

# REPORT

OF THE

# COUNCIL

OF THE

# ZOOLOGICAL SOCIETY

OF LONDON,

# FOR THE YEAR 1889.

READ AT THE ANNUAL GENERAL MEETING,

APRIL 29тн, 1890.

# LONDON: PRINTED BY TAYLOR AND FRANCIS,

RED LION COURT, FLEET STREET.

1890.

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# REPORT OF THE COUNCIL.

#### April 29, 1889.

THE Council have the pleasure of submitting to the Fellows their sixty-first Annual Report upon the progress 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 on the 1st of January, 1890, was 3075, classified as follows :----

G 1 1 1 1 1 600

Compounders who have paid $\pounds 20$		23
Ditto ditto £30		930
Compositions remitted		20
Paying annual contributions of $\pounds 2$		15
Ditto ditto £3		1903
Dormant		164
Admission-fees unpaid		

3075 A 2

The corresponding number of Fellows at the close of 1888 was 3076. The number of Fellows elected or readmitted in 1889 was 125, being 3 more than the corresponding number in 1888.

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

	.,po			Died.			1	Resigne	d.	R	lemove	d.	be.	of 31.
Years.	lected or -admitted	Co	mpoun	ders.	Subse	ribers.	Subsc	ribers.	es es aid.	Subsc	ribers.	mission Fees npaid.	Fellows	Number of Fellows, December 3
	Elected Re-admi	£20.	£30.	Fee re- mitted.	£2.	£3.	£2.	£3.	Admission Fees Unpaid.	£2.	£3.	Admission Fees Unpaid.	Ceased Fello	Nur F.
1880.	153	4	18	1	4	65		74			38	4	208	3306
1881.	138	24	31		5	75		65	3	1	27		231	3213
1882.	164	3	23	1	4	61		48			11	13	164	3213
1883.	159	4	25		3	55		38			33	4	162	3210
1884.	183	1	28		5	53		37		1	7	6	138	3255
1885.	111	2	17		5	69	2	55		1	20	2	173	3193
1886.	123	4	22		4	64		59			12	5	170	3146
1887.	138	4	20		7	68	1	67			10	3	180	3104
1888.	122	1	10	1	3	58		54			15	8	150	3076
1889.	125	1	14	1	2	58		36			12	2	126	3075

It will be observed by this table that the number of Fellows has now been slightly decreasing for several years, although it is satisfactory to find that the total for 1889 was only less by one than that of the preceding year.

The Council, however, venture to suggest to the existing Fellows that it is very desirable that the Society should receive additional support; and, with a view of enabling them to propose new Members more easily, have given orders that a prospectus of the Society's objects and a form of proposal shall be circulated along with each copy of the present report.

# b. Honorary Member.

In recognition of his valuable present of the first specimen of the Indian Bison, or "Sladang," received alive in Europe, Sir Cecil Clementi Smith, K.C.M.G., the Governor of the Straits Settlements, was elected an Honorary Member in 1889.

#### c. Corresponding Members.

The following Corresponding Members have been elected to fill vacancies during the past year :---

Dr. C. Wünderlich, Director of the Zoological Garden, Cologne.

Surgeon-Major A. S. G. Jayakar, of Muscat, Arabia.

Surgeon-Major David Douglas Cunningham, Professor of Anatomy and Physiology in the Medical College, Calcutta.

Heer F. E. Blaauw, of Amsterdam.

John J. Quelch, Esq., of George Town, British Guiana. Charles M. Woodford, Esq., of Sydney, New South Wales.

#### d. Medallist.

An addition to our list of Medallists was made in 1889 in the person of Dr. Edward Dalzel Dickson, an old and valued Corresponding Member of this Society at Constantinople, in recognition of his zoological collections presented to the Society.

#### 2. STATE OF THE FINANCES.

#### a. Income.

The Income of the Society during the past year shows many encouraging features of improvement when compared with that of 1888, and may be said to have attained a very satisfactory increase. The Garden Receipts, which consist of the sums received on week-days from visitors to the Society's Gardens, reached a total of £14,891 16s. 6d., being in excess of the corresponding amount received in 1888 by £1607 5s. 6d. The amount realized by the fees received from the riders on the Elephants and Camels was likewise more by £38 17s. 1d., and the rent received from the Lessees of the Refreshment Departments was larger by the sum of £119 17s. 7d. These increases are due to the greater number of visitors to the Gardens, attributable, no doubt, in great measure to the fine summer weather of 1889.

On the other hand the sum received for Life Compositions for Fellowships was less by £150. This slight falling-off was, however, more than compensated for by the large augmentation of the amount received from the sale of the Society's Publications, which reached the large total of  $\pounds 1291$  6s. 7d., being  $\pounds 525$  1s. 6d. more than in 1888.

The total Income of the Society for 1889 was £26,427 12s., and exceeded that of 1888 by the sum of £2402 1s. 4d., as shown by the subjoined Table :—

		Ind	com	e of			T			Deen		
	1889.			1888.			Increase.			Decrease.		
	£		d.	£ 13,284		<i>d</i> .	£ 1,607		d. 6		8.	d
Admissions to Gardens Elephant and Camel riding	14,001	10	~	10,201		Ť	2,001					
receipts	724	7	6	685	10	5	38	17	1			
Garden Sales	322		10	523	2	6				200	10	8
Rent for Refreshment-rooms			.8	692		1	119	17	7			
Rent for Freehold Premises			0	283	3	0				25	0	0
Admission Fees:-	80	0	0	70	0	0	10	0	0			
Past Present	470	-	õ	470		0						
Annual Subscriptions :	22	0	0	24	0	0	9	0	0			
Past				5,685		Ő				5	0	
Present	1 100		ŏ	102		Õ						
Future			ŏ	870		0				150	0	
Compositions	23	13		17		Ő	5	16				
Ivory Tickets			-	766		1						
Publications	and the second second		6	387		õ				27	18	
Zoological Record				73		3		4	9			
Dividends Miscellaneous			5		16	4		8	1			
	26,427	12	0	24,025						408	9	
Increase				2,402	1	4	408	9	2	Ded.	De	CI
	26,427	12	0	26,427	12	0	2,402	1	4			

The subjoined table shows the fluctuations of the Society's Income during the twenty years last past, fractions being omitted :---

Annual Income of the Society during the past 20 years.

Year.	Total Income.	Year.	Total Income.
10001	£		£

	d
1870	 23,257
1871	 24,620
1872	 26,728
1873	 28,099
1874	 28,417
1875	 28,738
1876	 34,955
1877	 30,988
1878	 27,944
1879	 26,463

1880	 27,388
1881	 25,810
1882	 34,270
1883	 28,966
1884	 28,939
1885	 25,809
1886	 25,787
1887	 23,102
1888	 24,025
1889	 26,427

#### b. Expenditure.

The ordinary expenditure of the Society in 1889, under which is reckoned every item necessary to keep the whole establishment in a state of efficiency, was £22,683 4s. 3d. This was in excess of the corresponding amount paid in 1888 by the sum of £1243 7s. 11d.; the excess being due to the larger amounts spent on the Society's scientific publications, and on repairs and renewals in the Gardens, which seemed to be justified by the favourable state of the receipts. Besides the ordinary expenditure, a sum amounting altogether to £545 7s. was devoted to certain special works and objects, which will be explained in subsequent portions of the Report. These were as follows :—

#### Extraordinary Expenditure paid in 1889.

	£	s.	d.	
1. Additions to the North Lodge	271	18	6	
2. New roof to the Monkey-house	248	8	6	
3. Grant in aid of Mr. Waterhouse's 'Index Generum Avium'		0		

£545 7 0

On adding the Ordinary and Extraordinary Expenditure together it will be seen that the total Expenditure of the year 1889 was  $\pounds 23,228$  11s. 3d., the particulars of which, together with a comparison of the corresponding amounts paid in 1888, are given in the subjoined Table :—

	I	Exp	end	iture o	of		Increase.	Decrease.
	18	39.		188	88.			
	£	8.	<i>d</i> .	£	8.	d.	£ s. d.	£ 8. d
Rent, Rates, Taxes, and Insurance	1,641	8	10	1,716	14	3		75 5 5
Salaries and Pensions	5,500	3	9	5,551	12	0		51 8 3
Provisions	3,603	14	6	3,768	9	6		164 15 (
Cost and Carriage of Animals	645	18	7	495	3	3	150 15 4	
Menagerie Expenses	3,200	8	11	3,024	6	9	176 2 2	
Keepers' Uniforms	167	7	10	- 147	0	11	20 6 11	
Works, Materials, &c		19	9	2,056	11	2	847 8 7	
Buildings				232	6	3		232 6 3
Garden Expenses	752	8	10	704	16	9	47 12 1	
Advertisements	180	6	6	299	10	6		119 4 0
Band Expenses	177	4	6	179	7	6		2 3 (
House and Office Expenses		9	0	1,106	14	7	25 14 5	
Stationery and Printing (Miscella-	-,							
neous)	367	8	7	293	6	8	74 1 11	
Cost of Publications			5	969	6	5	488 12 0	
Cost of Zoological Record		4	0	527	2	6	9 1 6	
Library Expenses			3	547	13	2		18 1 11
Expenditure of Davis Bequest	74	2	0	73		3	0 4 9	
Interest on Mortgage and Loan			6	387		11		82 3 4
Grant in aid of Science		0	õ				25 0 0	
Miscellaneous		10	6	58	10	2		30 19 8
in boomatoous		1.						
	23,228	11	3	22,139	18	-6	1,864 19 8	776 6 11
Increase	-0,-=0			1,088		9	776 6 11	Ded. Deci
Increase minimum				1,000				
	23,228	11	3	23,228	11	3	1,088 12 9	
O.V. D	20 000		0	01 400	10	4	1,243 7 11	
Ordinary Payments	22,683			21,439		42	1,240 1 11	154 15
Extraordinary ditto	545	4	0	700	2	4		101 10
	00.000	11	0	00 120	10	G	1,088 12 9	
	23,228	11	3	22,139	19	0	1,000 12 0	

The balance brought forward from 1888 was £1043 13s. 2d. This, added to the Income received in 1889 (£26,427 12s.), gave a total sum of £27,471 5s. 2d. available for expenditure in the year 1889. Thus the Council were enabled, after payment of the ordinary and extraordinary expenditures of the year, not only to devote the usual sum of £1000 to the reduction of the mortgagedebt on the Society's freehold house (which now amounts to £6000 only), but also to completely extinguish the temporary loan had from the Society's bankers in 1878. After these several payments were made, a balance of £1242 13s. 11d. was left in the Society's favour and carried forward for the benefit of the present year, being a larger amount by £199 0s. 9d. than the balance brought forward from 1888.

Thus the total receipts and payments of the past year may be summarized as follows :--

Receipts, 1889.				Payments, 1889.			
Balance brought from December 31, 1888 Income received in 1889	£ 1,043 26,427		2	Expenditure paid in the year Repayment of temporary Loan of £3000 (Balance) Repayment on account of Mortgage- debt	2,000 1,000	0	0
	27,471	5	2		27,471	5	2

## c. Assets and Liabilities.

The Assets and Liabilities of the Society on December 31, 1889, were estimated as follows :---

#### ASSETS.

£ s. d.

Animals in the Menagerie in the Regent's Park	25,886	0	0	
Books in the Library at Hanover Square	14.444	0	0	
Unsold Publications	4,424	0	0	
Stock of the Zoological Record	1,516	0	0	
Freehold Premises	25,000	0	0	
Value of £1,900 London and South-Western Railway New				
4 per cent. Preference Stock (Davis Trust Fund)	2,365	0	0	
Cash at the Bankers (Messrs. Drummond)	1,242	13	11	
Arrears considered good :— $\pounds$ s. d.	,			
Rent for Refreshment Rooms 60 7 6				
Rent for Rooms at Hanover Square 63 15 0				
Garden Sales 100 14 10				
Subscriptions				
Publication Sales 110 17 5				
Zoological Record Sales 25 10 0				
	443	4	9	
	07 - 900	10	0	
	£75,320	18	0	
· · · · · · · · · · · · · · · · · · ·			-	-

#### LIABILITIES.

Rent and Taxes unpaid :	£ s. d. 169 8 10	£	<i>s</i> .	d.
,, Office, say		213	3	10
Bills unpaid, estimated at : For the Gardens, say	659 14 11			
, Office, say		$951 \\ 6,000$	1000	9 0
Messrs. Drummond, Mortgage Debt		£7,165	-	$\frac{1}{7}$

## II. OFFICE, 3 HANOVER SQUARE.

#### 1. SCIENTIFIC MEETINGS.

To the fourteen meetings for the despatch of scientific business held in the Society's Rooms in Hanover Square, in 1889, 123 communications were made. Of these, 99 were from Fellows and 8 from Corresponding Members of the Society. The remaining 16 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 1888 was 101.

These communications were submitted to the Committee of Publication, by whom 78 were ordered to be printed entire in the 'Proceedings' of the Society, 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.

## 2. SCIENTIFIC PUBLICATIONS.

# a. Proceedings.

The volume of 'Proceedings' for 1889 is on the table. It contains 668 pages illustrated by 62 plates. In the following table are given the number of pages and plates of the volumes of 'Proceedings' for the past ten years:—

			plates.	pages.
1880			64	743
1881			72	1056
1882			61	827
1883			61	704
1884			58	645
1885			62	991
1886			60	716
1887			55	730
1888			32	717
1889			62	668

## b. Transactions.

Two parts of the quarto 'Transactions' were published in 1889, namely :---

# VOL. XII. PART VIII. (February, 1889).

On a specimen of *Ziphius* recently obtained near Dunedin. By John H. Scott, M.D., F.R.S.E., and T. Jeffery Parker, B.Sc., C.M.Z.S., Professors in the University of Otago. (With three Plates.)

# VOL. XII. PART IX. (August, 1889).

A Revision of the Subfamily Libellulinæ, with descriptions of new genera and species. By W. F. Kirby, F.E.S., Assistant in the Zoological Department, British Museum. (With seven Plates.)

The publication of the tenth part of Vol. XII. of the 'Transactions,' which it was intended also to have issued in 1889, was delayed by the absence in Australia of the author of the memoir. It has since been published, and contains also the titlepage and index for the volume, thus completing the twelfth volume of the Society's 'Transactions.'

## c. Zoological Record.

The volume of the 'Zoological Record' for 1889, containing a summary of the work done by British and Foreign Zoologists in 1888, was issued to the Subscribers early in the present year. The Council wish to express their thanks to the Editor, Mr. Beddard, and to the various contributors to the volume for their assiduity, and to point out to the Society that the 'Zoological Record' continues to appear far in advance of any other publication of a similar character. At the same time it is very desirable that the volume should, if possible, be published at a still earlier date; and as regards its future issue steps have been taken which, it is hoped, will effect this object.

#### 3. LIBRARY.

The Library has been kept in good working order during the past year, and has been much used by working zoologists.

The Librarian, Mr. Waterhouse, has compiled during his leisure moments, and published, under the title of 'Index Generum Avium,' a very useful list of the genera of birds established since the days of Linnæus. In acknowledgment of the value of this laborious piece of scientific work, the Council thought it right to vote the sum of  $\pounds 25$  in aid of its publication, which amount has been charged to extraordinary expenditure.

Many important additions were made to the Society's Library in 1889, among which attention may be called to the following donations :—

Atkinson. Notes on Indian Rhynchota. Heteroptera, No. 5. 1888. Presented by the Author.

Boulenger. Catalogue of the Chelonians, Rhynchocephalians, and Crocodiles in the British Museum. New edition. 1889. Presented by the Trustees of the British Museum.

Browne. The Vertebrate Animals of Leicestershire and Rutland. 1889. Presented by the Author.

Burmeister. Los Caballos fósiles de la Pampa Argentina. Supplemento. 1889. Presented by the Author.

Butler. Illustrations of Typical Specimens of Lepidoptera Heterocera in the Collection of the British Museum. Part vii. 1889.

Presented by the Trustees of the British Museum. Cotes and Swinhoe. A Catalogue of the Moths of India. Parts iv. -vii. 1888-89. Presented by the Trustees of the Indian Museum. Day. The Fauna of British India, including Ceylon and Burma.— Fishes. 2 vols. 1889. Presented by the Author. Foord. Catalogue of the Fossil Cephalopoda in the British Museum. Part i. Nautiloidea. 1888. Presented by the Trustees of the British Museum.

Giglioli. Primo Resoconto dei risultati della Inchiesta Ornitologica in Italia. Parte prima. Avifauna Italica. 1889. Presented by the Author.

- Goode. The Fisheries and Fishery Industries of the United States. Sects. iii. & iv. 1887. Presented by the United States Commission of Fish and Fisheries.
- Graells. Las Ballenas en Neustres Costas Oceanicas de España. 1889. Presented by the Author.
- Haeckel. Natürliche Schöpfungs-Geschichte. Achte Auflage. 1889. Presented by the Author.
- Journal of Comparative Medicine and Surgery. Vol. x. Nos. 1-3. 1889. Presented by the Editors.
- Lendenfeld. Descriptive Catalogue of the Sponges in the Australian Museum. 1888. Presented by the Trustees of the Australian Museum.
- Lilljeborg. Sveriges och Norges Fiskar. Häftet 6. 1889. Presented by the Author.
- Linnæus. Systema Naturæ. Editio multo auctior et emendatior. 1756. Presented by Dr. D. Sharp.
  - —. Animalium specierum in classis, ordines, genera, species methodica dispositio. Tenth edition. 1759. Presented by Dr. D. Sharp.
- Lord Howe Island : its Zoology, Geology, and Physical Characters. 1889. Presented by the Trustees of the Australian Museum.
- Lydekker. Catalogue of the Fossil Reptilia and Amphibia in the British Museum. Part ii. 1888. Presented by the Trustees of the British Museum.
- McCoy. Prodromus of the Zoology of Victoria. Decades xvi.xviii. 1888-89. Presented by the Government of Victoria.
- Macintyre. Hindu-Koh: wanderings and wild sports on and beyond the Himalayas. 1889. Presented by the Author.
- Monaco, Prince Albert the 1st of. Resultats des Campagnes scientifiques accomplies sur son Yacht. Publiés sous sa direction avec le concours du Baron Jules de Guerne. Fasc. i. Contribution à la Faune Malacologique des Iles Açores, par P. Dautzenberg. 1889. Presented by His Highness Prince Albert the 1st of Monaco.
- Peek. A Collection of British Birds at Rousdon. 1888. Presented by the Author.
- Przewalski. Wissenschaftliche Resultate der von N. M. Przewalski nach Central-Asien unternommen Reisen. Band i. (Säugethiere). Lief. 1-3. Presented by the Imperial Academy of Sciences of St. Petersburg.
- Steel. Outlines of Equine Anatomy. 1885. A Treatise on the Diseases of the Ox. Second edition. 1887. And a Treatise on the Diseases of the Dog. 1888. Presented by the Author.

Thomas. Catalogue of the Marsupialia and Monotremata in the British Museum. 1888. Presented by the Trustees of the British Museum.

Wallace. Darwinism: an exposition of the theory of Natural Selection, with some of its applications. 1889. Presented by the Author.

Waterhouse. Index Generum Avium. 8vo. 1889. Presented by the Author.

Woodward. Catalogue of the Fossil Fishes in the British Museum, Part i. 1889. Presented by the Trustees of the British Museum. The following is a list of the principal zoological works in course of publication of which parts were purchased in 1889:—

André. Species des Hyménoptères. Fasc. 33, 34.

Annals and Magazine of Natural History. Ser. 6. Vols. iii., iv. Auk. Vol. vi.

Aurivillius. Nordens Fjärilar. Haftet 1-6.

Bartlett. Monograph of the Weaver-Birds and Finches. Parts 3-5. Bellardi. Catalogo generale dei Molluschi del Piemonte e della Liguria. Parts iv., v.

Berlese. Acari, Myriapodi e Scorpioni Italiani. Fasc. xlix.-lvi. Blasius and Hayek. Ornis. Jahr. v.

Bronn's Thierreich. Band I. (Protozoa), Lief. 53-64; Band II. Abth. ii. (Calenterata), Lief. 1; Abth. iii. (Echinodermen), Lief. 1-4; Band IV. (Vermes), Lief. 7-11; Band V. Abth. ii. (Arthropoda), Lief. 20-24; Band VI. Abth. iii. (Reptilien), Lief. 65, 66; Abth. iv. (Vögel), Lief. 23-27; Abth. v. (Säugethiere), Lief. 32-34.

Bucquoy, Dautzenberg, and Dollfus. Mollusques marins du Roussillon. Tome ii. Fasc. 3.

Buller. Birds of New Zealand. 2nd ed. Parts 12, 13. (Completed.)

Carus. Prodromus Faunæ Mediterraneæ. Vol. ii. Part 1.

'Challenger,' Reports of the Voyage of H.M.S. Zoology, Vols. xxx.xxxii. Physics and Chemistry, Vol. ii.

Claus. Copepodenstudien. Heft 1.

Cleland, Mackay, and Young. Memoirs and Memoranda in Anatomy. Vol. i.

Clessin. Malakozoologische Blätter. N. F. Band xi. Heft i.

——. Die Mollusken-Fauna Oesterreich-Ungarns und der Schweiz. Lief. 4.

Edwards. Butterflies of North America. Ser. 3. Parts 6-8. Encyclopædia Americana. Vol. iv. (Completed.)

Encyclopædia Britannica. Ninth edition. Index. (Completed.) Entomologist. Vol. xxii.

Entomologist's Monthly Magazine. Vol. xxv. Nos. 297-307.

Ersch and Gruber. Encyklopädie. Sect. 2. Theil 43.

Fol. Recueil Zoologique Suisse. Tome v. No. 1.

Fowler. Coleoptera of the British Isles. Parts 25-35.

Giglioli. Iconografia dell' Avifauna Italica. Fasc. xliv.

Godman and Salvin. Biologia Centrali-Americana. Zoology, Parts lxxiii.-lxxxi.; Archæology, Part i.

Gould's Birds of New Guinea. Part xxv. (Completed.)
Grandidier. Histoire de Madagascar. Vol. xvi. (Poissons), Part 2, Atlas, Part 2, Fasc. xix. Vol. xxviii. (Plantes), Tome ii., Atlas i., Part 2, Fasc. xviii.

Gruber. Beobachtungen aus der menschlichen und vergleichenden Anatomie. Heft ix.

Hamann. Beiträge zur Histologie der Echinodermen. Heft 4.
Hatschek. Lehrbuch der Zoologie. Lief. ii.
Hayek. Handbuch der Zoologie. Band iv. Abth. 1.
Helmerson and Schrenck. Beiträge zur Kenntniss des Russischen Reiches. Folge 3. Band vi. Hudson and Gosse. The Rotifera. Supplement. (Completed.) Ibis. Ser. vi. vol. i.

Journal für Ornithologie. Band xxxvi. Heft. 2-4; xxxvii. Heft. 1, 2.

Kobelt. Rossmässler's Iconographie der europäischen Land- und Süsswasser-Mollusken. N.F. Band iv. Lief. 3, 4.

Lang. Lehrbuch der vergleichenden Anatomie. Abth. i., ii.

Leuckart and Chun. Bibliotheca Zoologica. Heft. iii.-v.

Lilford. British Birds. Parts ix .- xi.

Madarasz. Zeitschrift für die gesammte Ornithologie. Jahr. iv. Heft. 3, 4.

Marshall. Zoologische Vorträge. Heft. 1-4.

Martens. Conchologische Mittheilungen. Band iii. Heft. 1, 2.

Martini and Chemnitz. Conchylien-Cabinet. Lief. 367-372.

Meinert. Entomologiske Meddelelser. Bind I. Hefte 6; II. Hefte

1, 2. Menzbier. Ornithologie du Turkestan. Livr. ii., and Atlas, Livr. ii. Meyer. Abbildungen von Vogel-Skeletten. Lief. xii., xiii.

Mission Scientifique du Cap Horn. Tome vi. Zoologie (Mollusques et Protozoaires).

Olphe-Galliard. Contributions à la Faune Ornithologique de l'Europe Occidentale. Fasc. xii., xvii.-xix., xxiv., and xxv.

Paetel. Catalog der Conchylien-Sammlung. Lief. 9, 10.

Pleske. Ornithographia Rossica. Band ii. Lief. 1.

Romanoff. Mémoires sur les Lépidoptères. Tome v.

Salvadori. Aggiunte alla Ornitologia della Papuasia e delle Molucche. Parte i.

Sarasin. Ergebnisse naturwissenschaftlicher Forschungen auf Ceylon. Band II. Heft 3.

Saunders. Manual of British Birds. Parts xi.-xx. (Completed.) Schiödte. Zoologia Danica. Heft 6.

Scudder. The Butterflies of the Eastern United States and Canada. Parts ii.-xii. (Completed.)

Seidlitz. Fauna Baltica. Die Käfer. Zweite Auflage. Lief. 4. 

Semper (C.). Reisen im Archipel der Philippinen. Theil II. Band ii. Heft xvi. Hälfte 2; Band v. Lief. 4.

Semper (G.). Die Schmetterlinge der Philippinischen Inseln. Band i. Lief. 4.

Sharpe and Wyatt. Monograph of the Hirundinidæ. Parts ix., x. Smith and Kirby. Rhopalocera Exotica. Parts vii.-x.

Spengel. Zoologische Jahrbücher. Band iii. (Anat.), Heft. 4; iv. Heft. 1; iv. (Systematik), Heft. 1-4.

Staudinger. Exotische Schmetterlinge. Theil II. Lief. 5. Stray Feathers. Vol. xi. Nos. 1-4. Taschenberg. Bibliotheca Zoologica ii. Lief. vii. Thomson. Opuscula Entomologica. Fasc. xiii. Trimen and Bowker. South-African Butterflies. Vol. iii. (Completed.) Manual of Conchology. Parts xl., xli., xliii.; Ser. 2. Tryon. Parts xvi., xvii., xix.

Tunisie. Exploration Scientifique de la Tunisie. Echinides fossiles et Mollusques fossiles.

Vogt and Yung. Traité d'Anatomie Comparée. Livr. 13, 14. \_\_\_\_\_. Lehrbuch der Anatomie. Band ii. Lief. 1, 2.

Waterhouse. Aid to the Identification of Insects. Part xxx. Zittel. Handbuch der Paläontologie. Abth. ii. Lief. 7. Zoologist. Ser. 3, vol. xiii.

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

Austant. Les Parnassiens de la Faune Paléarctique. 8vo. 1889.

- Boisduval. Icones Historique des Lepidoptères nouveaux ou peu connus. 2 vols. 8vo. 1832-34.
- Harmonia Ruralis. New edition. 2 vols. in 1. 4to. Bolton. 1824.

Bryden. Kloof and Karroo: Sport, Legend, and Natural History in Cape Colony. 8vo. 1889.

Chapman. Bird-Life of the Borders. 8vo. 1889.

Claparède. Beobachtungen über Anatomie und Entwicklungsgeschichte wirbellosen Thiere. Folio, 1863.

Claus. Copepodenstudien. Heft i. Sm. folio, 1889.

Coquebert. Illustratis Iconographica Insectorum. 3 parts. 4to. ann. vii.-xii. (1799-1804).

Diesing. Systema Helminthum. 2 vols. 8vo. 1850–51.

Harvie-Brown and Buckley. A Vertebrate Fauna of the Outer Hebrides. 8vo. 1888.

Hayes (C.). The Portraits of British Birds. 4to. 1808.

Hayes (W.). Rare and Curious Birds. Folio, 1782.

Heilprin. The Bermuda Islands. 8vo. 1889.

Hickson. A Naturalist in North Celebes. 8vo. 1889.

Hill. A Decade of Curious Insects. 4to. 1773.

- Horsfield. Descriptive Catalogue of the Lepidopterous Insects in the Museum of the Honourable East India Company. 2 parts. 4to. 1828–29.
- Hume. Nests and Eggs of Indian Birds. 2nd edition, by Eugene W. Oates. 8vo. 1889.

Meyer. Illustrations of British Birds. 4 vols. 4to. 1835-43.

Muirhead. The Birds of Berwickshire. Vol. i. 8vo. 1889.

Nicholson. Sundevall's Tentamen. Translated into English, with Notes. 8vo. 1889.

Nikolsky. Fauna of the Saghalin Island. [In Russian.] 8vo. 1889.

Rudolf (Crown Prince). Notes on Sport and Ornithology. Translated by C. G. Danford. 8vo. 1889.

Schmidt. Die Spongien des Adriatischen Meeres. Sm. folio. 1862 - 68.

-----. Grundzüge einer Spongien-Fauna des Atlantischen Gebietes. Sm. folio, 1870.

Sclater and Hudson. Argentine Ornithology. Vol. ii. Royal 8vo. 1889.

Representation exactemente colorée d'après nature des Stoll. Spectres ou Phasmes etc. [Dutch and French.] 2 vols in 1. 4to. 1813.

Tristram. Catalogue of a Collection of Birds belonging to. 4to. 1889.

Weismann. Die Entstehung der Sexualzellen bei den Hydromedusen. Text and Atlas. Sm. folio, 1883.

——. Essays upon Heredity and Kindred Biological Problems. Translation edited by E. B. Poulton, S. Schönland, and A. E. Shipley. 8vo. 1889.

Westwood. Revisio Insectorum Familiæ Mantidarum. Sm. folio, 1889.

Willoughby. East Africa and its Big Game. 8vo. 1889.

The following is a list of the periodicals received in 1889 from the various Societies and Institutions with which this Society is in correspondence.

# AMERICA (NORTH).

The Boston Society of Natural History, Boston.

Proceedings, vol. xxiii., parts 3, 4.

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

Bulletin, vol. xvi., nos. 2-5; vol. xvii., nos. 3-5; and vol. xviii. Memoirs, vol. xiv., no. 1, part ii. no. 1. Annual Report, 1887-88.

The Meriden Scientific Association, Meriden, Connecticut. Transactions, vol. iii.

The "Antonio Alzate" Scientific Society, Mexico. Memorias, tomo ii., cuad. 5-11.

The Geological and Natural History Survey of Minnesota, Minneapolis. Annual Report, 16.

The Royal Society of Canada, Montreal.

Proceedings and Transactions, vol. vi.

The American Museum of Natural History, New York. Bulletin, vol. ii., no. 2. Annual Report, 1888–89.

The New York Academy of Sciences, New York. Annals, vol. iv., nos. 10, 11. Transactions, vol. viii., nos. 1-4.

- The Academy of Natural Sciences, Philadelphia. Proceedings, 1888, part 3; 1889, parts 1, 2.
- The American Entomological Society, Philadelphia. Transactions, vol. xv., nos. 2-4; xvi., nos. 1-3.

The American Philosophical Society, Philadelphia. Proceedings, vol. xxv., no. 128; xxvi., no. 129.

- The Franklin Institute, Philadelphia. Journal, 1889.
- The American Association for the Advancement of Science, Salem.

Proceedings, 37th Meeting, Cleveland, 1888.

- The California Academy of Science, San Francisco. Memoirs, vol. ii., no. 2. Proceedings, ser. ii., vol. i., parts 1, 2.
- The Canadian Institute, Toronto. Proceedings, ser. 3, vol. vi. fasc. 1.
- The Trenton Natural-History Society, Trenton. Journal, vol. ii., no. 1.
- The Smithsonian Institution, Washington. Annual Report, 1886, part 1.

The United States Geological Survey, Washington. Bulletin, nos. 40-47.

The United States National Museum, Washington. Bulletin, nos. 13-16, 20-22, 24, 27, 28, 30-32.

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The Natural History Society, Wisconsin. Occasional Papers, vol. i.

# AMERICA (SOUTH).

The National Academy of Sciences of Cordoba, Buenos Ayres.

Boletin, xi., entr. 3.

# AUSTRALIAN COLONIES.

The Royal Society of South Australia, Adelaide. Transactions and Proceedings, vol. xi.

- The Royal Society of Tasmania, Hobart. Papers and Proceedings for 1888.
- The Geological Survey of Australasia, Melbourne. Transactions, vol. i., part 4.
- The Zoological and Acclimatization Society of Victoria, Melbourne.

Annual Report, 1888.

- The Linnean Society of New South Wales, Sydney. Proceedings, ser. 2, vol. iii., parts 3, 4; vol. iv., parts 1, 2.
- Royal Geographical Society of Australasia, Sydney. Transactions and Proceedings, vols. iii., iv.
- The Royal Society of New South Wales, Sydney. Journal and Proceedings, vol. xxii., part 2.
- The New-Zealand Institute, Wellington. Transactions and Proceedings, vol. xxi.

#### AUSTRIA.

The Academy of the University, Cracow. Bulletin, nos. 1-9.

The Imperial Academy of Sciences, Vienna. Denkschriften, Bänd. liv., lv. Sitzungsberichte, Band xcvii. The Zoological and Botanical Society, Vienna.

Verhandlungen, Band xxxviii., Quartal. 3, 4; xxxix., Quartal. 1, 2.

## BELGIUM.

# The Entomological Society of Belgium, Brussels. Annales, tome xxxi.

The Royal Academy of Sciences, Letters, and Fine Arts, Brussels.

Mémoires, tome xlvii. Mémoires couronnés (4to), tome xlix. —— (8vo), tomes xl.-xlii. Bulletins, sér. 3. tomes xiv.-xvii. Annuaire, ann. liv., lv.

#### The Royal Malacological Society, Brussels.

Annales, tomes xxii., xxiii. Procès-Verbaux, 1888, 1889, pp. i-cxxxii.

#### CHINA.

The China Branch of the Royal Asiatic Society, Shanghai. Journal, vol. xxii., no. 6; xxiii., nos. 1-3.

## EAST INDIES.

The Royal Society of the Dutch East Indies, Batavia. Natuurkundig Tijdschrift, deel xlviii.

The Bombay Natural-History Society, Bombay.

Journal, vol. iii., no. 4; iv., nos. 1, 2.

The Asiatic Society of Bengal, Calcutta. Proceedings, 1888, nos. 9, 10; 1889, nos. 1–6. Journal, vol. 1vi., part 2, no. 5; 1vii., part 2, no. 4; 1viii., part

2, nos. 1, 2.

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The Geological Survey of India, Calcutta. Records, vol. xxi., part 4; xxii., parts 1-3.

#### FRANCE.

The Agricultural Society, Lyons. Annales, sér. 5, tomes ix., x. ; sér. 6, tome i.

The Entomological Society, Paris. Annales, sér. 6, tome viii.

The National Society of Acclimatation, Paris. Revue des Sciences Naturelles appliquées, 1889.

The Society Philomathique, Paris. Bulletin, sér. 7, tome xii., no. 4; sér. 8, tome i., nos. 1, 2. Mémoires, 1788–1888.

The Natural History Society, Toulouse. Bulletin, 1888, Avril-Sept.

#### GERMANY.

- The Royal Prussian Academy of Sciences, Berlin. Sitzungsberichte, 1888, nos. 38-52; 1889, nos. 1-38. Abhandlungen, 1888.
- The Society of Friends of Natural History, Berlin. Sitzungs-Berichte, 1888.
- The Natural-History Union of Rhenish Prussia and Westphalia, Bonn. Verhandlungen, Jahr. xlv., Hälfte 2; xlvi., Hälfte 1.
- The New Zoological Society, Frankfort a. M. Der Zoologische Garten, Jahr. xxix., nos. 11, 12; xxx.,

#### nos. 1–11.

The Royal Society of Sciences, Göttingen. Nachrichten, 1888.

The Imperial Leopoldino-Carolinian Academy of Naturalists, Halle.

Nova Acta, Bänd. lii., liii. Leopoldina, Heft 24. Katalog der Bibliothek, Lief. 2.

- The Natural History Scciety, Halle. Abhandlungen, Band xvii., Heft. 1, 2. Bericht, Jahre 1887.
- The Medical and Natural-History Society, Jena. Jenaische Zeitschrift, Band xxiii.
- The Academy of Metz. Mémoires, ann. lxvii.

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- The Royal Bavarian Academy of Sciences, Munich. Abhandlungen, Band xvi., Abth. 2, 3. Sitzungsberichte, 1887, Heft 3; 1888; 1889, Heft 1.
- The Natural-History Union, Würtemberg. Jahreshefte, Jahrg. xlv.

# GREAT BRITAIN AND IRELAND.

- The Natural-History and Philosophical Society, Belfast. Report and Proceedings, Session 1888-89.
- The Philosophical Society, Birmingham. Proceedings, vol. vi., parts 1, 2.
- The Essex Field Club, Buckhurst Hill, Essex. The Essex Naturalist, vol. ii., nos. 11, 12; iii., nos. 1-9.

# The Philosophical Society, Cambridge. Proceedings, vol. vi., parts 5, 6. Transactions, vol. xi., parts 1, 2; xiv., parts 3, 4.

# The Royal Dublin Society, Dublin. Scientific Transactions, ser. 2, vol. iv., nos. 2-5.

---- Proceedings, n. s., vol. vi., parts 3-6.

# The Royal Irish Academy, Dublin.

Proceedings, ser. 3, vol. i., no. 1. Transactions (Science), vol. xxix., parts 3-11.

- The Museum of Zoology, University College, Dundee. Studies, vol. i., nos. 1-5.
- The Royal College of Physicians, Edinburgh. Reports from the Laboratory, vol. i.

Royal Physical Society, Edinburgh. Proceedings, Session 1887-88.

- The Hertfordshire Natural-History Society, Hertford. Transactions, vol. v., parts 2-5.
- The British Association for the Advancement of Science, London.

Report, 58th Meeting, Bath, 1888.

The Entomological Society, London. Transactions, 1888, part 5; 1889, parts 1-3.

The Geological Society, London. Quarterly Journal, vol. xlv.

# The Linnean Society, London.

Transactions (Zoology), ser. 2, vol. v., part 3.
Journal (Zoology), vol. xx., nos. 122, 123; xxi., nos. 132–135; xxiii., nos. 141–144.
(Botany), vol. xxiii., nos. 156, 157; xxv., nos. 165–171; xxvi. no. 173.

The County of Middlesex Natural History and Science Society, London.

Transactions, Session 1888-89.

The Quekett Microscopical Club, London. Journal, ser. 2, vol. iii., nos. 23, 24; iv., no. 25.

The Royal Agricultural Society of England, London. Journal, ser. 2, vol. xxv., parts 1, 2.

The Royal Gardens, Kew, London. Bulletin, 1887, 1888, 1889, nos. 25-35. The Royal Geographical Society, London. Proceedings, vol. xi.

The Royal Horticultural Society, London. Journal, vol. x.

The Royal Institution of Great Britain, London. Proceedings, vol. xii., part ii., no. 82. List of Members, 1887.

The Royal Society, London. Proceedings vol xliv, no 272: xl

Proceedings, vol. xliv., no. 272; xlv., nos. 273-279; xlvi., nos. 280-283.

The Royal United Service Institution, London. Journal, 1889.

The Society of Arts, London. Journal, 1889.

The Literary and Philosophical Society, Manchester. Memoirs and Proceedings, ser. 4, vol. ii.

The Tyneside Naturalists' Field Club, Newcastle. Natural History Transactions, vol. viii., part 3; x., part 1.

The Marine Biological Association, Plymouth. Journal, n. s., nos. 1, 2.

The Plymouth Institution and Devon and Cornwall Natural-History Society, Plymouth.

Annual Report and Transactions, vol. x., part 2.

The Royal Institution of Cornwall, Truro. Journal, vol. ix., part 4.

The Yorkshire Philosophical Society, York. Annual Report, 1888.

#### HOLLAND.

#### The Royal Academy of Sciences, Amsterdam.

Verhandelingen (Natuurkunde), deel xxvi.
Verslagen en Mededeelingen (Natuurkunde), derde reeks, deel v; (Letterkunde), derde reeks, deel v.
Jaarboek, 1888.

# The Royal Zoological Society, "Natura Artis Magistra," Amsterdam.

Bijdragen tot de Dierkunde, Feestnummer.

#### The Dutch Society of Sciences, Haarlem.

Archives Néerlandaises, tome xxiii., livr. 2-5.

The Entomological Society of the Netherlands, The Hague. Tijdschrift voor Entomologie, deel xxxi., afl. 3, 4; and deel xxxii.

# ITALY.

The Italian Society of Microscopists, Acircale. Bollettino, anno 1, vol. i., fasc. 1, 2.

- The National Central Library, Florence. Bollettino, 1889, num. 74–96.
- The Civic Museum of Natural History, Genoa. Annali, ser. 2, vol. vi.
- The Italian Society of Natural Sciences, Milan. Atti, vol. xxx., fasc. 1-4.

The Society of Naturalists, Naples.

Bollettino, ser. 1, vol. iii., fasc. 1.

The Zoological Station, Naples. Mittheilungen, Band viii., Heft. 3, 4; ix., Heft. 1, 2.

The Royal Academy of the Lincei, Rome. Rendiconti, ser. 4, vol. iv., sem. 2, fasc. 6–12; v., sem. 1, fasc. 1–12; v., sem. 2, fasc. 1–6. Memorie, ser. 4, vols. iii., iv.

#### Royal Academy of Physical Science, Siena.

Atti, ser. 4, vol. i. fasc. 1-9.

The Museum of Zoology and Comparative Anatomy of the Royal University, Turin.

Bollettino, vol. iii., nos. 49-52; iv., nos. 53-66.

# The Royal Academy of Sciences, Turin.

Atti, vol. xxiv., disp. 1–15. Memorie, ser. 2, tome xxxix.

#### JAPAN.

#### The Imperial University, Tōkyō.

Journal of the College of Science, vol. ii., parts 4, 5; iii., parts 1, 2.
Mittheilungen aus der Medicinischen Facultät, Band i., no. 3.
Calendar, 1888-89.

# PORTUGAL.

#### The Royal Academy of Sciences, Lisbon.

Jornal, ser. 2, tom. i., nos. 1, 2.

#### RUSSIA.

## The Natural-History Society, Dorpat.

Sitzungsberichte, Band viii., Heft 3. Archiv für die Naturkunde, ser. 1, Band ix., Lief. 5.

#### The Society of Sciences of Finland, Helsingfors.

Öfversigt, vol. xxx.

Acta, tomus xvi.

The Imperial Society of Naturalists, Moscow. Bulletin, 1888, nos. 3, 4; 1889, nos. 1, 2. Nouveaux Mémoires, tome xv., livr. 6.

The Royal Academy of Sciences, St. Petersburg. Mémoires, sér. 7, tome xxxvi., nos. 6-17; xxxvii., no. 1.

#### SCANDINAVIA.

The Natural-History Society, Copenhagen. Videnskabelige Meddelelser, aarat 1888.

The Royal Danish Society of Sciences, Copenhagen. Oversigt, 1888, nos. 2, 3; 1889, no. 1. Mémoires, 6<sup>e</sup> sér., vol. iv., no. 8.

The Zoological Museum of the University, Copenhagen. E Museo Lundii, bind i.

The Tromsö Museum, Tromsö. Aarsberetning 1888. Aarshefter xii.

#### SPAIN.

The Royal Academy of Sciences, Madrid. Anuario 1889. Memorias, tomo xiii., parts 2, 3. Revista, tomo xxii., nos. 5-7.

The Spanish Natural-History Society, Madrid. Anales, tomo xvii., cuad. 3; xviii., cuad. 1, 2.

#### SWITZERLAND.

The Vaudois Society of Sciences, Lausanne. Bulletin, 3<sup>e</sup> série, vol. xxiv., no. 99.

The Society of Natural Science, Neuchâtel. Bulletin, tome vi.

The Natural Science Society, St. Gall.

## Bericht, 1886–87.

The Natural-History Society, Zurich. Vierteljahrschrift, Jahr. xxxi., Heft. 3, 4; xxxii., xxxiii., and xxxiv., Heft 1.

Donations, Memoirs, and Papers have also been received from :---the Agricultural Society of Lyons; the Editors of the 'American Journal of Science'; the Editors of the 'American Naturalist'; the Editors of the 'Archiv für Naturgeschichte'; the Editors of the 'Athenæum'; E. T. Atkinson, Esq.; the Trustees of the Australian Museum ; Dr. R. Blasius ; W. T. Blanford, Esq. ; Dr. O. Boettger; the Trustees of the British Museum; Dr. H. Burmeister; F. M. Campbell, Esq.; the Geological and Natural History Society of Canada; Prof. G. Canestrini; the Carlos Ribeiro Society, Oporto ; W. A. Conklin, Esq. ; Prof. E. D. Cope; the East India Association; Dr. A. Ernst; J. G. Goodchild, Esq.; the Geological Survey of India; Dr. Mariam de la Par Graells; the Trustees of the Indian Museum; the Royal College of Surgeons of Ireland; the Zoological Society of Ireland; Martin Jacoby, Esq.; H. B. James, Esq.; the Editors of the 'Journal de Conchyliologie'; Prof. O. C. Marsh; Prof. K. Möbius ; Dr. A. Mojsisovics ; Prince Albert of Monaco ; the Editors of 'The Naturalist'; the Editors of 'Nature'; the New York State Library; the Colonial Museum and Geological Survey of New Zealand; Dr. F. C. Noll; the Nottingham Naturalists' Society; Prof. F. P. Pascoe; Dr. Paul Pelseneer; C. G. J. Petersen, Esq.; the Zoological Society of Philadelphia; Bernard Quaritch, Esq.; Prof. L. Rütimeyer; Dr. R. Scharff; P. L. Sclater, Esq.; Prof. H. G. Seeley; R. Bowdler Sharpe, Esq.; Dr. R. W. Shufeldt; T. Southwell, Esq.; Prof. J. Steenstrup; Dr. Michell Stossich ; the United States Fish Commission ; the United States Geological Survey; Edwin A. Walford, Esq.; J. F. Walker, Esq.; F. H. Waterhouse, Esq.; and A. Smith Woodward, Esq.

III. GARDENS, REGENT'S PARK.

## 1. WORKS AND REPAIRS.

The only new works carried on, or commenced in the Society's Gardens in 1889, were (1) an addition to the North Lodge, and (2) the new roofing of the Monkeyhouse. The former of these cost the sum of  $\pounds 271$  18s. 6d.; on the latter work the amount of  $\pounds 248$  8s. 6d. was expended in 1889. Of the former item, it is only necessary to say that the accommodation previously provided in the

North Lodge was barely sufficient, and that on a favourable opportunity presenting itself for increasing it, the Council thought it right to take advantage of the occasion. As regards the re-roofing of the Monkey-house, it should be stated that the glass roof which was put up when the house was first erected 25 years ago, had long been in a most unsatisfactory state, and had occasioned a large annual expenditure on repairs. After a thorough survey, it was determined to be the best plan to put an entirely new glass roof on to the building, using much heavier glass and a modern system of glazing. This work was carried out for the Society by Messrs. Helliwell, and seems likely to answer its purpose in every way. Besides the roof, the larger cages in the Monkey-house were thoroughly repaired in 1889. But the old window-frames must still be renewed and various other repairs undertaken before the Monkey-house can be said to be in a thoroughly satisfactory state. These works, necessarily intermitted during the winter, will, it is hoped, be accomplished during the present summer.

The Society's ordinary staff of workmen was kept in active employ during the year 1889. The walk round the Seal-pond was raised so as to enable the visitors standing behind the front row better to see the feeding of the Sealions. The Deer-yards near the South Entrance were repaired, boarded, cleaned, and thoroughly painted. The gates, lodges, and fences at the Main and South Entrances of the Gardens were likewise repaired and painted. Opportunity was taken of a temporary vacancy in the Head-Keeper's Lodge to clean, paint, and put in thorough repair that building. Many other smaller repairs and renewals were effected in 1889, and in the autumn a large quantity of ballast was burnt and much valuable material was thus acquired for the repairs of the roads and paths.

## 2. STAFF.

An important change in the Staff of the Society's Gardens took place in 1889, owing to the retirement of Mr. Benjamin Misselbrook, who had served the Society as Head Keeper for twenty-one years, and had been sixty years and a half altogether in their employment. The Council thought it right to allow this old and valued Officer, who had attained an advanced age in the Society's service, to retire on full pay, and are certain that they will receive the full approbation of the Fellows in adopting this course. As his successor in this important Office they have selected Mr. Arthur Thomson, son of Mr. James Thomson, formerly Head Keeper, who has filled various positions in the Society's Gardens during the past twenty years and has lately acted as the Superintendent's Clerk and Chief-Assistant.

The permanent Staff now consists of a Superintendent and Assistant Superintendent, a Head Keeper and twentythree Keepers, three Money-takers, together with a Storekeeper, Cook, Prosector's Assistant, and Head Gardener —altogether 33 persons employed at monthly salaries. Besides these there are 20 Helpers in the Menagerie, 14 Garden-labourers, 8 Artisans, 6 Painters, 9 Labourers, 1 Butcher, 2 Firemen, 2 Night-Watchmen, and 1 Timekeeper employed at weekly wages; so that the number of the whole staff may be reckoned at about ninety-six persons.

#### 3. VISITORS.

The Council are pleased to be able to point out a considerable increase in the number of visitors to the Society's Gardens in 1889 as compared with 1888, as will be seen by the subjoined Table, the total number having risen from 608,402 to 644,679. The number of Schoolchildren admitted free, it may be remarked, was greater in 1889 than in any previous year.

#### Visitors to the Gardens.

	1889.	1888.	Comparison.
Fellows and Friends	167,984	176,609	Decr. 8,625
(On ordinary days at 1s. each	154,164	123,746	Incr. 30,418
On Mondays and other days	224,819	232,012	Decr. 7,19
Paying $\begin{cases} at 6d. each \dots \\ Children under 12 years at \\ 6d. each \dots \end{cases}$	61,248	49,021	Incr. 12,22
School Children (admitted free)	36,464	27,014	Incr. 9,45
	644,679	608,402	Incr. 36,27

The subjoined Table contains a statement of the Number of Visitors to the Society's Gardens during each year, from the year 1828 to the year 1889.

	Year.	Number.	Year.	Number.
	1828	98,605	1859	364,356
I	1829	189,913	1860	394,906
	1830	223,420	1861	381,837
	1831	000 100	†1862	682,205
ļ	1832	000 450	1863	468,700
	1833	011 010	1864	507,169
	1834	000 500	1865	525,176
1	1835	010 000	1866	527,349
	1836	000 050	1867	556,214
	1837	100 000	1868	573,186
	1838	150 105	1869	572,848
	1839	1 = 0 100	1870	573,004
	1840	1 11 000	1871	595,917
	1841	100 010	1872	648,088
	1842		1873	713,046
	1843	00,000	1874	706,907
		101,527	1875	699,918
	1845	00 015	±1876	915,764
	1010	100,045	1877	781,377
	1847	09 540	1878	706,713
	1848	7 10 000	1879	643,000
	1849	300 005	1880	675,979
	1850	000 100	1881	648,694
	*1851	00= 010	1882	849,776
		305,203	1883	743,485
	1853	100 050	1884	745,460
	1854	105 050	1885	659,896
	1855	315.002	1886	639,674

Number of Visitors to the Gardens, 1828-89.

515,002
344,184
339,217
351,580

\* Year of the Great Exhibition.

† Year of the International Exhibition. † Year of the exhibition of the Prince of Wales's Indian Menagerie.

TEA

# 4. PROSECTOR'S DEPARTMENT.

The Prosector (Mr. F. E. Beddard) reports as follows:-The number of deaths during the year 1889 was 839, being less than that of the deaths during 1888 by 109.

The more noteworthy deaths were perhaps the following:—On Jan. 17 a Westerman's Cassowary; on Nov. 16 a Condor which had lived for more than thirty years in the Gardens, having been purchased in April 1856; on Nov. 30 the surviving specimen of Hooker's Sea-lion; and on Nov. 22 a large Anaconda, which measured 15 feet 9 inches in length.

The following papers, prepared by the Prosector and published in the 'Proceedings' during the year, have been based upon materials furnished from the Gardens :—"On the Anatomy of *Rhinoceros sumatrensis* (in conjunction with Mr. Treves)"; "On certain Points in the Anatomy of the Accipitres"; "Some Notes upon the Anatomy of the American Tapir (*Tapirus terrestris*)"; "Notes upon the Anatomy of Picarian Birds.—Part I."; "On the Anatomy of Burmeister's Cariama."

Materials have been supplied to Prof. David Ferrier, F.R.S., and to Mr. W. K. Parker, F.R.S., for purposes of research; for Museum purposes to Prof. Flower, C.B., F.R.S., to Prof. d'Arcy Thompson, and to Prof. Herdman.

Some of the pathological material has been made use of by Mr. W. K. Sibley.

## 5. ZOOLOGICAL LECTURES.

The arrangements for the Davis Lectures on zoological subjects for the present year are as follows :---

A course of six Lectures will be delivered in the Lectureroom in the Society's Gardens, Regent's Park, on Thursdays, at 5.30 P.M., commencing May 8th, by Mr. F. E. Beddard, M.A., Prosector to the Society and Davis Lecturer. Subject: THE COLOURS OF ANIMALS. The Fee for the Course (including admission to the Gardens on the days of Lecture) is 5s. The Course is free to Fellows of the Society. Tickets for it may be obtained from Mr. F. E. Beddard, Zoological Society's Gardens, Regent's Park, N.W.

#### 6. MENAGERIE.

# a. Additions to the Menagerie in 1889.

The number of animals belonging to the first three classes of Vertebrates living in the Society's Menagerie at the close of 1889 was 2232. The corresponding number on the 31st of December, 1888, was 2290, as will be seen by the subjoined Table :—

	December 31.		Comparison.	
	1889.	1888.	Comparison.	
Mammals Birds Reptiles	$519 \\ 1411 \\ 302$	$666 \\ 1280 \\ 344$	Decr. 147 Incr. 131 Decr. 42	
	2232	2290	Decr. 58	

The total number of registered additions to the Menagerie in 1889 was 1140, of which 581 were acquired by presentation, 242 by purchase, 118 were bred in the Gardens, 164 were received on deposit, and 35 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.
		EFM	156	143	43	1458
.875.	559	557	171	172	27	1219
.876.	533	316		181	68	1260
877.	506	324	181	178	71	1182
.878.	511	272	150	124	56	1266
879.	550	421	115	161	40	1488
880.	624	515	148	136	35	1213
881.	565	310	167	111	25	1423
882.	772	402	113	and the second se	28	1388
1883.	637	376	128	219	133	1706
1884.	646	524	174	229	62	1451
1885.	762	251	241	135	48	1538
1886.	851	236	171	232	86	1135

1887. 1888. 1889.	$     \begin{array}{r}       600 \\       572 \\       581     \end{array} $	$\begin{array}{c c} 176\\ 143\\ 242 \end{array}$	138 158 118	$     \begin{array}{r}       135 \\       216 \\       164     \end{array}   $	32 35	112 <b>1</b> 1140	
20000000000						The second s	1

The following is a list of the principal additions made to the Menagerie during the year 1889:---

1. A small collection of birds from Algeria, obtained by purchase from a dealer at Oran on January 10th. Among these were specimens of Clotbey's Larks (*Rhamphocorys clotbeyi*), the Algerian Shore-Lark (*Otocorys bilopha*), and the Rosy Bullfinch (*Erythrospiza githaginea*), all new to the Society's Collection. 2. Two White Ibises, purchased January 18th, and differing from the White Ibises previously in the Society's Collection in their larger size and bright red bills. They appear to be referable to *Eudocimus longirostris*, Wagler.

3. A collection of Reptiles from the Cape Colony, presented, as have been many previous collections, by our Corresponding Member the Rev. G. H. R. Fisk. Amongst these were seven specimens of the new Tortoise, *Homopus femoralis*, lately described by Mr. Boulenger (P. Z. S. 1888, p. 251, pl. xiv.), and two of *Homopus signatus*, a species not previously received.

4. Four Marbled Polecats (*Putorius sarmaticus*), obtained in the vicinity of Quettah, and presented by Col. Sir Oliver B. C. St. John, K.C.S.I., R.E. This well-marked species is rare in most museums, and is quite new to the Society's Collection.

5. A fine specimen of Owen's Apteryx (*Apteryx oweni*), from the South Island of New Zealand, presented by Prof. T. Jeffery Parker, C.M.Z.S., of the University Museum, Otago, New Zealand.

6. A young Manatee (*Manatus australis*), said to have been received from the Amazons, purchased March 2nd, being the second example of this Sirenian obtained alive by the Society.

7. An Oriental Phalanger (*Phalanger orientalis*) from the Solomon Islands, received March 4th, and presented by C. M. Woodford, Esq., of Sydney.

8. A second specimen of Owen's Apteryx (Apteryx oweni), presented by Capt. C. A. Findlay on March 5th.

9. A young male Sinaitic Ibex (*Capra sinaitica*), from Mount Sinai, presented by Sir James Anderson, on April 1st.

10. A young male specimen of the Lesser Koodoo (Strepsiceros imberbis) from East Africa, presented by George S. Mackenzie, Esq., F.Z.S., April 18th.

11. An albino variety of the Cape Mole-Rat (Georychus capensis), presented May 1st by the Rev. G. H. R. Fisk, C.M.Z.S.

12. A fine male specimen of the Cocoa-nut Land-Crab of the East Indies (*Birgus latro*), presented by Commander Alfred Carpenter, R.N., and received June 14th.

13. A Short Python (*Python curtus*), from Malacca, presented July 2nd by Mrs. Bertha M. L. Bonser, new to the Collection.

14. A Prêtre's Amazon (Chrysotis prætrii), purchased July

23rd, also new to the Collection.

15. A young male Gaur (*Bibos gaurus*) from Pahang, one of the native States in the Malay Peninsula, presented to the Society by Sir Cecil C. Smith, K.C.M.G., the Governor of the Straits Settlement.

The subjoined table, which shows the provisions consumed in the Society's Menagerie during the past ten years, has been prepared in response to frequent applications to know " how the animals are fed."

С

	1880.	1881.	1882.	1883.
Hay	$182\frac{1}{4}$ lds.	209 <sup>1</sup> / <sub>4</sub> lds.	179 lds.	165 lds.
Clover	113 ids.	$121\frac{3}{4}$ lds.	$109\frac{3}{4}$ lds.	$115\frac{3}{4}$ lds.
Straw	$234\frac{1}{2}$ lds.	$233_4^3$ lds.	$187\frac{3}{4}$ lds.	$193\frac{3}{4}$ lds.
Barley	30 quarters.	$25\frac{1}{4}$ quarters.	25 quarters.	26 <sup>1</sup> / <sub>2</sub> quarters.
Oats	138 qrs.	146 qrs.	$142\frac{1}{2}$ qrs.	147 qrs.
Wheat	43 qrs.	33 qrs.	$36\frac{1}{2}$ qrs.	36 <u>1</u> qrs.
Peas and Beans	$26\frac{1}{2}$ qrs.	28 qrs.	26 qrs.	$19\frac{1}{4}$ qrs.
Maize	76 qrs.	$73\frac{1}{2}$ qrs.	74 qrs.	75 qrs.
Bran	308 qrs.	287 qrs.	288 qrs.	278 qrs.
Canary	10 <sup>1</sup> <sub>2</sub> qrs.	$9\frac{3}{4}$ qrs.	$11\frac{1}{4}$ qrs.	10 qrs.
Hemp	8 qrs.	$8^1_4$ qrs.	11 qrs.	11 qrs.
Rape	6 bushels.	7 bushels.	1 qr.	1 qr.
Millet	$2\frac{1}{2}$ qrs.	$2\frac{3}{4}$ qrs.	$3\frac{1}{2}$ qrs.	$2\frac{1}{2}$ qrs.
Buckwheat	$9\frac{1}{4}$ qrs.	12 qrs.	104 qrs.	$10\frac{1}{4}$ qrs.
Biscuit	302 cwt.	279 cwt.	253 cwt,	275 cwt.
Rice	100 cwt.	90 cwt.	86 cwt.	104 cwt.
Oatmeal	<sup>3</sup> / <sub>4</sub> ewt.	$1\frac{1}{4}$ cwt.	$1\frac{3}{4}$ cwt.	1 ewt.
Nuts	41 cwt.	43 cwt.	$39\frac{1}{2}$ cwt.	35 cwt.
Eggs	19,750	19,400	19,600	19,750
Milk	5646 qts.	5385 qts.	5210 qts.	5117 qts.
Whiting	16 tons 16 cwt.	18 tons 13 cwt.	18 tons 5 cwt.	17 tons 10 cwt.
Flounders	19 cwt. 2 qrs. 6 lbs.	19 cwt. 2 qrs. 6 lbs.	19 cwt. 2 qrs. 6 lbs.	19 cwt. 2 qrs. 6 lbs
Rough Fish	75 cwt. 2 qrs. 5 lbs.	75 cwt. 2 qrs. 5 lbs.	75 cwt. 2 qrs. 5 lbs.	75 cwt. 2 qrs. 6 lbs
Shrimps	313 galls.	· 313 galls.	313 galls.	313 galls.
Fowls' Heads	7512	7512	7512	7512
Horses killed	245	267	255	260
and Weighing	59 tons 8 cwt.	62 tons 9 cwt.	98 tons.	130 tons 17 cwt.

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# Provisions consumed during

Goats killed ..... 154154and Weighing ..... 4 tons 7 cwt. 3 tons 11 cwt. 1 qr. Bread..... 4603 qtns. 4497 qtns. Oil-Cake ..... 15 cwt. 20 cwt. Rye Bread ..... 371 cwt. ..... Mangel Wurzel ..... 19 tons. 18 tons. Tares ..... 1008 bundles. 976 bundles. Potatoes ..... 3 tons 18 cwt. 3 tons 18 cwt. Carrots ..... 7 tons 17 cwt. 7 tons 17 cwt. Bunch Greens ..... 3456 bunches. 3456 bunches.

174 2 tons 15 cwt. 4370 qtps. 15 cwt. 78 cwt. 17 tons. 1005 bundles. 3 tons 18 cwt. 7 tons 17 cwt. 3456 bunches.

164 2 tons 13 cwt. 4488 qtns. 15 cwt. 78 cwt.  $19\frac{1}{2}$  tons. 1640 bundles. 3 tons 18 cwt. 7 tons 17 cwt. 3456 bunches.

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the past 10 years 1880 to 1889.

	1884.	1885.	1886.	1887.	1888.	1889.
	172 lds.	160 lds.	147 lds.	149 lds.	148 lds.	143 lds.
	$120\frac{1}{2}$ lds.	123 lds.	$121\frac{1}{4}$ lds.	$129\frac{1}{4}$ lds.	112 lds.	91 <u>1</u> 1ds.
	$198\frac{1}{4}$ lds.	$204\frac{1}{2}$ lds.	$185\frac{1}{2}$ lds.	217 lds.	228 lds.	219 lds.
	$24\frac{1}{4}$ quarters.	23 quarters.	24 quarters.	$25\frac{1}{4}$ quarters.	$26\frac{1}{4}$ quarters.	26 quarters.
	156 qrs.	144 qrs.	148 qrs.	145 qrs.	141 qrs.	140 qrs.
	37½ qrs.	$41\frac{1}{2}$ qrs.	38 <sup>1</sup> / <sub>2</sub> qrs.	35 <u>1</u> qrs.	40 qrs.	46 qrs.
	26 <sup>3</sup> / <sub>4</sub> qrs.	23 <sup>1</sup> / <sub>4</sub> qrs.	$10\frac{3}{4}$ qrs.	$6\frac{1}{2}$ qrs.	$5\frac{1}{4}$ qrs.	$4_{4}^{3}$ qrs.
	$74\frac{1}{2}$ qrs.	$74\frac{1}{2}$ qrs.	79 qrs.	84 qrs.	84 qrs.	75 <sup>1</sup> <sub>2</sub> qrs.
	285 qrs.	250 qrs.	272 qrs.	276 qrs.	280 qrs.	341 qrs.
	11 qrs.	$10\frac{3}{4}$ qrs.	$11\frac{3}{4}$ qrs.	$11\frac{1}{4}$ qrs.	$10\frac{3}{4}$ qrs.	10 <sup>1</sup> / <sub>4</sub> qrs.
	$10\frac{1}{2}$ qrs.	10 qrs.	$11\frac{1}{4}$ qrs.	$10\frac{1}{2}$ qrs.	$11\frac{1}{2}$ qrs.	$11\frac{1}{4}$ qrs.
	6 bushels.	1 qr.	1 qr.	6 bushels.	6 bushels.	6 bushels.
	$2\frac{1}{2}$ qrs.	$2\frac{1}{2}$ qrs.	$2\frac{1}{2}$ qrs.	2 qrs.	$1\frac{3}{4}$ qrs.	$1\frac{3}{4}$ qrs.
	$6\frac{1}{2}$ qrs.	6 qrs.	$5\frac{3}{4}$ qrs.	$6\frac{3}{4}$ qrs.	$7\frac{1}{4}$ qrs.	6 qrs.
	287 cwt.	281 cwt.	278 ewt.	273 cwt.	260 ewt.	254 cwt.
	104 cwt.	106 cwt.	94 cwt.	88 cwt.	88 cwt.	92 cwt.
	1 cwt.	$1\frac{3}{4}$ cwt.	$\frac{1}{4}$ cwt.	½ cwt.	$\frac{1}{4}$ cwt.	3 <u>3</u> cwt.
	41 cwt.	$39\frac{3}{4}$ cwt.	42 cwt.	32 cwt.	34 cwt.	33 cwt.
	19,800	19,950	18,850	18,250	17,550	17,000
	4557 qts.	5055 qts.	5213 qts.	5409 qts.	5138 qts.	5060 qts.
	17 tons 4 cwt.	17 tons 2 cwt. 3 qrs.	17 tons 2 cwt. 1 qr.	17 tons 5 cwt. 3 qrs.	13 tons 5 cwt. 2 qrs.	13 tons 15 ewt.3 qrs.
1	19 cwt. 2 qrs. 6 lbs.	19 cwt. 2 qrs. 6 lbs.	19 cwt. 2 qrs. 6 lbs.	19 cwt. 2 qrs. 6 lbs.	19 cwt. 2 qrs. 6 lbs.	19 cwt. 2 qrs. 6 lbs.
	75 cwt. 2 qrs. 6 lbs.	75 cwt. 2 qrs. 5 lbs.	75 cwt. 2 qrs. 5 lbs.	75 cwt. 2 qrs. 5 lbs.	75 cwt. 2 qrs. 5 lbs.	78 cwt. 2 qrs. 19 lbs.
	313 galls.	313 galls.	313 galls.	313 galls.	313 galls.	313 galls.
	7512	7512	7512	7512	7512	7512
	274	291	298	290	281	203
	135 tons 7 cwt.	138 tons.	$144\frac{1}{4}$ tons.	$136_{4}^{3}$ tons.	$124\frac{1}{4}$ tons.	105 tons.
	152	162	173	197	191	181
	2 tons 12 cwt.	2 tons 10 cwt.	2 tons 8 cwt.	2 tons 5 cwt.	2 tons 4 cwt.	2 tons 1 cwt.
	4534 qtns.	4480 qtns.	4870 qtns.	4840 qtns.	4684 <sup>1</sup> / <sub>2</sub> qtns.	4540 qtns.
	20 cwt.	15 cwt.	20 cwt.	20 ewt.	25 cwt.	40 ewt.
	67 cwt.	39 cwt.	39 cwt.	39 ewt.	$40\frac{1}{2}$ cwt.	10 <sup>1</sup> / <sub>2</sub> cwt.
	20 tons.	$18\frac{1}{2}$ tons.	19 tons.	20 tons.	$19\frac{1}{2}$ tons.	$17\frac{1}{2}$ tons.
	2117 bundles.	2065 bundles.	2467 bundles.	2467 bundles.	1901 bundles.	2392 bundles.
	3 tons 18 cwt.	3 tons 18 cwt.	3 tons 18 cwt.	3 tons 18 cwt.	3 tons 18 cwt.	3 tons 18 ewt.
	7 tons 17 ewt.	7 tons 17 cwt.	8 tons 2 cwt.	8 tons 2 cwt.	8 tons 3 ewt.	8 tons 6 cwt.
	3456 bunches.	3456 bunches.	3456 bunches.	3456 bunches.	3744 bunches.	3744 bunches.
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#### b. List of Species new to the Collection exhibited during the year 1889.

The following list contains the specimens exhibited in 1889 which are referable to species not included in the last (eighth) edition of the List of Animals.

#### i. MAMMALS.

125b. Avalis laniger (Gm.). Flocky Lemur. Hab. Madagascar.

a. Purchased, June 28, 1889.

- 254a. Putorius sarmaticus (Pallas). Marbled Polecat. Hab. Central Asia.
  - a-d. Presented by Col. Sir Oliver B. C. St. John, K.C.S.I., R.E., Feb. 8, 1889. From Quettah. See P.Z.S. 1889, p. 85.
- 313a. Sciurus syriacus, Hempr. & Ehr. Syrian Squirrel. Hab. North Syria.

a-c. Deposited, Dec. 20, 1889.

366a. Georychus capensis (Pallas). Cape Mole-Rat. Hab. Cape Colony, S. Africa.

a. Presented by the Rev. G. H. R. Fisk, C.M.Z.S., May 1, 1889. See P.Z.S. 1889, p. 316.

#### 450a. Bibos gaurus (Hamilton Smith). Gaur. Hab. India.

 Male. Presented by Sir Cecil C. Smith, K.C.M.G., Oct. 23, 1889. From Pahang. See P. Z. S. 1889, p. 447. 634*a*. *Phalanger orientalis* (Pallas). Oriental Phalanger. *Hab.* Solomon Islands.

> a. Presented by Charles M. Woodford, Esq., C.M.Z.S., March 4, 1889. See P.Z.S. 1889, p. 161.

#### ii. BIRDS.

104a. Euphonia flavifrons (Sparrm.). Yellow-fronted Tanager.

Hab. West Indies.

a, b. Presented by Mrs. Herbert, May 20, 1889. From Dominica.

145a. Spermestes nana, Pucheran. Dwarf Finch. Hab. Madagascar.

a-d. Purchased, Nov. 1, 1889.

 246a. Fringilla tintillon, Webb et Berth. Tintillon Chaffinches.
 Hab. Teneriffe.

a, b. Deposited, June 20, 1889.

246b. Fringilla teydea, Webb et Berth. Teydean Chaffinch. Hab. Canary Islands.

*a*-*x*. Deposited, Aug. 9, 1889.

270a. Erythrospiza githaginea (Licht.). Rosy Bullfinch. Hab. Algeria.

a, b. Purchased, Jan. 10, 1889. See P. Z. S. 1889, p. 26.

314a. Agelæus frontalis, Vieill. Chestnut-fronted Troupial.
Hab. Brazil.
a. Received in exchange, Dec. 13, 1889.

410a. Rhamphocorys clotbeyi (Bonap.). Clotbey's Lark. Hab. Algeria.

> a-e. Purchased, Jan. 10, 1889. See P. Z. S. 1889, p. 26.

412a. Otocorys bilopha (Temm.). Algerian Shore-Lark. Hab. Algeria.

> a-e. Purchased, Jan. 10, 1889. See P. Z. S. 1889, p. 26.

656a. Chrysotis prætrii (Temm.). Prêtre's Amazon. Hab. Brazil.

a. Purchased, July 23, 1889. See P.Z.S. 1889, p. 394.

799a. Micrastur ruficollis (Vieill.). Red-necked Hawk. Hab. Brazil.

a. Presented by J. E. Wolfe, Esq., Oct. 19, 1889.

807 a. Falco melanogenys, Gould. Black-cheeked Falcon. Hab. Australia.

> a. Presented by Baron F. von Mueller, C.M.Z.S., May 18, 1889.

- 934a. Eudocimus longirostris (Wagler). Red-billed White Ibis. Hab. America.
  - a, b. Purchased, Jan. 18, 1888. See P. Z. S. 1889, p. 26.

1150a. Francolinus natalensis, Smith. Natal Francolin. Hab. South Africa.

> a. Male; b. Female. Presented by Capt. Henry F. Hoste, July 15, 1889.

#### iii. REPTILES.

19 c. Homopus signatus (Walbaum). Well-marked Tortoise.

Hab. South Africa.

- a, b. Presented by the Rev. G. H. R. Fisk, C.M.Z.S., Feb.
   5, 1889. From the Clanwilliam Mountains.
- c. Male; d-e. Females. Presented by the Rev. G. H. R. Fisk, C.M.Z.S., July 22, 1889.

f, g. Presented by the Rev. G. H. R. Fisk, C.M.Z.S., Oct. 14, 1889.

79 a. Trionyx muticus, Lesueur. Unarmed Trionyx. Hab. North America.

a. Received in exchange, March 3, 1889.

- 188a. Python curtus, Schleg. Short Python. Hab. Malacca.
  - a. Presented by Mrs. Bertha M. L. Bonser, July 2, 1889. See P.Z.S. 1889, p. 393.
- 221a. Helicops leopardinus (Schl.). Leopardine Snake. Hab. Brazil.

a. Purchased, July 23, 1889.

#### iv. BATRACHIANS.

 4b. Breviceps gibbosus (Linn.). Humped Short-headed Toad.
 Hab. South Africa.

a. Presented by the Rev. G. H. R. Fisk, C.M.Z.S., Oct. 14, 1889.

4c. Breviceps verrucosus, Rapp. Warty Short-headed Toad.
Hab. South Africa.
a-d. Presented by the Rev. G. H. R. Fisk, C.M.Z.S., Oct. 14, 1889.

#### c. List of Animals bred in the Gardens during the year 1889.

#### MAMMALS.

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1 Black Lemur (Lemur macaco). 1 Puma (Felis concolor). 5 North-African Jackals (Canis anthus). 1 Side-striped Jackal (Canis lateralis). 5 Collared Fruit-Bats (Cynonycteris collaris). 8 Long-fronted Gerbilles (Gerbillus longifrons). 2 Chinchillas (Chinchilla lanigera). 2 Viscachas (Lagostomus trichodactylus). 1 African Wild Ass (Equus taniopus). 1 American Bison (Bison americanus). 1 Yak (Poëphagus grunniens). 1 Gayal (Bibos frontalis). 1 Eland (Oreas canna). 2 Persian Gazelles (Gazella subgutturosa). 1 Thar (Capra jemlaica). 2 Burrhel Wild Sheep (Ovis burrhel). 2 Barbary Wild Sheep (Ovis tragelaphus). 1 Indian Muntjac (Cervulus muntjac). 1 Wapiti Deer (Cervus canadensis). 1 Japanese Deer (Cervus sika). 2 Hog Deer (Cervus porcinus). 1 Molucca Deer (Cervus moluccensis). 1 Axis Deer (Cervus axis). 6 Mule Deer (Cariacus macrotis). 3 Vulpine Phalangers (Phalangista vulpina). 1 Red Kangaroo (Macropus rufus). 1 Great Wallaroo (Macropus robustus). 1 Great Kangaroo (Macropus giganteus).

2 Bennett's Wallabys (Halmaturus bennetti). 1 Derbian Wallaby (Halmaturus derbianus). 2 Yellow-footed Rock Kangaroos (Petrogale xanthopus).

#### BIRDS.

2 Grey Wagtails (Motacilla penelope). 2 Cockateels (Calopsitta novæ-hollandiæ). 3 Australian Wild Ducks (Anas superciliosa). 6 Chilian Pintail (Dafila spinicauda).

2 Chiloe Wigeon (Mareca chiloensis).

5 Summer Ducks ( $\mathcal{A}x sponsa$ ).

8 Mandarin Ducks (Æx galericulata).

3 Triangular-Spotted Pigeons (Columba guinea).

1 Bolle's Pigeon (Columba bollii).

2 Cambayan Turtle Doves (Turtur senegalensis).

5 Crested Pigeons (Ocyphaps lophotes).

1 Nicobar Pigeon (Calænas nicobarica).

10 Gold Pheasants (Thaumalea picta).

1 Peacock Pheasant (Polyplectron chinquis).

3 American Wild Turkeys (Meleagris gallo-pavo).

1 Globose Curassow (Crax globicera).

1 Herring-Gull (Larus argentatus).

1 Yellow-legged Herring Gull (Larus cachinnans).

#### d. List of Donors and their Donations for the year 1889.

Alder, G. W., Esq.

One Common Chameleon.

Allison, Mrs. M.

One Grey Ichneumon.

Anderson, Sir James ...

One Sinaitic Ibex.

Arbib, Umberto, Esq.

One Gazelle.

Baker, Mr. A.

Three Blue-crowned Hanging Parrakeets. Bankes, W. R., Esq., F.Z.S.

One Hybrid Wild Swine.

Bannehe, W. J., Esq.

Two Alligators. Barclay, Thomas, Esq.

One Golden Eagle. Barker, The Hon. Mrs. Two Cape Crowned Cranes. Barron, E. E., Esq. One Axolotl. Bason, Capt. One Malayan Bear, one Gold Pheasant. Basset, —, Esq. One Otter.

Baylis, Major T. Erskine, F.Z.S. Six Barbary Turtle-Doves. Besant, Capt. W. W. One Cape Gorilla. Bibby, Mr. One Corn-Crake. Bird, W., Esq. One Slender-billed Cockatoo. Blandford, H. E., Esq. One Hairy-rumped Agouti, one Tuberculated Iguana. Boden, Mrs. Walter. One Ocelot. Bonser, Mrs. Bertha M. L. One Short Python. Boon, Dr. A. P., C.M.Z.S. Thirteen Violaceous Night-Herons, One Green Bittern, One Dominican Kestrel, One Porto-Rico Pigeon. Bostock, J. H., Esq. One Brown Capuchin. Breton, Miss E. H. One Northern Mocking-Bird. Brocklehurst, H. D., Esq. One Tessellated Snake. Brunsden, Mr. Two Stone-Curlews. Buckland, F., Esq. One Vulpine Phalanger. Buckland, Mr. One Derbian Wallaby. Burge, B., Esq. Two Common Vipers. Burrell, O., Esq. One Common Marmoset. Butler, Mr. T. B.

One Long-eared Owl. Byng-Payne, Mrs. Two Crimson-winged Parrakeets. Carpenter, Commander Alfred, R.N., F.Z.S. One Cocoa-nut Land-Crab. Carter, B., Esq. One Jackdaw. Cashel, E. Baldwin, Esq. One Common Fox. Cecil, The Lord William.

One Yellow-billed Amazon.

Chandler, W. Aubrey, Esq.

One Common Squirrel.

Clayton, J. E., Esq.

One Red-legged Partridge, one Redwing.

Clifton, Charles, Esq., F.Z.S.

One Crested Porcupine, two Nicobar Pigeons, two Rose-crested Cockatoos, one Fork-tailed Jungle-Fowl.

Collins, T. H., Esq.

Three Orbicular Horned Lizards.

Colvin, Miss.

One Grey Ichneumon.

Cookson, Capt. Treville.

Two Caracals.

Cookson, W. J., Esq., The Executors of the late.

Two Great Eagle-Owls.

Coombs, J., Esq.

One Rough Fox.

Corlett, Stuart N., Esq.

One Arctic Fox.

Cosh, Mrs.

One Pig-tailed Monkey.

Cousins, C. W., Esq.

One Turtle-Dove.

Cowley, J. H. B., Esq.

One Hybrid Polecat.

Cox, Harding, Esq., F.Z.S.

Two Black-footed Penguins. Cox, Mrs.

One Macaque Monkey. Creek, Col.

Three Bengal Foxes. Cunnington, H. J., Esq.

One Macaque Monkey. Curtis, C. L., Esq. One Grey Ichneumon. Curtis, H. Pelham, Esq. Three Common Hedgehogs. Cutting, Mr. J. One Coot. Dabbs, Mr. F. One Macaque Monkey. Dance, E., Esq. Four European Sousliks. Davy, Miss L. One Grey Parrot. Dugdale, Frank, Esq. One Brown Bear. Elliott, C., Esq. One Stump-tailed Lizard. Entwistle, Mr. James. One Bonnet-Monkey. Fairfax, Rear-Admiral Henry, R.N., C.B., F.Z.S. Two Tuatera Lizards. Farrell, Col. J. D. C. One Rhesus Monkey. Faulkner, Mrs. Arthur. One Common Squirrel. Feilden, Col., H. W., C.M.Z.S. One Black Tortoise, one Rough-eyed Cayman. Felstead, W. H., Esq. One White-backed Piping-Crow. Ffinch, B. T., Esq., C.M.Z.S. One Indian Wolf, five Chaplain Crows, one Indian Python. Ffoulkes, Mrs. Two Vinaceous Turtle-Doves. Findlay, Capt. C. A., R.N.R. Three Owen's Apteryx. Fisk, The Rev. G. H. R., C.M.Z.S. One Cape Mole-Rat, one Geometric Tortoise, one Areolated Tortoise, eleven Tuberculated Tortoises, seven Well-marked Tortoises, one Robben-Island Snake, two Infernal Snakes, five Rufescent Snakes,

Adder, four Warty Short-headed Toads, one Humped Short-headed Toad, six Narrow-headed Toads, thirty-four Gray's Frogs. Fitz-Simons, Mrs. M. One Kinkajou. Flemyng, Miss Agnes. One Smooth Snake. Gainsford, Mrs. One Herring-Gull.

five Smooth-bellied Snakes, two Many-spotted Snakes,

one Rhomb-marked Snake, one Hissing Sand-Snake,

two Spotted Slow-worms, one Puff-Adder, one Cape

Gibson, Mr. Stanley.

Two Common Marmosets. Gilbert, Dr. J.

Eight Indian Gerbilles.

Godfrey, J. E., Esq.

One Malabar Parrakeet.

Griffith, Lady Charlotte Brandford.

One Great-billed Touracou.

Gruchy, The Rev. J. de.

One Common Paradoxure.

Gunn, Mr. T. E.

One Tawny Owl.

Haines, The Rev. F. W.

Two Viperine Snakes, three Green Lizards, two Marbled Newts, two Spotted Salamanders, two Edible Frogs, three Green Tree-Frogs.

Hairby, Capt.

One Adorned Ceratophrys.

Hall, E. C., Esq.

One Common Fox.

Hanauer, H., Esq., F.Z.S.

One Greek Partridge.

Harcourt, L. V., Esq.

Two Herring-Gulls.

Hart, E., Esq., F.Z.S.

One Short-eared Owl.

Hart, Miss L. C.

One Rhesus Monkey.

Harvey, Capt. J. V.

One Common Buzzard.

Hastie, A. H., Esq.

Twenty-two Gold Fish, four Carp.

Hastings, G. F., Esq., F.Z.S.

One Raven.

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

One Lesser Razor-billed Curassow. Hay, Thomas, Esq. Two White Storks. Hayley, J. Newton, Esq. One Louisianian Meadow-Starling. Hayward, G., Esq. One Common Moorhen. Henderson, Mrs. One Macaque Monkey.

Henderson, Mr. T. G. One Golden Eagle. Henry, F. H. V., Esq. One Brown Capuchin. Hensman, F., Esq. Two Manx Shearwaters. Herbert, Mrs. Two Yellow-fronted Tanagers. Hewetson, H. B., Esq., M.R.C.S., F.Z.S. Two Razorbills, six European Tree-Frogs. Hoad, W., Esq., M.D. One Peregrine Falcon. Holmes, R. J., Esq. One Long-nosed Crocodile. Hopkins, The Rev. F. One Long-eared Owl. Hoste, Capt. Henry F. Two Crested Porcupines, one Jackal Buzzard, two Natal Francolins. Hughes, W. F., Esq. One Malbrouck Monkey. Hulme, G. H., Esq. One Common Badger. Hunt, Mrs. One Slender-billed Cockatoo. Hunter, H. C. V., Esq., F.Z.S. One Serval. Hunter, R., Esq. One Common Peafowl. Jamaica Institute, Jamaica, W. I. One Sharp-nosed Crocodile. James and Brown, Messrs. Four Black Swans. Jamrach, Mr. W.

One White-eared Fruit-Bat. Janes, Capt. Two Common Kestrels. Jansen, Mr. One Bewick's Swan. Johnson, Cuthbert, Esq. One Common Stoat, two Indian Jerboas. Johnson, Mr. J. B. One Tuberculated Iguana. Jones, H. L., Esq. One White-throated Monitor. Keilich, Mr. E. One Common Gull, one Black-headed Gull. Kennedy, J. D., Esq. Two Common Rheas. Kent, Capt. A. One Barbary Ape, one Saker Falcon, two Red-legged Partridges. Kirk, Miss Dolly. One Purple-crested Touracou. Knight, Mr. J. One Viperine Snake. Lacy, Capt. W. Heathorn. One Ocelot, one Brazilian Cariama. Lang, Dr. Messiter. One Malbrouck Monkey. Larking, Col. Cuthbert, F.Z.S. One Rhesus Monkey. Lart, W. S., Esq. One Common Wolf. Latham, Commdr. W. M., R.N., F.Z.S. Two Short-toed Larks, four Common Bluebirds. Lechmere, Sir Edmund A. H., Bart., M.P. One Brush-tailed Kangaroo. Leith, Mrs. One Dwarf Chameleon. Lemberg, P., Esq. One two-spotted Paradoxure. Lilford, The Lord, F.Z.S. One Cinereous Vulture, eight Spanish Blue Magpies. Liming, Miss. One Rose-crested Cockatoo. Lishman, Mr. One Green Monkey.

Lloyd, Mrs. Theodore. One Gold Pheasant, one Silver Pheasant.
London, Chatham, and Dover Railway Co. Four Common Snakes.
Lucas, C. J., Esq. One Bar-tailed Pheasant.
Lucas-Shadwell, Mrs. One Crested Porcupine.

Lumsden, Lieut.-Gen. Sir Harry B., K.C.S.I., F.Z.S. Two Long-fronted Gerbilles. McCausland, W. J., Esq. One Macaque Monkey. MacDonald, Major C. M. Two Schlegel's Doves. Mackenzie, George S., Esq., F.Z.S. One Leopard, one Lesser Koodoo, two White-crested Touracous. Mackie, J. G., Esq. Two Macaque Monkeys. Mackinnon, Sir William, C.I.E., F.Z.S. One African Zebu. Macnab, Mrs. One Grey-breasted Parrakeet. McNiven, C. F., Esq. Ten Common Vipers. Macpherson, The Rev. H. A. One Solitary Thrush. Martin, Charles, Esq. Two Prairie Wolves. Martin, J. A., Esq. One Ring-tailed Coati. Mason, F. T., Esq. One Spanish Terrapin. Meade-Waldo, E. J., Esq. Two Canary Finches, two Tintillon Chaffinches. Meux, Lady, F.Z.S. Two Red-and-Yellow Macaws, one Greater Sulphurcrested Cockatoo, one Roseate Cockatoo. Meyrick, Miss Gladys E. One Red-handed Tamarin. Millward, Master H. Two Natterjack Toads. Morant, Mrs. One Great Eagle-Owl. Mudge, A., Esq. One Chough. Muëller, Baron F. von, C.M.Z.S. One Black-cheeked Falcon. Newton, Miss C. One Macaque Monkey. Nicholson, Sir Richard. Five Herring-Gulls.

Nicol, Mrs. One Macaque Monkey. Oakes, Mrs. Alfred. One Red-billed Tree-Duck. Paget, Commdr., R.N. One Sinaitic Ibex. Pain, W. H. B., Esq. Four Common Vipers. Parker, Prof. T. Jeffery, C.M.Z.S. One Owen's Apteryx. Peacock, Mrs. G. One Alligator. Pelly, C. O., Esq. One White-fronted Lemur. Pelly, Miss A. L. Seven Common Slowworms. Percy, C. Reid, Esq. One Verreaux's Guinea-fowl. Peregrine, Lawson N., Esq. One Lesser White-nosed Monkey. Permain, Thomas Watson, Esq. Two Cayenne Aracaris. Petre, Mrs. One Ring-tailed Coati. Petrzywalski, Mr. Charles. Two Common Marmosets. Phillips, Mr. R. One Short-eared Owl. Pike, Arnold, Esq. One Polar Bear. Pitcairn, Dr. J. J., F.Z.S. Two Common Toads. Politzer, J. R., Esq., F.Z.S. One Canadian Beaver. Pullan, Mrs. Ayrton. One Black-bellied Sand-Grouse. Reeves, Mrs. E. One Green Monkey. Reynolds, Mr. H. One Shag. Riach, Capt. M. S. One Macaque Monkey. Rigby, Mrs. Two Chinese Mynahs.

D

Roberts, Mr. R. One Common Perch. Roberts, Mr. W. B. Two Razorbills, three Guillemots. Rolleston, Major Villet, F.Z.S. One Wood-Owl. Romer, R., Esq., Q.C. One Red-and-Blue Macaw. Romney, The Earl of. One Common Polecat. Rose, Capt. One Crested Porcupine. Sainsbury, Mrs. Charles. One Rhesus Monkey. St. John, Col. Sir Oliver B. C., K.C.S.I., R.E., F.Z.S. Four Marbled Polecats. St. Quintin, W. H., Esq., F.Z.S. One Cactus Conure. Score, Mr. G. One Indian Chevrotain. Seton, Dr. Two Ducorps' Cockatoos, two Slender-billed Cockatoos. Shiell, William, Esq. One Ring-tailed Coati. Sibley, Dr. W. K. One Vervet Monkey. Siemens, Mrs. One Black Swan. Simon, Alfred M., Esq. One Poë Honeyeater. Sinclair, J. Robert, Esq. One Wattled Crane. Skipton, Major C. S., R.A. One Indian Wolf.

50

Smith, Sir Cecil C., K.C.M.G., H.M.Z.S. One Gaur.
Smith, F., Esq. One Jelerang Squirrel.
Smith, Dr. Gerard. One Grey-headed Porphyrio.
Smith, Master M. A. Two Natterjack Toads.
Sparrow, H. F., Esq. One Common Fox. Spence, J. F., Esq. One Brown Bear. Stephens, Capt. Stewart. One Lesser White-nosed Monkey. Stewart, Mr. C. S. One Black-headed Lemur. Streatfield, F., Esq. One Puff-Adder. Stutterd, S., Esq. One Common Squirrel. Suarez, Pedro, Esq. One Tropical Squirrel. Swinhoe, Col. C., F.Z.S. One Ring-necked Parrakeet. Tatham, Miss B. One Common Squirrel. Taylor, Capt. C. One Formosan Deer, one Japanese Deer, two Threestriped Paradoxures, one Great Eagle-Owl. Taylor, J. H., Esq. One Purple-faced Monkey. Taylor, J. T., Esq. One Peregrine Falcon. Taylor, Thomas, Esq. Two Viscachas. Taylor, Mr. Thomas. One Chattering Lory. Teil, R. M. J., Esq. One Redshank. Teil, Master W. P. One Common Kestrel. Terrot, R., Esq. One Common Pintail. Theophilus, Bros., Messrs.

Four Angora Goats. Thesiger, The Hon. Eric. One Long-eared Owl. Tholen, Mr. One Indian Fruit-Bat. Touche, J. de la, and G. Siemssen, Messrs. One Imperial Eagle. Tredegar, The Lord, F.Z.S. One Common Fox. Tudway, C. C., Esq. One Common Trumpeter. Tupper, Mrs. One Macaque Monkey. Tweedie, W., Esq. One Palm-Squirrel. Upcher, H. M., Esq., F.Z.S. One Ringed Plover. Vernall, The Rev. James. One Patas Monkey. Vinton, Mr. J. W. One Guinea Baboon. Vokes, Miss. One Grey Squirrel. Waddell, James, Esq. One Common Marmoset. Walker, John, Jun., Esq. One Serval. Warburg, Masters F. & O. Fifteen Moorish Geckos. Waterbury Watch (Sales) Co., Limited. One Bonnet-Monkey. Watkins, J., Esq. One Common Chameleon. Watson, Capt. One Peregrine Falcon. Webster, Capt. One Cheetah. Wedlake, Mr. H. B. One Macaque Monkey. West Indian (Natural History) Exploring Committee. One Green Monkey. Wethered, Col. One Diana Monkey, one Campbell's Monkey, one Musanga Paradoxure. Whitlow, Mr. C. H.

One Green Lizard.

4=3

Williams and Basevi, Lieuts., R.N. One American Black Bear.
Williams, N. T., Esq. One Ring-tailed Coati.
Wilson, Miss. One Alexandrine Parakeet.
Wilson, Mr. J. T. One Rhesus Monkey.
Wolfe, Mrs. One Ocelot, one Red Brocket, one Brazilian Tree Porcupine, one Acouchy, one Hairy Armadillo, one Yellow Hangnest, one Pileated Jay, one Blue-fronted Amazon, two White-eared Conures.

Wolfe, J. E., Esq.

12)

One Red-necked Hawk.

Wood, J. M., Esq., C.E.

One Manx Shearwater.

Woodford, C. M., Esq., C.M.Z.S.

One Vinous-throated Fruit-Pigeon, one Oriental Phalanger.

Wynn, Charles H., Esq.

One Otter.

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

Two Nightingales, two Pine Grosbeaks, two Waxwings, two Nuthatches, two Fieldfares

#### Conclusion.

In concluding their Report the Council wish to acknowledge the assistance they have received from the Committee of Publication, upon whom is devolved, in accordance with the By-Laws, the arrangement and supervision of the Society's Scientific Publications.

The Council have also to ask you to thank those Fellows of the Society who during the past year have audited the Accounts and have served on the Finance Committee.

The temporary loan had from the Society's Bankers in 1887 having been now paid off, and the mortgage-debt on the freehold-house being reduced to  $\pounds6000$  (another £1000 of which will be repaid on the 15th of June next), the Council trust that they may soon be able to resume their former policy of adding to the permanent Buildings in the Gardens, which financial stress has obliged them to discontinue for several years.

### Signed (for the Council), P. L. SCLATER, Secretary. 3 Hanover Square, W., April 29th, 1890.

PRINTED BY TAYLOR AND FRANCIS, RED LION COURT, FLEET STREET.

#### REPORT

#### OF THE

## AUDITORS OF THE ACCOUNTS

#### OF THE

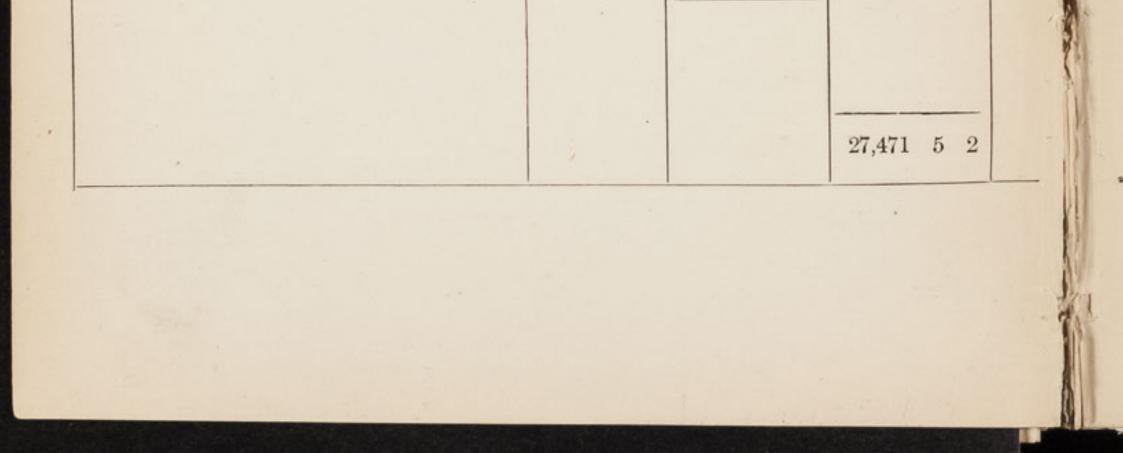
# ZOOLOGICAL SOCIETY OF LONDON,

#### Appointed January 16, 1890.

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, 1889, respectfully submit to the Society an abstract of the accounts, together with a statement of the Assets and Liabilities at the close of the year.



		*	
RECEIPT	S in 1889.		
Balance brought from December 31, 1888			£ s. d. 1,043 13 2
INCOME. 1886 Subscriptions	£ s. c	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
1887 { Subscriptions Publication Sales		6 18 0	
Garden Sales Rent for Refreshment-Rooms		1	
Ront for Rooms at Hanover Sauger		5	
1888 Admission Fees			
Subscriptions	24 0 0		
(Publication Sales	97 17 (		
(Administrate Condens	14,891 16 (	$\frac{-}{3}$ 398 4 8	
Admissions to Gardens Riding Receipts		5	
Garden Sales		3	
Rent for Refreshment-Rooms		4	
Rent for Rooms at Hanover Square	194 8 (	0	
Admission Fees	Ann	0	
Compositions		0	
1889 Subscriptions	5,680 0 ( 23 13 (		
Ivory Tickets           Publication Subscriptions	and the second sec	ő l	
Publication Sales	665 9 '	7	
Zoological Record Subscriptions	151 0 0	0	
Ditto ditto Sales	208 17 (	6	
Dividends	74 2 0	0	
(Miscellaneous	584 4	$\begin{bmatrix} 5 \\ - \end{bmatrix}$ 25,906 19 4	
Subscriptions	102 0	0	
1890 { Subscriptions	10 10	0	
		- 112 10 0	
	Part Same	-	
NCOME RECEIVED IN 1889	for the second second	26,427 12 0	26,427 12 0



## PAYMENTS IN 1889.

#### EXPENDITURE.

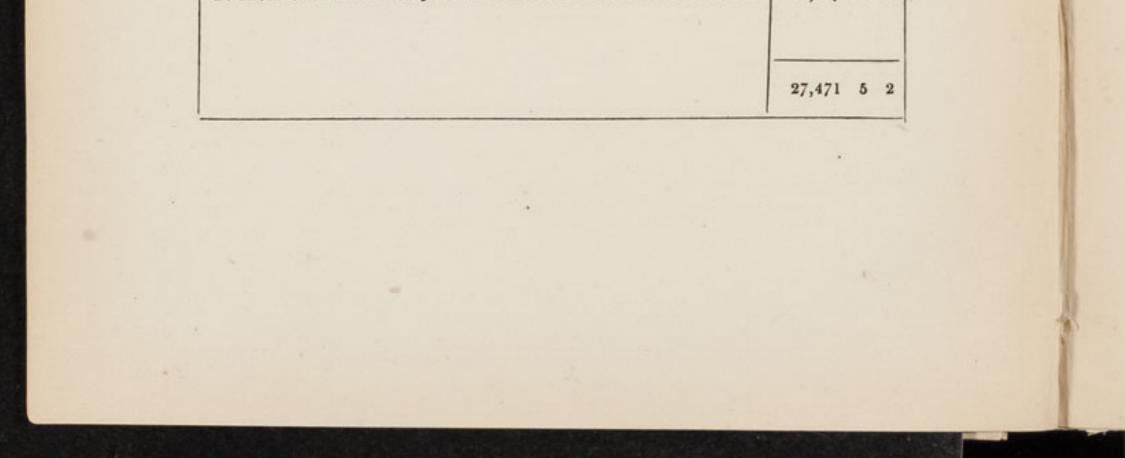
4

EATENDITORE.	£	s.	d.	£	s. 0	l.
Rent, Rates, Taxes, and InsuranceGardens	1,401 1	11	7			
Ditto dittoOffice	239 1		3			
Salaries and Pensions	3,601	3	9			
Ditto dittoOffice	1,899	0	0			
Provisions	3,603		6			
Cost and Carriage of Animals	645	18	7			
Menagerie Expenses	3,200	8	11			
Keepers' Dresses	167					
Works, &cGardens	2,764	3	10			
DittoOffice	139		1. Tak			
Garden Expenses	752	8	10			
Advertisements	100		6			
Band Expenses	100	4	6			
House and Office Expenses		16	6			
Ditto dittoOffice	661	12	6			
Stationery and Printing (Miscellaneous)	367	8	7			
Cost of Publications	1 45.00	18	5			
Cost of Zoological Record			0			
	200		3			
Library Expenses	10		Õ			
Returned Subscriptions	<b>E</b> 4		0			
Davis Lectures	10		ŏ			
Law Expenses	4	2010	6			
Cost of Medal	F 1		6			
Interest on Loan	050	-	ŏ			
Interest on Mortgage Debt	95		ŏ			
Grant in aid of Science	20					
TENDENDED DATE IN 1990	93 998	11	3	23,228	11	3
EXPENDITURE PAID IN 1889	10,110		-			-
Repaid Messrs. Drummond balance of Loan had Dec.	22, 1887	••••		2,000	0	0
Repaid Messrs. Drummond on account of Mortgage I	Debt			1,000	0	0
Cash at the Banker's, December 31, 1889 :	0770	1	0			
General Account	2113	12	11			

1,242 13 11 27,471 5 2

			Deserves						
	1889.			188	8.	_	Increase.	Decrease.	
	£	8.	d.	£	8.	d.		£ s. d.	
Admissions to Gardens	14,891		6	13,284	11	0	1,607 5 6	• • • • • • • • • • • •	
Elephant and Camel	=0.1	-	6.	Bor	10		38 17 1		
riding receipts	724			685 523		5	36 1/ 1	200 10 8	
Garden Sales Rent for Refreshment-	322	11	10	523	2	0		200 10 0	
Rooms	812	9	8	692	12	1	119 17 7		
Rent for Rooms at Han-	012	9	~						
over Square	258	3	0	283	3	0		25 0 0	
Admission Fees :				-					
Past	80	0	0	70	0	0			
Present	470	0	0	470	0	0			
Annual Subscriptions :							0.0.0	1	
Past	33	0	0	24 5,685	0	0	9 0 0	5 0 0	
Present	5,680 102	0	0	102	0	0			
Future	720	0	0	870	0	0		150 0 0	
Compositions		13	0	17	17	0	5 16 0		
Ivory Tickets Publications	1,291	6	7	766	5	1	525 1 6		
Zoological Record	359		6	387	16	0		27 18 6	
Dividends	74	2	0	73	17	3			
Miscellaneous	584	4	5	89	16	4	494 8 1		
	26,427	19	0	24,025	10	8	2,810 10 6	408 9 3	
Increase	20,427			2,402			408 9 2	Ded. Deci	
	26,427	12	0	26,427	12	0	2,402 1 4		
Total Rec Total Pay Receipts	ments i	n 11	889.		•••	··-			
Dr.			C	ash					

Comparison of Receipts in 1889 with 1888.



	1	Pa	ym	ents.				
		Ex	pend	liture of				Duran
	188	9.		188	8.		Increase.	Decrease.
	£	8.	d.	£	<i>s</i> .	d.	£ s. d.	£ s. d
Rent, Rates, Taxes, and In-								
surance	1,641		10	1,716		3	•••••	75 5
Salaries and Pensions	5,500		9	5,551		0	•••••	51 8
Provisions	3,603		6	3,768		6	150 15 4	164 15
Cost and Carriage of Animals	645		7	495	-		150 15 4	•••••
Menagerie Expenses		8	11	3,024		9	176 2 2 20 6 11	
Keepers' Uniforms	167	7	10	147	0	11 2	847 8 7	•••••
Works, Materials, &c	2,903			2,056 232	6	3		232 6
Buildings	752		10	704		9	47 12 1	
Garden Expenses	180		6	299		9		119 4
Advertisements	177	4	6	179	7	6		2 3
Band Expenses	1,132	9	0	1,106		7	25 14 5	
Stationery and Printing (Mis-	1,102	9	v	1,100		'	20 11 0	
cellaneous)	367	8	7	293	6	8	74 1 11	
Cost of Publications	1,457			969		5	488 12 0	
Cost of Zoological Record			0	527		6	9 1 6	
Library Expenses	529		3	547		2		18 1 1
Expenditure of Davis Bequest	74	2	0	73		3	0 4 9	
Interest on Mortgage and								
Loan	305	5	6	387	8	11		82 3
Grant in aid of Science	25	0	0				25 0 0	
Miscellaneous	27	10	6	58	10	2		30 19
	23,228						1,864 19 8	
Increase			••••	1,088	12	9	776 6 11	Ded. Dec
	23,228	11	3	23,228	11	3	1,088 12 9	
Ordinary Payments	22,683		2	91 490	16	4	1,243 7 11	
Extraordinary ditto	22,083			700				154 15
	040	-		700	-	-		
	23,228	11	3	22,139	18	6	1,088 12 9	
		(	Con	tra				Cr.
By Expenditure paid in the y								£ s. 23,228 11

## Comparison of Payments in 1889 with 1888.

Sag By Balance at the Bankers, December 31, 1889..... 1,242 13 11 27,471 5 2

Assets and Liabilities of the Society on December 31, 1889.

#### ASSETS.

				£	s.	d.
Animals in the Menagerie in the Regent's Park				25,886	0	0
Books in the Library at Hanover Square				14,444	0	0
Unsold Publications				4,424	0	0
Stock of the Zoological Record				1,516	0	0
Freehold Premises				25,000	0	0
Value of £1,900 London and South-Western Raily						
per cent. Preference Stock (Davis Trust Fund)				2,365	0	0
Cash at the Bankers (Messrs. Drummond)				1,242	13	11
Arrears considered good :	£	<i>s</i> .	d.			
Rent for Refreshment-Rooms	60	7	6			
Rent for Rooms at Hanover Square	63	15	0			
Garden Sales	100	14	10			
Subscriptions	82	0	0			
Publication Sales	110	17	5			
Zoological Record Sales	25	10	0			
-				443	4	9
				675 000	10	

£75,320 18 8

#### LIABILITIES.

Rent and Taxes unpaid :	£	s.	d.	£	8.	d.
For the Gardens, say	169	8	10			
" Office, say	43	15	0			
			-	213	3	10

6

Bills, &c., estimated at :--Office, say ..... 292 4 10 ,, 951 19 9 6,000 0 0

Messrs. Drummond, Mortgage Debt .....

£7,165 3 7

We have examined the Vouchers and the accounts of receipts and expenditure, and certify that they are correct.

> WALTER CROUCH. PHILIP CROWLEY. H. BERKELEY JAMES. RICHARD LYDEKKER. EUGENE W. OATES. J. JENNER WEIR.

Committee of Auditors.

ZOOLOGICAL SOCIETY OF LONDON, 3 Hanover Square, W. February 27, 1890.

