

THE
GEOLOGICAL MAGAZINE.

NEW SERIES.

DECADE V. VOL. VII.

JANUARY—DECEMBER, 1910.

36.

THE
GEOLOGICAL MAGAZINE

OR

Monthly Journal of Geology:

WITH WHICH IS INCORPORATED:

“THE GEOLOGIST”.

NOS. DXLVII TO DLVIII.

GEOLOGY DEPARTMENT
BIRKBECK COLLEGE, E.C.

HENRY WOODWARD, LL.D., F.R.S., F.G.S., F.R.M.S.,

LATE OF THE BRITISH MUSEUM OF NATURAL HISTORY; PRESIDENT OF THE
PALÆONTOGRAPHICAL SOCIETY; ETC., ETC.

ASSISTED BY

PROFESSOR J. W. GREGORY, D.Sc., F.R.S., F.G.S.

DR. GEORGE J. HINDE, F.R.S., F.G.S.

SIR THOS. H. HOLLAND, K.C.I.E., A.R.C.S., F.R.S.

PROFESSOR W. W. WATTS, Sc.D., M.Sc., F.R.S., V.P.G.S.

DR. ARTHUR SMITH WOODWARD, F.R.S., F.L.S., Sec. G. Soc.

AND

HORACE B. WOODWARD, F.R.S., F.G.S.

NEW SERIES. DECADE V. VOL. VII.

JANUARY—DECEMBER, 1910.

LONDON:

DULAU & CO., LTD., 37 SOHO SQUARE, W

1910.

HERTFORD :

PRINTED BY STEPHEN AUSTIN AND SONS, LTD.

LIST OF PLATES.

PLATE	FACING PAGE
I. Olivine Nodules in Basalt, Derbyshire	3
II. Olivine Nodules in Basalt, Derbyshire	4
III. Chalk Polyzoa (Bryozoa)	5
IV. Coast of Étrel, Morbihan	15
V. Pleochroic Halos around inclusions in minerals	19
VI. Sculpturings of the Chalk Downs	49
VII. Fossil Plants from the Bristol Coal-field	64
VIII. Chalk Polyzoa	77
IX. Coast of Etel, Morbihan	97
X. Sections of Rocks from Étrel, Brittany	101
XI. Rock-sections from pre-Tertiary Dyke, Usway Burn	110
XII. Skeleton of <i>Peloneustes philarchus</i> , Peterborough	112
XIII. Striations on Glacier Granules	114
XIV. Chalk Polyzoa	146
XV. <i>Archimylacris (Etoblattina) Woodwardi</i> , Bolton, sp. nov.	151
XVI. <i>Trinuclaus</i> from Duffton Shales	214
XVII. New Crustacea from Duffton Shales	218
XVIII. Porphyries, Huelva, Spain	228
XIX. Navis Valley in North Tirol	246
XX. Navis Valley in North Tirol	258
XXI. Chalk Polyzoa	260
XXII. Portrait of the Rev. Prebendary William Henry Egerton, M.A., F.G.S.	287
XXIII. New Fossils from the Duffton Shales	296
XXIV. New Fossils from the Duffton Shales	298
XXV. Wind-worn Pebbles	302
XXVI. Stone from wall, Sutton-on-Trent Church, Notts., and Silt in Prieska Ravine, Orange River	311
XXVII. Chalk Ammonoids from Lincolnshire	348
XXVIII. Wind-eroded Rocks on the Coast of Mull	353

PLATE		FACING PAGE
XXIX.	Wind-eroded Rocks on the Coast of Mull	355
XXX.	Chalk Polyzoa	392
XXXI.	Pebbles from Desert of Egypt showing action of wind-blown sand .	394
XXXII.	'Dreikante,' showing wind-cut curves	396
XXXIII.	Eocene Fishes from Egypt	405
XXXIV.	Fossils from Bembridge Limestone, Creechbarrow Hill	439
XXXV.	Superficial Deposits at the Foot of the Cheviots	458
XXXVI.	New Chalk Polyzoa	483

LIST OF ILLUSTRATIONS IN THE TEXT.

	PAGE
The Étél estuarine area	7
ÉtéI, section of raised beach	8
Rivière d'ÉtéI below ÉtéI and La Magoire	10
ÉtéI, terraces at mouth of the river	11
Complicated and sinuous Dry Chalk Valleys, North Downs	50
Dry Chalk Valleys of the 'Seven Sisters'	51
Three figures of <i>Sphenopteris ovatifolia</i> , sp. nov.	62
Two figures of <i>Lepidodendron Glincanum</i> , Eichw.	63
Sketch-map of Carboniferous Limestone near Llantrisant Station	68
Submerged forest and peat beds, Plougasnel-Primel, Finistère	100
Map of Leckhampton Hill to show well-sinkings	102
Outline of tegmina of <i>Etblattina mazona</i> , Illinois	149
Four figures of carina of <i>Scatpeltum accumulatum</i> , T. H. Withers, sp. nov.	152
Left tergum of <i>S. comptum</i> , T. H. Withers, sp. nov.	153
Four figures of carina of <i>S. cyphum</i> , T. H. Withers, sp. nov.	155
Four figures of carina of <i>S. aduncatum</i> , T. H. Withers, sp. nov.	156
Left tergum of <i>S. dissimile</i> , T. H. Withers, sp. nov.	158
Geological map of Dolgelley Gold-belt	203
Geological map of St. David's section of Dolgelley Gold-belt	208
Map of Tarntaler district, etc., Navis Valley, North Tirol	245
Sketch-map of Tarntal area	246
Diagram showing break in nival gradient	257
Section of the Drifts at Marros, near Amroth	278
Two figures of broken and contorted laminae in stone of Sutton Church, Notts.	306-7
Drift-bedding ripples in stone of Fledborough Church, Notts.	307
Dorsal shield (restored) of <i>Glyptops ruetimeyeri</i> (Lyd.)	312
Plastron of <i>G. ruetimeyeri</i> (not restored)	313
Map of the Augén Gneiss District of Ross-shire	338
Diagram of plate-crushing in <i>Holectypoida</i>	350
Comparison of plates in four genera of <i>Holectypoida</i>	351
Section of cliff south of North Sea Landing, Flamborough	356
Figure of 'Dreikante' in process of formation	394

	PAGE
Four types of ridge-curves in ' Dreikante '	395
Diagram of formation of curved-faced ' Dreikante '	396
Five-faced wind-worn pebble	397
Block of sandstone pierced by numerous borings from the Fayûm, Egypt	399
Section of Bagshot Beds, Shooters Hill, Kent	406
Pygidium of <i>Bronteus Halli</i> , sp. nov., Devonian, Gerolstein	408
<i>B. thysanopellis</i> , Barr. (two figures), Upper Silurian, Bohemia	409
<i>B. speciosus</i> , Corda, Devonian	409
Section of Creechbarrow Limestone and underlying series	437
Two figures of flint pebble, showing included organism	484
Section of shell of <i>Ostrea cornucopiæ</i>	486
Two figures of <i>Radiolites Mortoni</i>	487
Six figures of <i>Pollicipes imbricatus</i> , Withers, sp. nov.	497
Three figures of <i>P. unguis</i> , J. de C. Sby.	499
Section from Shooters Hill to Bostall Common	535