

THE
QUARTERLY JOURNAL

OF THE
GEOLOGICAL SOCIETY OF LONDON.

EDITED BY
THE ASSISTANT-SECRETARY OF THE GEOLOGICAL SOCIETY.

Quod si cui mortalium cordi et curæ sit non tantum inventis hæere, atque iis uti, sed ad ulteriora penetrare; atque non disputando adversarium, sed opere naturam vincere; denique non belle et probabiliter opinari, sed certo et ostensive scire; tales, tanquam veri scientiarum filii, nobis (si videbitur) se adjungant. —*Novum Organum, Præfatio.*

VOLUME THE THIRTY-SEVENTH.

1881.

LONDON:
LONGMANS, GREEN, READER, AND DYER.
PARIS: FRIED. KLINCKSIECK, 11 RUE DE LILLE; F. SAVY, 24 RUE HAUTEFEUILLE.
LEIPZIG: T. O. WEIGEL.

SOLD ALSO AT THE APARTMENTS OF THE SOCIETY.

MDCCCLXXXI.

List
OF THE
OFFICERS
OF THE
GEOLOGICAL SOCIETY OF LONDON.

~~~~~  
Elected February 18, 1881.  
~~~~~

President.

R. Etheridge, Esq., F.R.S.

Vice-Presidents.

John Evans, Esq., D.C.L., LL.D., F.R.S.	Prof. J. Morris, M.A.
J. W. Hulke, Esq., F.R.S.	H. C. Sorby, Esq., LL.D., F.R.S.

Secretaries.

Prof. T. G. Bonney, M.A., F.R.S.	Prof. J. W. Judd, F.R.S.
----------------------------------	--------------------------

Foreign Secretary.

Warrington W. Smyth, Esq., M.A., F.R.S.

Treasurer.

J. Gwyn Jeffreys, Esq., F.E.D., F.R.S.

COUNCIL.

H. Bauerman, Esq.	J Gwyn Jeffreys, Esq., LL.D., F.R.S.
Prof. J. F. Blake, M.A.	Prof. J. W. Judd, F.R.S.
Prof. T. G. Bonney, M.A., F.R.S.	Sir John Lubbock, Bart., M.P., F.R.S.
W. Carruthers, Esq., F.R.S.	Prof. N. S. Maskelyne, M.P., M.A., F.R.S.
Prof. P. M. Duncan, M.B., F.R.S.	Prof. J. Morris, M.A.
R. Etheridge, Esq., F.R.S.	J. A. Phillips, Esq., F.R.S.
John Evans, Esq., D.C.L., LL.D., F.R.S.	F. W. Rudler, Esq.
Lieut.-Col. H. H. Godwin-Austen, F.R.S.	Prof. H. G. Seeley, F.R.S., F.L.S.
J. Clarke Hawkshaw, Esq., M.A.	Warrington W. Smyth, Esq., M.A., F.R.S.
Rev. Edwin Hill, M.A.	H. C. Sorby, Esq., LL.D., F.R.S.
W. H. Hudleston, Esq., M.A.	H. Woodward, Esq., LL.D., F.R.S.
J. W. Hulke, Esq., F.R.S.	

Assistant-Secretary, Librarian, and Curator.

W. S. Dallas, Esq., F.L.S.

Clerk.

Mr. W. W. Leighton.

Library and Museum Assistant.

Mr. W. Rupert Jones.

TABLE OF CONTENTS.

	Page
ANDREWS, Rev. W. R. Note on the Purbeck beds at Teffont	251
BLAKE, Rev. J. F. On the Correlation of the Upper Jurassic Rocks of England with those of the Continent.—Part I. The Paris Basin (Plate XXVI.)	497
BONNEY, Rev. Prof. T. G. On the Serpentine and associated Rocks of Anglesey; with a Note on the so-called Serpentine of Porthdinlleyn.	40
———. On a Boulder of Hornblende Picrite near Pen-y-Carnisiog, Anglesey	137
———. Notes on the Microscopic Structure of some Anglesey Rocks	232
BRODIE, Rev. P. B. On certain Quartzite and Sandstone Fossiliferous Pebbles in the Drift in Warwickshire, and their probable Identity, lithologically and zoologically, with the true Lower Silurian Pebbles with similar Fossils in the Trias at Budleigh Salterton, Devonshire	430
BUCKMAN, JAMES, Esq. On the Terminations of some Ammonites from the Inferior Oolite of Dorset and Somerset	57
BUCKMAN, S. S., Esq. A descriptive Catalogue of some of the Species of Ammonites from the Inferior Oolite of Dorset	588
CALLAWAY, Dr. CHARLES. The Archæan Geology of Anglesey; with an Appendix on the Microscopic Structure of some Anglesey Rocks, by Prof. T. G. BONNEY. (Plate VIII.)	210
———. The Limestone of Durness and Assynt.	239
CARPENTER, P. H., Esq. On two new Crinoids from the Upper Chalk of Southern Sweden. (Plate VI.)	128
CARRALL, JAMES W., Esq. Notes on the Locality of some Fossils found in the Carboniferous Rocks at T'ang Shan, China	83
COPPINGER, Dr. R. W. On Soil-cap Motion.	348
DAVIS, JAMES W., Esq. Notes on the Fish-remains of the Bone-bed at Aust, near Bristol, with the Description of some new Genera and Species (Plate XXII.)	414
———. On <i>Anodontacanthus</i> , a new Genus of fossil Fishes from the Coal-measures, with Descriptions of three new Species. (Plate XXII.)	427

	Page
DAWSON, Dr. G. M. Additional Observations on the Superficial Geology of British Columbia and adjacent regions	272
DAWSON, Dr. J. W. Notes on new Erian (Devonian) Plants. (Plates XII. & XIII.)	299
DUNCAN, Prof. P. MARTIN. On the Coralliferous Series of Sind, and its Connexion with the last Upheaval of the Himalayas	190
DUNN, E. J., Esq. Notes on the Diamond-fields, South Africa, 1880	609
ECCLES, JAMES, Esq. On the Mode of Occurrence of some of the Volcanic Rocks of Montana, U. S. A.	399
ETHERIDGE, R., Esq. On a new Species of <i>Trigonia</i> from the Purbeck beds of the Vale of Wardour; with a Note on the Strata by the Rev. W. R. ANDREWS	246
———. On Plant-remains from the Base of the Denbighshire Grits. (Plate XXV.)	490
HICKS, Dr. HENRY. On the Discovery of some Remains of Plants at the Base of the Denbighshire Grits, near Corwen, N. Wales; with an Appendix by R. ETHERIDGE, Esq. (Plate XXV.)	482
HOLLINGWORTH, G. H., Esq. Description of a Peat-bed interstratified with the Boulder-drift at Oldham	713
HOLMES, T. V., Esq. The Permian, Triassic, and Liassic Rocks of the Carlisle Basin. (Plate XI.)	286
JUDD, Prof. J. W. On the Occurrence of the Remains of a Cetacean in the Lower Oligocene Strata of the Hampshire Basin; with an Appendix by Prof. H. G. SEELEY	708
KEEPING, H., Esq., and E. B. TAWNEY, Esq. On the Beds at Headon Hill and Colwell Bay in the Isle of Wight. (Plate V.)	85
KEEPING, WALTER, Esq. The Geology of Central Wales; with an Appendix on some new Species of <i>Cladophora</i> , by CHARLES LAPWORTH, Esq. (Plate VII.)	141
KENDALL, J. D., Esq. Interglacial Deposits of West Cumberland and North Lancashire. (Plate III.)	29
LAPWORTH, CHARLES, Esq. On the <i>Cladophora</i> (Hopk.) or Dendroid Graptolites collected by Prof. Keeping in the Llandovery Rocks of Mid Wales. (Plate VII.)	171
MACKINTOSH, D., Esq. On the precise Mode of Accumulation and Derivation of the Moel-Tryfan Shelly Deposits; on the Discovery of similar High-level Deposits along the Eastern Slopes of the Welsh Mountains; and on the Existence of Drift-zones, showing probable Variations in the Rate of Submergence	351
MOORE, CHARLES, Esq. On Abnormal Geological Deposits in the Bristol District	67
OWEN, Prof. R. On the Order Theriodontia, with a Description of a new Genus and Species (<i>Elurosaurus felinus</i> , Ow.). (Plate IX.)	261
———. Description of Parts of the Skeleton of an Anomodont Reptile (<i>Platypodosaurus robustus</i> , Ow.). Part II. The Pelvis. (Plate X.)	266

TABLE OF CONTENTS.

v

	Page
PARKINSON, C., Esq. Upper Greensand and Chloritic Marl, Isle of Wight	370
PHILLIPS, JOHN ARTHUR, Esq. Note on the Occurrence of Remains of recent Plants in Brown Iron-ore	1
———. On the Constitution and History of Grits and Sandstones. (Plates I. & II.)	6
RADE, T. MELLARD, Esq. The Date of the last Change of Level in Lancashire	436
RUTLEY, FRANK, Esq. The Microscopic Characters of the Vitreous Rocks of Montana, U.S.A.; with an Appendix by JAMES ECCLES, Esq. (Plate XX.)	391
———. On the Microscopic Structure of Devitrified Rocks from Beddgelert and Snowdon; with an Appendix on the Eruptive Rocks of Skomer Island. (Plate XXI.)	403
SEELEY, Prof. H. G. On Remains of a small Lizard from the Neocomian Rocks of Comén, near Trieste, preserved in the Geological Museum of the University of Vienna. (Plate IV.)	52
———. The Reptile Fauna of the Gosau Formation preserved in the Geological Museum of the University of Vienna; with a Note on the Geological Horizon of the Fossils at Neue Welt, west of Wiener Neustadt, by Prof. EDWARD SUESS. (Plates XXVII.—XXXI.)	620
———. Note on the Caudal Vertebra of a Cetacean discovered by Prof. Judd in the Brockenhurst Beds, indicative of a new Type allied to <i>Balenoptera</i> (<i>Balenoptera Juddi</i>).	709
SHRUBSOLE, G. W., Esq. Further Notes on the Carboniferous Fenestellidæ	178
SOLLAS, Prof. W. J. On <i>Astroconia Granti</i> , a new Lyssakine Hexactinellid from the Silurian Formation of Canada	254
———. On a new Species of <i>Plesiosaurus</i> (<i>P. Conybeari</i>) from the Lower Lias of Charmouth; with Observations on <i>P. megacephalus</i> , Stutchbury, and <i>P. brachycephalus</i> , Owen; accompanied by a Supplement on the Geographical Distribution of the Genus <i>Plesiosaurus</i> , by G. F. WHIDBORNE, Esq. (Plates XXIII. & XXIV.)	440
SUESS, Prof. EDWARD. Note on the Gosau Beds of the Neue Welt, west of Wiener Neustadt	702
TAWNEY, E. B., Esq., and H. KEEPING, Esq. On the Beds at Headon Hill and Colwell Bay in the Isle of Wight. (Plate V.)	85
VINE, G. R., Esq. Further Notes on the Family Diastoporidæ, Busk. Species from the Lias and Oolite. (Plate XIX.)	381
———. Silurian Uniserial <i>Stomatopora</i> and <i>Ascodietya</i>	613
WATERS, A. W., Esq. On fossil Chilostomatous Bryozoa from South-west Victoria, Australia. (Plates XIV.—XVIII.)	309

	Page
WHIDBORNE, G. F., Esq. Tabular Synopsis of the Geographical Distribution of the Plesiosaurs	480
WILLETT, EDGAR W., Esq., and HENRY WILLETT, Esq. Notes on a Mammalian Jaw from the Purbeck Beds at Swanage, Dorset.	376

PROCEEDINGS.

	Page
Annual Report	8
List of Foreign Members	16
List of Foreign Correspondents	17
List of Wollaston Medallists	18
List of Murchison Medallists	19
List of Lyell Medallists	20
List of Bigsby Medallists	21
Financial Report	22
Award of the Medals &c.	28
Anniversary Address	37
Donations to the Library (with Bibliography)	244

Presentation of Portrait of William Smith	2
HAHN, Dr. Otto. On Microscopic Sections of Meteorites	7
LONGE, F. D., Esq. On some Specimens of <i>Diastopora</i> and <i>Stomatopora</i> from the Wenlock Limestone. (Abstract.)	239
Bequest of Drawings of Fossil Fishes by Sir Philip Egerton	241

LIST OF THE FOSSILS FIGURED AND DESCRIBED IN THIS VOLUME.

[In this list, those fossils the names of which are printed in Roman type have been previously described.]

Name of Species.	Formation.	Locality.	Page.
------------------	------------	-----------	-------

Incertæ sedis.

<i>Tubutella ambigua</i>	Jurassic &c.....	Britain.....	71
--------------------------------	------------------	--------------	----

PLANTÆ.

<i>Ætheotesta devonica.</i> Pl. xii. f. 14.)	} Devonian	Scotland	306	
<i>Archæopteris</i> , sp. Pl. xiii. f. 19 ...		New Brunswick	305	
<i>Asteropteris noveboracensis.</i> Pl. xii. f. 1-9		New York ...	299	
<i>Cardiopteris eriana.</i> Pl. xiii. f. 18..		New Brunswick	305	
<i>Celluloxylon primævum</i>		New York ...	302	
<i>Cyclopteris</i> , sp.		New Brunswick	305	
<i>Cyclostigma affine.</i> Pl. xii. f. 11, 12		New York ...	301	
<i>Dicranophyllum australicum.</i> Pl. xiii. f. 15, 16		Australia	306	
<i>Equisetides Wrightiana.</i> Pl. xii. f. 10, Pl. xiii. f. 20		New York ...	301	
<i>Lepidodendron primævum.</i> Pl. xii. f. 13		New York ...	302	
<i>Nematophycus Hicksii.</i> Pl. xxv. f. 1-6		} Silurian	Wales	494
<i>Odontopteris squamosa.</i> Pl. xiii. f. 17		} Devonian	New Brunswick	305
<i>Pachythea.</i> Pl. xxv. f. 7-9		} Silurian	Wales	483

SPONGIÆ.

<i>Astroconia Granti</i>	Silurian	Canada.....	254
--------------------------------	----------------	-------------	-----

Name of Species.	Formation.	Locality.	Page.
------------------	------------	-----------	-------

CŒLENTERATA.

(Hydrozoa.)

<i>Acanthograptus ramosus</i> . Pl. vii.	Llandovery	Central Wales	}	174
f. 5				
<i>Calyptograptus? digitatus</i> . Pl. vii.				
f. 6				
— <i>plumosus</i> . Pl. vii. f. 4				
<i>Dictyonema corrugatellum</i> . Pl. vii.				
f. 3				
— <i>delicatulum</i> . Pl. vii. f. 2				
— <i>venustum</i> . Pl. vii. f. 1				
<i>Odontocaulis Keepingii</i> . Pl. vii. f. 7				

ECHINODERMATA.

<i>Antedon impressa</i> . Pl. vi. f. 8, 9 ...	Upper Chalk ...	Sweden	135
<i>Mesocrinus Fischeri</i> . Pl. vi. f. 1, 2.	Plänerkalk	Saxony.....	130
— <i>suedicus</i> . Pl. vi. f. 7	Upper Chalk ...	Sweden	132

POLYZOA.

<i>Ascodictyon radians</i>	Silurian	Britain	}	618
— <i>stellatum</i>				
<i>Caberea rudis</i> . Pl. xviii. f. 86	Miocene	S.W. Australia	}	322
<i>Canda fossilis</i> . Pl. xvi. f. 51, 52 ...				
<i>Catenicella alata</i> . Pl. xvi. f. 47, 49, 58				
— <i>ampla</i> . Pl. xvi. f. 46, 50				
— <i>cribriformis</i> . Pl. xvi. f. 39... ..				
— <i>elegans</i> , var. <i>Buskii</i> . Pl. xvi. f. 42, 43				
— <i>flexuosa</i> . Pl. xvi. f. 40, 41				
— <i>internodia</i> . Pl. xvi. f. 78, 79.. ..				
— <i>marginata</i> . Pl. xvi. f. 44, 45.. ..				
— <i>solida</i> . Pl. xvi. f. 37, 38				
<i>Cellaria fistulosa</i> . Pl. xiv. f. 1, 2, 10, 11				
— <i>globulosa</i> . Pl. xiv. f. 16, 17... ..				
— <i>malvinensis</i> . Pl. xiv. f. 3.....				
— <i>ovicellosa</i> . Pl. xiv. f. 4-6, Pl. xvii. f. 62.....				
<i>Cellepora fossa</i> . Pl. xviii. f. 89 ...				
— <i>yarraensis</i>				
— , sp.				
<i>Cribrillina dentipora</i> . Pl. xv. f. 33.				
— <i>suggestens</i> . Pl. xvii. f. 75				
— <i>terminata</i> . Pl. xvii. f. 68				
<i>Diatopora cricopora</i> . Pl. xix. f. 18-25.....	Oolite	Britain.....	}	387
— <i>oolitica</i> . Pl. xix. f. 11-14				
— <i>stomatoporides</i> . Pl. xix. f. 1-10.....				
— <i>ventricosa</i> . Pl. xix. f. 15-17.. ..	Lias	Britain &c. ...	}	384
	Oolite	Britain		

Name of Species.	Formation.	Locality.	Page.		
POLYZOA (continued).					
<i>Fenestella crassa</i>	Carboniferous ...	Britain.....	186		
— <i>halkinensis</i>			187		
— <i>membranacea</i>			181		
— <i>nodulosa</i>			183		
— <i>plebeia</i>			179		
— <i>polyporata</i>			185		
<i>Lepralia cleidostoma</i> , var. <i>rotunda</i> .					
Pl. xviii. f. 92.....					336
— <i>corrugata</i> . Pl. xvii. f. 60.....					335
— <i>monilifera</i> , var. <i>armata</i> . Pl. xv. f. 24.....					335
— <i>spatulata</i> . Pl. xviii. f. 87.....			335		
<i>Membranipora argus</i> . Pl. xiv. f. 20, 21.....			324		
— <i>catenularia</i>			323		
— <i>cylindriformis</i> . Pl. xvii. f. 74			323		
— <i>concamerata</i> . Pl. xiv. f. 22, 23.....			324		
— <i>geminata</i> . Pl. xvi. f. 55.....			325		
— <i>lineata</i>			323		
— <i>lusoria</i> . Pl. xiv. f. 14, Pl. xviii. f. 82.....			324		
— <i>macrostoma</i> . Pl. xiv. f. 18, 19.....			323		
— <i>maorica</i> . Pl. xiv. f. 9.....			325		
<i>Micropora patula</i>			326		
<i>Microporella ænigmatica</i> . Pl. xv. f. 29, 30.....			331		
— <i>clavata</i> . Pl. xviii. f. 84.....			332		
— <i>coscinopora</i> , var. <i>armata</i> . Pl. xv. f. 25.....	Miocene	S.W. Australia	331		
— <i>elevata</i> . Pl. xvii. f. 63, 64, Pl. xviii. f. 90.....			330		
— <i>ferrea</i> . Pl. xvii. f. 72.....			330		
— <i>symmetrica</i> . Pl. xviii. f. 83...			332		
— <i>violacea</i> . Pl. xv. f. 26, Pl. xvii. f. 73.....			329		
— <i>yarraensis</i> . Pl. xv. f. 27, 28...			331		
<i>Mucronella duplicata</i> . Pl. xvi. f. 54			328		
— <i>elegans</i> . Pl. xviii. f. 91.....			329		
— <i>mucronata</i> . Pl. xvii. f. 66...			328		
<i>Porella denticulata</i> . Pl. xvii. f. 70..			337		
— <i>emendata</i> . Pl. xvii. f. 69.....	337				
<i>Porina clypeata</i> . Pl. xvii. f. 67...	332				
— <i>columnata</i> . Pl. xviii. f. 88.....	334				
— <i>coronata</i> . Pl. xv. f. 57.....	333				
<i>Retepora marsupitata</i> . Pl. xv. f. 34– 36, Pl. xvii. f. 59, 61, 76, 77...			342		
— <i>rimata</i> . Pl. xvi. f. 48, 53.....			343		
<i>Schizoporella amphora</i>			341		
— <i>australis</i> . Pl. xiv. f. 15.....			341		
— <i>conservata</i> . Pl. xviii. f. 81...			340		
— <i>excubans</i> . Pl. xvi. f. 56, Pl. xviii. f. 80.....			341		
— <i>fenestrata</i>			339		

Name of Species.	Formation.	Locality.	Page.		
POLYZOA (<i>continued</i>).					
Schizoporella phymatopora. Pl. xv.	Miocene	S.W. Australia	}		
f. 31, 32				338	
— <i>spiroporina</i>				340	
— <i>submersa</i> . Pl. xviii. f. 85.....				340	
— <i>ventricosa</i>				338	
— <i>vigilans</i> . Pl. xiv. f. 13				338	
—, sp.				339	
Selenaria alata				345	
— <i>marginata</i> . Pl. xvii. f. 71 ...				344	
Smittia anceps. Pl. xviii. f. 94 ...				337	
— <i>centralis</i>				337	
—, var. <i>laevigata</i> . Pl. xiv.				}	}
f. 7, 8					
Tatei. Pl. xvii. f. 65				337	
<i>Stomatopora dissimilis</i>				Silurian	Britain
— <i>inflata</i>	Silurian	America	615		

MOLLUSCA.

(*Lamellibranchiata.*)

<i>Trigonia densinoda</i>	Purbeck	Dorsetshire	246
---------------------------------	---------	-------------	-----

(*Cephalopoda.*)

<i>Amaltheus subspinatus</i>	Inferior Oolite...	Dorsetshire ...	}	
Ammonites Braikenridgii				606
— <i>Brongniarti</i>				61
— <i>cadomensis</i>				64
— <i>cadomensis</i>				607
— <i>concavus</i>				60
— <i>Gervillii</i>				63
— <i>Humphriesianus</i>				64
— <i>linguiferus</i>				62
— <i>Manselii</i>				64
— <i>Martinsii</i>				63
— <i>Moorei</i>				65
— <i>Sauzei</i>				62
— <i>subcostatus</i>				63
— <i>subradiatus</i>				61
<i>Cosmoceras Caumontii</i>				600
— <i>Garantianum</i>				600
— <i>Parkinsoni</i>				599
— <i>subfurcatum</i>				600
Haploceras oolithicum				607
Harpoceras adicrum	603			
— <i>concavum</i>	603			
— <i>cornu</i>	605			
— <i>cycloides</i>	604			
— <i>dispansum</i>	605			
— <i>Edouardianum</i>	604			
— <i>fissilobatum</i>	603			
— <i>Levesquei</i>	604			
— <i>Moorei</i>	605			
— <i>Murchisonæ</i>	603			

Name of Species.	Formation.	Locality.	Page.		
MOLLUSCA (<i>continued</i>).					
(<i>Cephalopoda</i> , continued).					
Harpoceras Sowerbyi.....	Inferior Oolite...	Dorsetshire ...	602		
<i>Lytoceras confusum</i>			601		
— Eudesianum			601		
— torulosum			601		
Oppelia subcostata			607		
— subradiata			606		
— Truelli			606		
Perisphinctes Martinsii			602		
— pygmæum			602		
Sphæroceras Brongniarti			597		
— dimorphum			598		
— Gervillii			597		
— Manselii			597		
— meniscus			597		
— polymorphum			598		
— Sauzei			596		
— <i>Wrightii</i>			599		
Stephanoceras Blagdeni.....			595		
— Braikenridgii			595		
— Deslongchampsii			595		
— Humphriesianum			594		
— linguiferum			596		
— polymerum.....			596		
— zigzag	596				
VERTEBRATA.					
(<i>Pisces</i> .)					
<i>Anodontacanthus acutus</i> . Pl. xxii.	Coal-measures...	Yorkshire.....	428		
f. 10.....				428	
— <i>fastigiatus</i> . Pl. xxii. f. 12				428	
— <i>obtusus</i> . Pl. xxii. f. 11			424		
<i>Cladodus curtus</i> . Pl. xxii. f. 9			422		
<i>Ctenoptychius Ordii</i> . Pl. xxii. f. 8.			424		
— <i>pectinatus</i>			416		
<i>Hybodus austriensis</i> . Pl. xxii. f. 1 ...	Rhætic.....	Bristol	417		
— <i>punctatus</i> . Pl. xxii. f. 2				419	
<i>Nemacanthus minor</i> . Pl. xxii. f. 5.				420	
<i>Palæosaurus Stricklandi</i> . Pl. xxii.			420		
f. 6					
<i>Sphenonchus obtusus</i> . Pl. xxii. f. 7)					
(<i>Reptilia</i> .)					
Acanthopholis horridus. Pl. xxvii.	Cretaceous	Folkestone ...	634		
f. 7, 8					
<i>Adriosaurus Suessii</i> . Pl. iv.	Neocomian	Comén, Trieste	55		
<i>Ælurosaurus felinus</i> . Pl. ix.	Karoo	South Africa..	261		
<i>Aræosaurus gracilis</i>			700		
<i>Crataeomus lepidophorus</i> . Pl. xxvii.	Cretaceous	Austria.....	660		
f. 17-19; Pl. xxviii. f. 5; Pl. xxix.					
f. 1-3, 6; Pl. xxx. f. 2, 5; Pl. xxxi.					
f. 3-5					

Name of Species.	Formation.	Locality.	Page.
------------------	------------	-----------	-------

VERTEBRATA (*continued*).(*Reptilia*, continued).

<i>Crataeomus Pawlowitschii</i> . Pl. xxvii. f. 20; Pl. xxviii. f. 2-4; Pl. xxix. f. 4, 5; Pl. xxx. f. 3, 4; Pl. xxxi. f. 1, 2, 12.....	Cretaceous	Austria.....	642		
— sp. Pl. xxvii. f. 9-16			638		
<i>Crocodylus proavus</i> . Pl. xxvii. f. 24- 26; Pl. xxviii. f. 10, 11; Pl. xxix f. 7-13; Pl. xxx. f. 6-14			685		
<i>Doratodon carcharidens</i>			671		
<i>Emys Neumayri</i> . Pl. xxvii. f. 27; Pl. xxx. f. 16; Pl. xxxi. f. 13			69		
<i>Hoplosaurus ischyryus</i> . Pl. xxxi. f. 11			681		
<i>Megalosaurus pannoniensis</i> . Pl. xxvii. f. 21-23			670		
<i>Mochlodon Suessii</i> . Pl. xxvii. f. 1..			624		
<i>Oligosaurus adelus</i>			678		
<i>Ornithocheirus Bünzeli</i>			701		
<i>Ornithomerus gracilis</i> . Pl. xxviii. f. 6, 7			671		
<i>Platypodosaurus robustus</i> . Pl. x....			Karoo.....	South Africa..	266
<i>Plesiosaurus brachycephalus</i> . Pl. xxiv. f. 2			Lias	Dorset	476
— <i>Conybeari</i> . Pl. xxiii., Pl. xxiv. f. 1					440
— <i>megacephalus</i>			472		
<i>Pleuropeltus Suessii</i> . Pl. xxviii. f. 8, 9; Pl. xxx. f. 15.....			693		
<i>Rhadinosaurus atcimus</i> . Pl. xxxi. f. 6-10.....	Cretaceous	Austria	675		
<i>Struthiosaurus austriacus</i> . Pl. xxvii. f. 5, 6			628		

(*Mammalia*.)

<i>Balaenoptera Juddi</i>	Oligocene	Hampshire ...	709
<i>Triconodon mordax</i>	Purbeck	Dorset.....	378

EXPLANATION OF THE PLATES.

PLATE	PAGE
I. } MICROSCOPIC SECTIONS OF GRITS, and GRAINS OF SAND, to illustrate Mr. J. A. Phillips's paper	6
II. }	
III. { MAPS, PLANS, and SECTIONS of INTERGLACIAL DEPOSITS of WEST CUMBERLAND AND NORTH LANCASHIRE, to illustrate Mr. J. D. Kendall's paper	29
IV. { ADRIOSAURUS SUESSII, to illustrate Prof. Seeley's paper on that Lizard.....	52
V. { SECTION OF THE CLIFFS IN TOTLAND AND COLWELL BAYS, ISLE OF WIGHT, to illustrate the paper by Messrs. Keeping and Tawney	85
VI. { SWEDISH CRETACEOUS CRINOIDS, to illustrate Mr. P. H. Carpenter's paper	128
VII. { WELSH CLADOPHORA, to illustrate Mr. C. Lapworth's appendix to Mr. Walter Keeping's paper	171
VIII. { MAP AND SECTIONS OF ANGLESEY, to illustrate Dr. Callaway's paper	210
IX. { ÆLUROSAURUS FELINUS, to illustrate Prof. Owen's paper on that reptile	261
X. { PLATYPODOSAURUS ROBUSTUS, to illustrate Prof. Owen's paper on that reptile	266
XI. { MAP SHOWING THE ROCKS OF THE CARLISLE BASIN, to illustrate Mr. T. V. Holmes's paper.....	286
XII. }	
XIII. } DEVONIAN PLANTS, to illustrate Dr. J. W. Dawson's paper ...	299
XIV. }	
XV. }	
XVI. }	
XVII. }	
XVIII. } VICTORIAN FOSSIL BRYOZOA, to illustrate Mr. A. W. Waters's paper	309

PLATE	PAGE
XIX. { JURASSIC DIASTOPORIDÆ, to illustrate Mr. G. R. Vine's paper	381
XX. { MICROSCOPIC SECTIONS OF VITREOUS ROCKS OF MONTANA, to illustrate Mr. F. Rutley's paper.....	391
XXI. { MICROSCOPIC STRUCTURE OF WELSH LAVAS OF LOWER SILURIAN AGE, to illustrate Mr. F. Rutley's paper	403
XXII. { FISH-REMAINS FROM THE AUST BONE-BED AND THE COAL- MEASURES, to illustrate Mr. J. W. Davis's papers	414, 427
XXIII. } PLESIOSAURUS CONYBEARI AND P. BRACHYCEPHALUS, to illustrate XXIV. } Prof. W. J. Sollas's paper on those reptiles	440
XXV. SILURIAN PLANT-REMAINS, to illustrate Dr. Hicks's paper ...	482
XXVI. { COMPARATIVE SECTIONS OF UPPER JURASSIC ROCKS IN FRANCE AND ENGLAND, to illustrate Prof. Blake's paper	497
XXVII. } XXVIII. } XXIX. } REMAINS OF REPTILIA FROM THE GOSAU FORMATION AT WIENER XXX. } NEUSTADT, to illustrate Prof. Seeley's paper..... XXXI. }	620
