

GEOLOGICAL DEPARTMENT,  
BIRKBECK COLLEGE, UNIVERSITY OF LONDON

THE  
GEOLOGICAL MAGAZINE.

NEW SERIES.

DECADE V. VOL. I.

JANUARY—DECEMBER, 1904.



THE  
GEOLOGICAL MAGAZINE

OR,

Monthly Journal of Geology:

WITH WHICH IS INCORPORATED

“THE GEOLOGIST.”

NOS. CCCCLXXV TO CCCCLXXXVI.

EDITED BY

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

LATE OF THE BRITISH MUSEUM OF NATURAL HISTORY;

PRESIDENT OF THE PALÆONTOGRAPHICAL SOCIETY, 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

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., V.P.G.S., &c.

NEW SERIES. DECADE V. VOL. I.

JANUARY—DECEMBER, 1904.

LONDON:

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

1904.

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

## LIST OF PLATES.

PLATE	FACING PAGE
I. <i>Cupressinoxylon hookeri</i> , Arber, sp. nov. . . . .	7
II. Examples of erosion of rocks in Corsica . . . . .	12
III. Portrait of the late R. Etheridge, F.R.S. L. & E., F.G.S., etc. . . . .	49
IV. Portrait of the late Professor K. A. von Zittel . . . . .	90
V. <i>Phacops Robertsi</i> , Reed, sp. nov. . . . .	109
VI. Mammals of the Eocene of Egypt . . . . .	162
VII. Borings at Cunapo Coalfield, Trinidad . . . . .	198
VIII. Trinidad Foraminifera . . . . .	249
IX. Trinidad Foraminifera . . . . .	250
X. Portrait of the late Charles Emerson Beecher, Ph.D. . . . .	284
XI. Eocene Echinoids from Sokoto . . . . .	304
Sketch-map of River System of Equatorial Africa . . . . .	344
Sketch-map of Lake Tanganyika . . . . .	368
XII. <i>Phacops</i> and <i>Enerinurus</i> . . . . .	383
XIII. Eroded Granite Boulder, near Ajaccio, Corsica . . . . .	390
XIV. Portrait of W. H. Hudleston, J.P., M.A., F.R.S., F.L.S., F.G.S. . . . .	431
XV. <i>Linthia oblonga</i> (Orbigny). . . . .	445
XVI. <i>Desorella elata</i> (Desor) . . . . .	480
XVII. Shell of <i>Testudo Ammon</i> , Andrews . . . . .	527
XVIII. Natural Arch in Limestone, Torquay . . . . .	608

## LIST OF ILLUSTRATIONS IN THE TEXT.

	PAGE
<i>Cupressinoxylon hookeri</i> , E. A. Newell Arber, sp. nov. . . . .	9, 10
Partially Silicified Crystalline Limestone . . . . .	17
Suture-line of <i>Pericyclus fasciculatus</i> . . . . .	29, 30, 31
Tongue of Clay in Chalk . . . . .	73
Middle portion of above, enlarged . . . . .	73
Skull of <i>Mæritherium</i> . . . . .	110
Skull of <i>Palaomastodon</i> . . . . .	113
Section showing junction between the Lias and Cretaceous . . . . .	125
General Section of Black Ven . . . . .	127
Junction between the Selbornian and Lias of Black Ven . . . . .	128
Section in the Selbornian of Black Ven . . . . .	130
Lower Keuper basement-beds . . . . .	171
Sketch-map of Afou Seicont below Pont Seicont . . . . .	201
Sketch-map of Nant Rhos Ddu . . . . .	205
Section across Nant Rhos Ddu . . . . .	206
Diagram-Section of <i>Gonatosphæra</i> . . . . .	242
Diagram to illustrate the Phylogeny of <i>Nodosaria</i> and allied forms . . . . .	249
Succession of beds in the folded region of Cape Colony . . . . .	253
Eocene outcrop in Central Africa . . . . .	291
<i>Plesiolampas Saharæ</i> , Bather, sp. nov. . . . .	294
Contorted pegmatite vein in granite, Sweden . . . . .	310
Folded pegmatite in a sett quarry, Sweden . . . . .	310
Contorted pegmatite in gneiss, Sweden . . . . .	311
Pegmatite vein in granite, Sweden . . . . .	312
Curves showing the frequency of branching in <i>Stomatopora</i> . . . . .	320
Diagram showing method of branching in <i>Stomatopora</i> and <i>Proboscina</i> . . . . .	321
Plan of the Graben System and its relation to the Congo Basin . . . . .	355
Section across British East Africa . . . . .	357
Section of the Lower Congo between the Atlantic and Stanley Pool . . . . .	361
Structure of a Graben . . . . .	368
Hollow in granitic block . . . . .	389
Sections to illustrate Dr. Bonney's paper . . . . .	389, 390

	PAGE
Section from Fremington and Eastcombe to Clayhanger, etc. . . . .	394
Section through Coddon Hill Beds, Barnstaple . . . . .	396
Diagram of longitudinal sections of forms of <i>Actinocamax</i> . . . . .	409
Sketch-map of zircon granites near Balangoda, Sab, Ceylon . . . . .	419
Structure of allanite granite . . . . .	422
Diagram to illustrate Mr. Vaughan's paper . . . . .	427
<i>Cypridina antiqua</i> , Jones, sp. nov. . . . .	439
Section at Clapham, north of Bedford . . . . .	440
Bones of <i>Algoasaurus Bauri</i> , Broom, gen. et sp. nov. . . . .	446
Apical disc of <i>Desorella elata</i> (Desor) . . . . .	480
Map of Earthquake-area near Penzance . . . . .	488
Section from Idak to Mirán Shah . . . . .	491
Belemnite and <i>Crioceras</i> (?) from Mesozoic rocks, Mirán Shah, N.W. India . . . . .	492
Diagram of carapace of <i>Testudo Ammon</i> , Andrews . . . . .	528
Diagram Map of Hesse Earthquake . . . . .	537
Diagram Map of Strontian Earthquake . . . . .	538
Diagram Map of the Kishon and Jordan Valleys . . . . .	577
Figure of skull of <i>Notochampsia Istedana</i> , sp. nov. . . . .	583
View of Unconformable Junction of Hornstones with Highland Schists, Arran . . . . .	594
Diagram Figure of Natural Arch, Torquay . . . . .	613