

GEOLOGICAL MAGAZINE

Edited by

O. M. B. BULMAN and S. R. NOCKOLDS

assisted by

PROFESSOR W. S. BOULTON

PROFESSOR O. T. JONES

PROFESSOR W. G. FEARNSIDES

W. J. PUGH

PROFESSOR LEONARD HAWKES

PROFESSOR C. E. TILLEY

HENRY WOODS

CONTENTS

	PAGE
WILSON, G. Ptygmatic Structures and their Formation	1
BOND, K. W. Cyclic Sedimentation of the Rough Rock (Millstone Grit) as illustrated by a section near Eakring, Nottinghamshire	22
JOPLIN, G. A. The Granitization Process and its Limitations as Exemplified in Certain Parts of New South Wales	25
FERMOR, L. L. A Note on Chromite-Marbles	39
HARRY, W. T. An Unusual Appinitic Sill Near Killin, Perthshire	41
QUENSEL, P. The Paragenesis of the Varuträsk Pegmatite	49
LEHMANN, E. The Significance of the Hydrothermal Stage in the Formation of Igneous Rocks	61

CORRESPONDENCE

The Name "Tholeiite", R. A. DALY	69
Age of the Portsalon Conglomerate, D. W. BISHOPP	70

REVIEWS

pp. 71-2

STEPHEN AUSTIN & SONS, LTD.
1 FORE STREET, HERTFORD, HERTS

SUBSCRIPTION 32/6 PER ANNUM

GEOLOGICAL MAGAZINE

founded in 1864

by the late Dr. H. Woodward, F.R.S., with which
is incorporated

THE GEOLOGIST

(founded 1858)

Published every two months, price 32/6 per annum
(single numbers, 7/6).

Subscriptions for 1952, inquiries relating to back
stock, advertising, etc., should be sent to Stephen
Austin & Sons, Ltd., Fore Street, Hertford, Herts.

Instructions to Contributors.

Articles submitted for publication in the *Geological Magazine* should be addressed to the Editors at the *Sedgwick Museum, Cambridge*, not to the Publishers.

Manuscripts should be typewritten, double-spaced, and preferably with a wide margin, and should be carefully revised; they should be as concise as possible, and in no case should an article exceed 10,000 words. MS. must be accompanied by a short abstract, 50–100 words. References should not be given in footnotes, but arranged in alphabetic order of author's names at the end of the article; the author's name should be followed by date of publication, and the title of each paper should be given in addition to volume and page numbers of the Journal, thus:—

LAPWORTH, C. 1878. The Moffat Series. *Quart. Journ. Geol. Soc.*, xxxiv, 240–343.

References should be cited in the text by author's name and date, with page reference if necessary, in brackets:—(Lapworth, 1878, p. 339).

Illustrations should be so drawn as to allow reduction to a maximum size of $6\frac{1}{2} \times 3\frac{1}{2}$ inches (the type-area of the Magazine) and originals must not exceed 40×22 inches. Map lettering should be such as to be clearly legible after reduction (equivalent to 5-point as a *minimum* on reduction), while lettering on text-figures should in general be left in pencil for printing.

Authors will receive 25 reprints free of cost.

THE
GEOLOGICAL MAGAZINE

VOL. LXXXIX OF WHOLE SERIES

JANUARY–DECEMBER, 1952

GEOLOGICAL MAGAZINE

with which is incorporated

THE GEOLOGIST

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

Edited by

O. M. B. BULMAN, Ph.D., A.R.C.Sc., F.R.S.

and

S. R. NOCKOLDS, Ph.D.

assisted by

PROFESSOR W. S. BOULTON, D.Sc.
PROFESSOR W. G. FEARNSIDES, M.A., F.R.S.
PROFESSOR LEONARD HAWKES, D.Sc., F.R.S.
PROFESSOR O. T. JONES, M.A., D.Sc., F.R.S.
W. J. PUGH, O.B.E., D.Sc., F.R.S.
PROFESSOR C. E. TILLEY, Ph.D., F.R.S.

Vol. LXXXIX of Whole Series

JANUARY—DECEMBER, 1952

STEPHEN AUSTIN & SONS, LTD

1 FORE STREET, HERTFORD, HERTS

HERTFORD
STEPHEN AUSTIN AND SONS, LTD.

CONTENTS OF VOLUME LXXXIX, 1952

No. 1	JANUARY—FEBRUARY	PAGE
G. WILSON. Ptygmatic Structures and their Formation		1
K. W. BOND. Cyclic Sedimentation of the Rough Rock (Millstone Grit) as illustrated by a section near Eakring, Nottinghamshire		22
G. A. JOPLIN. The Granitization Process and its Limitations as Exemplified in Certain Parts of New South Wales		25
L. L. FERMOR. A Note on Chromite-Marbles		39
W. T. HARRY. An Unusual Appinitic Sill Near Killin, Perthshire		41
P. QUENSEL. The Paragenesis of the Varuträsk Pegmatite		49
E. LEHMANN. The Significance of the Hydrothermal Stage in the Formation of Igneous Rocks		61
CORRESPONDENCE.—The name "Tholeiite", 69; Age of the Portsalon Conglomerate, 70.		
REVIEWS.— <i>Geologia Applicata all' Ingegneria</i> , 71; International Geological Congress, 71; <i>Das Polarisations-mikroskop</i> , 72; <i>Spectrochemical Analysis</i> , 72.		
No. 2	MARCH—APRIL	
A. F. WILSON. Metamorphism of Granite Rocks by Olivine Dolerite in Central Australia		73
J. A. MABBUTT. A Study of Granite Relief from South-West Africa		87
M. S. AMIN. Metamorphic Differentiation of Talc-Magnesite-Chlorite Rocks in Shetland		97
G. P. BLACK. The Age Relationship of the Granophyre and Basalt of Orval, Isle of Rhum		106
E. M. ANDERSON. Lineation and its relation to sub-crustal Convection Currents		113
G. G. LEMON. The Moian Inlier of Rosses Point, near Sligo, Eire		124
Y. K. BENTOR. Magmatic Intrusions and Lava-sheets in the Raman area of the Nagev (Southern Israel)		129
G. WILSON. A Quartz Vein System in the Moine Series near Melness, A'Mhoine, North Sutherland, and its Tectonic Significance		141
Sir L. L. FERMOR. On a New Chrome-Garnet		145
W. S. MCKERROW. Notes on the Species and Subspecies in Palaeontology		148
CORRESPONDENCE.—Zoological Nomenclature, 151; Accuracy in Geological Localities, 152.		
No. 3	MAY—JUNE	
T. M. THOMAS. Littoral Trias in the Vale of Glamorgan		153
B. W. SPARKS. Pleistocene Sections at Barrington, Cambridgeshire		163
B. E. BALME. Spore Specimens from British Upper Carboniferous Coals		175
F. G. H. BLYTH. Malvern Tectonics—A Contribution		185
W. W. BLACK. Supposed Tufa Bands in Carboniferous Reef Limestones		195
D. PARKINSON. Allometric Growth in <i>Dielasma hastata</i> from Treak Cliff, Derbyshire		201
C. FRIEDLAENDER. Structural Imperfections in Alpine Quartz Crystals		217
C. A. COTTON. Cyclic Resection of Headlands by Marine Erosion		221

Contents

vii

	PAGE
W. T. HARRY. Basic hornfels at a gabbro contact near Carlingford, Eire	411
K. W. BARR. Limestone Blocks in the Lower Cretaceous Cucho Formation of the Central Range, Trinidad, B.W.I.	417
V. A. EYLES and A. G. MACGREGOR. The Great Glen Crush-Belt	426
CORRESPONDENCE.—Foraminiferal Zones in the Tertiary of Australia, 437; Lineation in the Shetland Islands, 438; Mugarites and Oligoclase-Basalts, 439; Cove Marine Bands, 440; Malvern Tectonics, 440.	
REVIEWS.—A Palaeogeographical Atlas, 441; Grundlagen der Biostratonomie, 442; Radiocarbon Dating, 442.	
LIST OF PUBLICATIONS RECEIVED.—443.	
INDEX.—445.	