly Journal. Paper-makers' Circular. Plumber and Decorator. Scientific American (New York). Symons' Monthly Meteorological Magazine. Telegraphic Journal and Electrical Review.

The Publishers of the following have been good enough to occasionally forward copies of their Journals to the Museum:—

Druggists' Circular.

Engineering and Mining Journal (New York).

Jeweller and Metal-worker.

Leather Trades' Circular.

Paper Consumers' Circular.

Textile Manufacturer (Manchester).

J. H. MAIDEN, Curator and Secretary.

Sydney, 31st January, 1883.