

NOTICES OF MEMOIRS.

BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.—
Nottingham Meeting, September 13–21, 1893.

TITLES OF PAPERS READ BEFORE SECTION (C), GEOLOGY.

President :—J. J. H. TEALL, M.A., F.R.S., Sec. Geol. Soc.

The President's Address.

Prof. E. Hull.—Note on the Water-bearing Capacity of the New Red Sandstone of Nottinghamshire.

Prof. F. Clowes.—On a Nottingham Sandstone containing Barium Sulphate as a Cementing Material.

C. E. De Rance.—Report of the Committee on the Circulation of Underground Water.

Prof. E. Hull.—On the Discovery of a Concealed Ridge of pre-Carboniferous Rocks under the Trias of Netherseal, Lincolnshire.

J. L. Myres.—Geology of the Coast Land of Caria.

Prof. T. Rupert Jones.—Report of the Committee on the Fossil Phyllopoda of the Palæozoic Rocks.

Dr. R. H. Traquair.—On the Discovery of *Cephalaspis* in the Caithness Flags.

M. Laurie.—Report on the Eurypterid-bearing Deposits of the Pentland Hills.

Montagu Browne.—On some Vertebrate Remains not hitherto recorded from the Rhætic Beds of Britain.

George Fowler.—Note on a Fault at Cinder Hill.

Dr. H. Hicks.—On the Base of the Cambrian in Wales.

E. T. Newton.—On the Reptilia of the British Trias.

Discussion on the Limits of Geology and Geography.

Prof. J. P. Iddings.—The Dissected Volcano of Crandall Basin, Wyoming. Illustrated by Lantern Slides.

Sir A. Geikie.—On Structures in Eruptive Bosses which resemble those of Ancient Gneisses.

Prof. W. J. Sollas.—On the Pittings in Pebbles from the Trias.

Dr. V. Ball, C.B.—On Bones and Antlers of *Cervus giganteus* incised and marked by mutual attrition, while buried in Bogs or Marl.

Prof. W. H. Herdman.—Note on the exhibition of a mass of cemented shells, dredged from the sea bed.

R. D. Oldham.—Note to accompany the exhibition of a Geological Map of India.

Walcot Gibson.—Geological Sketch of Central East Africa.

Dr. H. J. Johnston-Lavis.—Report of the Committee on the Volcanic Phenomena of Vesuvius.

Dr. H. J. Johnston-Lavis.—Quartz Inclusions in Lava of Stromboli.

A. T. Metcalfe.—On the Gypsum Deposits of Nottinghamshire and Derbyshire.

O. W. Jeffs.—Report of the Committee on Geological Photographs.

H. B. Woodward.—On a Bed of Oolitic Iron Ore in the Lias of Raasay.

- A. C. G. Cameron.*—Note on a Transported Mass of Chalk in the Boulder Clay of Catworth, Huntingdonshire.
- J. G. Goodchild.*—Augen-Structure in relation to the Origin of Eruptive Rocks and Gneiss.
- Prof. W. C. Brögger.*—The Genetic Relations of the Basic Eruptive Rocks of Gran (Christiania region).
- A. Harker.*—Berthelot's Principle applied to Magmatic Concentration.
- Prof. W. J. Sollas.*—On the Origin of Intermediate Varieties of Igneous Rocks by Intrusion and Admixture, as observed at Barnavave, Carlingford. Illustrated by Lantern Slides.
- Prof. W. J. Sollas.*—On the Transformation of an Amphibolite into Quartz-Mica-Diorite. Illustrated by Lantern Slides.
- W. W. Watts.*—On the Hornblende-Pikrite of Greystones, co. Wicklow.
- F. T. Howard and E. W. Small.*—On some Igneous Rocks of S. Pembrokeshire, with a note on the Isle of Grassholme.
- A. Smith Woodward.*—Report of the Committee on the Registration of Type Specimens of Fossils.
- Discussion on Coral Reefs (Fossil and Recent). Opened by *Prof. W. J. Sollas.*
- Prof. C. Lapworth.*—The Trias of the Midlands.
- Rev. A. Irving.*—Twenty Years Work on the Younger Red Rocks.
- Baron von Reinach and W. A. E. Ussher.*—Note on the exhibition of *Schizodus* and *Aucella Hausmanni* from the Magnesian Limestone of Bulwell.
- Prof. E. Hull.*—Note on the Himlack Stone.
- J. W. Gray and P. F. Kendall.*—On the Permo-Triassic Junction at Stockport.
- R. B. Newton.*—Note on some Molluscan Remains lately discovered in the English Keuper.
- H. Bolton.*—On the Skiddaw Slates of the Isle of Man.
- Prof. J. Milne.*—On the Volcanic Phenomena of Japan. Illustrated by Lantern Slides.
- Howard Foz.*—On the Radiolarian Chert of Cornwall. Illustrated by Lantern Slides.
- Discussion on Geological Education. Opened by—
Prof. G. A. J. Cole.—On Geology in Intermediate Education.
Prof. G. A. Lebour.—On Geology in Professional Education.
- Prince Kropotkin.*—On the Glaciation of Asia.
- Prof. T. G. Bonney.*—On some Assumptions in Glacial Geology.
- C. A. Lindvall.*—The Glacial Period, its Origin and Effects.
- Dugald Bell.*—Report of the Committee on the High-level Shell-bearing Deposits at Clava, Chapelhall, and other localities.
- P. F. Kendall.*—Report of the Committee on Erratic Blocks.
- Prof. W. J. Sollas.*—A Map of the Esker Systems of Ireland.
- P. W. Abbott and P. F. Kendall.*—On some Supposed Evidence of the Recent Submergence of North Wales.
- Dugald Bell.*—On some Shelly Clay and Gravel in the North-East of Aberdeenshire.

C. E. De Rance.—On the Pre-Glacial Form of the Ground in Lancashire and Cheshire.

Dugald Bell.—On the Granite Boulders of the Clyde Valley.

H. Arnold-Bemrose.—The Toadstones of Derbyshire. Illustrated by Lantern Slides.

Prof. W. J. Sollas.—On the Minute Structure of the Skeleton of *Monograptus priodon*. Illustrated by Lantern Slides.

W. W. Watts.—On Perlitic Structure in Quartz. Illustrated by Lantern Slides.

In other Sections—

Prof. Stirling.—Note on the Discovery of *Diprotodon* Remains in Australia.

Report of the Committee on Earth Tremors.

Report of the Committee on the Volcanic and Seismological Phenomena of Japan.

R E V I E W S.

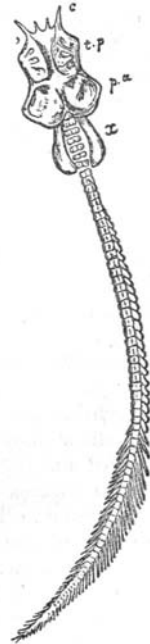
I.—A FURTHER DESCRIPTION OF *PALÆOSPONDYLUS GUNNI*. By

Dr. R. H. TRAQUAIR, F.R.S., Proc. Roy.

Phys. Soc. Edinburgh, vol. xii. 1892–93,
pp. 87–94, pl. i.

THIS little organism, it will be remembered, is a supposed fossil Marsipobranch fish, first briefly described three years ago by Dr. Traquair, from the Old Red Sandstone of Achanarras, Caithness. A more detailed account of the genus and species is now given, and the author adds the accompanying restored sketch.

The organism is now shown to be destitute of jaws: and it still remains uncertain whether or not the nose was a paired organ. The supposed dorsal shield behind the head proves to consist of a pair of oblong plates, apparently not external; and between these the ring-vertebræ are spaced, while behind they form a continuous chain. There are short and stout neural spines in the abdominal region, but no ribs. No traces of paired limbs can be detected in any specimen.



Restoration of *Palæospondylus Gunnii* (somewhat enlarged), by Dr. R. H. Traquair.
c. cirri; t. p. anterior part of cranium; p. a. posterior part of cranium; x. paired plate-like structure behind the head.