

THE
GEOLOGICAL MAGAZINE

NEW SERIES.

DECADE II. VOL. IX.

JANUARY — DECEMBER. 1882.

THE
GEOLOGICAL MAGAZINE:

OR,

Monthly Journal of Geology:

WITH WHICH IS INCORPORATED

“THE GEOLOGIST.”

NOS. CCXI. TO CCXXII.

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;

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 GEOLOGICAL SOCIETIES OF EDINBURGH, GLASGOW, AND WORWICH; 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

PROFESSOR JOHN MORRIS, M.A., F.G.S., &c., &c.,

AND

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

OF THE BRITISH MUSEUM OF NATURAL HISTORY.

NEW SERIES. DECADE II. VOL. IX.

JANUARY—DECEMBER, 1882.

LONDON:

TRÜBNER & Co., 57 AND 59, LUDGATE HILL.

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

1882.

HERTFORD :

PRINTED BY STEPHEN AUSTIN AND SONS.

LIST OF PLATES.

PLATE	PAGE
I. Portrait of Dr. J. G. Linnarsson	1
II. <i>Spermophilus</i> from beneath the Glacial Till of Norfolk	49
III. Pteraspidean plates from the Eifel and from British Localities	104
IV. Devonian Fossils from Torquay	156
V. Oxfordian and Lower Oolite Gasteropoda, Yorkshire (<i>Fusus</i> , <i>Natica</i> , and <i>Purpurina</i>)	193
VI. Oxfordian and Lower Oolite Gasteropoda, Yorkshire (<i>Chemnitzia</i> and <i>Eulima</i>)	241
VII. Portrait of Sir Andrew Ramsay	289
VIII. Russian Permian Reptilia	337
IX. New Phyllopod Crustacean Shields from the Upper Devonian, Eifel, and from Upper Silurian, South Wales	385
X. Section of the Chloritic Marl and Upper Greensand at Ventnor, Isle of Wight	440
XI. Silurian Fossils of Central Wales	488
XII. <i>Oreaster bulbiferus</i> , E. Forbes, Upper Chalk, Bromley, Kent	529

LIST OF WOODCUTS.

	PAGE
Diagrammatic Section of Pit near Cefn Cymryg	20
Ground Plan of Twt Hill Quarry	115
Prof. Bonney's Section	115
Prof. Hughes's Section	116
Section across Lower (Southern) Quarry, S. of Nebo, Anglesey, Dr. Callaway's Section	153
Dr. Roberts's Section	153
<i>Rhamphorhynchus phyllurus</i> , Marsh	206
Caudal extremity of <i>R. phyllurus</i> , seen from the left side	207
Restoration of <i>R. phyllurus</i>	210
Diagrams illustrating Vorticose Earthquake Shocks	260, 262, 263, 265
Form of the Crystals found on the Ice off the Taimur Coast	360
Shields of <i>Pellocaris</i> , <i>Discinocaris</i> , <i>Aptychopsis</i> , and <i>Ellipsocaris</i>	444
Section across the Grödner Joch showing anticlinal fracture	502
Section of one side of Valley of St. Cassian	502
Carth Mine near Cardiff	523
Upper and Under side of Arm of <i>Oreaster bulbiferus</i>	532



Yours very truly
G. Linnarsson.

D^r. J. G. Linnarsson.

Palæontologist to the Geological Survey of Sweden.

Obit. Sept. 19th 1887.

West Newman & Co. engr.