# REPORT

OF THE

## COUNCIL

OF THE

# ZOOLOGICAL SOCIETY

OF LONDON,

FOR THE YEAR 1880.

READ AT THE ANNUAL GENERAL MEETING,

APRIL 29TH, 1881.

LONDON:
PRINTED BY TAYLOR AND FRANCIS,

RED LION COURT, FLEET STREET.

1881.

# CONTENTS.

Pa	age
I. General Condition of the Society	3
1. State of the Roll of Members	3
a. Fellows	3
b. Corresponding Members	4
2. State of the Finances	4
a. Income	4
b. Expenditure	5
c. Assets and Liabilities	7
II. Office, Hanover Square	8
1. Extension of Premises	8
2. Scientific Meetings	9
3. Scientific Publications	9
4. Library	10
III. Gardens, Regent's Park	20
1. Buildings and Works	20
2. Staff	23
3. Visitors	23
4. Zoological Lectures	25
5. Prosector's Department	25
6. Menagerie	26
List of Special Additions to the Society's Menageric	)
in 1880	27
List of Species new to the Collection exhibited in	1
the year 1880	29
List of Animals bred in the Gardens of the Society	7
in 1880	31
List of Donors and Donations	32
Conclusion	46

# REPORT OF THE COUNCIL.

April 29, 1881.

THE Council have the pleasure of submitting to the Fellows their fifty-second Annual Report upon the pro-

gress of the Society.

This, in accordance with previous Reports, is divided into three heads, the first of which relates to the General Condition of the Society and its Finances, the second to the business transacted at the Office in Hanover Square, and the last to the state of the Gardens in the Regent's Park.

# I. GENERAL CONDITION OF THE SOCIETY.

## 1. STATE OF THE ROLL OF MEMBERS.

### a. Fellows.

The number of Fellows and Fellows Elect at the close of the year 1880 amounted to 3309. Of these there were:-

Compounders who has	ve	pai	d a	£20				67
Ditto ditto				£30				061
compositions remitted								10
aying annual contrib	uti	ons	of	£2				57
Ditto ditto				£3	128	12	100	2155
Dormant								120
Admission-fees unpaid								28
								3309

The state of the Society during the past Ten years, as regards the number of its Ordinary Members, is given in the subjoined Table.

Comparative Statement of Elections, Deaths, Resignations, and Removals during the past Ten years, with the number of Fellows at the end of each Year.

	g.,			Died.				esigne	d.	R	emove		s.	of 18,										
Years.	ted or mitted	Con	npoun	ders.	Subsc	ribers.	Subsci	Subscribers.		Subscribers.		Subscribers.		Subscribers.		Subscribers.		Subscribers. Hoes		Subscriber		Admission Fees Unpaid.	Ceased to Fellows	Number of Fellows, December 3
		Elected or Re-admitted	£20.	£30.	Feere- mitted	£2.	£3.	£2.	£3.	Admission Fees Unpaid.	£2.	£3.	Admissic Fees Unpaid	Cea	Nu F Dec									
1871.	163	4	8		10	38	1	48		2	26		137	3047										
	185	5	7	2	11	38	2	40	1		62	14	182	3050										
1872.	1000000	5	7		6	38		34			2	1	93	3173										
1873.	216		0.00	1	8	60		33			74	8	197	3197										
1874.	221	7	6	1		57		36	1000			11	136	3241										
1875.	180	8	16		8		***	49		***		15000	154	3311										
1876.	224	9	28		4	63			1	***			182	3358										
1877.	228	3	23		9	63		20			58	6	1000											
1878.	176	6	12		5	52	1	40	1			1	118	3416										
	I III GARA	9	17		7	46		54			50	6	189	3364										
1879. 1880.		4	18	1	4	65		74			38	4	208	3309										

## b. Corresponding Members.

The following Corresponding Members were elected during the year 1880 to fill vacancies in the list:—

Dr. Anton Reichenow, of the Royal Zoological Museum, Berlin.

Dr. Louis Lortet, Director of the Museum of Natural History, Lyons.

Dr. J. Hjalmar Théel, of Upsala, Sweden.

Dr. Arthur Stradling, of the Royal Mail Steam-Shipping Company's Service.

Dr. Stephen Wootton Bushell, of H.B.M. Legation, Pekin.

Dr. Emil Holub, of Prague.

W. B. Pryer, Esq., of Sandakan, Borneo.

Dr. Max Schmidt, Director of the Zoological Garden, Frankfort-on-the-Main.

Mr. C. Ernest Pope, of Alice, Victoria East, South Africa. Mr. Wilfrid Powell, of Thursday Island, Torres Straits.

## 2. STATE OF THE FINANCES.

#### a. Income.

As will be seen by the subjoined comparative statement, the Income of 1880 shows a considerable increase over that of the previous year. The total receipts amounted to £27,388 0s. 3d. in 1880 as against £26,463 3s. 6d. for 1879. The chief sources from which the augmentation of £924 16s. 9d. was derived were Admissions to the Gardens and Compositions, both of which heads compare favourably with the corresponding amounts in the previous year. It should be noted, however, that the increase of the Miscellaneous receipts is due to Mr. Gatty's kind present of the band-stand hereinafter mentioned.

# Comparison of Receipts in 1879 and 1880.

		I	ico	me of			-					
	18	79.		18	80.		Incr	eas	e.	Deci	reas	e.
Admission Fees:— Past Present Annual Subscriptions:—	£ 110 585	8. 0 0	d. 0 0	£ 90 615	0	0		s. 5	d. 0	£ 20	s. 0	
Past	100	9	0 0	63 6,508 138		0 0	60	3		3 42		(
Compositions Ivory Tickets Admissions to Gardens Garden Sales	43	0 10 7	0 0	1,020 39 15,786	0 18 12	0 0	120	0	0	1	12	
Rent for Refreshment-rooms Rent for Premises in Oxford	1,220	9	8		10	3					19 1	
Street Publications Dividends	881	8	9	300 975		0 4	94					
Miscellaneous	74 36	8 9	1	74 340	5	9	303	16	10	0	1	
Increase	26,463 924	3 16	6 9	27,388	0	3	1,179 254		5 8	254 Ded.		
	27,388	0	3	27,388			924	16	9			

The balance carried forward from 1879 was £1071 1s. 3d. Adding this to the Income received in 1880 (£27,388 0s. 3d.) we find a total amount of £28,459 1s. 6d. available for the expenditure of the year.

### b. Expenditure.

This amount was disposed of in the following manner:— The sum of £24,753 9s. 5d. was required for the ordinary expenditure of the year. The extraordinary expenditure during the same period amounted to £1825 17s. 11d.

The sum of £1000 was paid to Messrs. Drummond on account of their mortgage on the Society's House and Premises. This left a balance at the Society's Bankers, on the 31st of December last, of £879 14s. 2d., which was carried forward for the benefit of the present year.

It will be observed that the ordinary expenditure of 1880, under which is placed every item required for maintaining the Society's whole establishment in a perfect state of efficiency, was £845 3s. 4d. more than in 1879. This increase is attributable mainly to the augmented cost of provisions (£496 5s. 1d.) and to the large expenditure on ordinary works and repairs (£2930 3s. 5d. against £2134 2s. 1d.), which will be explained in a subsequent part of the Report.

Comparison of Payments in 1879 and 1880.

THE RESERVE BOILD	1	Exp	end	liture o	f		Incre	ease	٠.	Decr	ease	٠.
	187	9.		188	30.					2		
	£ 2,267	s. 9	d. 2	£ 2,124	s. 8	d. 6	£	8.	d.	£ 143	s. 0	d 8
Arrears of previous years Rent, Rates, Taxes, and Insu-	-,-01		-	-,								
rance	985	15	7	857	5	4				128	10	2
Salaries, Wages, and Pensions	5,106	16	6	5,160	1	2	53					
Cost and Carriage of Animals	1,349	9	2	1,494	14	5	145		3			
Provisions	4,180	8	3	4,676	13	4	496	5	1			
Menagerie Expenses	2,785		8	2,808	17	6	23	4	10			
Keepers' Dresses	141		0	144	12	0	2	14	0			
Works, Repairs, and Materials .	2,892	11	3	3,922	0	11	1,029	9	8			
Buildings	200	0	0							200		1
Garden Expenses	843	6	9	792	18	0				50		1
Advertisements	229	17	2	213	18	11				15	18	1
	221	8	0	223	4	0	1	16	0			
Band Expenses House and Office Expenses	601	0	7	641	5	0	40	4	5			
Stationary and Assount Rooks		16	2	70	16	2	8	0	0.			
Stationery and Account Books	391	4	0	397	4	3	6	0	3			
Printing (Miscellaneous)	2,044	17	7	1,835	10	11				209	6	
Publications	322	0	o	664	7	7	342	7	7			
Library Expenses	43	8	0	114			71	7	0			
Returned Subscriptions Grant in aid of Science	50	0	0	50		0						
	74	8	4	74	1	0				. 0	7	
Expenditure of Davis Bequest Interest on Mortgage Debt	352	10	0	312	13	4				39	16	
	25,146	17	2	26,579	7	4	2,219	18	9	787	8	
Increase	1,432		2				787		7	Ded.	Dec	er
	26,579	7	4	26,579	7	4	1,432	10	2			

Of these payments, the items charged to the extraordinary expenditure in 1880 were as follows:—

# Extraordinary Expenditure paid in 1880.

I. Buildings:	0.		
Raising House at Hanover Square an additional story	£		d.
II. Works in Gardens:	396	3	0
Repair of Slip on Canal-bank £ s. d.			
THE THEOLOGIAN			
- 1 W II A CHUIC AILLI IN OUGH IN IN ANTIS I I - 1			
Tre-creeting Crows Cares			
000 44			
The chieff of the Frosector's Office Of 10 11			
Burning ballast for new Reptile House 94 18 11 31 8 3			
y Zacpenoco.	1154	15	4
New Library-rooms and fittings 105 19 1			
New Library Catalogue			
IV. Grant in aid of Science.	224	19	7
In aid of the Zoological Record	50	0	0
Belonging to 1879 559 0 10 Belonging to 1880		-	-
Belonging to 1880 1266 17 1	1005		1637
	1825	17	11

# c. Assets and Liabilities.

The Assets and Liabilities of the Society on the 31st of December 1880 were estimated as follow:—

		-	-	_						v .—					
					A	SS	ETS.								
		1	Arr	ears	of		Freel	nold :	and						_
		revio Year			urre Yea		Fu	nded	1		Cash.		T	otal.	
Cash at the Banker's Cost of £1900		s.	d.	£	8.	d.	£	s. 	d.	£ 879	s. 14	d. 2	£ 879	s. 14	
Lond. & South- western Ry. Co.'s New 4 per Cent.							National Control								
Preference Stock. Freehold Premises Innual Subscrip-			• • • •		•••••	***	1,938 24,490	9	6		••••••	2	1,938 4,490	9	
vory Tickets	13-100 A			0	0	0							176 2	0 2	
arden Sales ent for Freehold	0	-	O	00	11	3		•••••			•••••		229 61		1
Premises	T1 6576 YA												75	0	(
	124	6	0	419	11	8	26,428	9	6	879	14	2 27	7,852	1	4

LIABILITIES.						
			Del	ots.		
Bills, &c., estimated at— For the Gardens, say Office, say	£ 1345 425	s. 7 1	d. 9 2	£		
Rent and Taxes unpaid— For the Gardens, say	285 23	2 1	10 9	1770		
Messrs. Drummond, Mortgage Debt				308 7000		0
	THE STATE OF			9078	13	6

The amount paid for the freehold of the Society's premises (No. 11 Hanover Square and No.  $314\frac{1}{2}$  Oxford Street) was £22,225. To this amount must be added the value of the lease of the Hanover-Square portion held by the Society, which, at the time of the purchase, was estimated to be £1500, making the total value of the freehold at the date of the purchase £23,725. To this sum, in order to arrive at the total value of the freehold, an addition (of £225) is made annually in respect of the increasing value of the premises in Oxford Street, the lease of which will run out on the 29th of September, 1882.

## II. OFFICE, 11 HANOVER SQUARE.

## 1. Extension of Premises.

The extension of the premises in the Society's House in Hanover Square, which was spoken of in the last Annual Report and carried out in the autumn of 1879, involved a charge of £396 3s. upon the expenditure of the present year for building-purposes. Besides this a sum of £105 19s. 1d. was devoted to the rearrangement of the shelves and cases in the Librarian's department.

The Council believe that these alterations have given

general satisfaction to the Fellows who use the Library. The additional accommodation thus provided has rendered the back room on the second floor available for the use of readers, and has also given ample space for additions in the new large room on the upper story.

## 2. Scientific Meetings.

To the fourteen meetings for the despatch of scientific business held in the Society's Rooms in Hanover Square in 1880, 131 communications were made. Of these, 99 were from Fellows, 3 from Foreign Members, and 15 from Corresponding Members of the Society. The remaining 14 papers were from individuals not belonging to the Society, and were communicated to it by the Secretary or by other Members. The corresponding number of communications in the year 1879 was 144.

These communications were submitted to the Committee of Publication, by whom the following orders were made respecting them: 7 were ordered to be printed entire in the 'Transactions' of the Society, and 93 in the 'Proceedings,' such illustrations being in each case allowed as the Committee considered necessary for the purpose. Of the remaining communications, abstracts or extracts were considered to be sufficient for publication.

# 3. Scientific Publications.

The volume of the Society's 'Proceedings' for 1880, which is now on the table, contains 743 pages, illustrated by 64 (mostly coloured) plates.

Two Parts of the Society's 'Transactions' were issued during the year 1880, namely:—

# Vol. XI. Part I. (January, 1880).

On the External Characters of two Species of British Dolphins (*Delphinus delphis*, Linn., and *D. tursio*, Fabr.). By William Henry Flower, LL.D., F.R.S., P.Z.S., &c. (with one coloured plate).

Description of a Portion of Mandible and Teeth of a large extinct Kangaroo (*Palorchestes crassus*, Ow.) from ancient fluviatile Drift, Queensland. By Prof. Owen, C.B., F.R.S., F.Z.S. (with one plate).

On the Brain and other parts of the Hippopotamus (H. amphibius). By A. H. Garrod, M.A., F.R.S., Prosector to the Society (with two plates).

## Vol. XI. Part II. (August, 1880).

Further Observations on the Manatee. By James Murie, M.D., LL.D., F.G.S., Assist. Secretary Linnean Society

(with five plates).

On the Intestinal Spiral Valve in the genus Raia. By T. Jeffrey Parker, B.Sc., Assoc. R.S.M., Lecturer on Biology in Bedford College, London, and Demonstrator in the Royal School of Mines (with two plates).

A Supplement to the List of Animals in the Gardens was also prepared and issued in 1880.

Since the commencement of the present year two more parts of 'Transactions' (iii. and iv.) have been issued, and two others (v. and vi.) (containing all the remaining papers ordered for publication in the 'Transactions' up to the end of 1880) are in a forward state.

A General Index to the ten volumes of 'Proceedings' from 1871 to 1880 and a General Index to the first ten volumes of 'Transactions' are in preparation.

#### 4. LIBRARY.

The Library, under the superintendence of Mr. F. H. Waterhouse, the Society's Librarian, has been kept in good order during the past year: it now contains upwards of 9000 volumes.

The books have been rearranged in classes on the new shelves, and the press-marks entered in the standard catalogue, so that every volume is readily accessible.

Many important additions have been made to the Library, among which attention may be called to the following donations:—

A MS. work by Colonel S. R. Tickell, containing original drawings, principally of the "Fishes of India." 2 vols., small folio. Presented by Francis Day, Esq., F.Z.S.

Odontornithes: a Monograph of the Extinct Toothed Birds of North America. By Othniel Charles Marsh. 4to, Washington, 1880. Presented by the Author.

An Introduction to the Study of Fishes. By Albert C. L. G. Günther, M.A., M.D., &c. 8vo, Edinburgh, 1880. Presented by the Author.

Pterophoridæ of California and Oregon. By Thomas, Lord Walsingham. Royal 8vo, London, 1880. Presented by the Author,

Some of the most important additions to the Society's Library, purchased since the last anniversary, are the following:-

Barrois. Recherches sur l'Embryologie des Bryozoaires (1877). Boisduval's Lepidoptères de l'Amérique septentrionale (1829).

Candèze's Monographie des Elatérides (1857-63).

'Challenger,' Voyage of H.M.S. [Zoology], vol. i. (1880).

Cory's Birds of the Bahama Islands (1880).

Cox. Handbook of the Coleoptera of Great Britain (1874).

Crouch. Illustrated Introduction to Lamarck's Conchology (1826).

D'Albertis. New Guinea (1880).

Dawkin's Early Man in Britain (1880). Dawson's Geodephaga Britannica (1854).

De Geer. Mémoires pour servir à l'histoire des Insectes (1752-78).

Descourtilz. Voyage d'un Naturaliste (1809).

Donovan's Natural History of British Fishes (1802-08). Du Val. Genera des Coléoptères d'Europe (1857-68).

Ehlers. Die Borstenwürmer [Annelida Chætopoda] (1864-68).

Entomologist's Annual (1855–74). Geikie. Prehistoric Europe (1881).

A

Germar. Magazin der Entomologie (1813-21).

Gratiolet. Mémoire sur les Plis Cérébraux de l'Homme et des Primatès (1854).

Grenacher. Untersuchungen über das Sehorgan der Arthropoden (1879).

Hallez. Contributions à l'Histoire Naturelle des Turbellariés (1879).

Hassall. British Freshwater Algæ (1845). Hincks's British Marine Polyzoa (1880).

His. Anatomie menschlichen Embryonen (1880).

Jhering. Vergleichende Anatomie des Nervensystemes und Phylogenie der Mollusken (1877).

Linnæa Entomologica [Zeitsch. herausg. von dem Entom. Vereine in Stettin] (1846-66).

McLachlan. Monographic Revision and Synopsis of the Trichoptera (1874-80).

Matthew's Trichopterygia (1872).

Maynard's Birds of Florida (1872-78).

Möbius. Beiträge zur Meeresfauna (1880).

Moniez. Essai Monographique sur les Cysticerques (1880).

Monthly Microscopical Journal (i.-xviii.). Morphologisches Jahrbuch (1875-80).

Nicholson's Manual of Palæontology (2nd Ed., 1879).

Piaget. Les Pédiculines (1880).

Royle's Illustrations of the Himalayan Mountains (1833-39). Sappey. Études sur l'Appareil Mucipare des Poissons (1880).

Neue Turbellarien, Rotatorien Schmarda. und Anneliden (1859-61).

Simon. Les Arachnides de France (1874-79). Troschel. Das Gebiss der Schnecken (1856-79).

Van Vollenhoven. Beschrijvingen en Afbeeldingen van Nederlandsche Vlinders (1860-77).

Walker's Diptera (1851-56).

Wallace. Island Life (1880).

Westwood's Arcana Entomologica (1845).

Westwood's Cabinet of Oriental Entomology (1848).

White's Natural History of Selborne (1st Ed., 1789).

Wiener entomologische Monatschrift (1857-64).

Wilkinson's British Tortrices (1859).

Wood's Index Testaceologicus (1856).

The following is a list of the periodicals received in 1880 from the various Societies and Institutions with which this Society is in correspondence.

#### AMERICA.

The Museum of Comparative Zoology, Harvard College, Cambridge, Mass.

Bulletin, vol. vi. nos. 1–11. Memoirs, vol. vi. no. 1; vol. vii. nos. 1, 2, pt. 1. Annual Report, 1879–80.

The Academy of Natural Sciences, Philadelphia.
Proceedings, 1880.

The American Philosophical Society, Philadelphia. Proceedings, vol. xviii. nos. 103-105.

The Franklin Institute, Washington. Journal, 1880.

The United States National Museum, Washington.
Bulletin, no. 18.

The United States Geological and Geographical Survey of the Territories, Washington.

Bulletin, vol. v. no. 4.

The Academy of Natural Sciences, Cordova.

Boletin, tomo ii. et iii. entrega 1. Actas, tomo i. et iii. entrega 1, 2.

The Boston Society of Natural History.

Proceedings, vol. xx. part 3.

The American Association for the Advancement of Science.

Proceedings, 1878.

- The American Academy of Arts and Sciences, Cambridge.
  Proceedings, New Series, vol. vi.; vol. vii. part 1.
- The New York Academy of Sciences.
  Annals, vol. i. nos. 3-13.
- The Connecticut Academy of Arts and Sciences.
  Transactions, vol. v. part 1.
- The National Museum, Rio de Janeiro. Archives, vols. ii. & iii. (1877-78).
- The American Entomological Society.
  Transactions, vol. vii.
- The Philosophical Society, Washington. Bulletin, vols. i.-iii.
- The Smithsonian Institution, Washington.

  Contributions to Knowledge, vol. xxii.

  Miscellaneous Collections, vols. xvi., xvii.

  Annual Report, 1878.

人

#### AUSTRALASIA.

- The Linnean Society of New South Wales, Sydney.

  Proceedings, vols. iv. & v. parts 1, 2.
- The New-Zealand Institute, Wellington.
  Transactions, vol. xii.
- The Royal Society of Victoria, Melbourne. Transactions, vols. xv., xvi.
- The Royal Society of New South Wales.

  Journal and Proceedings, vol. xii.
- The Zoological and Acclimatization Society of Victoria.

  Proceedings, vol. v.
- The Royal Society of Tasmania.

  Papers and Proceedings for 1878.
- The Philosophical Society of Adelaide.
  Transactions and Proceedings, 1878-79.

#### BELGIUM.

The Entomological Society of Belgium.

Annales, tom. xxii. Compte-Rendu, 1880.

The Royal Museum of Natural History, Brussels.

Annales (Série Paléontologique), tome iv. part 2; and tome v. part 2.

#### EAST INDIES.

The Royal Society of the Dutch East Indies, Batavia.

Natuurkundig Tijdschrift, deel xxxviii.

The Society of Arts and Sciences, Batavia.

Verhandelingen, deel xxxix. 2° stuk; deel xli. 1° stuk. Tijdschrift, deel xxv. afl. 1–6; deel xxvi. afl. 1. Notulen, deel xvi. afl. 3, 4; deel xvii. afl. 1–4. Register, 1867–78.

The Asiatic Society of Bengal, North-China Branch.

Journal, new series, no. xiv.

The Asiatic Society of Bengal, Calcutta.

Proceedings, 1879, no. 10; 1880, nos. 1-8. Journal, vol. xlvii. (extra no.); vol. xlviii. no. 230; vol. xlix. nos. 231-235.

The Geological Survey of India, Calcutta.

Memoirs, ser. x. parts 4, 5; ser. xiii. part 2; ser. xiv. part 1; ser. xv. part 2; ser. xvii. parts 1, 2. Records, vol. xiii. parts 1-4.

#### FRANCE.

The Museum of Natural History, Paris. Nouvelles Archives, sér. 2, tome ii., iii.

The Zoological Society of Acclimatation, Paris. Bulletin, 1880.

The Society Philomatique, Paris.

Bulletin, sér. 7, tome iii. nos. 3-5; tome iv. nos. 1-3.

The Academy of Sciences, Lyons.

Annales, 4° série, tome x.; 5° série, tome i.

The Linnean Society of Normandy, Caen. Bulletin, 3rd ser. vols. i., ii.

#### FINLAND.

The Society of Sciences, Finland.

Œfversigt, xxi. (1878-79). Observations Météorologiques, année 1877.

#### GERMANY.

The Royal Prussian Academy of Sciences, Berlin.

Monatsbericht, 1880.
Abhandlungen 1879-80.

The Society of Friends of Natural History, Berlin. Sitzungsberichte, 1879.

The Senckenbergian Natural-History Society, Frankfort a. M.
Bericht, 1879-80.

The Zoological Society, Frankfort a. M.

Der Zoologische Garten, Jahr. xx. (1879) nos. 7-12; Jahr. xxi. (1880) nos. 1-6.

The German Malacological Society, Frankfort a. M. Jahrbücher, 1880.

The Society of Sciences, Göttingen.
Abhandlungen, Band xxv.

The Medical and Natural-History Society, Jena. Jenaische Zeitschrift, Band xiv. Heft 1-4. Denkschriften, Band i. Abh. 2. Sitzungsberichte, 1879.

The Royal Bavarian Academy of Sciences, Munich. Sitzungsberichte, 1879, Heft 4; 1880, Heft 1-4. Abhandlungen, Band xiii. Abh. 3.

The Imperial Academy of Sciences, Vienna.
Sitzungsberichte, Band lxxviii.—lxxxi., lxxxii. Heft 1, 2.
Denkschriften, Band xl.—xlii.

The Zoological and Botanical Society, Vienna. Verhandlungen, Band xxix. 1880.

The Natural-History Union, Hamburg.
Verhandlungen, 1877-79.
Abhandlungen, Band vii. Abth. 1.

The Imperial Leopoldino-Carolinian Academy of Naturalists, Dresden.

Nova Acta, Band xxxviii.-xl. Leopoldina, Heft 10-15.

The Natural-History and Medical Society, Heidelberg. Verhandlungen, new series, Band ii. Heft 5.

# GREAT BRITAIN AND IRELAND.

Royal Society of Edinburgh.

Transactions, vol. xxviii. part 3; vol. xxix. part 1. Proceedings, vol. x. no. 103 (1878-79).

The Hull Literary and Philosophical Society.
Report and Transactions, 1878-79.

The Leeds Philosophical and Literary Society, Leeds.
Annual Report for 1879-80.

The Royal Society, London.

Proceedings, vol. xxix. nos. 199, 200; vol. xxx. nos. 201-207. Philosophical Transactions, vol. clxx. part 2; vol. clxxi. part 1.

The Linnean Society, London.

Journal (Botany), vol. xvii. nos. 104-107; vol. xviii. nos. 108-

— (Zoology), vol. xv. nos. 81-84.

Transactions, 2nd ser. (Botany), vol. i. parts 7-9.

—, 2nd ser. (Zoology), vol. ii. part 1.

The Royal Geographical Society, London.

Proceedings, vol. ii. nos. 1-12. Journal, vol. xlix.

The Geological Society, London.

Journal, vol. xxxvi. parts 1-4. List of Fellows of the Society, 1880.

The Royal Institution of Great Britain, London.

Proceedings, vol. ix. part 2. List of Fellows of the Society, 1879. Additions to the Library, 1879.

The Royal United-Service Institution, London. Journal, vol. xxiv. nos. 104-108.

The British Association for the Advancement of Science, London.

Report for 1879.

- The Royal Asiatic Society of Great Britain and Ireland, London.
  - Journal, new series, vol. xii.
- The Society of Arts, London. Journal, 1880.
- The Royal Agricultural Society of England, London. Journal, vol. xvi. parts 1, 2.
- The Entomological Society, London. Transactions, 1880, parts 1-4.
- The Quekett Microscopical Club, London. Journal, nos. 42-45.
- The Royal Society of Literature, London. Transactions, 2nd ser. vol. xii. part 2.
- The Norfolk and Norwich Naturalists' Society, Norwich.
  Transactions, vol. iii. part 1.
- The Plymouth Institution and Devon and Cornwall Natural-History Society, Plymouth.

  Annual Report and Transactions, vol. vii. part 2.
- The Royal Institution of Cornwall, Truro. Journal, no. xxii.
- The Belfast Natural-History and Philosophical Society. Proceedings, Sessions 1878-79, 1879-80.
- The Cornwall Polytechnic Society. Forty-seventh Annual Report, 1879.
- The Royal Irish Academy, Dublin.

  Transactions (Science), vol. xxvi. no. 22.

  (MS. series), vol. i. no. 1.

  Proceedings, ser. 2, vol. ii. no. 1; vol. iii. no. 4.
- The Royal Dublin Society.

  Transactions, vol. i. parts 1-12; vol. ii. parts 1, 2.

  Proceedings, vol. i. parts 1-3; vol. ii. parts 1-6.

  Journal, vol. vii. no. 45.
- The Literary and Philosophical Society, Manchester.

  Memoirs, ser. 3, vol. vi.

  Proceedings, vols. xvi.-xix.
- The Yorkshire Naturalists' Union. Transactions, Parts 1-3.
- The Watford Natural-History Society.

  Transactions, vol. i. no. 1.

  List of Members, &c.

#### HOLLAND.

The Royal Academy of Sciences, Amsterdam.

Verslagen en Mededeelingen (Natuurkunde), tweede reeks, deel xiv.; (Letterkunde), tweede reeks, deel viii. Jaarboek, 1879. Verhandelingen, deel xix.

The Dutch Society of Sciences, Haarlem.
Archives Néerlandaises, tom. xv. livr. 1, 2.

The Entomological Society of the Netherlands, The Hague.
Tijdschrift voor Entomologie, deel xxiii. afl. 1, 2.

#### HUNGARY.

The Hungarian Academy of Sciences, Budapest.

Literarische Berichte aus Eingarn, 1878–79. Évkönyvei, Thötet xvi. darabja 2, 4. Közlemenyek (Math. és Term.), kötet xiv., xv. Ertekezezések (Math.), kötet vi. szám 3–9; kötet vii. szám 1–5. — (Természet.), kötet viii. szám 8–15; kötet ix. szám 1–19.

#### ITALY.

The Civic Museum of Natural History, Genoa. Annali, vols. xiv., xv. (1879-80).

The Natural-History Society, Modena. Annuario, ser. 2, anno xiii. fasc. 3, 4.

The Royal Academy of the Lincei, Rome.

Transunti, ser. 3, vol. iv.; vol. v. fasc. 1-4.

Memorie, ser. 3, vols. iii., iv.

The Royal Academy of Sciences, Turin.

Atti, vol. xv.

Bollettino, Anno xiv., 1879.

The Zoological Station, Naples.
Mittheilungen, vol. ii. nos. 1, 2.

### PORTUGAL.

The Royal Academy of Sciences, Lisbon. Jornal, nos. 26, 27.

### Russia.

The Natural-History Society, Dorpat.
Sitzungsberichte, Band v. Heft 2.
Archiv, Serie 1, Band viii. Lief. 4.

The Imperial University, Kazan. Bulletin, 1879.

The Imperial Society of Naturalists, Moscow. Bulletin, 1879, nos. 3, 4; 1880, no. 1.

The Royal Academy of Sciences, St. Petersburg.

Bulletin, tome xxvi. nos. 1-12.

Mémoires, 7° série, tome xxvi. nos. 12-14; tome xxvii. nos. 1-12.

Mélanges Biologiques, tome x. livr. 2.

## SCANDINAVIA.

The Royal Danish Society of Sciences, Copenhagen.

Oversigt, 1879, no. 3; 1880, no. 1.

Mémoires, 5° sér. vol. xi. no. 6; vol. xii. no. 5.

The Natural-History Society of Copenhagen. Videnskabelige Meddelelser, 1877-78, 1879-80.

The Royal Society of Sciences, Upsala.

Nova Acta, vol. xi.

Bidrag, vol. xxxii.

Observations Météorologiques, 1878.

### SPAIN.

The Spanish Natural-History Society, Madrid. Anales, tomo ix. cuad. 1, 2.

## SWITZERLAND.

The Natural-History Society, Bern.
Mittheilungen, nos. 937-978.
Verhandlungen, 1877-78, 1878-79.

The Society of Natural Sciences, Lausanne. Bulletin, 2° série, vol. xvi. no. 83.

The Society of Natural Sciences, Neuchâtel.
Bulletin, tom. xii. cahier 1.

Donations of Works, Memoirs, and Papers have also been received from:—Professor A. Agassiz; the Editors of the American Naturalist; Professor J. V. Barboza du Bocage; W. T. Blanford, Esq.; John Brazier, Esq.; the Trustees of the British Museum; Messrs. Cassell, Petter, and Galpin; Robert Collett, Esq.; Alfred E. Craven, Esq.; Monsieur Crosse; Professor James D. Dana; C. J. Danford, Esq.; D. G. Elliot, Esq.; Dr. Joseph Ewart; W. A. Forbes, Esq.; Professor H. H. Giglioli; the Museum Godeffroy; Lt.-Col. H. H. Godwin-Austen; H.

Goss, Esq.; Dr. A. Günther; Dr. II. A. Hagen; Dr. F. V. Hayden; Dr. James Hector; Dr. E. Holub; the Government of India; W. F. Kirby, Esq.; Monsieur Adrien Lacroix; Dr. J. L. Le Conte; New York State Library; New York State Museum of Natural History; Capt. M. F. Ommanney; Monsieur E. Oustalet; Professor Owen; Bernard Quaritch, Esq.; Monsieur Xavier Raspail; Professor J. Reinhardt; Dr. G. O. Sars; P. L. Sclater, Esq.; Henry Stevenson, Esq.; Professor Ralph Tate; W. B. Tegetmeier, Esq.; Professor J. Tennant; Dr. H. Troschel; the University College of London; U.S. Commission of Fish and Fisheries; Monsieur Léon Vaillant; Heer S. C. Snellen van Vollenhoven; Rowland Ward, Esq.; F. Buchanan White; Dr. R. Wiedersheim; Dr. Julius von Haast.

# III. GARDENS, REGENT'S PARK.

# 1. BUILDINGS AND WORKS.

The expenditure on new buildings in the Society's Gardens in 1880 has again been of a somewhat restricted character. The surplus of Income over Ordinary Expenditure (which in 1880 amounted only to £2634 10s. 10d.), and the necessity of devoting part of this surplus to the reduction of the mortgage-debt on the Society's House, rendered it advisable to exercise strict economy under this head. The total sum spent upon new buildings and works in the Gardens in 1880 was therefore only £1154 15s. 4d. (against £758 9s. 2d. in 1879), which was devoted to the following seven items:—

ollowing seven reeme.	£	8.	d.
1. Repair of slip on Canal-bank	166	10	6
2. Re-erection of glass building for Insectorium.  3. New paths and roads in North	286	0	11
Gardens	88	8	11
4. Re-erection of Crows' Cages	178	16	11
5. New Band-stand	308	10	11
6. Enlargement of Prosector's Office	94	18	11
7. Burning ballast for new Reptile-house	31	8	3
	£1154	15	4

(1) The state of the question between the Society and the Regent's Canal Company as to the liability for repairs of the slips on the Canal-banks has not altered since the last Anniversary. The sum of £166 10s. 6d. was expended on the repair of the slip on the north bank at the western extremity of the Gardens, under the circumstances stated in the last Report.

(2) and (3). The re-erection in the North Gardens of the iron-and-glass building which formerly served as a second-class refreshment-room was completed in 1880 at a total cost of £286 0s. 11d., including the new heating-apparatus; and the sum of £88 8s. 11d. was spent on the

paths and approaches in the North Gardens.

This building has been found of great convenience during the past severe winter for the accommodation of some of the more delicate Monkeys, Birds, and Reptiles, which thrive only when kept in a continuously high temperature. In the present summer the Council have resolved to try the novel experiment of utilizing it as an Insectorium. Every endeavour will be made to keep up a collection of living Insects in it, and to make the exhibition both instructive and attractive; but it is not yet possible to say how far these endeavours will prove successful.

(4) The thorough repair and reconstruction of the Parrot-house, executed in 1880 and charged to ordinary Expenditure, necessitated the removal of the adjacent Crows' cages, in order that a more suitable doorway and windows might be provided on the south side of the building. These cages have been put into thorough order and re-erected as a separate building in the South Gardens, near the Western Aviary, at a cost of £178 16s. 11d.

(5) As was mentioned in the last Report, the Military Band having become a great attraction to the Fellows and Visitors during the summer months, it became advisable to provide a covered Band-stand. Mr. Charles Henry Gatty, of Felbridge Park, East Grinstead, Fellow of the Society, having intimated his wish to provide the necessary funds for this purpose, the Council had great pleasure in accepting Mr. Gatty's most liberal offer; and a new Band-stand was erected in 1880 at a cost of £308 10s. 11d., which sum was repaid to the Society by Mr. Gatty, and has therefore not really involved any cost to the Society, although, from the form in which the accounts are kept, it is necessary to specify it as an item of expenditure.

10

(6) There being no accommodation for occasional visitors and assistants in the Prosector's Office, the Council have determined to make an addition to it of some studies at the back, for Naturalists engaged in special examinations. This work was commenced in 1880 by the Society's staff of workmen, and the sum of £94 18s. 11d. was expended upon it. The studies are now nearly finished, and will be ready for use in the course of the summer.

(7) The present Reptile-house in the Middle Garden having been long in bad repair, and not being suitably constructed for the purpose to which it is devoted, the Council have determined to build a new Reptile-house in the south-eastern corner of the South Garden, near the Reservoir. There is here a vacant spot available for the purpose, where a building 120 feet by 60 facing nearly due south may be conveniently erected. The plans for the new building are in preparation, and will require very careful study, as the subject is a difficult one, and the only other building of the kind yet attempted is that in the Jardin des Plantes at Paris.

The clearing of the ground and burning of the clay into ballast on the proposed site was commenced in December last, and the amount thus expended in 1880 (£31 8s. 3d.) was charged to the extraordinary expenditure of that year.

It is estimated that a sum of at least £4000 will be required for a new Reptile-house to finish it complete for use.

Besides these special works, large sums were devoted to ordinary repairs in the Society's Gardens during the past year, amounting altogether to £3128 16s. 6d. Amongst the buildings thoroughly overhauled and renovated may be mentioned the Eagle-aviary, of which it was found necessary to take up and relay the old floor; the Bear-pit, which has now been placed in excellent repair, and to which a new sleeping-den has been added; the Parrothouse, of which the roof required entire renewal, and where new doors and windows have been placed on the south side, and a new porch built in order to give greater protection from the weather. Besides these, many other houses were thoroughly renovated and painted during the past summer by the Society's staff of painters, amongst which may be mentioned the Hippopotamus-house, the Lion-house (outside), the Head Keeper's lodge, the Raccoons' cages, and a portion of the greenhouses, not to speak of various other minor buildings. It is obvious that, so long as the number of buildings in the Gardens continues to be increased, as is the case now from year to year, a corresponding increase must necessarily take place in the expenditure on repairs and maintenance.

#### 2. STAFF.

The permanent Staff of the Society's Gardens has been slightly increased since the last Anniversary. It consists of:—

1 Superintendent.

1 Assistant Superintendent.

1 Head Keeper.

6 Keepers (1st class).

7 Keepers (2nd class).

9 Keepers (3rd class).

3 Money-takers.1 Storekeeper.

1 Cook.

1 Office Clerk.

1 Prosector's Assistant.

32

Besides these there are 19 Helpers in the Menagerie, 1 Head Gardener, 12 Garden-labourers, 9 Artisans, 4 Painters, 15 Labourers, 1 Butcher, 1 Fireman, 2 Night-Watchmen, and 1 Timekeeper employed at weekly wages; so that the number of the whole staff may be reckoned at about 97 persons, against 93 at the corresponding period last year.

## 3. VISITORS.

The total number of visitors to the Society's Gardens during the year 1880 was 675,979, as will be seen by the following Table, which gives the corresponding numbers of entrances under each head for 1879 and 1880:—

Visitors to the Gardens.

in have not by his solution in	1879.	1880.	Compa	rison.
Fellows and Friends	169,737 151,808	190,695 156,560	Incr.	20,958 4,752
On Mondays and other days	259,931	271,148	Incr.	11,217
Paying at 6d. each	45,067	44,793	Decr.	274
Charity Children	16,457	12,783	Decr.	3,674
	643,000	675,979	Incr.	32,979

The following Table contains a statement of the Number of Visitors to the Society's Gardens during each year, from the year 1828 to the year 1880.

Number of Visitors to the Gardens, 1828-80.

Year. Number.	Year. Number.
1828 98,605	$1855 \dots 315,002$
1829 189,913	1856 344,184
1830 223,420	1857 339,217
1831 262,193	1858 351,580
1832 206,652	1859 364,356
1833 211,343	1860 394,906
1834 208,583	1861 381,837
1835 210,068	+1862 682,205
1836 263,372	1863 468,700
1837 173,778	1864 507,169
1838 179,197	1865 525,176
1839 158,432	1866 527,349
1840 141,009	1867 556,214
1841 132,616	1868 573,186
1842 107,459	1869 572,848
1843 98,280	1870 573,004
1844 101,527	1871 595,917
1845 99,615	1872 648,088
1846 100,045	1873 713,046
1847 93,546	1874 706,907
1848 143,630	1875 699,918
1849 168,895	1876 915,764
1850 360,402	1877 781,377
*1851 667,243	1878 706,713
1852 305,203	1879 643,000
1853 409,076	1880 675,979
1854 407,676	and the female salaburily
* Year of the Great Exhibition.	† Year of the International Exhibition

#### 4. ZOOLOGICAL LECTURES.

The Zoological Lectures, to which the proceeds of the Davis Trust-fund have been devoted for several years, will be continued during the present season.

The Lectures for this year will be given in the usual Lecture-room in the Society's Gardens, on Thursdays at 5 P.M., commencing June 16th.

The following is a list of the subjects:-

Date.	Subject.	Lecturer.
2. " " 23 3. " 30 4. " July ' 5. " 14 6. " 2	Dolphins	n. Prof. W. K. Parker, F.R.S. n. W. A. Forbes, Esq. P. L. Sclater, Esq., F.R.S.

These Lectures will be free to Fellows of the Society and their Friends, and to other Visitors to the Gardens.

### 5. PROSECTOR'S DEPARTMENT.

Mr. W. A. Forbes, the Society's Prosector, reports that during the past year the number of deaths amongst the animals in the Gardens showed a slight decrease over that in the preceding year.

Very few serious losses have occurred, and, as usual, by far the greatest mortality (probably about 50 per cent.) occurred amongst the newly-arrived animals. These frequently reach us in a very weak state, after a prolonged voyage, and consequently never recover, even when placed in most favourable conditions.

As showing that animals, when once fairly established, may live for very considerable periods (in fact for probably their natural term of life) in captivity, it may be mentioned that the old female Polar Bear, which died early in the year, had lived in the Gardens for about 34 years; a Fruit-eating Bat (*Pteropus medius*), that also died, had been in the Monkey-house for more than 17 years. Both these animals showed no traces of organic disease, and probably died of old age.

As already noticed in previous reports, tuberculosis, in

various forms, continues to be the chief cause of death when the cause is ascertainable; but a great number of animals succumb suddenly without previous symptoms, and without leaving any cause of death ascertainable on post-mortem examination.

A fine Leopard from Persia died in the spring, under the curious circumstance already recorded in the Society's 'Proceedings' (P. Z. S. 1880, p. 358). The health of the larger Carnivora generally in the new Lion-house has been

very good.

Opportunity was taken in the early part of the year to thoroughly sort and arrange, so as to be readily available for scientific work, the very considerable mass of material, in the shape of spirit-specimens of the higher Vertebrates, accumulated by the late Prosector, Prof. A. H. Garrod.

The following papers, contributed by the Prosector to the scientific publications of the Society in 1880, were mainly based upon specimens from the Society's menagerie:—"On the Structure of the Stomach in certain Genera of Tanagers"; "On two rare Ploceine Birds now or lately living in the Society's Menagerie"; "Note on a Specimen of Denham's Bustard"; "Remarks on the Shedding of the Horns in the Prongbuck"; "On the External Characters and Anatomy of the Red Uakari Monkey."

## 6. MENAGERIE.

The number of animals belonging to the first three classes of Vertebrates living in the Society's Menagerie at the close of 1880 was 2372. The corresponding number on the 31st of December, 1879, was 1955, as will be seen by the subjoined Table:—

Manhaybish Tours	December 31.		C	
Quadrupeds	1879.   1880.		Comparison.	
	548	703	Incr. 155	
Birds	1334	1438	Incr. 104	
Reptiles	73	231	Incr. 158	
	1955	2372	Incr. 417	

The total number of registered additions to the Menagerie in 1880 was 1488, of which 624 were acquired by presentation, 515 by purchase, 148 were bred in the Gardens, 161 were received on deposit, and 40 obtained in exchange.

The mode in which these figures compare with those of

previous years is shown in the subjoined table:-

	Presented.	Purchased.	Born.	Deposited.	Received in Exchange.	Total.
1870.	386	529	160	218		1000
1871.	496	434	138	129	40	1333
1872.	460	527	195	110	90	1287
1873.	483	457	191	231	52	1344
1874.	425	296	214	242	188	1530
1875.	559	557	156	143	25	1202
1876.	533	316	171	172	43	1458
1877.	506	324	181	181	27	1219
1878.	511	272	150	178	68	1260
1879.	550	421	115	124	71	1182
1880.	624	515	148	161	56 40	1266 1488

The following is a list of the most noticeable additions made to the Menagerie during the year 1880:—

### JANUARY.

1. A Japanese Hawk-Eagle (Spizaetus orientalis), from Japan, being the first individual of this scarce Bird of Prey we have received. It was presented to us by our Corresponding Member, Harry Pryer, Esq., of Yokohama, and arrived under the kind care of Mr. Maries on January 6th.

2. Two Blue-eyed Cockatoos (Cacatua ophthalmica), presented by the Rev. George Brown, C.M.Z.S., of Duke-of-York's Island. This acquisition is of much interest, as the species was hitherto believed to be peculiar to the Solomon Islands, where, however,

it may also occur.

III (I

## FEBRUARY.

3. Two female Thars (Capra jemlaica), mother and young, presented by H.R.H. the Prince of Wales on the 5th February. The mother is the same animal that was brought home by the Prince of Wales on his return from India in 1876, and deposited for some time in the Society's Gardens. The young female was born whilst the mother was in the Society's Gardens. The male, which arrived at the same time, is unfortunately dead, so that another male of this species would be a very desirable acquisition to the Society's Menagerie.

4. Two Burrhel Wild Sheep (Ovis burrhel), purchased February 19th, being the first examples of this fine Himalayan Sheep that have been acquired by the Society.

#### MARCH.

5. A pair of Spanish Ichneumons (Herpestes widdringtoni) from Andalusia, presented by J. C. Forster, Esq., F.Z.S., March 19th.

#### APRIL.

6. An example of the Short-nosed Perameles (Perameles obesula), purchased April 15th, being the first example of this Marsupial which we have received for the Menagerie.

7. A young male Cape Hunting-Dog (Lycaon pictus), presented by C. Ernest Pope, Esq., of Alice, Victoria East, South Africa,

and received April 19th.

8. A Koala, or Native Bear of Australia (*Phascolarctus cinereus*), purchased April 28th, being the first example of this peculiar Marsupial that has been brought alive to Europe.

#### MAY.

9. Two Side-striped Jackals (Canis lateralis), acquired by purchase May 28th. Only one example of this rare species has been

previously received by the Society.

10. A young male Lühdorf's Deer (Cervus luehdorfi), born in the Zoological Gardens of Hamburgh, and new to the collection. Lühdorf's Deer is a newly discovered species from Amoorland, closely allied to the Wapiti.

#### JUNE.

11. A male Leonine Monkey (Macacus leoninus) from Arracan, received in exchange June 14th, from the Zoological Gardens of Calcutta. This rare Monkey agrees well with the excellent figure of Mr. Wolf (P. Z. S. 1870, p. 664, t. xxxv.) taken from our former individual of this species.

12. A Tufted Umbre (Scopus umbretta) from Africa, purchased June 26th, being the first example of this peculiar African form

that has reached us.

#### JULY.

13. A pair of Ocellated Turkeys (Meleagris ocellata) from Yucatan, presented by Mr. W. E. Sibeth, July 20th.

#### AUGUST.

14. Two Tcheli Monkeys (Macacus tcheliensis) from China, north of Pekin, presented by Dr. S. W. Bushell, C.M.Z.S., of H.B.M. Legation, Pekin. This little-known Monkey belongs to

the group of M. rhesus, but is covered with dense short fur, fitting

it to bear the severe winters of its native country.

15. A Michie's Tufted Deer (Elaphodus michianus), purchased August 25th, being the fourth example of this rare ruminant which we have obtained.

16. A young pair of the Koodoo Antelope (Strepsiceros kudu),

purchased August 26th.

#### OCTOBER.

17. A pair of Gayals (Bibos frontalis) from the hills of Chittagong, received in exchange from the Zoological Gardens of Calcutta.

18. A pair of young Polar Bears (Ursus maritimus), brought from the Polar Seas, and presented to the Society by Mr. B.

Leigh Smith, F.Z.S.

19. An Ivory Gull (Larus eburneus), also from the Polar Seas, and presented by the same donor, being the first example of this

species that has reached us.

20. An Indian Jerboa (Alactaga indica), obtained in May last in the Logar Valley, between Kabul and Guzni, and presented to the Society by Major W. E. Money.

#### NOVEMBER.

21. Two Matamata Terrapins (Chelys matamata), purchased November 26th. Only two examples of this singular Tortoise have been previously received.

22. A Uniform Water-Snake (Fordonia unicolor), purchased

November 29th, and new to the Collection.

## DECEMBER.

23. A young female Red Wolf (Canis jubatus) from the Argentine Republic, presented by Mr. W. Petty, of Monte Video, being the second example of this scarce animal we have received.

24. A Pig from Brooker Island, Louisiade Archipelago, presented by Lieut. De Hoghton, of H.M.S. 'Beagle,' probably

referable to Sus papuensis.

The following is a systematic list of the Mammals, Birds, and Reptiles, belonging to species new to the Society's Catalogue, which were exhibited in the Society's Gardens in the year 1880:—

## MAMMALS.

2 Tcheli Monkeys (Macacus tcheliensis).

1 Azara's Capuchin Monkey (Cebus azaræ).

1 Very Black Lemur (Lemur nigerrimus).
1 Algerian Hedgehog (E. inaceus algirus).

1 Marked Paradoxure (Paradoxurus stigmaticus).

1 Indian Jerboa (Alactaga indica).

1 Gerbille (Gerbillus, sp. inc.).

1 Yellow-toothed Cavy (Cavia flavidens). 1 Black-necked Hare (Lepus nigricollis).

1 Papuan Pig (Sus papuensis).

1 Natal Antelope (Cephalophus natalensis).

1 Lühdorf's Deer (Cervus luehdorfi).

1 White-bellied Opossum (Didelphys albiventris).

1 Short-eared Perameles (Perameles obesula).

1 Koala (Phascolarctus cinereus).

#### BIRDS.

1 Brown Mock Thrush (Harporhynchus rufus).

3 Crested Tits (Parus cristatus).

1 Black-headed Tanager (Orchesticus ater).

1 Resplendent Weaver Bird (Hypochera splendens).

3 Russ's Weaver Birds (Quelea russi).

4 Bengal Weaver Birds (Ploceus bengalensis).

3 Euler's Finches (Spermophila euleri).

4 Golden Sparrows (Auripasser euchlorus).

1 Varrell's Siskin (Changemiteis aurili)

1 Yarrell's Siskin (Chrysomitris yarrelli).
3 Yellow-shouldered Hangnests (Icterus tibialis).

1 Changeable Troupial (Quiscalus versicolor).

1 Blyth's Pastor (Pastor blythi).

1 Cat-bird (Ptilonorhynchus smithi).

2 Blue-banded Grass-Parrakeets (Euphema chrysostoma).

1 Noble Macaw (Ara nobilis).

1 White-bellied Parrot (Caica leucogastra).

1 Brown Passerine Owl (Glaucidium phalanoides).

1 Gould's Harrier (Circus gouldi). 2 Moor-Harriers (Circus maurus).

1 Beautiful Wood-Hawk (Dryiotriorchis spectabilis).

1 Japanese Hawk-Eagle (Spizaetus orientalis).
1 Louisianian Heron (Ardea ludovicianus).

1 Tufted Umbre (Scopus umbretta).
3 Muscovy Ducks (Cairina moschata).

2 Red-underwinged Doves (Leptoptila rufaxilla).

1 Banded Sand-Grouse (Pterocles fasciatus).

1 Sanderling (Calidris arenaria).

7 Richardson's Skuas (Stercorarius crepidatus).

1 Ivory Gull (Pagophila eburnea). 1 Fulmar Petrel (Fulmarus glacialis).

#### REPTILES.

1 Geometric Tortoise (Testudo geometrica).

1 White Amphisbæna (Amphisbæna alba).

1 Gray's Amphisbæna (Lepidosternum grayi). 1 Brazilian Amphisbæna (Bronia brasiliensis).

1 Galeate Lizard (Calotes opiomachus). 1 Barbadian Anolis (Anolis cepedii).

1 Marbled Polychrus (Polychrus marmoratus). 1 Anguine Lizard (Chamæosaura anguina).

1 Many-spotted Snake (Coronella multimaculata).

1 Bordeaux Snake (Coronella girondica). 1 Tigrine Snake (Tropidonotus tigrinus).

1 Uniform Water-Snake (Fordonia unicolor).

1 Dekay's Snake (Ischnognathus dekayi). 1 Saw-marked Snake (Philodryas serra).

1 Pointed Tree-Snake (Dryiophis acuminata).

1 Ornamented Ceratophrys (Ceratophrys or nata).

1 Bosca's Newt (Cynops boscai).

The subjoined list gives the number of animals of each species which were bred in the Gardens in the year 1880 :-

## MAMMALS.

4 Collared Fruit-Bats (Cynonycteris collaris).

2 Lions (Felis leo).

2 Common Foxes (Canis vulpes). 2 Common Badgers (Meles taxus).

4 Wild Swine (Sus scrofa).

1 Zebu (Bos indicus).

1 Mouflon (Ovis musimon).

2 Elands (Oreas canna).

2 Reeves's Muntjacs (Cervulus reevesi).

1 Red Deer (Cervus elaphus).

1 Wapiti Deer (Cervus canadensis).

2 Japanese Deer (Cervus sika).

1 Sambur Deer (Cervus aristotelis). 1 Molucca Deer (Cervus moluccensis).

1 Mesopotamian Fallow Deer (Cervus mesopotamicus).

1 Hybrid Mesopotamian Fallow Deer (Between Cervus mesopotamicus and C. dama).

4 Axis Deer (Cervus axis).

2 Squirrel-like Phalangers (Belideus sciureus).

1 Red Kangaroo (Macropus rufus).

1 Black Wallaby (Halmaturus ualabatus).

1 Yellow-footed Rock-Kangaroo (Petrogale xanthopus).
4 Gaimard's Rat Kangaroos (Hypsiprymnus gaimardi).

#### BIRDS.

3 Common Bluebirds (Sialia wilsoni).

2 Turquoisine Parrakeets (Euphema pulchella).

3 Upland Geese (Bernicla magellanica).

4 Variegated Sheldrakes (Tadorna variegata).

5 Australian Wild Ducks (Anas obscura).

12 Spotted-billed Ducks (Anas pæcilorhyncha).

3 Common Teal (Querquedula crecca).
3 Garganey Teal (Querquedula circia).
4 Chilian Pintails (Dafila spinicauda).

4 Mandarin Ducks (Aix galericulata). 1 Geoffroy's Dove (Peristera geoffroii).

1 Bronze-winged Pigeon (Phaps chalcoptera).

1 Wonga-Wonga Pigeon (Leucosarcia picata).
3 Siamese Pheasants (Euplocamus prælatus).

4 Horned Tragopans (Ceriornis satyra).

4 Peacock Pheasants (Polyplectron chinquis).

2 Yellow-legged Herring-Gulls (Larus cachinnans).

2 Jameson's Gulls (Larus jamesoni).

## REPTILES.

35 Seven-banded Snakes (Tropidonotus leberis).

The following is a List of the Donors and their several Donations for the year 1880.

### H.R.H. The Prince of Wales.

Two Thars, six Himalayan Monauls, three Horned Tragopans, one Temminck's Tragopan, one Spotted Turtle Dove, two Wild Boars.

Addison, W., Esq. One Wood-Owl.

Adey, T. H., Esq.

One Macaque Monkey.

Alexander, Capt. A., R.E.

One Cinereous Vulture.

Amlot, G. L., Esq.

One Rhesus Monkey.

Anderson, Dr. W.

One Long-eared Owl.

Anson, Mr. J.

One Macaque Monkey.

Arabin, St. Julien, Esq.

One Java Sparrow, one Spotted-sided Finch, one Chestnut-eared Finch, two Chestnut-bellied Finches, two Red-beaked Weaver Birds, one Crimson-crowned Weaver Bird, one Paradise Whydah Bird, one Brazilian Tanager, one Yellow-bellied Liothrix, one Bearded Tit.

Atkins, C., Esq.

One Moustache Monkey.

Badger, The Rev. G. P., D.C.L., F.Z.S.

Two Black Lemurs.

Baker, Miss.

One White-throated Capuchin.

Ball, Capt. E.

One Quica Opossum.

Barlee, F. P., Esq., C.M.G.

Four Globose Curassows, one Little Guan.

Barnes, C. Stanley, Esq.

One Brazilian Cariama.

Barrow, Capt.

One Anubis Baboon, one Collared Mangabey, one Grivet Monkey, one Ludio Monkey.

Bartlett, Mr. A. D.

One Salt-water Terrapin.

Bartlett, Miss.

One Goffin's Cockatoo.

Bayldon, The Rev. G.

One Frigate-bird.

Bayliss, S., Esq., F.Z.S.

Four Rose-coloured Pastors.

Beale, Miss Mabel.

One Sykes's Monkey.

Beazley, Mr.

Three Lesser Black-backed Gulls.

Behrens, W., Esq.

One Malbrouck Monkey.

Bentley, Miss E.

One Blue-fronted Amazon.

Bowen, Lady.

Three Red-crowned Pigeons.

Bower, H. R., Esq.

One Kittiwake Gull.

Bower, Capt. R.

One Dominican Gull.

Boyd, W. C., Esq.

One Horned Lizard.

Bradford, Earl of, F.Z.S.

One Common Raven.

Braithwaite, W. H., Esq.

One West-Indian Agouti.

Branscom, Miss.

Two Horned Lizards.

Braybrooke, Lord, F.Z.S.

Two Summer Ducks.

Brennan, H. P., Esq., R.N. One Toque Monkey.

Brook, L., Esq.

One Speckled Terrapin, one Slowworm.

Brooke, A. Basil, Esq. One Stock-Dove.

Brown, Mrs. M. A.

One Greater Sulphur-crested Cockatoo.

Brown, The Rev. George, C.M.Z.S.

Two Blue-eyed Cockatoos.

Buckland, F., Esq., F.Z.S.

A collection of young Salmonidæ.

Budgett, Mrs.

One Horned Lizard.

Bushell, Dr.

Two Tcheli Monkeys.

Bussey, H. F., Esq.

One Slender-billed Cockatoo.

Castell, J., Esq.

Two Common Gulls.

Chandle, G., Esq.

One Common Cuckoo.

Chetwode, Mrs. A. L.

One Greater White-crested Cockatoo.

Chevallier, H., Esq.

One Indian Gazelle.

Childers, Right Hon. Hugh, M.P. One Feline Douroucouli.

Chirnside, A., Esq.

One Garnett's Galago, one Marsh Ichneumon.

Christie, G. Whitmore, Esq.

One Ocelot.

Clarke, Stephenson, Esq.

One Common Ocelot, one Harpy Eagle.

Clayton, R., Esq.

One Common Rook.

Collingwood, W., Esq.

One Purple-faced Monkey.

Colman, J., Esq., C.M.Z.S.

Six Paradise Whydah Birds, two Yellow-backed Whydah Birds, one White-winged Whydah Bird, twelve Red-beaked Weaver Birds.

Conklin, W. A., Esq.

Two Yellow-headed Troupials.

Connell, W., Esq.

One Rhesus Monkey.

Cooper, E., Esq.

One Azara's Fox.

Cope, W. H., Esq., F.Z.S. One Kittiwake Gull.

Cotton, Capt. W.

One Horsfield's Tortoise.

Cox, Dr. J. C., C.M.Z.S.

Two Common Wombats.

Craven, C. A., Esq.

One Yellow-headed Conure, one Brown Capuchin, one Ocelot, one Ring-tailed Lemur.

Craven, O. W., Esq.

One Common Kingfisher.

Cresswell, F., Esq.

One Bar-tailed Godwit, one Grey Plover, six Knots, thirteen Dunlins.

Cross, Mr. W.

Six Mocking-birds.

Cubitt, W., Esq.

Two Black Rats.

Cullen, J. R., Esq.

One Bonnet-Monkey.

Dalrymple, Sir Hugh, Bart. Eleven Common Guillemots, two Common Gulls.

Davis, Miss.

Two American Black-backed Geese.

Davis, C. H., Esq.

One Green Woodpecker.

Day, J., Esq.

Two Blood-breasted Pigeons.

Day, P., Esq.

One Common Chameleon.

De Hoghton, Lieut. R.N. One Papuan Pig.

Dixie, Lady Florence. One Jaguar.

Dobrée, R. B., Esq.

One Spur-winged Goose.

Dobson, Dr. G. E., C.M.Z.S.

One Algerian Hedgehog, two Common Barn-Owls, one Long-eared Owl.

Donovan, J. M., Esq.

One Pig-tailed Monkey.

Dudfield, Mrs. L.

One Javan Chevrotain.

Dumbell, H., Esq.

One Roseate Cockatoo.

Dundas, G., Esq.

One Crab-eating Opossum.

Dunn, W., Esq., C.E., C.M.Z.S.

Two Bankiva Jungle-fowls, two Starred Tortoises.

Dunt, W., Esq.

One Persian Gazelle.

Dutton, Mrs. M.

One Common Jay.

Edson, G., Esq.

One Gannet.

Edwards, G. D., Esq.

One Common Barn-Owl.

Elliot, E., Esq., M.R.C.S.

One Dunlin, one Sanderling.

Elliot, Mrs.

One Plantain-Squirrel.

Evans, E. A., Esq.

One Malbrouck Monkey.

Everitt, W. T., Esq.

One Common Pheasant.

Felix, F., Esq.

One Rhesus Monkey.

Fenton, Lieut. L. L.

One Eyed Lizard, one Æsculapian Snake, six Viperine Snakes, one Bordeaux Snake.

Fenwick, N. P., Esq., F.Z.S. One Larger Hill-Mynah.

Ferris, Mr. A.

One Banded Ichneumon.

Fife, Capt.

One Vulpine Phalanger.

Fisk, Rev. G. H. R., C.M.Z.S.

One Robben-Island Snake, five Rufescent Snakes, one Areolated Tortoise, one Geometric Tortoise, one Silver-backed Fox, one Caffre Wild Cat.

Forbes, W. A., Esq., F.Z.S.

One Red Brocket, one White-bellied Opossum, one Brazilian Hare, one White-bellied Guan, one Black Tortoise, one Brazilian Amphisbæna, one Gray's Amphisbæna.

Foster, J. C., Esq., F.Z.S.

Two Spanish Ichneumons, two Wild Cats.

Fricke, Charles, Esq.
Two Hawk-headed Caiques.

Gape, Major.

One Macaque Monkey.

Gibbes, Dr., F.Z.S.

One Spotted Salamander, one Common Tench, one Axolotl.

Gillespie, J. W., Esq.

One West-African Love-bird.

Gissing, Commander, C.E., R.N. One Black Wallaby.

Gordon, Lord Ernest.

One Dingo Dog.

Gordon, W. C., Esq.

One Red-fronted Lemur, one Grivet Monkey.

Gow, A. B., Esq.

Three Gaimard's Rat Kangaroos.

Greaves, C. H., Esq.

One Common Kingfisher.

Green, W. F., Esq.

One Goffin's Cockatoo.

Grosvenor, F. C., Esq.

One Rhesus Monkey.

Günther, Dr. A., F.R.S.

Five Bosca's Mud-Newts.

Gurney, J. H., Esq., F.Z.S. Two Polish Swans. Haines, F. G., Esq.

One Common Badger.

Hall, H., Esq.

One Banded Ichneumon.

Hallawell, J., Esq.

One Ring-tailed Coati.

Hallett, Miss C.

Two Silver Pheasants.

Hamilton, J. G., Esq.

One Ludio Monkey, one Mona Monkey.

Harris, E., Esq., F.Z.S.

One Silver Fox, one Golden Eagle.

Harris, T. S., Esq.

One Horned Lizard.

Harting, J. E., Esq., F.Z.S.

One Black Scoter. Harvey, Wm. Underwood, Esq.

One Bonnet-Monkey.

Hastings, Dr.

One Egyptian Jerboa.

Hawtayne, G. H., Esq., C.M.Z.S.

One Thick-necked Tree-Boa, two American Moorhens, one South-American Rat-Snake, one Two-toed Sloth.

Hay, Capt. the Hon. F. G., and - Wylde, Esq.

Two Striped Hyænas.

Hayes, F. R., Esq.

One Peregrine Falcon.

Haynes, Mr. A.

One Green Monkey.

Henderson, Lieut. G. P., R.N.

One Philantomba Antelope.

Henniker, Capt., F.Z.S.

One Yellow-cheeked Amazon.

Henry, J. Snowdon, Esq., F.Z.S.

One Macaque Monkey, one Rhesus Monkey, two Hybrid Macaque Monkeys.

Herring, G., Esq.

One Common Gull.

Higginson, E. G. Forbes, Esq. One Common Cuckoo.

Higham, W. R., Esq.

One Indian Cobra.

Hill, Viscount.

One Golden Eagle, one Red-fronted Lemur, one Natal Antelope.

Hirsch, L., Esq.

One Fallow Deer.

Hoare, Mrs. J.

Two Common Peafowl.

Holt, Lord, and Co., Messrs.

Two Horrid Rattlesnakes.

Holt, J., Esq.

One Greek Land-Tortoise, one Common Hedgehog.

Hooker, Mrs. E.

One Egyptian Ichneumon.

Horlock, Dr.

One Patas Monkey.

Howard, P., Esq.

One Common Chameleon.

Hyde, R. M., Esq.

One Green-winged Trumpeter.

Ilchester, Lord.

One Hog-Deer.

Jackson, The Hon. L. S.

Two Three-ridged Terrapins, two Hamilton's Terrapins, one Black-necked Hare, one Spotted Ichneumon.

Jamrach, Mr. A. H.

One Musky Lorikeet.

Jamrach, Mr. W.

Two Hardwicke's Mastigures.

Jeyes, L., Esq.

One Slowworm.

Joliffe, Mrs. Hylton.

Two Nutmeg-Finches, one Chestnut-breasted Finch.

Jones, Capt. E.

One Stanley Crane.

Jones, H. T., Esq.

One Ring-tailed Coati.

Jones, Mr. S.

One White-throated Finch.

Julien, Lindsay von, Esq.

One Great Eagle-Owl.

Keep, Mr. H.

One Centipede.

Kendall, A., Esq.

One Herring-Gull.

Kincaid, J. E., Esq.

One Rhesus Monkey.

King, Capt. H.

Two Martinican Doves, one Hawk's-billed Turtle.

King, Mr. J.

Two Green Woodpeckers.

Kirby, G., Esq.

One Macaque Monkey.

Knight, C. H., Esq.

One Common Raven.

Ladell, Mrs.

One Malbrouck Monkey.

Lake, Commander Atwell, R.N.
One Brown Bear.

Laver, H. E., Esq.

One Grivet Monkey.

Lawes, W. C., Esq.

One Pig-tailed Monkey.

Lawson, Mrs.

One Herring-Gull.

Lemberg, P., Esq.

One African Civet Cat.

Lewis, A. R., Esq.

One Ruddy Ichneumon.

Lichtabbell, H. C. Marckman de.

One White-cheeked Capuchin.

Lilford, Lord, F.Z.S.

Three Slender Loris, two Azara's Foxes, one Jaguar.

Litkie, V. A., Esq.

One Cape Eagle-Owl.

Low, Messrs. Hugh and Co.

Three Madagascar Porphyrios, one Blood-breasted Pigeon.

Lumsden, Capt. C. A.

One Long-eared Owl.

Macaulay, Mrs. H. D.

One Pinche Monkey.

Macaulay, Mr.

One Macaque Monkey.

McCubbin, Hugh, Esq.

Two Radiated Tortoises.

McGregor, J., Esq.

One Gold Pheasant.

McIlwraith, A., Esq., F.Z.S.

One Emu.

McRitchie, Capt. A.

One Turnstone.

Manley, F. W., Esq.

One Macaque Monkey.

Mann, T. J., Esq.

One Smooth Snake, one Water-Rail.

Mantell, G., Esq.

One Black-eared Marmoset.

Martin, Mrs. H. D.

One Herring-Gull.

Middleton, W., Esq.

One Crested Porcupinc.

Milward, G., Esq.

One Common Squirrel.

Mitchison, A. W., Esq.

One Common Raven.

Money, Major.

One Indian Jerboa.

Moore, H., Esq.

One Common Turtle Dove.

Morison, J., Esq., F.Z.S.

One Black-eared Marmoset.

Morris, J., and A. H. Brown, Messrs. One Chinese Rhesus Monkey.

Mülhauser, G. A., Esq.

One Tayra.

Murray, T. Douglas, Esq., F.Z.S. One Common Marmoset.

Murray, Miss M.

One Arabian Gazelle.

Nevill, Lady Dorothy.

One Malbrouck Monkey.

Nicholls, C. Kerry, Esq.

One Bonnet-Monkey.

Nicholson, Mr. M.

One Bonnet-Monkey.

Nixon, J. Forbes, Esq.

One Herring-Gull.

Ockenden, Mr. E.

Two Common Nightjars.

Officers of the Royal Yacht.
One Sykes's Monkey.

Ord, Sir Harry St. George, C.B., H.M.Z.S.

One Black-faced Kangaroo, four Short-tailed Wallabies, three Vulpine Phalangers, three White-backed Piping Crows. Overbeck, C., Esq.

One Brown Bear.

Owen, Capt.

One Side-striped Jackal.

Ozorio, Luiz de Tavares, Esq. One Horned Lizard.

Pain, W. H. B., Esq.

Two Common Vipers.

Palmer, J., Esq.

One Herring-Gull.

Peake, F., Esq., F.Z.S.
One Green Monkey.

Peele, C., Esq.

One Macaque Monkey. Petty, W., Esq.

One Red Wolf, three Muscovy Ducks.

Phillips, F., Esq.

One Greater Sulphur-crested Cockatoo.

Pillans, C. B., Esq.

One Cape Bucephalus.

Pillans, Eustace, Esq.

One Rhomb-marked Snake, one Many-spotted Snake, one Anguine Lizard.

Pope, C. Ernest, Esq.

One Cape Hunting-Dog.

Porter, C., Esq.

One Rose-Hill Broadtail.

Porter, W., Esq.

One Robben-Island Snake.

Powles, W. D., Esq., C.M.Z.S. One Hybrid Fowl.

Pryce, T. E., Esq.

One Little Grebe.

Pryer, Harry, Esq., C.M.Z.S.

One Japanese Hawk-Eagle.

Pryer, W. B., Esq.

One Sumatran Civet.

Queensberry, Marquis of.

One Huanaco, one Common Rhea.

Ravenscroft, W. H., Esq.

One Indian Chevrotain.

Reid, Dr.

One Dwarf Chameleon.

Rembielinski, Count.

One Gerbille.

Ringer, Sydney, Esq., M.D. Two Corean Pigs.

Ringrove, Mrs. G.

One Common Hare.

Robinson, C. B., Esq.

One Ocelot, one Ring-tailed Coati.

Rodney, J., Esq.
Two Slowworms.

Rose, H. F., Esq.

One Weka Rail.

Rose, T. L. M., Esq.
One Mississippi Alligator.

Russell, Miss Flora.
One Viviparous Lizard, one Sand-Lizard.

Russell, Capt.

One American Red Fox.

St. Quintin, W. H., Esq.

Two Red-legged Partridges, two Northern Buzzards, one Scops Owl, two Rufous-necked Weaver Birds, one Common Spoonbill.

Salvin, Mrs. C.
One Rhesus Monkey.

Samuel, L., Esq.

One Vervet Monkey.

Saunders, the Rev. J., B.A. One Rhesus Monkey.

Saunders, J. E., Esq.
One Malbrouck Monkey.

Savage, E. S., Esq.

One Sykes's Monkey. Schmettau, Karl J., Esq.

One Horrid Rattlesnake.

Schütte, A. L., Esq. One Ocelot.

Schweder, E., Esq.
One Common Fox.

Scott, T. C., Esq. Four Richardson's Skuas.

Scrutton, P. E., Esq.
One Brown Capuchin.

Seaborne, Capt. J.
One Gould's Harrier.

Shairp, N. W., Esq.
Two Common Cranes.

Sibeth, W. E., Esq.

Two Ocellated Turkeys.

Simonds, J., Esq.

One White Pelican.

Simpson, F., Esq.

One Vervet Monkey, one Balearic Crowned Crane.

Smerdon, Capt.

Two Indian Porcupines.

Smith, B. Leigh, Esq., F.Z.S.

Two Polar Bears, one Ivory Gull.

Smith, Lieut.-Col. J. A.

Four Ring-tailed Coatis.

Smith, J., Esq.

One Pike, one Bream, one Tench.

Sparagnapane, Madame.

One Common Marmoset.

Speer, Dr. F.

One West-African Python.

Speer, Surgeon F.

One Long-nosed Crocodile.

Spooner, Miss M. S.

One Crested Ground-Parrakeet.

Starling, R., Esq.

One Northern Buzzard.

Stevenson, W. H., Esq.

One Sambur Deer.

Stovell, J., Esq.

One Common Trumpeter.

Stradling, Dr. A., C.M.Z.S.

One Long-headed Snake, one Pointed Tree-Snake, one White Amphisbæna, two Red-underwinged Doves, two Giant Toads, one Tuberculated Iguana, one Marbled Polychrus, one Saw-marked Snake.

Sturt, Lieut.-Col. C. S., C.M.Z.S.

One Common Paradoxure, one Carpet-Viper, one Blyth's Pastor, one Banded Sand-Grouse.

Taylor, W., Esq., M.D.

Two Domestic Goats.

Thimbleley, H. J., Esq.

One Macaque Monkey.

Tholandir, Capt.

One Common Squirrel.

Thomas, O., Esq., F.Z.S.

Two Slowworms,

Thomas, Capt.

One Grey-cheeked Monkey.

Thomas, Capt. J.

One Stump-tailed Lizard.

Thomson, J. H., Esq., C.M.Z.S. One Alligator Terrapin.

Thornhill, E., Esq.

One Greater Black-backed Gull.

Thunder, G. H., Esq., R.N. One Common Genet.

Ticehurst, Capt.

One Arabian Gazelle.

Tilbury, Miss.

One Rhesus Monkey.

Tober, D., Esq.

One Smooth Snake, one Plantain-Squirrel.

Turner, G. G., Esq.

One Macaque Monkey.

Tustin, W. B., Esq.

One Macaque Monkey.

Veale, J., Esq.

One Leadbeater's Cockatoo.

Veitch, Messrs. James and Son, and Charles Maries, Esq. One Brown Bear, three Tigrine Snakes.

Wainwright, H. G., Esq.

One Macaque Monkey.

Wakefield, The Rev. T.

Two Elliot's Guinea-fowl.

Waller, Gerald, Esq.

Four Abyssinian Guinea-fowls, two American Darters.

Walsingham, Lord, F.Z.S.

Thirty-six Golden Tench.

Weaver, G., Esq.

Two Common Gulls.

Weaver, H. E., Esq.

One Horrid Rattlesnake.

Wedderburn, Miss.

Two Common Peafowls.

Westermann, G. F., Esq., F.M.Z.S.

One Russ's Weaver Bird.

Westminster, The Marchioness of.

Three Red-beaked Weaver Birds.

Whitmarsh, H. B., Esq.

One Central-American Agouti, one Prince Albert's Curassow.

Williams, C., Esq.

One Alexandrine Parrakeet, two West-African Lovebirds, one Common Canary, one Crimson-eared Waxbill.

Williams, J. F., Esq.

One Hawk's-billed Turtle.

Wilson, J. W., Esq.

Ten Amaduvade Finches.

Wilson, S., Esq.

One Common Trout.

Winchester, M. M., Esq.

One Macaque Monkey.

Winterton, Earl of, F.Z.S.

Four Egyptian Jerboas.

Wood, H., Esq.

One Brown-necked Parrot.

Woolward, Capt.

One Black-handed Spider Monkey.

Worssam, E., Esq.

One Black Rat.

Wynne-Roberts, Mrs. R.

One Sykes's Monkey.

Young, J., Esq., F.Z.S.

Two Bearded Tits.

Young, J., Esq.

One Common Kestrel.

Younge, Mrs. S. M.

One Macaque Monkey.

#### Conclusion.

In concluding their fifty-second Report, the Council have to acknowledge, with many thanks, the assistance they have received from the Committee of Publication, and from the gentlemen who have served upon the Committees of Finance and Audit during the past year.

Signed (for the Council),

P. L. SCLATER,

Secretary.

11 Hanover Square, April 29th, 1881.

#### REPORT

OF THE

#### AUDITORS OF THE ACCOUNTS

OF THE

## ZOOLOGICAL SOCIETY OF LONDON,

Appointed January 20, 1881.

The Committee of Auditors to the Zoological Society having fully examined the Accounts, inspected the Books, and seen Vouchers for all the various Payments ordered by the Council for the year ending December 31st, 1880, respectfully submit to the Society an abstract of such Accounts, together with a Statement of the Assets and Liabilities at the close of the year, and a Report thereon.

#### RECEIPTS.

Balance brought from Dec. 31, 1879		••••					£ 1071	s. 1	d
INCOME.			-						
Garden Sales		8.		£	s.	d.			
Admission Food	5	0	0						
Subscriptions	9								
Ivory Tickets	1	1	0						
Carony and the control of the contro				20	11	0			
(Rent for Freehold Premises	75	0	0	20	11	v			
Garden Sales		100	8						
879 Admission Fees	85	0	0						
Subscriptions	54		0			1			
Ivory Tickets	3	3	0			-			
( Publication Sales	290	0	1						
		_		700	7	9			
Admissions to Gardens	15,786		0						
Rent for Refreshment Rooms	1,107	0	0						
Rent for Freehold Premises	225	0	0						
Garden Sales	130		7				= 12		
Admission Fees	615		0						
880 Compositions	6.500	0	0						
Subscriptions Ivory Tickets	34		0						
Publication Subscriptions	505	13	0						
Publication Sales	172	2	3						
Dividends	74		9			v.			
Miscellaneous	340		11						
				26,519	9	6			
Subscriptions	138	3	0	20,010		0			
881 { Ivory Tickets	1	1	0						
Publication Subscriptions	8	8	0						
		-	-	147	12	0			
						_			
COME RECEIVED IN 1880			-/4			92			
COME RECEIVED IN 1880	••••••			27,388	0	3	27,388	0	3
						1			
						100			
						_			-
						10	28,459		

RUSDPCMKVNGABHUSPPLRUGH

E

R

### PAYMENTS.

s. d. 1 3

0 3

	1	Belon						
	1879.		188	0.		То	tal.	
EXPENDITURE.			79.53					
Rent, Rates, Taxes, and InsurancesGardens	£ s		£ 788	s. 7	<i>d</i> . 0	£ 942	s. 1	d. 5
	19 (	100		18	4		18	
Salaries, Wages, and Pensions Gardens .		• • • • • • • • • • • • • • • • • • • •	3,300		8	3,300		8
Ditto dittoOffice .	361 1	10	1,859	7	6	1,859 5,037		6 2
Provisions	50 10	5 1000	4,676 1,494		5	1,545		
Menagerie Expenses	222 14	10 101	2,808		6	3,031		6
Keepers' Dresses	8 2		144		0	152		0
Works, Materials, and Repairs	361 10	100	3,922		11	4,283		10
New BuildingsOffice	396	000000000000000000000000000000000000000				396		0
Garden Expenses	11 4	8 504	792		0	804	2	6
Advertisements	43 5	2 1	213	18	11	257	1	0
Band Expenses			223	4	0	223	4	0
House and Office ExpensesGardens	28 1		233		0	262		9
Ditto dittoOffice	7.7	10	407		0	432		
Stationery	13 9			16	2	84		2
Printing (Miscellaneous)	20 10		397		3	417		9
Publications	321 8		1,835		11	2,156		
Library Expenses	88	1 2	664		7	752 114		9
Returned Subscriptions			114	1	0		1	0
Davis Bequest				0	0		0	0
Interest on Mortgage Debt			312		4	312		0 10000
	-							
EXPENDITURE PAID IN 1880	2,124	3 6	24,454	18	10	26,579	7	4
	-				-			
Repaid Messrs. Drummond on account of Mo	ortgage De	ebt				1,000	0	0
Cash at the Banker's, December { General A	Account		. £545 . 333		100			
31, 1880, viz. Petty Cas	n Account	•••	. 000	•		0.00		
						879	14	2
						7.5		

# Comparison of Receipts in 1879 and 1880.

	Rec	eipts.		
	Increase.	Decrease.		
	1879.	1880.	11101011101	
Admission Fees:  Past  Present  Past  Past  Past  Past  Present  Future  Compositions  Ivory Tickets  Admissions to Gardens  Garden Sales  Rent for Refreshment Rooms  Rent for Premises in Oxford Street  Publications  Dividends  Miscellaneous	£ s. d. 110 0 0 585 0 0  66 0 0 6,550 9 0 78 0 0 900 0 0 41 10 0 15,215 7 0 401 9 8  1,223 1 8  300 0 0 881 8 9 74 8 4 36 9 1	£ s. d.  90 0 0 615 5 0  63 0 0 6,508 8 0 138 3 0 1020 0 0 39 18 0 15,786 12 0 329 10 3  1,107 0 0  300 0 0 975 11 4 74 6 9 340 5 11	# s. d.  30 5 0  60 3 0 120 0 0  571 5 0  94 2 7  303 16 10	0 1 7
Increase	26,463 3 6 924 16 9	27,388 0 3	0-1 1- 0	254 15 8 Ded. Decr.
Increase	27,388 0 3	27,388 0 3	924 16 9	
Total Pay	over Payments	cash		
To Balance brought from To Income received in the	December 31, e Year	1879		£ s. 6 1,071 1 27,388 0
				28,459 1

## Comparison of Payments in 1879 and 1880.

		Pa	yn	nents.		
	18	79.		1880.	Increase.	Decrease.
Arrears of previous years Rent, Rates, Taxes, and In-	£ 2,267		d. 2	£ s. d. 2,124 8 6		£ s. d.
surance	985	15	7	857 5 4		128 10 :
sions	5 106	16	6	5,160 1 2	50 4 0	
Cost and Carriage of Animals	1,349		2	1,494 14 5	53 4 8 145 5 3	
Provisions	4,180	-	3	4,676 13 4	496 5 1	
Menagerie Expenses	2,785		8	2,808 17 6	23 4 10	
Works, Repairs, and Mate-	141	18	0	144 12 0	2 14 0	
rials	2,892		3	3,922 0 11	1,029 9 8	
Buildings	200	0	0			200 0 0
Garden Expenses	843	6	9	792 18 0		50 8 9
Band Expenses	229 221	17	0	213 18 11		15 18 3
House and Office Expenses	601	0	7	223 4 0 641 5 0	1 16 0	
Stationery and Account Books	62	16	2		40 4 5	
Printing (Miscellaneous)	391	4	0	70 16 2 397 4 3	8 0 0 6 0 3	
Publications	2,044	17	7	1,835 10 11		200 6 0
Library Expenses	322	0	0	664 7 7	342 7 7	209 6 8
Returned Subscriptions	43	8	0	114 15 0		· · · · · · · · · · · · · · · · · · ·
Grant in aid of Science	50	0	0	50 0 0		
Expenditure of Davis Bequest	74	8	4	74 1 0		0 7 4
Interest on Mortgage-d.bt	352	10	0	312 13 4		
Increase	25,146 1,432			26,579 7 4	2,219 18 9 787 8 7	787 8 7 Ded. Decr.
	26,579	7	4	26,579 7 4	1,432 10 2	
Ordinary Expenditure	23,908	6	1	24,753 9 5	845 3 4	
Extraordinary ditto	1,238		1	1,825 17 11	587 6 10	
	25,146	17	2	26,579 7 4	1,432 10 2	
		C	on	tra		Cr.
By Expenditure paid in the years of the Repayment to Messrs. Drugs Balance at Banker's, December 1988.	mmond	on	2001	annt of Moutees		£ s. d. 6,579 7 4 1,000 0 0 879 14 2

The Assets and Liabilities of the Society on the 31st of December 1880 were as follow:—

				A	مد	12.	rs.					_
	Arrears of			Freehold and Funded	Ca	sh.	Total.					
	Previous Current Years. Year.		Property.	Ca	311.	2 Otali						
Cashat the Banker's							£ s. d.	and the same of	s. d. 14 2			
Cost of £1900 Lond. & South- western Ry. Co's												
New 4 per Cent. Preference Stock. Freehold Premises.							1,938 9 6 24,490 0 0			1,938 24,490		
Annual Subscrip-		0	0	78 2	0	0				176 2		
Ivory Tickets Publication Sales	18	3	6	210 53	18					229		1
Garden Sales Rent for Freehold Premises				75		0		100000			0	
	124	6	0	419	11	8	26,428 9 6	879	14 2	27,852	1	-

#### LIABILITIES.

	Debts.									
Bills, &c., estimated at—  For the Gardens, say  Office, say	£ 1345 425	s. 7	d. 9 2	£	8.	d.				
		_	_	1770	8	11				
Rent and Taxes unpaid— For the Gardens, say	285 23		10 9							
			_	308	4	7				
Messrs. Drummond, Mortgage Debt				7000	0	0				
				9078	13	6				

The Auditors are glad to be no longer obliged to report a decrease in the Society's revenue. Although the expenditure has increased, chiefly by an additional sum of about £1000 for repairs and nearly £500 for higher cost of provisions (consequent upon an increase in the number of animals), the Council have been able to reduce the mortgage on the Society's premises by the sum of £1000, and yet to leave the cash balance in hand at the close of 1880 only £191 7s. 1d. less than at the close of the preceding year.

There has been a small decrease in the number of Fellows, owing chiefly to deaths and resignations; but the receipts for Subscriptions, Admission Fees, and Compositions are

together larger by £108 than in 1879.

The Auditors are glad to acknowledge their satisfaction at the state of the Books as placed before them by Mr. Barrow, the Society's Accountant.

EDWARD JOHNSTONE.
W. T. BLANFORD.
HENRY SEEBOHM.
HERBERT DRUCE.
W. H. HUDLESTON.
F. M. BALFOUR.

11 Hanover Square, W. February 24, 1881.