

THE
GEOLOGICAL MAGAZINE.

NEW SERIES.

DECADE II. VOL. II.

JANUARY—DECEMBER, 1875.

THE
GEOLOGICAL MAGAZINE:

OR,

Monthly Journal of Geology:

WITH WHICH IS INCORPORATED

“THE GEOLOGIST.”

NOS. CXXVII. TO CXXXVIII.

EDITED BY

HENRY WOODWARD, F.R.S., F.G.S., F.Z.S.,

VICE-PRESIDENT OF THE GEOLOGISTS ASSOCIATION;
MEMBER OF THE AMERICAN PHILOSOPHICAL SOCIETY, PHILADELPHIA;
HONORARY MEMBER OF THE GEOLOGICAL SOCIETIES OF EDINBURGH, GLASGOW, AND NORWICH;
CORRESPONDING MEMBER OF THE GEOLOGICAL SOCIETY OF BELGIUM; OF THE NATURAL
HISTORY SOCIETY OF MONTREAL; AND OF THE LYCEUM OF
NATURAL HISTORY, NEW YORK.

ASSISTED BY

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

AND

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

NEW SERIES. DECADE II. VOL. II.

JANUARY—DECEMBER, 1875.

LONDON:

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

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

1875.

HERTFORD :

PRINTED BY STEPHEN AUSTIN AND SONS.

LIST OF PLATES.

PLATES.	PAGE
I. Species of <i>Cystiphyllum</i>	30
II. Devonian Polyzoa	33
III. Gault <i>Aporrhaidæ</i>	49
IV. Meteoric Iron found 1870 at Ovifak	152
V. Fossil <i>Aporrhaidæ</i>	124
VI. Fossil <i>Aporrhaidæ</i>	198
VII. Sketch of Vulcano to Illustrate Mr. Judd's Paper	99
VII.* Fossil <i>Aporrhaidæ</i>	291
VIII. View of Stromboli	145
VIII.* New Carboniferous Fossils	241
IX. Section of Meteoric Iron from Toluca, Mexico (Autotype)	311
X. Tasmanites and Better-Bed Coal	337
XI. The Meteorite which fell at Busti, Dec. 2, 1852 (Chromolithograph)	401
XII. Cretaceous <i>Aporrhaidæ</i>	392
XIII. Fossil Foraminifera from Sumatra	532
XIV. Fossil Foraminifera from Sumatra	533
XV. Incised Outline of a Reindeer from the Kesslerloch Cave, Thaugen, Schaffhausen	610

* *To the Binder.*—By an oversight two plates are numbered each Plate VII. and two are numbered each Plate VIII. (see above). *The Binder is particularly requested to observe the titles of these plates, so as to avoid their being transposed or otherwise misplaced.*

LIST OF WOODCUTS.

	PAGE
Map Illustrating the Volcanic Group of the Lipari Islands	7
View of Panaria and surrounding Islands	9
Ruined Crater of Monte Sant' Angelo.....	14
Section near Quaglia on the South-West Coast of Vulcano	15
Interesting Section at La Capo	16
Vulcanello with its Three Craters.....	58
Section of Cone of Vulcanello in Sea Cliff.....	58
View of the Breached Crater of Campo Bianco.....	67
Sections of Quartz-trachyte Lava-streams at Porto delle Genti	69
Diagrams of the Submergence of Land in Isle of Man	83
Plan of the Island of Vulcano	110
Diagram Illustrating the Sediment Theory of Drift	171
Three Fossil Fruits, <i>Cardiocarpus elongatus</i> ; <i>C. bisectus</i> ; <i>C. samareformis</i> : and <i>Welwitschia mirabilis</i> , from Dana's Manual of Geology	179
Section of the Red Rocks near Birmingham	196
View of the Active Crater of Stromboli	203
Section through the Island of Stromboli	210
Plan of the Island of Ischia.....	248
Monte Rotaro with Monte Tabor.....	253
The Crater Lake of Lago del Bagno, Ischia	254
Island of San Stephano seen from the South	299
The Headland Monte della Guardia in Ponza	300
Western Spur of Monte della Guardia	301
Block of Caille Iron in Paris Collection	369
Meteorite of Aumières	402
Diagram of Lake Glacier	438
View of a Lake Outlet	439
Machine for Melting Ice	441
Diagram Illustrating the Velocity of Ice	442
Flood Level of the Rhine	444
Section of Hirwain Common.....	445
Diagrams Illustrating a Stream of Water in an Artificial Channel	446
Diagrams of different effect of Depth and Velocity	447

	PAGE
Diagram showing Width of the Mississippi at various points	448
Course of the River Amazon	448
Actual Junction of Tributaries of the Mississippi at acute angles	449
Same River joined at right angles	449
Alternate Headlands and Coombes	450
Diagram of the effect on Velocity in relation to different quantities.....	450
Diagram of the River Danube	451
Angular Junction of Side Stream with Main River	451
Mount Tabor, from a photograph.....	452
Diagram of Outline of Mountain	452
Fish Back Hill	453
Section of Fish Back Hill	453
Section of a Hill of Glacial Drift.....	454
Section of Two Hills	454
Outline of Sand Hills near Leighton Buzzard	454
Ecclesbourn Glen	455
Folkestone in the Pluvial Period	456
Ecclesbourn Glen in the Pluvial Period	456
Section showing Surfaces removed by Denudation	457
Gorge through Chalk Hills being formed	457
Gorge through Chalk Hills formed	458
Diagram of Rutmoo River	459
Black Gang Chine, Isle of Wight	460
View of Dovedale, Derbyshire	461
Diagram of East and West Flexures of Gault and Wealden Beds	462
Drawing of an ordinary Injector.....	468
Section of a River Perforating an Escarpment	473
Diagram showing the effect of Transverse Flexures on the Weald Clay	473
Map of a portion of Central Sumatra.....	477
Diagrammatic Section of Sumatra from Padang to Doerian Gedang	483
Diagrammatic Section of the Western Part of the Island of Nias	483
Meteoric Iron Ring which fell at Tucson, 1854	499
Section of Mendip Hills	567