

THE  
GEOLOGICAL MAGAZINE.

NEW SERIES.

DECADE IV. VOL. V.

JANUARY—DECEMBER, 1898.

THE  
GEOLOGICAL MAGAZINE

OR,

*Monthly Journal of Geology:*

WITH WHICH IS INCORPORATED

“THE GEOLOGIST.”

NOS. CCCCHH TO CCCCXIV.

EDITED BY

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

OF THE BRITISH MUSEUM OF NATURAL HISTORY;

PRESIDENT OF THE PALÆONTOGRAPHICAL SOCIETY,

AND VICE-PRESIDENT OF THE MALACOLOGICAL SOCIETY;

MEMBER OF THE LYCEUM OF NATURAL HISTORY, NEW YORK; AND OF THE AMERICAN PHILOSOPHICAL

SOCIETY, PHILADELPHIA; HONORARY MEMBER OF THE YORKSHIRE PHILOSOPHICAL SOCIETY;

OF THE GEOLOGISTS' ASSOCIATION, LONDON; OF THE INSTITUTION OF MINING AND

METALLURGY, LONDON; OF THE GEOLOGICAL SOCIETIES OF EDINBURGH,

GLASGOW, HALIFAX, LIVERPOOL, AND SOUTH AFRICA; CORRESPONDING

MEMBER OF THE GEOLOGICAL SOCIETY OF BELGIUM; OF THE

IMPERIAL SOCIETY OF NATURAL HISTORY OF MOSCOW; OF

THE NATURAL HISTORY SOCIETY OF MONTREAL;

AND OF THE MALACOLOGICAL

SOCIETY OF BELGIUM.

ASSISTED BY

ROBERT ETHERIDGE, F.R.S. L. & E., F.G.S., F.C.S., &c.

WILFRID H. HUDLESTON, M.A., F.R.S., F.G.S., F.L.S., F.C.S.

GEORGE J. HINDE, PH.D., F.R.S., F.G.S., &c.

AND

HORACE BOLINGBROKE WOODWARD, F.R.S., F.G.S., &c.

NEW SERIES. DECADE IV. VOL. V.

JANUARY—DECEMBER, 1898.

LONDON:

MESSRS. DULAU & CO., 37, SOHO SQUARE.

F. SAVY, 77, BOULEVART ST.-GERMAIN, PARIS.

1898.

**HERTFORD :**  
**PRINTED BY STEPHEN AUSTIN AND SONS.**



## LIST OF ILLUSTRATIONS IN THE TEXT.

	PAGE
Tooth of <i>Avalonia Sanfordi</i> , Seeley . . . . .	2
Tooth of <i>Pierodon Herveyi</i> , Seeley . . . . .	2
Rapakivi granite . . . . .	12
Globular granite . . . . .	13
Diagram of Lake Tremorgio . . . . .	16
Diagram of Lake Ritom, Lake Cadagno, and Lake Tom . . . . .	17
<i>Oudenodon (Aulacocephalus) pithecoops</i> , Seeley, sp. nov. . . . .	109
Section in a 'leptite' quarry, Mauri, Finland . . . . .	111
Antlers of Red-Deer, <i>Cervus elaphus</i> , Linn. . . . .	121
How they hunt the Irish Deer at the present day . . . . .	136
Geological Map of a Portion of West Dorset . . . . .	163
Section across the Vale of Marshwood . . . . .	166
Section to illustrate the Rev. J. F. Blake's paper . . . . .	214
" " " " " . . . . .	216
" " " " " . . . . .	218
" " " " " . . . . .	218
" " " " " . . . . .	219
" " " " " . . . . .	222
" " " " " . . . . .	224
<i>Squatina alifera</i> (Münster) . . . . .	290
Fossil <i>Estheria</i> from North America . . . . .	292
Stone Pit-mouth, showing Windlass and 'Trug-Basket' . . . . .	295
<i>Neocarcinus glaber</i> , H. Woodw., sp. nov. . . . .	303
Syenitic Rock-exposure near Martley . . . . .	304
The Development of 'Pores' from Cirri . . . . .	327
Comparative Sections of English and Scottish Lower Carboniferous Rocks . . . . .	348
Diagram of posterior segments and telson of <i>Cyclosphaeroma</i> . . . . .	386
Section in Pit near Cosgrove Hill. . . . .	415
Course of axial nerve-cords in Crinoids . . . . .	422
Comparison of the dicyclic and monocyclic base in Crinoids. . . . .	423
Course of the axial nerve-cords in <i>Isocrinus</i> . . . . .	424
Bases and their modifications in Crinoids . . . . .	427
Ground-plan of Pit at Stankey Wood . . . . .	451
Dene Hole at Cavey Spring, Bexley . . . . .	451

Dene Hole at Hangman's Wood . . . . .	45 $\frac{1}{2}$
Outline of associated head-bones, etc., of <i>Cœlacanthus Kayseri</i> (Von Koenen) .	53 $\frac{1}{2}$
Deformed example of <i>Hoplites tuberculatus</i> , J. Sowerby, Gault, Folkestone (three views) . . . . .	54 $\frac{1}{2}$
Diagrams of the upper or actinal surface and vertical section of <i>Dinocystis</i> .	54 $\frac{1}{2}$
Sketch of section on shore below Treborth . . . . .	56 $\frac{1}{2}$
Hypothetical section through the Menai Straits between the bridges . . . .	56 $\frac{1}{2}$
Section in the Gravel Pit near Martley . . . . .	56 $\frac{1}{2}$
Ground-plan of same . . . . .	56 $\frac{1}{2}$
Diagram-section to illustrate Glacier-motion . . . . .	56 $\frac{1}{2}$