

THE
GEOLOGICAL MAGAZINE.

VOL. LXIX OF WHOLE SERIES.

JANUARY—DECEMBER, 1932.

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, M.A., Sc.D., M.Inst.M.M.,
FELLOW OF CHRIST'S COLLEGE AND
UNIVERSITY LECTURER IN MINERALOGY AND PETROLOGY, CAMBRIDGE.

ASSISTED BY
PROFESSOR W. S. BOULTON, D.Sc.
SIR T. H. HOLLAND, K.C.S.I., D.Sc., F.R.S.
PROFESSOR J. E. MARR, Sc.D., 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. LXIX OF WHOLE SERIES.
JANUARY-DECEMBER, 1932.

LONDON:
DULAU & CO., LTD., 32 OLD BOND STREET, W. 1.
1932.

HERTFORD
STEPHEN AUSTIN AND SONS, LTD.

CONTENTS OF VOLUME LXIX, 1932.

No. 811	JANUARY	PAGE
K. S. SANDFORD. Some Recent Contributions to the Pleistocene Succession in England		1
A. M. MACGREGOR. Batholiths of Southern Rhodesia		18
F. L. KITCHIN and J. PRINGLE. The Stratigraphical Relations of the Red Rock at Hunstanton		29
REVIEWS.—Eocene Vertebrates, 41; E. D. Cope, 42; The Permian System, 43.		
CORRESPONDENCE.—W. J. Arkell, 44; R. A. Baldry, 45; A. E. Trueman, 46; E. H. Davison, 47.		
A Geological Conference at Kigoma, 47.		

No. 812	FEBRUARY	PAGE
W. J. MCCALLIEN. The Kainozoic Igneous Rocks of Kintyre		49
G. D. OSBORNE. Custerite and Monticellite in the Carlingford District		61
W. A. MACFADYEN. On the Zebayir Islands, Red Sea		63
T. ICHIMURA. A Teschenite from Formosa		67
A. J. BULL. The Pattern of a Contracting Earth		73
E. H. DAVISON. The Age of the Lundy Granite		76
A. E. MOURANT. Orbicular Rocks in the Channel Islands		77
J. REID MOIR. The Pleistocene Succession in England		83
REVIEWS.—Fossil Plants from Greenland, 85; Igneous Rocks in New South Wales, 86; Migration, 87; The Rocks of Traversella, 88; The Geology of Argentina, 88; The Geology of Dutch Guiana, 91; Minerals in Industry, 91; The <i>Summary of Progress</i> , 92; The Geology of Whitehaven, 93.		
CORRESPONDENCE.—E. B. Bailey, 95.		
Petrological Classification, 96.		

No. 813	MARCH	PAGE
BAILEY WILLIS and L. PICARD. The Jordan Valley and Judean Highlands		97
D. BALSILLIE. The Ballantrae Igneous Complex, S. Ayrshire		107
R. H. RASTALL. The Hunstanton Red Rock.		131
W. J. MCCALLIEN. Note on a Composite Lava from Kintyre		135
REVIEWS.—Alpine Orogenesis, 138; Determinative Mineralogy, 140; Optical Mineralogy, 141; The Baltic Region, 141.		
CORRESPONDENCE.—G. W. Tyrrell, 142; H. C. Boydell, 142; E. Greenly, 142; P. G. H. Boswell, 143; G. Slater, 143.		

No. 814	APRIL	PAGE
E. S. HILLS.	The Geology of Marysville, Victoria . . .	145
C. T. TRECHMANN.	The Permian Shell-Limestone Reef beneath Hartlepool	166
J. E. MARR and W. B. R. KING.	Further Notes on the Huntingdon Road Gravels	175
M. STEWART.	Notes on the Geology of North Rona . . .	179
REVIEWS.—Primeval Monsters, 186; Pontian Carnivora, 186; Oceanography, 187; Mineral Tables, 188; Kaolin Minerals, 188; China Clay, 189; Dalradian Geology, 190.		
CORRESPONDENCE.—K. S. Sandford, 191.		

No. 815	MAY	PAGE
F. J. RICHARDS, L. A. CAMMIADE, and M. C. BURKITT.	Climatic Changes in S.E. India during Early Palaeolithic Times	193
F. R. COWPER REED.	Notes on two Species of the genus <i>Ampyx</i>	205
G. D. OSBORNE.	The Metamorphosed Limestones of the Carlingford District, Co. Louth	209
R. H. RASTALL.	A Bibliography of the Tectonics of England and Wales	233
REVIEW.—The Microscopic Determination of Ore Minerals, 237.		
REPORTS AND PROCEEDINGS.—Edinburgh Geological Society, 239.		
CORRESPONDENCE.—L. Hawkes, 240.		

No. 816	JUNE	PAGE
C. T. TRECHMANN.	Notes on Brimstone Hill, St. Kitts. Petrology by T. S. WESTOLL	241
A. T. J. DOLLAR.	Age-Problems of the Lundy Island Granites	265
W. J. MCCALLIEN.	The Sub-Bothnian Unconformity (Finland)	268
I. HAYASAKA.	An <i>Astraeiform</i> Coral from Central Japan	273
E. DIX and S. H. JONES.	A Note on an Arthropod from the South Wales Coalfield	275
R. WRIGHT BARKER.	Three Species of Larger Tertiary Foraminifera from S.W. Ecuador	277
REVIEWS.—The Geology of Manchester, 282; Geological Map of the British Isles, 283.		
CORRESPONDENCE.—A. A. Fitch, 283; G. Sheppard and G. H. S. Bushnell, 284; B. R. Ross and S. W. Wooldridge, 286.		
REPORTS AND PROCEEDINGS.—Mineralogical Society, 288.		
ANNOUNCEMENTS AND INQUIRIES.—Variation of American Glaciers, 288.		

Contents

vii

No. 817	JULY	PAGE
H. C. RICHARDS and W. H. BRYAN. Algal Limestones from Gigoongan, Queensland		289
R. WRIGHT BARKER. Larger Foraminifera from the Eocene of Santa Elena Peninsula, Ecuador		302
Z. SUJKOWSKI. The Influence of the Desert on the Deposits of the Red Sea		311
J. D. SOLOMON. On the Heavy Mineral Assemblages of the Great Chalky Boulder-clay and Cannon-shot Gravels of East Anglia		314
F. A. LEA. The Gault at Compton, Surrey		320
H. JEFFREYS. Elastic Instability and Geology		321
L. RAMA RAO. Recent Discoveries of Dinosaurs in India		324
J. PARKINSON. The Gneiss of the Ufipa Plateau, Tanganyika		326
T. THOMSON FLYNN. A New Species of Fossil Cetacean from Tasmania		327
REVIEWS.— <i>Spirula</i> , 329; The Evolution of <i>Spirifer</i> , 332; Theoretical Seismology, 333; Geology of Brampton, 334.		
CORRESPONDENCE.—K. W. Earle, 335; J. F. Kirkaldy, 336.		
The late Professor J. W. Gregory, 336.		

No. 818	AUGUST	
JAMES WRIGHT. The Scottish Species of <i>Allagecrinus</i>		337
C. A. MATLEY. The Old Basement of Barbados		366
F. M. TROTTER and S. E. HOLLINGWORTH. The Glacial Sequence in the North of England		374
REVIEWS.—The Unstable Earth, 381; The Grand Coulée, 382; Canyon Country, 383.		
CORRESPONDENCE.—H. Jeffreys, 383.		
NOTICE TO CONTRIBUTORS.—384.		

No. 819	SEPTEMBER	
Presentation to Professor A. HUTCHINSON, F.R.S.		385
ELINOR W. GARDNER. Some Problems of the Pleistocene Hydrography of the Kharga Oasis, Egypt		386
B. SIMPSON. Note on the Petrology of the Drybrook Sandstone of the Forest of Dean		421
K. C. DUNHAM. Quartz-Dolerite Pebbles in the Upper Brockram		425
REVIEWS.—American Littoral Foraminifera, 428; A Geological Dictionary, 428.		
REPORTS AND PROCEEDINGS.—Mineralogical Society, 429.		
CORRESPONDENCE.—C. T. Trechmann, 430; F. E. Suess, 431.		

No. 820		OCTOBER	PAGE
S. R. NOCKOLDS.	The Contaminated Granite of Bibette Head, Alderney		433
C. F. DAVIDSON.	The Geology of Moncreiffe Hill, Perthshire		452
F. SMITHSON.	The Petrography of the Northern Portion of the Leinster Granite		465
E. ST. J. BURTON.	A Peneplain and Re-excavated Valley Floors in Dorsetshire		474
REVIEWS.—Geological Map of Australia, 477; A Text-book of Petrology, 479; Genesis of the Diamond, 479.			
The late Dr. F. H. Hatch, 480.			

No. 821		NOVEMBER	
W. A. MACFADYEN.	Foraminifera from some Late Pliocene and Glacial Deposits in East Anglia		481
A. W. GROVES.	Petrology and the Western Rift of Central Africa		497
F. R. COWPER REED.	New Miocene Faunas from Cyprus		511
J. PARKINSON.	A Preliminary Note on the Buramo Schists, British Somaliland		517
G. W. TYRRELL.	The Petrography of some Kainozoic Igneous Rocks, and of the Cape Parry Alkaline Complex, East Greenland		520
REVIEW.—Minerals in Industry, 528.			

No. 822		DECEMBER	
J. U. TODD and R. WRIGHT BARKER.	Tertiary Orbitoids from North-Western Peru		529
ARTHUR HOLMES.	The Origin of Igneous Rocks		543
REVIEWS.—A Text Book of Mineralogy, 558; Bauxite and Aluminous Laterite, 559.			
CORRESPONDENCE.—S. J. Shand, 561.			

INDEX.—563.