

REPORTS

OF THE

COUNCIL AND AUDITORS

OF THE

ZOOLOGICAL SOCIETY

OF LONDON,

READ AT THE ANNUAL GENERAL MEETING,

APRIL 29TH, 1858.

LONDON:

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1858.

REPORTS

OF THE

ZOOLOGICAL SOCIETY

LONDON

The Zoological Society of London was founded in 1826, and has since that time been engaged in the study of the natural history of the animals of the British Islands, and in the collection and preservation of the specimens of the same. The Society has also been engaged in the study of the natural history of the animals of other countries, and in the collection and preservation of the specimens of the same. The Society has also been engaged in the study of the natural history of the plants of the British Islands, and in the collection and preservation of the specimens of the same. The Society has also been engaged in the study of the natural history of the plants of other countries, and in the collection and preservation of the specimens of the same.

REPORT OF THE COUNCIL.

IN accordance with the provisions of the Charter, the Council have now the pleasure of presenting to the Society their Twenty-ninth Annual Report.

I. GENERAL ESTABLISHMENT.

1. FELLOWS AND ANNUAL SUBSCRIBERS.

The number of Fellows, Fellows Elect, and Annual Subscribers at the present time amounts to 1726. Of these there are—

Compounders, paying £20	245
Ditto ditto £30	236
Paying annual contributions of £2	362
Ditto ditto £3	664
Dormant	144
Admission fees unpaid	16
Ditto remitted	8
Annual Subscribers, paying £3	51
	<hr/>
	1726

Fifty-seven Fellows have been elected since the last Anniversary, and one has been readmitted under the provision of the By-Laws, Chap. 1, Sect. 9.

The number of Deaths during the same period has been 57.

The number of Resignations has been 24; and the Removals ordered by the Council, in conformity with the Laws of the Society, amount to 27.

The number of Candidates is 16.

2. FINANCES.

a. Income.

The INCOME of 1857 amounted to £14,822 15s. 5d., which may be regarded as a favourable result, considering that the permanent sources of revenue have in all cases maintained an average sum, excepting THE RECEIPTS AT THE GARDEN GATE, where a decrease of £223 only took place, as compared with those of the previous year. This decrease did not however result from any falling off in the attractions of the Establishment, as the money taken on Mondays and Holidays presented an increase of £288 19s., representing an increase of 11,558 visitors, as compared with 1856, which was the eighth most productive year on record.

The SUBSCRIPTIONS amounted to £2802 15s., giving an increase of £20 6s. over 1856.

The ADMISSION FEES amounted to £245, and the LIFE COMPOSITIONS produced the considerable sum of £420, being an increase of £90 over the same head in 1856, and nearly equal to the very favourable year of 1855.

The GARDEN SALES also exhibited a considerable increase, having brought in £971 11s. 1d., or £141 7s. 10d. more than in the previous year, an improvement principally attributable to the large number of valuable species which are now annually bred in the Menagerie.

b. Expenditure.

The EXPENDITURE incurred in the year 1857 was £12,305 14s. 7d., falling within the Income by no less a sum than £2517 0s. 10d.

The actual decrease, as compared with the year 1856, was £2698 0s. 11d., which has been effected without impairing the attractions or good order of the Collection, by means strictly in accordance with the suggestions offered by the Auditors at the last Anniversary.

The ORDINARY EXPENDITURE is divided into six heads:—

1. The payments for the PURCHASE and CARRIAGE OF ANIMALS, including £167 18s. belonging to the arrears of 1856, amounted to £950, of which more than half was

incurred in the transport of a most valuable Collection from India, which will be more particularly noticed in that part of the Report which relates to the progress of the Menagerie.

2. The payments for PROVISIONS amounted to £3020 19s. 5d., of which £466 10s. 3d. belonged to the year 1856. The decrease under this head compared with that year was £718 13s. 3d., partly resulting from a diminution of prices, and partly from a reduction in the number of duplicate Animals which was effected by the sales mentioned above.

3. The INCIDENTAL MENAGERIE EXPENSES, including Straw, Fuel, Water-supply, &c. &c., from similar causes present a decrease of £236 4s. 2d., having been reduced to £1342 8s. 5d., including an arrear of £323 11s. 7d. belonging to 1856.

The numerous items which are classified under this head will be found in the Table of Payments annexed to the Report of the Auditors.

4. The payments for WORKS and REPAIRS amounted to £1413 11s. 11d., and present a decrease of £491 6s. 9d. as compared with 1856. This decrease has been effected by the discontinuance of any new works of importance, in conformity with the Resolution announced by the Council at the last and preceding Anniversaries. Considering that the protection of the Society's property against dilapidation is their first duty, the Council have not omitted any repair which appeared to them to be urgent, and the extensive operations in painting which they carried on whenever the weather was favourable, have had a most beneficial result upon the general appearance of the buildings and fences.

5. The GARDENER'S DEPARTMENT has been kept within the limit of £500, as intimated in the last Report, and presents a decrease of £262 10s. 2d., as compared with the previous year.

6. The Expenditure on account of PUBLICATIONS has amounted to £830 18s. 6d., including £306 6s. 1d. belonging to 1856.

c. Assets and Liabilities.

The Cash Assets of the Society on the 31st of December 1857 amounted to—

	£	s.	d.
Cash at the Bankers	1031	7	0
Cost of £3000 Red. 3 per Cents	2628	19	10
	<u>3660</u>	<u>6</u>	<u>10</u>
The Liabilities at the same period amounted to	919	4	2
Leaving a Cash Balance in favour of the Society of	2741	2	8

The Balance at the Bankers on the 31st of December was £1031 7s., the Total Liabilities at the same period being £919 4s. 2d. The Assets presented an increase of £608 11s. 10d., and the Liabilities presented a decrease of £2043 15s. 8d., as compared with the same day of the preceding year, showing an improvement of no less than £2652 7s. 6d. in the financial position of the Society.

II. PUBLICATIONS.

The Illustrated Volumes of the Proceedings for 1855 and 1856 have been issued since the last Anniversary; the Volume for 1857, containing eight Plates of Mammalia, nine of Birds, one of Fish, three of Mollusca, five of Annulosa, and four of Radiata, is now ready for delivery.

The letter-press of the Proceedings of the current year is completed up to the end of March, and the First Part of the Illustrated Edition, containing nine coloured, and one plain Plate, will be ready for delivery on the 1st of May.

The Second Part, containing the papers which shall have been read up to the last meeting in July, will be published on the 1st of September, and the last part on the 1st of February 1859. The volume will contain at least thirty Plates, the majority of which will be coloured in the most careful manner.

The Illustrated Edition has now extended to Ten Volumes, and contains three hundred and two Plates, divided into the following series.

58 of Mammalia with figures of 62 species.			
130 -	Birds	”	146 ”
12 -	Reptiles	”	12 ”
6 -	Fish	”	15 ”
39 -	Mollusca	”	352 ”
48 -	Annulosa	”	204 ”
9 -	Radiata	”	17 ”

The whole of these species have been represented with careful accuracy. The Mammalia and Birds for the most part by Mr. Wolf; the Fish and Reptiles by Mr. Ford; the Shells by Mr. Ford and Mr. Sowerby; the Insects in part by Mr. Ford, Mr. Westwood, and the late Mr. Wing.

The Fourth Part of the Fourth Volume of the Transactions has been published since the last Anniversary. The Fifth Part is in the Press. It will contain, among others, the following papers by Professor Owen:—

- 1st. “On Dinornis (Part VII.): containing a Description of *D. elephantopus*, Owen.”
- 2nd. “Osteological Contributions to the Natural History of Chimpanzees (*Troglodytes*) and Orangs (*Pithecus*), Part VI.”
- 3rd. “On the Anatomy of the Great Anteater (*Myrmecophaga jubata*), Part II.”
Illustrated with Eight Plates.

The published volumes of the Transactions contain papers by Contributors of the first eminence, illustrated by a series of Plates which are inferior to no scientific publication in any country.

III. LIBRARY.

The usual Serials purchased for the Library, and the Transactions of Learned Bodies, presented by them, or received in exchange for the publications of the Society, have been continued, and some additions have been made to the number of Institutions at home and abroad with which these interchanges are effected.

The principal Donations to the Library since the last Anniversary consist of Transactions and Proceedings from

The Royal Society of London.

The Linnean Society of London.

The Entomological Society of London.

- The Literary and Philosophical Society of Liverpool.
 The Literary and Philosophical Society of Portsmouth
 and Portsea.
 The Berwickshire Naturalists' Club.
 The Tyneside Naturalists' Field Club.
 The Royal Society of Edinburgh.
 The Royal Irish Academy of Dublin.
 The Smithsonian Institution, Washington.
 The American Academy of Arts and Sciences, Boston.
 The Natural History Society of Boston.
 The American Philosophical Society of Philadelphia.
 The Academy of Natural Sciences of Philadelphia.
 The Wisconsin State Agricultural Society.
 The Natural History Society of Paris.
 The Academy of Sciences of Paris.
 The Imperial Academy of Sciences of Vienna.
 The Royal Academy of Sciences of Berlin.
 The University of Basle.
 The Society of Arts and Sciences of Batavia.
 The Imperial Academy of Naturalists of Breslau.
 The Royal Academy of Sciences of Amsterdam.
 The Royal Academy of Sciences of Göttingen.
 The Royal Academy of Sciences of Stockholm.
 The Royal Academy of Sciences of Munich.
 The Dutch Society of Sciences of Haarlem.
 The Natural History Society of Hamburg.
 The Natural History Society of Chur.
 The Natural History Society of Bonn.
 The Natural History Society of Heidelberg.
 The Society of Natural Sciences of Zurich.
 The Natural History Society of Halle.
 The Imperial Society of Naturalists of Moscow.
- Mémoires, Journals, Bulletins, Annals, and Reports
 have also been received from
- The British Association for the Advancement of Science.
 The Linnean Society of London.
 The Royal Geographical Society of London.
 The Royal Agricultural Society of England.
 The Geological Society of London.
 The Society of Arts.
 The Royal Institution of Great Britain.
 The Photographic Society.
 The Art-Union of London.

The Statistical Society of London.
 The Royal Society of Literature.
 The United Service Institution.
 The Literary and Philosophical Society of Manchester.
 The Royal Institution of Cornwall.
 The Leeds Philosophical and Literary Society.
 The Geological and Polytechnic Society of the West
 Riding of Yorkshire.
 The Imperial Academy of Sciences of St. Petersburg.
 The Museum of Natural History of Paris.
 The Royal Academy of Sciences of Turin.
 The Society of Natural Sciences of the Canton of Vaud.
 The Imperial Academy of Copenhagen.
 The Physical and Natural History Society of Geneva.
 The Royal Society of Sciences of Neuchatel.
 The Royal Society of Sciences of Liège.
 The Smithsonian Institution of Washington.
 The Historical Society of Wisconsin.
 The Franklin Institute.
 The Geological Society of Dublin.
 The Asiatic Society of Bengal.

Donations have also been received from M. Guérin-Mè-
 neville, Cor. Mem.; Dr. Budge, of Bonn; M. Petit; Pro-
 fessors Tuomy and Holmes; Professor Baird; Professor
 Malherbe; Professor Martins; the Heirs of Amos Binney,
 M.D.; Isaac Lea, Esq., Corr. Mem.; the Commissioner of
 Patents, U. S. A.; C. Giraud, M.D.; W. Stimpson, Esq.;
 the Postmaster General; Dr. Gray, F.Z.S.; A. J. B.
 Beresford Hope, Esq., M.P., F.Z.S.; Jacob Bell, Esq.,
 F.Z.S.; Philip Kernan, Esq., F.Z.S.; John Hogg, Esq.;
 F. O. Ward, Esq.; Colonel Portlock, R.E.; B. H. Hodg-
 son, Esq., Corr. Mem.; the Editor of the Zoologist; the
 Editor of the Literary Gazette; the Editor of the Athe-
 næum Journal; and Messrs. Longman and Co.

IV. GARDEN ESTABLISHMENT.

a. WORKS.

1. The Works, as intimated in an earlier part of the Report,
 have been limited to conservation and such improvements
 as were absolutely necessary. Of this kind the principal
 undertaking has been the additional wiring applied to the
 fence on the south-western boundary of the Garden, pre-

senting a line of 460 yards towards the Park, which has been strengthened with the view of excluding intruders of all kinds, and efficiently protecting the animals in the Vivarium from the incursions of dogs, which had become a serious evil, and in some instances had occasioned actual loss of life in specimens of value.

2. A large space on the north side of the Carnivora Terrace has been cleared and gravelled for the accommodation of Visitors, who were constantly inconvenienced for want of room in that situation.

3. The Octagonal Eagle Aviary has been thoroughly repaired.

4. The Giraffe Yard has been raised, re-sloped and re-gravelled.

5. Two of the Ponds have been re-formed and lined entirely with brick, with the view of keeping the water in a purer state, by facilitating the operation of cleansing the bottom.

6. The principal lawn has been re-levelled.

7. The boundary banks towards the carriage-road, which had become overgrown with forest trees, have been thinned and replanted with evergreens; and several minor improvements have been made in various parts of the Garden.

b. MENAGERIE.

The sanitary condition of the Menagerie has been particularly fortunate during the last twelve months; and probably no winter has produced fewer casualties of importance than that which has just passed.

One of the best tests of general health and judicious treatment is derived from the number of species which reproduce in confinement; it being borne in mind that limited accommodation and publicity, unavoidable in an establishment like that of the Society, add materially to the obstacles which are opposed to that result.

The following list is particularly interesting on this account:—

LIST OF ANIMALS WHICH BRED IN THE GARDENS OF THE
ZOOLOGICAL SOCIETY BETWEEN THE 29TH OF APRIL, 1857,
AND THE 29TH OF APRIL, 1858.

MAMMALIA.

QUADRUMANA.

Rhesus Monkey.
Macacus nemestrinus } Hybrid.
" cynomolgus }
Ring-tailed Lemur.
Black-fronted Lemur } Hybrid.
White-handed Lemur }

CARNIVORA.

Leopard.
Ocelot.
Genetta pallida } Hybrid.
" felina }
Wolf.
Brown European Bear } Hybrid.
Black American Bear }

RUMINANTS AND PACHYDERMS.

Wapiti Deer.
Sambur Deer.
Persian Deer.
Javan Deer.
Hog Deer.
Leucoryx Antelope.
Eland Antelope.
Dorcas Gazelle.
Duiker Bok.
Burchell's Duiker.
Earless Sheep.
Llama.
West African River Hog.
Wild Hog of Europe.

MARSUPIALS.

Rufous-necked Kangaroo.
Bennett's Kangaroo.
Pademelon Kangaroo.

BIRDS.

SCANSORES.

Red-backed Parrakeet.
 Turquoise Parrakeet.
 Zebra Parrakeet.

INSESSORES.

Virginian Nightingale.
 Victoria Crowned-Pigeon.
 Crested Dove.
 Senegal Dove.
 Zenaida Dove.

RASORES.

Impeyan Pheasant.
 Purple Kaleege.
 Japan Pheasant
 Californian Quail.

NATATOIRES.

Herring Gull.
 Tufted Duck.
 Castaneous Duck.
 Shoveller.
 Gadwall.
 Pintail.
 Red-billed Duck.
 Bahama Duck.
 Summer Duck.
 Ruddy Shieldrake } Hybrid.
 Mountain Goose }
 Ashy-headed Goose.
 Cereopsis Goose.
 Black-necked Swan.

Of these, the OCELOT, the PERSIAN DEER, the WAPITI DEER, the ELAND, the LEUCORYX, the DUIKERS, the EARLESS SHEEP, the WEST AFRICAN RIVER HOG, the IMPEYAN PHEASANT, the PURPLE KALEEGE, the CALIFORNIAN QUAIL, the VICTORIA CROWNED-PIGEON, the ASHY-HEADED GOOSE, the MANDARIN DUCK, the SUMMER DUCK, the BAHAMA DUCK, the RED-BILLED DUCK, the CEREOPSIS GOOSE, and the BLACK-NECKED

SWAN are all species of great beauty and importance, and several of them are now for the first time proved to be capable of breeding in confinement.

The PERSIAN DEER presented to the Society in 1857 by the Earl of Ducie, had previously produced three fawns while in his Lordship's possession at Tortworth, and there is every probability that they will continue to increase. The series of Deer has been materially strengthened by the addition of a male BARASINGHA from the Collection of Rajendra Mullick, at Calcutta, the Society having for some years only possessed two females of this desirable species. When pending arrangements are completed for exhibiting the Deer under more favourable circumstances than at present, the approximation of the Wapiti, the Persian Deer, the Barasingha, the Javan Deer, and the Sambur, with their respective Fawns, will be one of the most interesting and attractive spectacles in the Menagerie.

The EARLESS SHEEP, presented to the Society in the year 1855 by His Royal Highness the Prince Consort, were originally obtained in Shanghai, by H. M. Vice-Consul, Mr. Rutherford Alcock. They are remarkable not only for their structure, which is well delineated in the Proceedings of the Society for 1857, Mammalia, pl. 52, but for their extraordinary fecundity, and the quality of their wool. The texture of the wool has been highly commended for particular fabrics by the Chamber of Commerce at Bradford, and experiments which have been conducted with the view of testing the results of a cross with some of the short-woolled sheep of this country have also been considered satisfactory. The Ewes which have been retained in the Society's possession have almost always produced four lambs at a birth; and as they may be obtained at almost any period of the year, this quality may hereafter place them in a superior position to the Dorset, which is the earliest-breeding race we have.

The IMPEYAN PHEASANT and the PURPLE KALEEGE have again commenced laying. The circumstances under which the latter species produced nine young birds in September last, are worthy of notice as indicating great hardiness of constitution. Their natural period for nidification is the month of April; but as the birds were shipped at Calcutta on the 7th of March, that impulse was arrested by the voyage, and in most instances would consequently have ceased until the following season. On arriving in the

Menagerie on the 14th of July, and being placed in a moderately convenient Aviary, eggs began to be laid in August; and nearly the whole of them proved fertile, the hatch coming off on the 13th of September. The nine young Birds, the first which have been produced in Europe, are now strong and healthy, their natural vigour having carried them through the winter with complete success.

To obtain the Impeyan Pheasants and other of the magnificent species of Gallinaceous Birds which inhabit the temperate regions of the Himalaya, the Governor-General of India, Lord W. Hay, Capt. Hay, Major Ramsay, Mr. Brian Hodgson, Mr. Keene, Capt. James the Acting Resident at Darjeeling, and other officers, contributed their valuable aid in the country, and a very large Collection was accordingly formed.

The difficulties of the voyage reduced the number of Birds which were shipped, after the worst part of the transit was passed; but notwithstanding that unavoidable misfortune, five species—

The Cheer (*Catreus wallichii*),

The Purple Kaleege (*Gallophasis horsfieldii*),

The White-crested Kaleege (*Gallophasis albocristatus*),

The Black-backed Kaleege (*Gallophasis melanotus*),

The Hill Partridge (*Arborophila torqueola*),

arrived in sufficient numbers to afford a reasonable prospect of permanently acclimating them in this country.

In addition to these breeding Birds, which have maintained their health up to the present time in the most remarkable degree, the Society received brilliant specimens of the *Polyplectron*, the *Bengal Bustard*, the *Saras Crane*, and other interesting species.

Sufficient success has therefore attended this first attempt of the Society to import the Game Birds of the Himalaya to prove their ultimate acclimation is perfectly possible, and to warrant further attempts at a future period.

In connexion with this subject, the Council have to record their thanks to Richard Green, Esq., of Blackwall, who undertook the conveyance of a large part of the collection formed under the auspices of the Governor-General of India, on the most liberal terms, in one of the magnificent ships belonging to his firm.

The VICTORIA CROWNED-PIGEON, like the ordinary Goura, although indigenous to the equatorial region of the Indian Archipelago, has exhibited an extraordinary facility

for reproduction in Europe when judiciously treated. The first instance on record in this country is the Hybrid Bird produced in the Society's Menagerie in 1848, followed by another in the following year, which is still living in the Collection. The very beautiful pair purchased in 1857, hatched out two Birds late in the autumn, which (probably on account of the season) did not, however, long survive. The robust health in which they now are, as well as a pair of the ordinary Goura, gives room for expecting a more successful result in the approaching summer.

The ASHY-HEADED GOOSE has now bred for several years in the Menagerie, and has proved itself perfectly capable of acclimatation. The Birds which have been distributed by the Society have succeeded equally well in France and Belgium; and this species, originally imported by the late Earl of Derby in 1849, may now be considered firmly established in Europe.

By the liberality and zeal of His Excellency Capt. Thomas E. L. Moore, R.N., Governor of the Falkland Islands, the Society have received a closely allied species of still more beautiful plumage, from which it is to be hoped similar results will be obtained. The true *Bernicla magellanica*, called in the Falkland Islands the UPLAND GOOSE, differs in a remarkable manner from all its congeners, in the great dissimilarity of the male and female. It is a more powerful, and altogether a more imposing Bird than the better-known species, and is perhaps the finest addition to our series of Exotic Water Fowl which has been recently made, with the exception of

The BLACK-NECKED SWAN.—This excessively beautiful species was acquired in 1851, but remained unproductive until 1857, when four birds were successfully hatched out in a nest which had been constructed in a retired corner of their enclosure in the month of April. These cygnets rapidly acquired the plumage of the adult state, and continue to be one of the most brilliant ornaments of the Collection. The breeding birds, and two others since dead, were imported by the late Earl of Derby; but the Society are indebted to Captain the Hon. E. A. Harris, R.N., while Consul-General in Chili, for a third pair, the female of which still survives, and may possibly, with the existing stock, perpetuate this highly desirable species as successfully as has been done with some of the earlier introductions of aquatic birds.

THE SPECIES EXHIBITED FOR THE FIRST TIME consist of six Mammalia, fifteen Birds, and fourteen Reptiles, exclusive of Mollusca, Annelides, and Zoophytes, of which a considerable number have been added to the collection in the Aquavivarium.

LIST OF ANIMALS EXHIBITED FOR THE FIRST TIME IN THE GARDENS OF THE ZOOLOGICAL SOCIETY, BETWEEN THE 29TH OF APRIL, 1857, AND THE 29TH OF APRIL, 1858.

MAMMALIA.

Titi Marmozet.	<i>Midas ursulus.</i>	S. America.
African Epomophorus.	<i>Epomophorus</i> ———?	W. Africa.
Mexican Jaguar.	<i>Leopardus Hernandezii.</i>	Mazatlan.
Harp Seal.	<i>Phoca grælandica.</i>	N. America.
Bosch Vark.	<i>Potamochærus africanus.</i>	S. Africa.
Mexican Deer?	<i>Cariacus mexicanus.</i>	Ste. Croix.

BIRDS.

RAPTORES.

Urubitinga Eagle.	<i>Morphnus urubitinga.</i>	Monte Video.
Brahminee Kite.	<i>Milvus govinda.</i>	Hindustan.
American Barn Owl.	<i>Strix americana.</i>	N. America.

INSESSORES.

Purple Plantain-eater.	<i>Musophaga violacea.</i>	W. Africa.
Ring Ouzel.	<i>Merula torquata.</i>	Europe.

SCANSORES.

Green-moustache Parrakeet.	<i>Palæornis affinis.</i>	India.
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RASORES.

Crested Guinea Fowl.	<i>Guttera cristata.</i>	S. Africa.
Cheer Pheasant.	<i>Catreus wallichii.</i>	N. India.
Red-breasted Ceriornis.	<i>Ceriornis hastingsii.</i>	N. India.
Black-backed Kaleege.	<i>Gallophasis melanotus.</i>	N. India.
White-crested Kaleege.	<i>Gallophasis albocristatus.</i>	N. India.
Hill Partridge.	<i>Arborophila torqueola.</i>	N. India.
Indian Quail.	<i>Coturnix argoondah.</i>	India.

GRALLATORES.

Bengal Bustard.	<i>Eupodotis bengalensis.</i>	India.
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NATATORES.

Upland Goose.	<i>Bernicla magellanica.</i>	Falkland Islands.
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T.C.M. 1857

The BOSCH VARK is the first living specimen which has reached Europe, and forms an interesting addition to the series of African Wild Hogs, of which the Society now possesses all the known species.

The MEXICAN JAGUAR, on comparison with the specimens of *Felis onca* which the Society have received from South America, appeared to be specifically distinct from them, and has been described in the 'Proceedings' for 1857, by Dr. Gray, under the name of *Leopardus hernandesii*. The only information which has hitherto reached the Council in reference to this valuable animal is that it was captured near Mazatlan, more than two years since, by Mr. Knight, through the liberality of whose sister it was presented to the Society. Further particulars have been requested from Mr. Knight, which will be published as soon as his communication is received.

Among the BIRDS exhibited for the first time, the most interesting Raptorial form is the Urubitinga Eagle, for which the Society is indebted to the untiring zeal of His Excellency W. D. Christie, Her Majesty's Plenipotentiary in the Argentine Republic, to whom the Council have had occasion to record their thanks on many previous occasions.

The PURPLE PLANTAIN-EATER is one of the most brilliant and remarkable species of the family to which it belongs. The delicacy of its constitution has hitherto prevented its successful introduction into this country, and the specimen which has recently reached the Society is certainly unique in Europe.

The CRESTED GUINEA FOWL is a very desirable addition to the fine series of Gallinaceous Birds now contained in the Collection. A single female unfortunately is the only representative of this species which the Council have been able to obtain; but as it is not uncommon in South-eastern Africa, it is to be hoped that the communication now rapidly developing with that portion of the African continent will at no distant period put the Society in possession of not only this, but many other desiderata of importance.

The Council have availed themselves of the co-operation which Dr. Livingstone, with his characteristic zeal for the advancement of science in all its branches, offered to them during his short residence in London; and the Council

have reason to believe that by his valuable aid they will in the course of next year be enabled to introduce some of the larger animals of Zambezia. In furtherance of this object the Council have great pleasure in stating that His Majesty the King of Portugal has, at their request, "given orders that the Governor-General of Moçambique should transmit directions to the Governor of Tête, and the other authorities of Zambezia, to afford all the aid and assistance in their power for the acquisition and transport of such animals as Dr. Livingstone may desire to procure."

LIST OF DONORS AND DONATIONS TO THE MENAGERIE.

HIS MAJESTY THE KING OF PORTUGAL.

A Jaguar.

The Earl Fitzwilliam.

An Emu, Two Axis Deer, a Llama, an Alpaca, a Cashmere Goat, Two Bennett's Kangaroos, a Tapir, a Black Bear, Two Ring-tailed Lemurs, a Black-fronted do., Two White-headed Eagles, a Golden do., a Bonelli's do., a Razor-billed Curassow, Two Gold Pheasants, Three Bronze-wing Pigeons, a Crested do., a Passenger do., Three Senegal do., Four Collared Doves, Two Indian do., Two Crowned Cranes, an African Water Hen, Two Crested Coots, Two Sandwich Island Geese, a Cereopsis Goose, a Summer Duck, Two Wigeons, a Gargany Teal.

The Right Hon. the Viscount Canning, Governor-General of India; The Lord W. Hay; Capt. Hay; Major Ramsay; Capt. James; J. Keene, Esq.; Brian H. Hodgson, Esq.; Rajendra Mullick.

A Collection of Himalayan Game Birds, including specimens of the Impeyan Pheasant, the Ceriornis, the Pucras, the Cheer, the Purple Kaleege, the White-crested Kaleege, the Black-backed Kaleege, the Polyplectron, the Bengal Bustard, the Saras Crane, &c.

13 The Earl of Ducie.

Thirty-two Terrestrial Mollusca from Malta.

Capt. Abbott, R.M.S. "Magdalena."

Two young Pumas, Seven Cuban Quails.

W. D. Christie, Esq., F.Z.S., H. M. Minister Plenipotentiary
to the Argentine Confederation.

Alfred Blyth, Esq.
Edward Newton, Esq.

Charles H. Croker, Esq.
Miss Mary Knight.

Major Marston.

15 Capt. Thomas E. L. Moore, R.N., Governor of the Falkland
Islands.

Clement George, Esq., F.Z.S.

John Macmeikan, Esq.

Charles Gubbins, Esq.

Mrs. Pearson.

W. P. Collier, Esq.

Capt. Pope, ship 'Alfred.'

Capt. Tower, R.N.

James Raine, Esq.

Mrs. Dempsey.

Capt. Bunbury.

E. T. Call, Esq.

Admiral Trotter.

Frederick Peake, Esq., F.Z.S.

E. de Mornay, Esq.

Hon. and Rev. S. G. Osborne.

J. F. Wilkins, Esq.

J. Brenchley, Esq.

R. M'Donnell, Esq.

Robert Mack, Esq.

Capt. Erskine, R.N.

John Wolley, jun., Esq., F.Z.S.

W. G. Smith, Esq., Secretary to the Hudson's Bay Company.

J. S. Caldwell, Esq.

C. Bordas, Esq.

*Two King Vultures, a Coati-
mondi, a Jaguar, a Gua-
naco, a Grison, a Urubi-
tinga Eagle.*

Two Jaguars.

*A pair of Mexican Deer, a
Turkey.*

A pair of Jaguars.

*A new Jaguar (L. Hernand-
esii, Gray).*

A pair of Tigers.

Four Upland Geese.

A Vulpine Phalanger.

A Flying Opossum.

Two Palm Squirrels.

A Macaque Monkey.

Two young Otters.

A pair of small Indian Cattle.

A Rattel.

A Pig-tailed Monkey.

A Rhesus Monkey.

A Tiger Cat.

An American Flying Squirrel.

*A Lemur and a Johanna
Lemur.*

A Common Badger.

*A Capuchin Monkey, a Col-
lared Peccary.*

A Gannett.

An Ichneumon.

Two Titi Monkeys.

A Baboon.

A Coati-mondi.

A Kinkajou.

*A Lapland Hare, Two Si-
berian Jays.*

Two Silver and two Red Foxes.

A Golden Agouti.

*Two Common Agoutis, an
Armadillo.*

- J. Colling, Esq. *A South American Peccary.*
 Madame Spartati. *A Dorcas Gazelle.*
 Dr. Daubeny. *A Bonneted Monkey.*
 J. Walton, Esq. *A Toque Monkey.*
 R. G. Whitfield, Esq., F.Z.S. *Two Iacchus Monkeys.*
 Mr. James Styles. *A Grey Ichneumon.*
 Dr. Way. *A Black-backed Jackal.*
 Dr. Fitzgibbon, of Sierra Leone. *An African Civet Cat.*
 Andrew Swanzy, Esq. *A Flying Fox.*
 Quarter-Master Hanley, 1st Life Guards. *A Jackal.*
 Richard Hillen, Esq. *A Black Hare.*
 T. Tyrrell, Esq. *A Common Hare.*
 H. Vignoles, Esq. *A young King Vulture.*
 Miss Kepp. *A Crested Ground Parrakeet.*
 Mrs. Stevenson. *Two Curassows.*
 E. H. Rickards, Esq. *A Common Sea Eagle.*
 Thomas Woolley, Esq., F.Z.S. *An Australian Owl.*
 Capt. Morice, R.N. *Two King Vultures.*
 J. J. Bagot, Esq. *A Sea Eagle, two Golden ditto.*
 Mrs. Clarke. *A White-fronted Parrot.*
 P. H. Saturn, Esq. *A Goshawk.*
 A. Turnbull, Esq. *An American Owl.*
 R. Boys, Esq. *A Cuckoo.*
 W. M. Buckton, Esq., F.Z.S. *Two Long-eared Owls.*
 T. H. Parker, Esq. *A Great Sulphur-crested
Cockatoo.*
 William Russell, Esq., F.Z.S. *Two Woodpeckers.*
 W. C. Kelaart, Esq., Corr. Mem. *A Common Guan, a Maccaw.*
 James Searight, Esq. *Three Egyptian Geese.*
 J. H. Gurney, Esq., M.P., F.Z.S. *Six Common Turtle Doves,
two Kestrel Hawks.*
 G. E. Bulger, Esq., 69th Regt. *A Land Rail.*
 Capt. Herd. *American Peregrine Falcon.*
 Zoological Society of Ghent. *Four Californian Quails.*
 Miss Gould. *A Hawfinch.*
 Thomas Walker, Esq., F.Z.S. *Two Bower Birds.*
 A. Davis, Esq. *Two S. American Love Birds.*
 J. S. Gaskoin, Esq., F.Z.S. *A Solitary Thrush, Marine
Animals, &c.*
 M. Henri Duveyrier. *Three Uromastix Lizards.*
 S. Wimbush, Esq. *Two Common Tortoises.*
 R. B. Mansfield, Esq. *A Proteus anguinus.*

Mr. Friend.	<i>Two Lizards.</i>
Redmond Buxton, Esq.	<i>Six Lizards.</i>
Mr. Brettel.	<i>A Royal Rock Snake.</i>
Mr. Lawrance.	<i>A Locust.</i>
Henry Obie, Esq.	<i>A young Alligator.</i>
E. Sheldon, Esq.	<i>A Chamæleon.</i>
Odo Russell, Esq.	<i>Twenty-one Tortoises.</i>
Thomas Landseer, Esq., F.Z.S.	<i>Four Common Water Newts, a Leech, and Fourteen Water Snails.</i>
Samuel Gurney, Esq., M.P., F.Z.S.	<i>Twenty-five young Trout, and Trout Spawn.</i>
George Nevile, Esq., F.Z.S.	<i>Six Burbots.</i>
A. Arcedeckne, Esq., F.Z.S.	<i>Crayfish and Oysters, &c.</i>
Mrs. Egan.	<i>Collection of Marine and Freshwater Animals.</i>
Rev. M. Hill.	<i>Eight Actinias.</i>
Capt. Duncan Baillie.	<i>A Common Seal.</i>
Miss Bell.	<i>A Hermit Crab.</i>
Hon. E. Chitty.	<i>Trout Spawn.</i>
Frederic Ouvry, Esq., F.Z.S.	<i>A Gold Fish.</i>
Lady Cust.	<i>Marine Animals.</i>
F. Roxburgh, Esq., F.Z.S.	<i>Four Pectens.</i>

Conclusion.

The Council cannot conclude their Report without a record of their thanks to the COMMITTEES OF AUDIT, FINANCE, AND PUBLICATION, to whom their best acknowledgments are due for the time and attention they have bestowed on their respective branches of the business of the Society.

The state of the Establishment is in the highest degree satisfactory both as to the efficiency, health, and variety of the Collection: the casualties have been remarkably few, and the additions of an extremely desirable kind.

The continued interest of the public is satisfactorily evinced by the increase of visitors on Mondays; and the desire of the most influential members of the community to promote the objects of the Society is amply proved by the List of Donations, many of which were obtained only at the cost of great labour and expense by the liberal bene-

factors, to whose disinterested influence and exertions alone their acquisition is primarily due.

The Financial result of the past year is also a subject of congratulation, and fully bears out the expectation which the Council had formed at the period of the last anniversary. They feel confident that the present state of the Society's property will enable them to provide for its effective maintenance at an expenditure not exceeding that of last year, and thus to secure a considerable surplus, which they propose to apply in part to necessary improvements in the accommodation of the Collection, and the residue towards that gradual increase of the reserve fund to which they still adhere as a principal object of their management.

REPORT
OF THE
AUDITORS OF THE ACCOUNTS,

Appointed January 7, 1858.

THE Committee of Auditors having carefully examined the Accounts of the Society for the year ending December 31, 1857, and having inspected all the Books and seen Vouchers for all the Payments, as ordered by the Council, now beg to lay before the Society the following Abstract of such Accounts, together with a Statement of the Assets and Liabilities of the Society, and a Report thereon.

RECEIPTS.

				£	s.	d.	
Balance of Cash brought from Dec. 31, 1856.				554	9	4	
INCOME.							
Belonging to years		£	s.	d.	£	s.	d.
1852 and 1853	Admission Fee	5	0	0			
	Annual Subscriptions	8	0	0			
	Transactions	2	2	6			
	Proceedings	1	4	0			
					16	6	6
1854	Admission Fee	5	0	0			
	Annual Subscriptions	5	0	0			
	Proceedings	2	2	6			
					12	2	6
1855	Annual Subscriptions	12	0	0			
	Transactions	1	9	0			
	Proceedings	16	0	0			
	Garden Sales	3	15	0			
	Museum Sales	90	0	0			
					123	4	0
1856	Admission Fees	35	0	0			
	Annual Subscriptions	72	0	0			
	Ivory Tickets	2	2	0			
	Proceedings	88	5	1			
	Garden Sales	212	0	0			
	Museum Sales	190	0	0			
					599	7	1
1857	Admissions to Gardens	8981	16	0			
	Garden Sales	755	16	4			
	Rent for Refreshment Room	400	0	0			
	Admission Fees	200	0	0			
	Compositions	420	0	0			
	Annual Subscriptions	2693	15	0			
	Ivory Tickets	87	14	0			
	Transactions	33	7	0			
	Proceedings	146	19	6			
	Museum Sales	228	5	0			
	Dividends	85	13	9			
Interest on Deposit Account	26	8	9				
					14,059	15	4
1858	Annual Subscriptions (anticipated)				12	0	0
INCOME RECEIVED IN 1857				£14,822	15	5	14,822 15 5
Proceeds of Sale of £1000 3 per Cents Red at 92 $\frac{7}{8}$ (April 7)							919 17 6
							£16,297 2 3

PAYMENTS.

EXPENDITURE.		Gardens.			Museum.			General Estabt.			Total.			
		£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	
Belonging to years	1856	Rent, Rates, Taxes, &c.	443	4	9	.....	66	16	7	510	1	4	
		Bills.....	1230	18	2	21	1	4	403	9	0	1655	8	6
		Repayment of Loan advanced Dec. 1856.....	800	0	0	800	0	0
		Paid on account of previous year	1674	2	11	21	1	4	1270	5	7	2965	9	10
1857	1857	Rent, Rates, Taxes, &c.	538	7	7	.....	165	15	9	.....	.....	.....
		Salaries, Wages, Gratuities, &c.....	2391	19	4	.....	953	0	4	.....	.....	.....
		Cost of Animals	286	0	0	.....	.....	.....	.....	.....	.....	.....
		Carriage of Animals and Keepers' } Expenses	496	2	2	.....	.....	.....	.....	.....	.....	.....
		Keepers' Dresses.....	97	3	0	.....	.....	.....	.....	.....	.....	.....
		Provisions	2554	9	2	.....	.....	.....	.....	.....	.....	.....
		Menagerie Expenses	1018	16	10	.....	.....	.....	.....	.....	.....	.....
		Works, Repairs, Alterations, &c. ...	1131	9	4	.....	.....	.....	20	16	10	.....	.....
		Garden Expenses	469	7	11	.....	.....	.....	.....	.....	.....	.....
		Band Expenses	203	2	6	.....	.....	.....	.....	.....	.....	.....
		Advertisements	113	17	6	.....	.....	.....	.....	.....	.....	.....
		House and Office Expenses.....	65	14	6	.....	.....	.....	148	5	1	.....	.....
		Museum Expenses .....	.....	.....	.....	49	15	6	.....	.....	.....	.....	.....
		Library Expenses .....	.....	.....	.....	48	14	6	.....	.....	.....	.....	.....
		Stationery, including Account Books .....	.....	.....	.....	.....	.....	.....	29	7	2	.....	.....
		Printing (Miscellaneous).....	.....	.....	.....	.....	.....	.....	67	13	0	.....	.....
		Transactions, including Printing ...	.....	.....	.....	.....	.....	.....	81	18	6	.....	.....
Proceedings, including Printing .....	.....	.....	.....	.....	.....	.....	442	13	11	.....	.....	
Returned Subscriptions .....	.....	.....	.....	.....	.....	.....	12	0	0	.....	.....	
Paid on account of the current year	9366	9	10	98	10	0	1921	10	7	11,386	10	5		
EXPENDITURE PAID IN 1857		11040	12	9	119	11	4	3191	16	2	14,352	0	3	
Paid for £1000 3 per Cents Red. at 91¼ (August 21) .....		.....	.....	.....	.....	.....	.....	.....	.....	.....	913	15	0
Cash at the Banker's, December 31, 1857. {		General Account		1006		10		1		.....		.....
		Petty Cash Account		24		16		11		.....		.....
										1,031		7 0		
										£		16,297 2 3		

The Assets and Liabilities on the 31st of December 1857
were as follow :—

ASSETS.						
	Arrears of		Capital Funded.	Cash.	Total.	
	Previous Years.	Current Year.				
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	
Cash at Banker's...				1031 7 0	1031 7 0	
Paid for £3000 Reduced 3 per Cents.			2628 19 10		2628 19 10	
Ann. Subscriptions	60 0 0	162 0 0			222 0 0	
Transactions	15 6 6	38 15 2			54 1 8	
Proceedings.....	68 3 6	173 10 0			241 13 6	
Ivory Tickets	3 3 0	10 10 0			13 13 0	
Garden Sales	7 10 0	598 13 6			606 3 6	
Museum Sales.....	60 0 0	28 10 0			88 10 0	
	214 3 0	1011 18 8	2628 19 10	1031 7 0	4886 8 6	

LIABILITIES.			
Debts.			
	£ s. d.	£ s. d.	
Bills, &c. estimated at—			
For the Gardens, say	434 4 2		
General Establishment	261 15 11		
		696 0 1	
Rent, Rates, &c. unpaid—			
For the Gardens, say	167 3 10		
General Establishment	56 0 3		
		223 4 1	
		£919 4 2	

	Belonging to		Total.
	Previous Year.	Current Year.	
Rent, Rates, Taxes, &c. :—			
Gardens	£ s. d. 443 4 9	£ s. d. 538 7 7	} 1,214 4 8
General Establishment	66 16 7	165 15 9	
Salaries, Wages, Gratuities, &c. :—			
Gardens		2,391 19 4	} 3,344 19 8
General Establishment		953 0 4	
Cost of Animals	154 14 0	286 0 0	440 14 0
Carriage of Animals and Keepers' Expenses :—			
Freight, Dock Charges, and Gratuities ..	13 4 0	66 9 9	} 509 6 2
Carriage and Keep of Animals, including a Collection from India		429 12 5	
Provisions :—			
Miscellaneous	466 10 3	2,005 0 2	} 3,020 19 5
Cost of Cattle		549 9 0	
Menagerie Expenses :—			
Straw, £121 10s.; Coke, £49 1s. 6d.; Coals, £47 8s. 6d.; Police, £15 18s. 6d.; Water Supply, £50; Sea-water and Carriage, £26 5s.; Brooms, £2 9s.; Miscellaneous, £10 19s. 1d.	323 11 7		} 1,342 8 5
Straw, £279 19s.; Coke, £73 19 6d.; Coals, £114 6s.; Police, £9 0s. 6d.; Labourers' Wages, £290 3s. 5d.; Water Supply, £25; Sea-water and Carriage, £89 15s. 10d.; Shoeing, £11 7s. 6d.; Bird Sand, £19 10s. ...		913 1 9	
Saw-dust, £14 7s.; Chimney-sweeping, £8 17s. 3d.; Mops, Brooms and Brushes, £24 7s. 6d.; Medicine, £4 2s. 7d.; Saddlery, £2 5s. 6d.; Miscellaneous (including Soap, Candles, Shovels, Water-pots, Knives, Tolls, Hampers, Wrappers, Repairs, &c.), £51 15s. 3d.		105 15 1	} 97 3 0
Keepers' Dresses		97 3 0	
Works, Materials, Repairs, &c. :—			
Gardens	237 0 11	1,131 9 4	} 1,413 11 11
General Establishment	24 4 10	20 16 10	
Garden Expenses :—			
Miscellaneous	29 1 3		} 498 9 2
Labourers' Wages, £362 3s. 9d.; Seeds, Plants and Carriage, £63 19s. 6d.; Loam and Turf, £12 16s.; Miscellaneous, £30 8s. 8d.		469 7 11	
House and Office Expenses :—			
Oil, £8 9s.; Miscellaneous, £3 13s. 11d.	12 2 11		} 226 2 6
Oil, Soap and Candles, £21 16s. 6d.; Gas at the Gardens, £6 19s. 3d.; Coals and Wood, £15 12s.; Medical attendance on Keepers, £20; Subscription to University College Hospital, £5 5s.; Tea and Coffee at Evening Meetings, £10 19s. 6d.		80 12 3	
Keepers' Washing, £5 17s. 6d.; Brooms, Brushes and Mops, £3 4s.; Postages, £47 17s. 1d.; Interest on Loan, £12 15s. 3d.; Miscellaneous, £63 13s. 6d.		133 7 4	} 209 8 6
Band Expenses :—			
Programmes	6 6 0		} 209 8 6
Music, £189; Programmes, £14 2s. 6d.		203 2 6	
Advertisements		113 17 6	113 17 6
Library :—			
New Books	13 13 4		} 62 7 10
New Books, £24 15s. 3d.; Water-colour Drawings and Mounting, £7 16s. 6d.; 18 Drawings of Fish, framed, £10 10s.; Duty and Carriage, £5 12s. 9d.		48 14 6	
Museum Expenses :—			
Camphor and Spirits	7 8 0		} 57 3 6
Commission on Sale of Specimens, £10 15s. 6d.; Attendance, Cleaning and Arranging Specimens, £39		49 15 6	
Stationery and Account Books	24 4 4	29 7 2	53 11 6
Printing (Miscellaneous)	37 1 0	67 13 0	104 14 0
Transactions :—			
Printing Plates, £56 1s.; Binding, 18s. .	56 19 0		} 138 17 6
Engraving Plates, £51 13s. 6d.; Printing Letterpress, £27 1s.; Binding, £3 4s.		81 18 6	
Proceedings :—			
Paper for Plates, £12 15s.; Printing Plates, £28 10s. 6d.; Paper for Letterpress, £49 10s.; Printing Letterpress, £114 14s. 6d.; Binding, £43 17s. 1d.	249 7 1		} 692 1 0
Lithographic Drawings, £112 4s.; Printing Plates, £63 14s. 3d.; Colouring, £121 16s. 8d.; Paper, £44; Printing Letterpress, £86 14s.; Binding, £9 5s.; Preparing Index, £5.		442 13 11	
Returned Subscriptions		12 0 0	12 0 0
Repayment of Loan to Bankers advanced in December 1856	800 0 0		800 0 0
	2,965 9 10	11,386 10 5	14,352 0 3

Expenditure incurred in 1857.

	Paid in the Year.			Unpaid, Dec. 31.			Total.		
	£	s.	d.	£	s.	d.	£	s.	d.
Rent, Rates, Taxes, &c.	704	3	4	223	4	1	927	7	5
Salaries, Wages, Gratuities and Pensions }	3,344	19	8	.....			3,344	19	8
Cost of Animals	286	0	0	15	0	0	301	0	0
Carriage of ditto and Keep- ers' Expenses }	496	2	2	.....			496	2	2
Provisions.....	2,554	9	2	166	0	9	2,720	9	11
Menagerie Expenses	1,018	16	10	101	15	9	1,120	12	7
Keepers' Dresses	97	3	0	.....			97	3	0
Works, Repairs, Alterations, &c.	1,152	6	2	142	12	7	1,294	18	9
Garden Expenses.....	469	7	11	0	15	10	470	3	9
Band Expenses	203	2	6	.....			203	2	6
Advertisements	113	17	6	.....			113	17	6
House and Office Expenses.....	213	19	7	19	13	3	233	12	10
Library Expenses	48	14	6	9	10	0	58	4	6
Museum Expenses	49	15	6	.....			49	15	6
Stationery.....	29	7	2	8	15	1	38	2	3
Printing (Miscellaneous).....	67	13	0	42	3	6	109	16	6
Transactions(including Printing)	81	18	6	.....			81	18	6
Proceedings (including Printing)	442	13	11	189	13	4	632	7	3
Returned Subscriptions	12	0	0	.....			12	0	0
	11,386	10	5	919	4	2	12,305	14	7

The Committee of Auditors have great pleasure in observing, that while the Income of the Society has been maintained at an amount which is satisfactory, although not quite equal to that of the previous year, there has been a very considerable decrease in the Expenditure, the payments, including the arrears of 1856, having amounted to £14,352, while in the previous year the payments were £15,839 15s. 7d.

The Expenditure incurred in the year 1857 appears to have been £12,305 14s. 7d., while the Income amounted to £14,822 15s. 5d. The heavy liabilities of 1856 absorbed the whole of this surplus of £2517; but as the liabilities standing over on the 31st of December, 1857, only amounted to £919 4s. 2d., the Income of the present year will be relieved from any similar pressure upon it, and will, if the expenditure is kept down to its present rate, probably present a surplus, which will tend materially to accomplish that increase of the funded capital to £5000, which was recommended in the Report made at the last Anniversary.

The actual decrease in the Liabilities on the 31st of December, 1857, as compared with that of the corresponding period in 1856, was £2043 15s. 8d., while on the other hand, your Committee find that the Cash Assets had increased by the amount of £608 11s. 10d., showing a total improvement of £2652 7s. 6d. in the financial position of the Society. Your Committee note also that the Cash at the Banker's on the 31st of December exceeded the amount of the liabilities of all kinds at the same date.

Your Committee notice with satisfaction, as a proof of the continued popularity of the Society's establishment, that the number of Visitors on Mondays and Holidays had exceeded those of the preceding year by 11,558 persons, although there is a slight decrease in the numbers on other days in the week.

In concluding their Report, your Committee have again to return their thanks to the Accountant, Mr. Leigh, for the perspicuous manner in which his accounts have been submitted to their examination.

EDWARD GREENAWAY.
JOHN D. SALMON.
EDWARD HAMILTON, M.D.
SAMUEL OXENHAM.
WILLIAM MARTYN.
EDWARD PERIGAL.
EDWARD JOHNSTONE.

11 *Hanover Square*, March 24, 1858.