

THE  
GEOLOGICAL MAGAZINE.

VOL. LXXI OF WHOLE SERIES.

JANUARY—DECEMBER, 1934.

THE  
GEOLOGICAL MAGAZINE

OR  
Monthly Journal of Geology.

WITH WHICH IS INCORPORATED  
THE GEOLOGIST.

FOUNDED IN 1864 BY THE LATE DR. HENRY WOODWARD, F.R.S.

EDITED BY  
R. H. RASTALL  
AND  
O. M. B. BULMAN.

ASSISTED BY  
PROFESSOR W. S. BOULTON, D.Sc.  
SIR T. H. HOLLAND, K.C.S.I., D.Sc., F.R.S.  
PROFESSOR W. W. WATTS, Sc.D., LL.D., M.Sc., F.R.S.  
HENRY WOODS, M.A., F.R.S.  
SIR ARTHUR SMITH WOODWARD, LL.D., F.R.S.

VOL. LXXI OF WHOLE SERIES.  
JANUARY—DECEMBER, 1934.

LONDON:  
DULAU & CO., LTD.,  
2 STAFFORD STREET, OLD BOND STREET, W. 1.

1934.

HERTFORD  
STEPHEN AUSTIN AND SONS, LTD.

# CONTENTS OF VOLUME LXXI, 1934.

No. 835.	JANUARY.	PAGE
J. H. TAYLOR. The Mountsorrel Granodiorite . . . . .		1
G. W. TYRRELL. Petrographical Notes on Rocks from the Gulf of Guinea . . . . .		16
F. RAW. Triassic and Pleistocene Surfaces on some Leicester- shire Igneous Rocks . . . . .		23
S. R. NOCKOLDS. The Production of Normal Rock Types by Contamination . . . . .		31
REPORTS AND PROCEEDINGS.—British Association, 40; Mineralogical Society, 45.		
REVIEWS.—Geology of British Somaliland, 47; Minerals and the Microscope, 47; Historical Geology, 48; Applied Geophysics, 48.		

No. 836.	FEBRUARY.	PAGE
T. DEANS. The Spherulitic Ironstones of West Yorkshire . . . . .		49
C. JOHNS. Significance of the British Quaternary Strand-line Oscillations . . . . .		66
R. G. LEWIS. Subsidence in the European Area . . . . .		76
J. WALTON. The Flora of the Upper Westphalian in Yorkshire . . . . .		86
REVIEWS.—Continental Blocks, 91; Geology of California, 92; North Rona, 93; Vertebrate Palaeontology, 94.		
REPORTS AND PROCEEDINGS.—Geological Society: Medals and Awards, 95.		
CORRESPONDENCE.—V. Madsen, 95.		

No. 837.	MARCH.	PAGE
V. E. FUCHS. The Geological Work of the Cambridge Expedition to the East African Lakes, 1930-1 . . . . .		97
R. L. SHERLOCK. Notes on the Amazon . . . . .		112
A. E. TRUEMAN. The Age of the Highest Coal Measures in West Pembrokeshire . . . . .		116
D. M. REID. Notes on the Geology of the Lower Amazon . . . . .		119
F. WALKER. The Term "Crinanite" . . . . .		122
REVIEWS.—History of the Theory of Ore Deposits, 129; Geology of Holmfirth and Glossop, 132; Sedimentation, 133; Carboniferous Plants, 134; The Theory of Orogeny, 137.		
REPORTS AND PROCEEDINGS.—Mineralogical Society, 139.		
CORRESPONDENCE.—H. J. MacGillivray, 140; J. Reid Moir, 142; E. A. Gamba, 144.		

No. 838.		APRIL.	PAGE
V. E. FUCHS.	The Geological Work of the Cambridge Expedition to the East African Lakes, 1930-1 ( <i>concluded</i> )		145
W. H. BRYAN.	Some Spherulitic Growths from Queensland		167
C. JOHNS.	Quaternary Raised Beaches and the Coral Reef Problem		176
W. HOPKINS.	<i>Lingula</i> Horizons in the Coal Measures of Northumberland and Durham		183
REVIEWS.—Mineral Deposits of the Canadian Shield, 189; Lehrbuch der angewandten Geophysik, 191.			
REPORTS AND PROCEEDINGS.—Mineralogical Society, 191.			
No. 839.		MAY.	
D. F. W. BADEN-POWELL.	The Marine Gravels at March, Cambria		193
J. L. BEGG.	On the Genus <i>Cyclocystoides</i>		220
A. LAMONT.	A new species of <i>Comularia</i> from Girvan		224
I. COX.	The Shell Musculature of <i>Gryphus vitreus</i>		226
W. K. SPENCER and T. GROOM.	Starfish from the Welsh Borderland		231
D. K. GREGER.	Notes on <i>Dentalium neohexagonum</i>		236
The late Dr. F. A. BATHER.	A Triassic Crinoid from Brazil		237
REVIEWS.—Arthur's Seat, 239; The Dorset Coast, 239.			
CORRESPONDENCE.—F. Smithson, 240.			
No. 840.		JUNE.	
J. WRIGHT.	New Scottish and Irish Fossil Crinoids		241
J. WRIGHT.	Blastoids from Co. Wexford		267
F. HERITSCH.	Graptolites of the Eastern Alps		268
G. F. S. HILLS.	Granitic and Basaltic Areas of the Earth's Surface		275
H. JEFFREYS.	Note on Mr. Hills's Paper		276
H. H. SIMPSON.	—Fishes of the Ruabon Marl		280
REVIEWS.—Dip and Strike Problems, 282; Geology of King's Bay Region, 282; Upper Carboniferous Floras, 283.			
CORRESPONDENCE.—R. G. Lewis, 285; E. O. Teale, 286.			
No. 841.		JULY.	
L. J. CHUBB.	The Structure of the Pacific Basin		289
H. H. READ.	Age Problems of the Moine Series of Scotland		302
W. J. ARKELL.	The Corallian Rocks in the New Railway Cutting at Westbury, Wilts		317
C. DAVISON.	The Relative Seismicity of Different Regions of the World		320
W. S. BOULTON.	The Sequence and Structure of the S.E. Portion of the Leicestershire Coalfield		323
REVIEWS.—The Deformation of the Earth's Crust, 329; The Dinosaurs, 332.			
REPORTS AND PROCEEDINGS.—Mineralogical Society, 333.			
CORRESPONDENCE.—L. H. Ower, 335.			

Contents.

vii

No. 842.	AUGUST.	
		PAGE
L. R. COX. On the Occurrence of the Marine Oligocene in Palestine . . . . .		337
G. SHEPPARD. Geology of the Interandine Basin of Cuenca, Ecuador . . . . .		356
A. MOZLEY. Post-glacial Fossil Mollusca in Western Canada . . . . .		370
REVIEWS.—Tropical Weathering, 382.		
CORRESPONDENCE.—W. A. Macfadyen, 384.		

No. 843.	SEPTEMBER.	
A. C. SEWARD. Some Early Mesozoic Plants from the Tanganyika Territory . . . . .		385
T. MORTENSEN. Notes on some Fossil Echinoids . . . . .		393
C. JOHNS. The Quaternary Changes of Ocean Level . . . . .		408
J. D. H. WISEMAN. On an Ultrabasic Epidiorite from Loch Fyne . . . . .		425
REVIEWS.—Economic Minerals of the French Colonies, 427; The Economic Geology of Minas Geraes, 428; Microscopic Mineralogy, 430; Physical Geology, 430.		
CORRESPONDENCE.—L. R. Cox and H. D. Thomas, 431; A. W. Groves, 432.		

No. 844.	OCTOBER.	
A. D. HALLAM. The Geology of the Hangman Grits of the Quantock Hills . . . . .		433
B. SIMPSON and A. STUART. The Petrology of the Culm Sandstones of North-West Devon . . . . .		446
M. P. LATTER. The Calcareous Tufa Deposits of Buxton, near Taungs, Cape Province . . . . .		458
E. S. COBBOLD. The Cambrian Genus <i>Stenotheca</i> . . . . .		463
K. L. GOSKAR and A. E. TRUEMAN. The Coastal Plateaux of South Wales . . . . .		468
REVIEWS.—Geology of Coral Reefs, 477.		
CORRESPONDENCE.—D. L. Reynolds, 479.		

No. 845.	NOVEMBER.	
C. T. TRECHMANN. Tertiary and Quaternary Beds of Tobago . . . . .		481
C. DAVISON. The Origin of Earthquakes as illustrated by their Periodicity . . . . .		493
S. I. TOMKEIEFF. Differentiation in Basalt Lava, Island Magee, Co. Antrim . . . . .		501
L. J. WILLS and F. W. SHOTTON. New Sections showing the Junction of the Cambrian and Pre-Cambrian at Nuneaton . . . . .		512
REVIEWS.—Mineral Alteration in Weathering, 521; Tertiary Faunas, 522; Guide Fossils of the Jurassic, 523; Monastic Remains of East Anglia, 526.		
CORRESPONDENCE.—R. G. Lewis, 526; F. Dixey, 528.		
GEOLOGICAL LECTURES.—University of London, 528.		

No. 846.	DECEMBER.	PAGE
J. V. HARRISON and N. L. FALCON. Collapse Structures		529
C. DAVISON. On the Effect of the Mino-Owari Earthquake of 1891 on the Seismic Activity of Other Districts in Japan		539
F. J. NORTH. "The Anatomy of the Earth"—A Seven- teenth-century Cosmogony		541
E. H. KRANCK, E. B. BAILEY, and W. J. McCALLIEN. Pre- Cambrian Association . . . . .		548
REVIEWS.—Geological Survey of Great Britain, 558; Tertiary Mammals, 559.		
REPORTS AND PROCEEDINGS.—Mineralogical Society, 560.		
CORRESPONDENCE.—W. F. Fleet, 561.		
INDEX.—562.		