

NOTICES OF MEMOIRS.

BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE,
FIFTY-THIRD MEETING, SOUTHPORT, 19TH SEPTEMBER, 1883.

[Professor A. CAYLEY, M.A., LL.D., F.R.S., etc., *President*.]

A.—TITLES OF PAPERS READ IN SECTION C. (GEOLOGY).

President: PROFESSOR W. C. WILLIAMSON, LL.D., F.R.S., etc.

Address by the *President* (*Professor Williamson*).—On the Present State of our Knowledge of the Fossil Vegetation of the Carboniferous Age.

C. E. De Rance.—Notes on Geological Sections within 40 Miles Radius of Southport. (See p. 500.)

G. H. Morton.—Section Across the Trias recently exposed by a Railway Excavation in Liverpool.

Professor W. Boyd Dawkins, M.A., F.R.S.—The Master Divisions of the Tertiary Period.

R. J. Ussher, M.R.I.A.—Report on Exploration in Caves in the Carboniferous Limestone of the South of Ireland.

J. W. Davis.—Report on the Exploration of Raygill Fissure, Yorkshire.

J. W. Davis.—On the Occurrence of Labyrinthodonta in the Yoredale Rocks of Wensleydale, Yorkshire.

J. W. Davis.—On some Fossil Fish Remains found at Leyburn, Yorkshire.

H. W. Crosskey, LL.D.—Report of the Boulder Committee.

Professor W. C. Williamson, LL.D., F.R.S. (*President*).—On some Supposed Fossil Algæ, from the Carboniferous Rocks.

Professor W. C. Williamson and W. Cash.—Report on the Fossil Plants of Halifax.

Principal J. W. Dawson, C.M.G., F.R.S.—Geological Relations and Mode of Preservation of *Eozoon Canadense*.

Professor E. Hull, LL.D., F.R.S.—On the Geological Age of the North Atlantic Ocean.

Baldwin Latham.—The Influence of Barometric Pressure on the Discharge of Water from Springs.

W. H. Baily.—Additional Notes on *Anthracosaurus Edgei* (Baily, sp.); a large Sauro-Batrachian from the Lower Coal-measures, Jarrow Colliery, near Castlecomer, Co. Kilkenny.

W. T. Knowles.—On Basalt apparently overlying Post-Glacial Beds, Co. Antrim.

Mark Stürrup.—On some Recent Opinions respecting the Loess-Deposits of the Valley of the Rhine.

G. P. Hughes.—On the Former Physical Condition of Glendale, Northumberland.

James Thomson.—On a Conglomerate with Boulders in the Laurentian Rocks of North Uist, Scotland.

James Thomson.—On a Coral Atoll on the Shore-line at Arbigland, near Dumfries, Scotland.

G. R. Vine.—Report on the British Fossil Polyzoa.

- C. E. De Rance.*—Report on the Underground Waters of England and Wales.
- Professor John Milne.*—Report on the Earthquake Phenomena of Japan.
- H. J. Johnston-Lavis.*—On the Earthquake of 1881 in the Island of Ischia.
- H. J. Johnston-Lavis.*—On the Earthquake of 1883 in the Island of Ischia.
- Rev. A. Irving, B.A., B.Sc.*—Dyas versus Permian.
- Rev. A. Irving.*—On the Coloration of some Sands, and the Cementation of Siliceous Sandstones.
- H. G. Fordham.*—Note on a Boulder from the Chloritic Marl of Ashwell, Herts.
- Professor T. R. Jones, F.R.S.*—Report on the Fossil Phyllopora of Palæozoic Rocks. (See p. 461.)
- W. H. Baily.*—Report on the Fossil Plants Associated with the Basalts of the North of Ireland.
- Professor T. G. Bonney, M.A., F.R.S.*—Note on the Nagelflue of the Rigi and Rossberg. (See p. 511.)
- Professor T. G. Bonney.*—On a Supposed Case of Metamorphism in an Alpine Rock of Carboniferous Age. (See p. 507.)
- Professor J. F. Blake, M.A.*—On the Pre-Cambrian Igneous Rocks of St. David's.
- J. S. Diller.*—On the Topography and Geology of the Troad.
- John Gunn, M.A.*—On the Causes of Change of Climature during Long Periods of Time, and of Coincident Changes of Fauna and Flora.
- G. V. Smith.*—Preliminary Note on the Further Discovery of Vertebrate Footprints in the Penrith Sandstone.
- C. S. Bate, F.R.S.*—On *Archæaslicus Williamæsi*, a new genus of Eryonidæ from the Lias of Lyme Regis.

B.—TITLES OF PAPERS, BEARING UPON GEOLOGY, READ IN OTHER SECTIONS.

SECTION A.—MATHEMATICAL AND PHYSICAL SCIENCE.

- Professor A. Schuster, F.R.S.*—Report of the Committee on Meteoric Dust.
- G. Johnstone Stoney, M.A., F.R.S.*—On the Cause of Crystalline Form.
- I. Roberts.*—On the Attractive Influence of the Sun and Moon in Causing Tides, and the Variations in Atmospheric Pressure and Rainfall, causing Oscillations in the Underground Waters in Porous Strata.
- J. Glaisher, F.R.S.*—Report of the Committee on Underground Temperature.
- Professor Schuster.*—On the Motion of Swiss Glaciers in 1883.

SECTION B.—CHEMICAL SCIENCE.

- G. Johnstone Stoney.*—On the Relation between Chemical Constitution and Crystalline Form.
- R. Warington.*—On the Nitrates in Soil.

SECTION D.—BIOLOGY.

Messrs. Scott and Osborne.—On the Origin and Development of the Rhinoceros Group.

A. R. Hunt, M.A.—On the Influence of Wave-Currents on the Marine Fauna of Shallow Seas.

DEPARTMENT OF ANTHROPOLOGY.

W. Pengelly, F.R.S., F.G.S.—Address of the President.

W. Pengelly.—On a Flint Implement found on Torre Abbey Sands, Torbay.

A. R. Hunt, M.A.—The Borness Cave, Kirkcudbrightshire.

W. J. Knowles.—The Antiquity of Man in Ireland.

SECTION E.—GEOGRAPHY.

Lieut.-Colonel H. H. Godwin-Austen, F.R.S., F.G.S.—Address of the President.

Cuthbert E. Peek.—On the Hot Spring Regions of Iceland and New Zealand, with Notes on Maori Customs.

W. Hancock.—On the Volcanic and Earthquake Regions of Central America.

SECTION F.—ECONOMIC SCIENCE AND STATISTICS.

Major the Hon. D. Erskine.—The Gold Fields of South Africa.

SECTION G.—MECHANICAL SCIENCE.

Hyde Clarke.—Morecambe Bay in 1836 and 1883.

G. H. Daglish.—The Rosebridge Colliery.

A. W. Darbshire.—The Working of Slate Quarries.

A. R. Hunt.—The Action of Waves on Sea Beaches.

REVIEWS.

I.—ON THE FOSSIL FISHES OF THE CARBONIFEROUS LIMESTONE SERIES OF GREAT BRITAIN. By JAMES W. DAVIS, F.G.S. (Scientific Transactions of the Royal Dublin Society, vol. i. series ii. pp. 327-600. Plates xlii.-lxv. 4to. Dublin, 1883.)

WITH the history of fossil fishes in this country four names will naturally be associated, viz. Agassiz, Egerton, Enniskillen, and Mantell. For world-wide as in later years became the reputation of Louis Agassiz, his earliest researches in fossil fishes were mainly carried out in conjunction with Sir Philip Grey-Egerton, the Earl of Enniskillen, and Dr. Mantell; and it is their collections which contain the largest proportion of the "types" of his great works. It is no small satisfaction to geologists and palæontologists to know that all three of these magnificent collections (Mantell, Egerton, and Enniskillen) now form part of the National treasures, and their choicest specimens may be seen assembled in one gallery at the new Natural History Museum, Cromwell Road.

Of these vast and varied treasures it is not our intention to speak