

















Porkshire Philosophical Society.

ANNUAL REPORT

State States

FOR

MDCCCXLII.





ANNUAL REPORT

OF THE COUNCIL

OF THE

YORKSHIRE

PHILOSOPHICAL SOCIETY,

FOR

MDCCCXLII.

PRESENTED TO THE ANNUAL MEETING,

FEBRUARY 7, 1843.



Y O R K:

RICHARD BURDEKIN, 16, HIGH-OUSEGATE.

1843.



TRUSTEES

OF

THE YORKSHIRE MUSEUM,

APPOINTED BY THE ROYAL GRANT.

HIS GRACE, EDWARD, LORD ARCHBISHOP OF YORK.

GEORGE, EARL OF CARLISLE, K.G.

CHARLES WILLIAM, EARL FITZWILLIAM, F.R.S., F.S.A.

THOMAS PHILIP, EARL DE GREY.

HON. AND VERY REV. HENRY HOWARD, D.D.,

DEAN OF LICHFIELD. SIR WILLIAM LAWSON, BART., F.S.A. FRANCIS CHOLMELEY, ESQ., F.S.A. ROBERT DENISON, ESQ. REV. WILLIAM VERNON HARCOURT, F.R.S. WILLIAM HATFEILD, ESQ., F.G.S. RICHARD JOHN THOMPSON, ESQ.

PATRONESSES

OF THE

Forkshire Philosophical Society.

HER MAJESTY THE QUEEN.

HER ROYAL HIGHNESS THE DUCHESS OF KENT.

PATRONS.

HIS GRACE THE ARCHBISHOP OF YORK. EARL OF CARLISLE, K.G. EARL FITZWILLIAM, F.R.S. EARL OF TYRCONNEL, F.R.S. THE VISCOUNT MORPETH. THE LORD STOURTON. THE LORD WHARNCLIFFE. THE LORD FEVERSHAM. THE LORD WENLOCK.

OFFICERS OF THE SOCIETY, 1843.

PRESIDENT:

EARL FITZWILLIAM, F.R.S.

VICE-PRESIDENTS:

STEPHEN BECKWITH, M.D.
REV. STEPHEN CREYKE.
W. D. T. DUESBERY.
GEORGE GOLDIE, M.D.
SIR J. V. B. JOHNSTONE, BART, M.P.
REV. WM. VERNON HARCOURT, F.R.S.
WILLIAM HATFEILD, F.G.S.
REV. CHARLES WELLBELOVED.

TREASURER: ROBERT DAVIES, F.S.A.

COUNCIL:

<i>Elected</i> 1841	. Rev. T. EGERTON, F.G.S.
	Rev. W. Hey,
	W. D. LITTLEDALE,
	W. F. RAWDON, M.D.
<i>Elected</i> 1842	. JAMES ALLEN,
	JOHN PHILLIPS, F.R.S., G.S.
	HENRY ROBINSON,
	WM. WHYTEHEAD.
<i>Elected</i> 1843	. JAMES BARBER,
	CAPTAIN BENTHAM,
	Rev. John Graham,
	REV. JOHN KENRICK.

 $S \in C \cap R \in T \cap R \cap Y$:

THOMAS MEYNELL, JUN, F.L.S.

OFFICERS OF THE SOCIETY.

CURATORS:

NATURAL HISTORY DEPARTMENT.

Geology		J. PHILLIPS, F.R.S., G.S.
MINERALOGY		W. HATFEILD, F.G.S.
ZOOLOGY-VERTEBRATA	*	
ANNULOSA	• •	T. MEYNELL, JUN. F.L.S.
Mollusca and Zoophyta	D)	
Zoophyta	} *	
Comparative Anatomy	• •	THOMAS ALLIS.
BOTANY-GENERAL	• •	WM. D. HUSBAND.
BRITISH	• •	O. A. MOORE.

ANTIQUITIES		• •
LIBRARY and N	ISS.	• •
LABORATORY	6 e	• •
OBSERVATORY		• •
Meteorologi	CAL INS'	TRUM.

REV. C. WELLBELOVED.

Joseph Munby.

T. H. BARKER.

W.L.NEWMAN, F.R.Ast.S.

r

John Ford.

SUB-CURATOR OF THE MUSEUM:

HENRY BAINES.

* Those departments, for which no Curators are specially named, are considered to be under the direction of the Secretary and the Sub-Curator.

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YORKSHIRE PHILOSOPHICAL SOCIETY.

REPORT OF THE COUNCIL

TO THE

ANNUAL MEETING OF THE SOCIETY ON THE 7th of FEBRUARY, 18 3

IN presenting their Annual Report, the Council cannot refrain from congratulating the Society on its increasing prosperity.

From the large amount of debt with which it has hitherto had to contend, it has barely been able to devote any portion of its funds to the attainment of those objects for which the Society was originally established, viz. : " the promotion of science in the District for which it has been instituted." The Council are, however, willing to hope that brighter days are in store; and judging from the experience of the two last years, confidently look forward to the time when they will be relieved from those embarrassments which have hitherto beset them.

Former Reports have made the Society acquainted with the manner in which the debt has been incurred : it will only be necessary at the present time to draw the attention of the Meeting to the present state of the Society's finances.

The Balance due to Messrs. Swann & Co., on the 31st of December, 1841, was £1321. 11s. 8d. That balance has been reduced during the last twelve months to £1093. 10s. 11d., being a reduction of £228. 0s. 9d. In addition to this the Society has been called upon to repay to the Executors of the late Mr. Wolstenholme the

sum of £50., lent to it by that gentleman, so that the total debt of the Society has been reduced to the extent of £278. 0s. 9d., or from £5171. 11s. 8d., the amount on the 31st of December, 1841, to £4893. 10s. 11d., the present debt.

Notwithstanding the large reduction in the liabilities of the Society, which the Council have been enabled to effect, amounting, during the last two years, to above £500, they have, owing to several fortuitous circumstances, had it in their power to expend a considerable sum in general repairs, as well as in the construction of New Cases for the Mineralogical Collection, which Collection will forthwith be removed into the Geological room.

A sum of $\pounds 41$. 1s. 9d. has been paid to the Treasurer, by the Managers of the County Ball, held in 1839, the proceeds of which were to be applied to the repairs of the Hospitium. The Council deeming it incumbent upon them to appropriate this sum to the object for which it was intended, entered into contracts for the repairing and laying new joists to support the floor of the upper room, and likewise for glazing the upper windows of the building. When the work, however, came to be entered upon, several other repairs to the walls, &c., were found necessary, which compelled them rather to exceed the amount which was paid to them for the purpose.

As a proof of the increasing interest the public take in the Museum and Grounds, may be mentioned the fact, that nearly two thousand Strangers have during the past year paid for admissions to the Gardens, the proceeds from which, after deducting the attendant expenses, amount to the sum of ± 86 . 1s. 6d. In 1841 the amount received was ± 63 . 14s. 6d. and in the previous year 1840 only ± 50 .

Gratuitous admission was granted to the Public on Whit Monday and Tuesday, when the Gardens and Museum were as usual crowded with visitors; and the Council have the satisfaction of stating that the utmost order and regularity prevailed, and that the Collections were in no wise injured, notwithstanding the crowded state of the rooms.

In accordance with the recommendation of the last Annual Meeting, the Council welcomed the Yorkshire Agricultural Society, by granting to its Members the free use of the Theatre, for the delivery of a lecture by the Curator of the Laboratory, upon Agricultural Chemistry, The Annual Horticultural Fête, under the judicious Management of a Committee of the Members of the Society, took place on the third of August, and afforded the highest gratification to the inhabitants of the City, as well as to the numerous Country families, who were drawn hither by the Meeting of the Agricultural Society. Favoured by a propitious day, the attendance was more numerous than on any former occasion, and the receipts, after deducting the necessary expenses, amounted to about £115. This casual accession of income has enabled the Council to complete the laying out of the grounds near the Hospitium, and to form the drain there; a work which had long been considered almost absolutely necessary.

In addition to this, the Gardens have been generally improved, and the stock of Plants greatly increased. An improvement has been effected in the Hothouse, by which that building has been made more available to the healthy growth of the valuable Collection of Orchideous Plants, now possessed by the Society, and which has been considerably increased by donations during the past year. Encouraged by the general prospect of the Society's finances, and looking to the continued success of future Horticultural exhibitions, the Council hope to be enabled to render the Gardens still more attractive.

The Geological Collection has been enriched by the donation of several hundred examples of Organic Remains, and the Council have more pleasure in announcing this fact, because these additions are exactly in those parts of the series of Palæozoic organization. which are at this moment of special Geological interest, and which were imperfectly represented in the Cabinets. The contributions to the Silurian series from North America, through the continued kindness of Mr. Jos. Clarke of Cincinnati, are extremely important, and contain many very interesting forms of Polypiaria, Crinoidea, Conchifera, Cephalopoda, and Crustacea. Mr. Hatfeild, whose travels into remote parts of the world have always been the means of enriching the Museum, in which he has laboured when at home, has sent a choice selection of Organic Remains from the Silurian, Carboniferous, and Cretaceous groups of the United States, exhibiting on the whole a marked general analogy with the contemporaneous forms imbedded in European Strata, and, at the same time, those lesser differences and variations of structure which are

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often observed between both the extinct and the living creations of America and Europe. Taken in connexion with prior contributions from the same regions, by Mr. Wortley, Mr. Stapylton, and the Rev. C. V. Harcourt, with the Norwegian Specimens gathered by Mr. Bilton and Mr. Hatfeild, the student will find in the Yorkshire Museum the means of investigating some of the most general questions at present under discussion, regarding the nature and distribution of the most ancient forms of animal life.

For the same purpose, the large series of Fishes from the Old Red Sandstone of Morayshire, presented by Mr. Stephenson, may be consulted with advantage. Placed only one step higher in the scale of stratification, only one Geological period later, this group of extinct fishes,—Pterichthys, Coccosteus, Cheirolepis, &c.,—has no representative in the older Silurian, nor yet in the more recent Carboniferous rocks; nor, except by distant and faint analogies with existing fishes, can their obscure and mysterious structures be reduced to modern laws of organization, explained by the knowledge acquired through the study of existing animals.

Mr. Weaver has conferred on the Society an additional obligation, by extending the series of specimens from the Tortworth district, so as to make it include the Liassic and Oolitic Strata, as far upward as the Portland Stone. The New Cases just completed will permit an improvement in the exhibition of the Minerals, which has been long desirable, and of expanding to double its present extent the collection of recent Invertebrata.

The Collection of Vertebrated Animals has likewise been enriched by some valuable donations: amongst which may be enumerated collections of the Skins of Birds, from North America by Mr. Hatfeild, from Australia by Mr. James Backhouse, and from South America by the Rev. W. V. Harcourt.

The Collections of Comparative Osteology have been entirely rearranged; the Ornithological Specimens have been placed in the Gallery of the Zoological Room, where they are better displayed and rendered more available to the student, than in the room they previously occupied. The Mammalia and Reptiles have likewise been removed from their former locality, and placed in a more commodious room, where they are exhibited to greater advantage than heretofore. The Council hear with satisfaction that it is the intention of the

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Curator of this department, to present the Society with some valuable additions during the ensuing year.

Some additions have likewise been made to the Annulosa, by the presentation of several rare Foreign Insects, by the Rev. Francis Orpen Morris, and to the British Coleoptera, by the Rev. Wm. Hincks. The Collection of Foreign Insects has been entirely rearranged, and named, as far as the Books to which the Curator has had access, have enabled him; and the Collections generally are in a good state of preservation.

But that which specially claims the notice of the Society, is the donation of a valuable Collection of British Crustacea, from S. Hailstone, Esq. This Collection was formed by his son, the late Samuel Hailstone, Jun., Esq., and, at the particular request of the donor, is to be preserved as a distinct Cabinet, under the denomination of the "Hailstone Collection," as a just tribute the memory of the Collector. To the Collection of Mollusca and Zoophyta, several donations have also been received.

In the Botanical department, the diligent Curator of British Botany has been engaged in completing the arrangement of the British Herbarium. This is in a good state of preservation, and he confidently hopes to be enabled during the present year, to render this portion of the Museum available to the instruction of those who are practical admirers of our indigenous Flora.

In speaking of this department, your Council are painfully reminded that, within the last few weeks, the Botanists of this country have lost from amongst their number one of the most indefatigable and distinguished private Naturalists of the last half century;—the friend of the late Sir James Edward Smith and of Professor Hooker, and one of the founders of the Society's Botanical Collection. The large and valuable Herbarium, containing many Specimens from the Authors of the English and British Floras, is a sufficient monument to the merits, as a naturalist, of the late Rev. James Dalton, of Croft : and the Council have the pleasure of stating, that through the liberality of his son, J. Dalton, Esq., the Collection of Lichens of his late lamented Father, is now presented to the Society's Museum. The Society has likewise to regret the loss of W. Middleton, Esq., one of the earliest contributors to the Botanical Collection.

The additions to the Antiquarian Collections have consiste

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chiefly of coins; distinguished indeed by their number, but not in general by any great intrinsic value or rarity. Some however are undoubted remains of Eboracum. The most interesting are a very small portion of a vast hoard of Northumbrian Stycas, accidentally discovered in the month of April last, by some workmen employed in the erection of the De Grey Rooms, in St. Leonard's Place. They had probably been enclosed in a wooden box and buried near the foot of the rampart of the Roman Wall; but the wood had perished, and the coins were at first scarcely to be distinguished from the surrounding earth. As usual in such cases they quickly became the prey of the workmen, and were dispersed. Several hundreds have happily been recovered and rendered legible by the persevering zeal of Mr. John Browne. Of these an accurate descriptive Catalogue, will, it is hoped soon be completed, containing some very curious matter relating to this peculiar ancient coinage of the North, to which in consequence of recent discoveries, especially that at Hexham, the attention of Numismatists is now earnestly directed. It is much to be wished that arrangements could be made by which this portion of the hoard might be retained in York, and deposited in the Museum, amongst the few relics of "Eoferwic," where probably many of these coins were minted. The original deposit is supposed to have contained more than 5000 Stycas, and appears to have been made later than that at Hexham, as the series of kings extends lower, probably to the middle of the ninth century. It is with sincere pleasure the Council have to notice the publication by the Curator of this department, of the result of his diligent researches into the history of Roman York,a work which was undertaken at the special request of the Council, and which not only embodies, in lucid order, all the authentic information now attainable, regarding the traces of Roman sway in "Eburacum," but sheds over many previously unconnected facts, the light of extensive learning and philosophical reasoning.

The different learned Societies continue to supply the Library with their valuable Transactions; and several other interesting works have been presented to it. The Council cannot however but regret the absence of many scientific Works, the want of which is severely felt by the Curators of the several departments, during their labours.

The Laboratory has been greatly improved under the manage-

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ment of its Curator, who, with the permission of the Council, has continued his Lectures therein to the York School of Medicine, He has likewise delivered a series of highly interesting Lectures on Chemistry, in the Theatre of the Museum, to which the Members of the Society were almost gratuitously admitted;* and the Council feel assured that had they been able to give sufficient publicity to this fact, previous to the commencement of the course, the interesting nature of the subject, and Mr. Barker's well known talents as a lecturer, would have ensured a more numerous audience. Mr. Addams was likewise engaged by the Council, and delivered three most interesting lectures on the Electric Telegraph of Professor Wheatstone and on the Solidification of Carbonic-Acid Gas.

The Observatory has undergone several repairs during the past year; the usual Observations have been persevered in with diligence, and several interesting phenomena noted. A new Barometer and Thermometer have been placed therein by the liberality of the Curator, who contemplates the delivery of a few Lectures in the course of the present year, the proceeds to be applied in improving the instrumental power of the Observatory.

Following out the suggestions of the Council, as contained in the last Report, the Curator of Meteorological Instruments has made thirty-six Horary Observations, during the Vernal and Autumnal Equinoxes, and the Summer and Winter Solstices; and M. Quetelet, of Brussels, has confessed the importance of them, in a letter addressed to the Council, in acknowledgement of the receipt of those for the Vernal Equinox. From these observations the following results have been deduced, viz.:

Vernal Equinox, Mean of 24 Obs, 36.°79 occurring bet. 8 and 9 A.M. and 7 & 8 P.M. Summer Solstice 24 61.°87 7 and 8 A.M. and 6 and 7 P.M. Autumnal Equinox 24 48.°00 at 10 A.M. and at 7 P.M. Winter Solstice 24 49.°33 between 10 and 11 A.M. and not again.

The Curator has likewise continued his register of the Meteorological Phenomena at York, of which the subjoined Table gives the annual results :—

* 2s. 6d. only being charged by the Council for a ticket of admission to the twelve lectures, to defray the cost of lighting, attendance, &c.

		Barometer.			Rain.		Ther	mom	eter.			
		Mean.	Highest.	Lowest.	Inches.	Mean Maximum.	Mean Minimum.	Mean Temperature.	Highest Range.	Lowest.	Nights at or below 32º.	Rainy days, more or less.
	Jan.	30.04	30.57	28.76	2.20	34.5	27	30.7	40	6	29	7
	Feb.			29.16	.64		30.9			25	20	8
	March	29.85	30.34	29.22	2.15	48.9	35	41.9	55	30	12	16
	April	30.18	30.46	29.24	.39	55.7	33	44.5	66	23	17	2
	May	29.94	30.56	29.19	2.39	61.4	42	51.7	69	35	0	16
	June			29.50	1.91	68.6	48.9	58.8	7 6	40	0	8
	July			29.60	3.32	66	49	57.5	74	40	0	9
	Aug.			29.68	1.86	71	53.3	62	82	41	0	10
	Sept.	29.86	30.34	29.32	2.73	62.6	47	54.8		38	0	15
14	Oct.			28.95	.93	50.2		-		27	10	6
	Nov.			28.80	2.83	44.9	35.2	40	56	30	10	17
	Dec.	30.00	30.47	29.30	.42	48.6	38.1	43.4	58	27	9	11
N. N.	··· · · ·	29.96	-		21.77			47.1			107	125
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METEOROLOGICAL REGISTER—YORK, 1842.

At the last Annual Meeting, the Council were authorized to present an invitation to the British Association for the advancement of Science, to hold their Meeting for 1843, in this City, provided they saw reason to believe sufficient money could be raised for defraying the attendant expenses. In compliance with this resolution, the Council lost no time in making application to the Members of this Society and to the Friends of Science connected with the County, for their support, and finding that ample funds might be depended upon, they appointed a deputation of their body to attend, and present the invitation to the Meeting at Manchester. The invitation was presented, but owing to urgent solicitations on the part of the inhabitants of Cork, the Association determined that its next Annual Meeting should be held in that City. The Council, however, have strong reason to hope, that should the present Meeting authorize them to renew their invitation, for the Association to meet in York in 1844, that body will be induced to accept it; and we shall once more have the high honor and gratification of welcoming within our walls, a Society which had its origin amongst us, and which may now be justly considered as the first and most influential body of Naturalists and Philosophers the world can boast.

TREASURER OF THE YORKSHIRE PHILOSOPHICAL SOCIETY,

IN ACCOUNT FOR THE YEAR 1842.

1842. £. s. d. 1842. £. s. d. Annual Subscriptions and Arrears 580 0 0 Permanent Debt, viz. £. s. d. Admission of New Members 50 0 Company $£.$ s. d. Donation from Miss Lloyd 20 0 0 Company $£.$ s. d. Vorkshire Insurance Company $£.$ s. d. Ladies' Subscriptions, and Keys of wm. Gray, Esq. $1000 = 0$ Seven Members at 501. $350 = 0$ 0 Tickets at 1s. each. 50 10 0 Balance overdrawn Messrs. Swann & Co. $Berasce overdrawn$ $1321 = 11 = 8$ Corown Rents 1 0 5 Corporation Rents 6 12 6 $11 = 0$ Mr. Addams's Lectures 3 5 0 Gate Keeper $11 = 0$ 0 Ninety copies of " Guide to the Insurance $50 = 0$ 0 0 Museum" $110 = 0$ Sub-Curator, on account 205 $0 = 0$ $1419 = 13 = 11$ Permanent Debt, viz. £. s. d. Suders So $0 = 0$ $112 = 16 = 12$ $112 = 16 = 12 = 12 = 12 = 12 = 12 = 12 =$	Dr.	Cr.
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Tickets at 1s. each	-	Wm. Gray, Esq 1000 0 0
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Audited 7th Feb., 1843. T. ALLIS.

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ANALYSIS OF DISBURSEMENTS

DURING THE YEAR 1842.

ORDINARY EXPENSES.

Rent, Rates, &c.:			£	. s.	d.			
Rent to the Crown		• •	1	0	5			
Rent to the Corporation	•••	•••	$\hat{6}$			2		
Poor Rates, Highway Rates, a	nd Land Tax	••		$1\overline{2}$	7를			
Insurance and Water Rent	ing Lang Tax	••	11	$\tilde{0}$	0^{2}			
insurance and water nent	• •		11	0	0	48	5	$6\frac{1}{2}$
Salaries and Wages :						-10	0	02
Sub-Curator	• •	• •	100	0	0			
Servant			20		0			
Lodgekeeper			11	Õ	ŏ			
Labourer			36	8	0			
Collector			$\tilde{5}$	ŏ	ŏ			
Occasional Labourers		•••	17	ĭ	ŏ			
	• •					189	9	0
Interest on Debt:						100	v	Ū
Interest on Mortgage Debt			100	0	0			
Interest on £100			40	Ő	Õ			
Interest to Bankers for being	overdrawn		$\overline{46}$		ŏ			
interest to Dankers for Song	o i ol al contr	č •				186	1	0
Museum, Gardens, Grounds,	&c :					100	-	Ū
Painting and General Repairs			97	14	101			
Purchase and Preparation of S		• •		10	0			
Observatory	••		8	5	0			
						122	9	10분
Library :								-
Books and Binding						7	10	6
books and binding ••	• •	• •				'	10	0
Incidentals :								
Printing, Advertising, and Sta	ltionery		34	12	0			
Coals, Gas Light, and Coke	•••			15	6			
Postages, Carriage, and Sundr	ies				11			
		•••				83	7	5
						÷		
						637	3	4
Extraordi	NARY EXPER	NSES.						
3.C. 4.11			1.00	7.5				
Mr. Addams's Lectures	••	• •		15	4			
New Cases in the Geological	Koom	• •	65	0	0			
Tables for the Tent	• •	• •	45	0	0			
Cupboards in the Council Roc			_4	3				
Cases for the Antiquarian Col	lection				0.			
Hospitium Repairs		• •	62	14	11			
		,		denia Localizza		207	6	1
					-			
					£	844	9	5
					-			

RESOLUTIONS

PASSED AT THE ANNUAL MEETING, FEB. 7, 1843.

Resolved, that Joseph Clarke, Esq., of Cincinnati, and Thomas Weaver, Esq., F.G.S., of London, be elected Honorary Members of the Society.

1. That the Report of the Council be adopted and printed for the use of the Members.

2. That the Council be authorized to present an invitation to the British Association for the Advancement of Science, at its next Meeting, to appoint its meeting for 1844 to be held in York.

3. That the Thanks of the Society be given to the Vice-Presidents and Members of the Council retiring from office.

4. That the Thanks of the Society be given to the Treasurer and Secretary for their valuable services.

5. That the Thanks of the Society be given to the Curators for their diligent and useful services in the several departments of the Museum.

6. That the Council be empowered, on certain days, to be selected by them, during the present year, to permit free admission to the Museum and Gardens to all persons; the mode of admission to be regulated by the Council.

7. That the Regulations adopted at the last seven Annual Meetings, for the admission of Strangers by the purchase of Tickets, be continued for the present year.

8. That the Resolution of the last Annual Meeting, empowering the Council to authorize the holding one or more Horticultural Meetings in the Society's Gardens, be continued in force during the present year.

9. That the best Thanks of the Society be given to the Chairman and Committee of Management of the Horticultural Fête held in August last; and that they be respectfully requested to continue their valuable services for the year 1844.

SUBSCRIBING MEMBERS

OF THE

YORKSHIRE PHILOSOPHICAL SOCIETY,

ELECTED IN 1842 - 3.

1842.

Thomas Henry Travis, York.
Arthur Symonds, York.
James Hack Tuke, York.
Thomas Winn, York.
Charles Wilkinson, York.
Hon. William Stourton, Holdgate Lodge, York.
Captain R. M. Darnell, Clifton Grove, York.
Francis Whaley Harper, York.
Abraham Braithwaite, York,
J. Walker, Mountville, York.

1843.

Rev. Thomas Billington, York.
Abraham Bower, Middlethorp Hall, York.
Edward Harper, York.
Joseph King, York.
Joshua Oldfield, York.
Rev. Charles Payton, York.
Henry Sotheran, York.
Robert Sunter, York.
Thomas K. L. Walker, York.

SCIENTIFIC COMMUNICATIONS

TO THE

GENERAL MEETINGS.

APRIL 5th, 1842.—Horary Observations of the state of the Barometer, Thermometer, direction of the Wind, and state of the Weather on the 21st and 22nd of March, 1842; with a diagram of the Barometrical and Thermometrical Curves during the period of the Observations. Also, a General Meteorological Report for York, for the year 1841; and some general remarks on the mode of recording Meteorological Observations, by JOHN FORD.

OCTOBER 4th.—A Communication from Professor PHILLIPS, containing an account, of 24 Meteors or Shooting Stars observed by him at Malvern, on the 9th of August last.

JAN. 3rd, 1843.—Meteorological Observations made at Huggate, in 1841, by the Rev. T. RANKIN.

DONATIONS

то

THE SOCIETY'S MUSEUM.

$\mathbf{G} \mathbf{E} \mathbf{O} \mathbf{L} \mathbf{O} \mathbf{G}^{\mathsf{Y}} \mathbf{Y}$.

Jos. Clark, Esq., (Cincinnati) Crinoidea, corals, shells, and crustacea, from

Thomas Weaver, Esq., F.G.S.

Samuel Hailstone, Esq., F.L.S.

Henry Philip Cholmely, Esq.

William Hatfeild, Esq., F.G.S.

*Rev. Francis Orpen Morris ...

Roland Stephenson, Esq.

T. Meynell, Jun., Esq., F.L.S.
D. Priestman, Esq
Mr. Henry Baines
J. Phillips, Esq., F.R.S., G.S.

the Silurian Strata of Cincinnati, including isotelus gigas, actinocrinus simplex, triarthrus bechei, orthis callactis, strophomena alternata, &c.

Second large series of specimens from the Tortworth district; including specimens of rocks and fossils from the lias and oolitic series to the Portland rock.

Scales of megalichthys in caunel coal from Wigan.

Fossil wood (coniferous) from the sandstone associated with oolite, at Bransby.

Crustacea, shells, corals, &c., from the Silurian carboniferous and more recent strata of the United States, including euripterus, homalonotus, &c.

Series of specimens from the lias and oolites of the south of England, including pentacrinites, pleurotomariæ, astarte, modiola, terebratula, ammonites, &c., from Dundry, and fishes from Lyme Regis (73 specimens).

Series of (62) specimens of fossil fishes from the old red-sandstone of Morayshire, including coccostei, cheirolepides, pterichthys, &c.

Spatangus hemisphæricus from Sussex.

Fine specimen of fossil wood from the lias.

Fossils from the tertiary bed of Bridlington.

Specimens of wood and marl from the bog near which some of the sulphuretted springs of Harrogate rise.

MINERALOGY.

James Backhouse, Esq...... Various minerals from Australia.T. Meynell, Jun., Esq. F.L.S. Elastic bitumen from Derbyshire; iron pyrites from Sussex.

Thomas Backhouse, Esq. Carbonate of iron.

ZOOLOGY.

VERTEBRATA.

	James Backhouse, Esq	Wombat and 4 other quadrupeds, 4 reptiles,
		23 birds, 1 flying fish, part of a saw-fish, from
		Australia.
	Rev. W. V. Harcourt, F.R.S	Skins of birds, from South America.
	Lieut. C. Rudston Read, R.N.	Skins of birds, from Australia, China, &c.
	Mr. Thomas Allis	The guan, from Australia.
	Mr. William Holder (Hull)	Skull of the polar bear.
•	Rev. F. Orpen Morris	190 eggs of British birds
	Thomas Sutton, Esq	Solitary snipe, shot at Fulford, 1842.
	R. Denison, Esq.	Dotterell.
	John Henderson, Esq	Large specimen of the pike (esox lucius), from Castle Howard.
	Silburn Barber, Esq	Hooded crow.
	Samuel Hailstone, Esq	Specimens of several British fishes, jaws of sharks, and eggs of sharks and skates.
	William Hatfeild, Esq., F.G.S.	82 skins of birds from North America.
		ANNULOSA.
	Rev. F. Orpen Morris	80 Foreign insects.
	Rev. James Wake (Hedon)	2 specimens of locust (L. migratoria), taken in Holderness, in 1842.

MOLLUSCA AND ZOOPHYTA.

James Backhouse, Esq	5 starfish and Crustacea, from Australia.
Mrs. Davies	Echinus and ophiura.

ZOOLOGY.

T. Meynell, Jun. Esq., F.L.S. Lieut. C. Rudston Read, R.N.

Rev. F. Orpen Morris R. A. Tudor, Esq. (*Liverpool*) Green Simpson, Esq..... Echinus miliaris and chiton, from Seaton.Spondylus varius (very rare), and cypræa argus (rare), from China.A lizard in spirits.80 species of zoophytes.

Asterias.

BOTANY.

Sarah & Isaac Bass (Brighton)

Oswald Allen Moore, Esq.....

G. Brown, Esq.

Mr. Cooper.....

A volume, containing a collection of algæ, from the coast of Sussex.

Barbaræa stricta (Clifton Beck), rumex aquaticus (Clifton Ings), potamogeton plantagineus (Ditch near Heslington.).

ANTIQUITIES.

Rev. Charles Wellbeloved .. A celt, from Ireland.

John Bayldon, Esq. Impression of an ancient seal of the Merchants' Company of York, found in the ruins of Shap Abbey.

2 cannon balls, from a bastion in Walmgate Bar-Walls.

A horse-shoe and pair of shears, dug up from a drain in Coppergate.

COINS.

Rev. F. Orpen Morris	250 various coins.
Rev. Charles Wellbeloved	3 Roman and 1 Saxon coin, 70 stycas recently
	found in St. Leonard's Place, a forty-shilling piece of William iii, and I shilling of Eliza-
	beth, medal found in the Asylum Garden.
J. Prest, Esq	2 Roman coins.
G. Hobson, Esq	A large number of coins, chiefly Roman. Se- veral provincial pence and half-pence.
Mr. John Bleckley	Styca of Ethelred.
Robert Davies, Esq	Denarius of Commodus, medal in bronze of
	Mr. Carrington, chairman of the Aylesbury railway company.

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GARDEN.

Mr. Lowe (Clapham)	78 orchideous, stove, and hardy plants.
Mr. Barratt, (St. John's, Wake-	
field)	30 plants.
Miss Tweedy	Several plants.
Mr. John Bleckley	Standard rose trees.
Wm. Oldfield, Esq	4 loads of manure.
J.F. Browne, Esq	5 loads of manure.

MISCELLANEOUS DONATIONS.

James Backhouse, Esq	Skull of a native of Australia, various barks and gums from Australia.
Rev. Wm. Taylor	Model of the new roof of the choir of York Minster, scale $\frac{3}{4}$ inch to a foot.
Wm. Gray. Jun., Esq	Several articles of chemical and pneumatic apparatus.
Mrs. Wilson (Oxton Hall)	Ornamented wooden bowl and two cups, 2 basins and teapot of alabaster, belt, pouch, and beads, of the North American Indians.
Rev. F. O. Morris	Various curiosities from North America.
G. Hobson, Esq	Sulphur casts.

LIBRARY.

The Society of Arts
The Royal Astronomical Society
The British Association for the Advancement of Science ..
The Cambridge Philosophical Society
Geological Society
Manchester Philosophical Society
Natural History Society of Northumberland
Royal Society of Edinburgh ...

Royal Cornwall Polytechnic Society The Transactions of the Society, vol. 53, part 2. The Greenwich Observations for 1840.

Report of the Association for 1841.

- Transactions of the Society, vol 6, part 1 and 2. vol. 7, part 1, 2, 3.
- Proceedings of the Society.

Memoirs of the Society, vol. 6, N.S.

- Annual Reports for 1834, 1835, 1836, 1838, 1840, 1841. Catalogue of the Generic Types of the Class Aves, with list of Desiderata.
- Transactions of the Society, vol. 15, part 2. Proceedings of the Society.

Ninth Annual Report,

LIBRARY.

Scarbro' Philosophical Society Sheffield Literary and Philoso-	Twelfth Annual Report.
phical Society	Nineteenth Annual Report.
Shropshire Natural History So-	T
ciety	Annual Report.
Zoological Society of London	Report and Proceedings of the Society for 1842.
R. I. Murchison, Esq., Pres.	Address delivered at the Anniversary Meeting of
Geol. Soc. (the Author)	the Geological Society. Address delivered
	at the first Meeting of the Dudley and Mid- land Geological Society.
R. Kilvington, Esq. (Phila- delphia)	Transactions of the Pensylvania Horticultural Society, with its Constitution and Bye-laws.
Wm. Hatfeild, Esq., F.G.S	2 Reports to the State Assembly of New York.
Mrs. Maude	Additional Notes to Maude's Visit to the Falls of
	Niagara in 1800, with Portraits of the Author,
	and View of Moor House, his residence.
S. Hailstone, Esq	Malacostraca Podopthalma of Leach. Paper on
	some species of Crustacea, by S. Hailstone,
	Jun., Esq., with Notes, by Westwood. From the Mag. Nat. Hist.
Dr. Mantell, F.G.S.(the Author)	Memoir on Fossil Reptiles of the South of England.
Rev. D. Williams (the Author)	Memoir on the Devonshire Strata.
J. Phillips, Esq., F.R.S., &c.	On the Palæozoic Fossils of Devonshire and
(the Author)	Cornwall. On the occurrence of Shells and Corals, &c., in conglomerate at Malvern.
J. Hogg, Esq. (the Author)	Remarks on the Horny Sponges, &c., from the Mag. Nat. Hist.
W. D. Fitton, Esq., M.D. (the	
Author)	Review of the Silurian System.
M. Jobert (joint Author)	Recherches sur les Ossemens Fossils du Puy de Dôme, par Croizet et Jobert.

THE FOLLOWING WORKS AND ARTICLES

HAVE BEEN PURCHASED BY THE SOCIETY.

"Eburacum," by the Rev. C. Wellbeloved.

"Monographia Anoplurorum Britanniæ, by H. Denny, Esq.

Shells, Dresses, and Warlike Instruments from the South Sea Islands. 20 Boxes of Foreign Lepidoptera.

2 Swords found in digging the foundations of York Castle. Curious set of ancient Weights and Scales.

Printed by R. Burdekin, High Ousegate, York.

Thesenters 13 MAR 1886



















