

magnificent specimen of *Cycadeoidea*, which is now in the British Museum Fossil Plant Gallery.

Since this was published my attention has been called to the fact that it is to Mr. A. M. Wallis, guide and quarryman, of Portland, that we are primarily indebted for this valuable addition to the National Collection. Mr. Wallis, on discovering the specimen, at once realized its scientific value, and took care that it fell into the hands of those who appreciated its worth. I am much indebted to Mr. Strahan for calling my attention to this omission, and for furnishing me with the above facts.

A. C. SEWARD.

CAMBRIDGE, March 11, 1897.

#### THE AGE OF THE MORTE SLATES.

SIR,—If Dr. Hicks had only claimed that the Morte Slates are older than the Ilfracombe Beds, probably no palæontologist would have objected on the evidence at present available. But Dr. Hicks claimed that the fossils proved the Morte Slates to be Silurian.

If Dr. Hicks considers the Oriskany Sandstone to be Silurian, his views are as reactionary regarding the Devonian rocks of America as they are revolutionary regarding those of England.

In reference to the suggestion that I had not noticed that the specimen shown in figure 3 in the text did not belong to the same individual as the specimen shown in pl. x, fig. 6, I would ask whether the fossil fox on the staircase of the Geological Society and the fossil fox in the British Museum are to be called one specimen? I should think most people would call them two specimens representing one individual.

I am grateful to Dr. Hicks for emphasizing my argument that *Modiolopsis* cannot be recognized without seeing the dentition. But as this is not shown in any of the Morte Slate specimens, why were they referred to the typically Silurian genus *Modiolopsis*?

In regard to the identification of the big Brachiopod, I did not refer to the "characteristic ribbing," as I did not think the character worth referring to. I have nothing to add or retract from my remarks about this fossil, and prefer to leave the question to the ultimate decision of palæontologists.

J. W. GREGORY.

#### OBITUARY.

#### CHARLES TOMLINSON, F.R.S.

BORN IN 1808.

DIED FEBRUARY 15, 1897.

By the death of Charles Tomlinson science has lost a man of great learning, and who may perhaps be appropriately described as a Natural Philosopher of the old school. Although best known for his researches on physical and chemical subjects, as Lecturer on Experimental Science at King's College, and as one of the founders of the Physical Society; he was also a man of great literary attainments, and one who had given a good deal of attention to subjects of Natural History, including Geology.

He joined the Geologists' Association soon after it was established in 1859, and was for several years an active member, serving on

the "General Committee" in 1862. During this period he communicated several papers: (1) "On the Action of Heat on certain Sandstones of Yorkshire" (*Proc. Geol. Assoc.*, vol. i, p. 50), when he drew attention to the road-metal used near Huddersfield, and to the custom of hardening the stone by the action of fire; (2) "On the Efflorescence which succeeds the action of Heat on certain Sandstones of Yorkshire" (*ibid.*, p. 158); (3) "On the Plasticity and Odour of Clay" (*ibid.*, p. 237), in which he observed that clay ceased to be plastic when deprived of its chemically combined water, and that plasticity and other properties depend upon variations in the attractive force of the molecules of matter according to the distances apart of such molecules. The peculiar odour of clay belonged only to impure clays, and chiefly to those containing oxide of iron.

H. B. W.

THE REV. JOHN EDWARD CROSS., M.A., F.G.S.

(*Prebendary of Lincoln*).

BORN 1821.

DIED FEBRUARY 28, 1897.

THE REV. J. E. CROSS (brother of Viscount Cross) was educated at Christ Church, Oxford, and was appointed to the curacy of Bolton-le-Moors in 1846. Three years later he became curate of Appleby, near Brigg, in Lincolnshire, and he was presented to the vicarage in 1856. In this quiet village he lived and laboured for thirty-five years, retiring in 1891 to Grange-over-Sands.

To geologists Mr. Cross is known as the author of an excellent paper on "The Geology of North-West Lincolnshire" (*Quart. Journ. Geol. Soc.*, vol. xxxi, pp. 115-130. Appendix by R. Etheridge). In this work he described, for the first time in detail, the Jurassic formations from the Lower Lias to the Cornbrash, in the area bordering the south shore of the Humber between the rivers Trent and Ancholme. It was, as he remarked, "a corner of the land unknown to fame" until the discovery of the valuable iron-ore in the Lower Lias at Frodingham. Long and diligently had Mr. Cross worked, as shown by his careful record of facts, and the numerous fossils he had collected. Several new species of Mollusca were described by Mr. Etheridge.

H. B. W.

MISCELLANEOUS.

NEW GEOLOGICAL SURVEY MAPS.—Attention was drawn in the GEOLOGICAL MAGAZINE for February, 1896, p. 96, to the General Map of England and Wales (on the scale of four-miles to one inch), which was in course of publication by the Geological Survey. We now learn that the hand-coloured edition of this useful map is complete, the fifteen sheets, including title and index of colours, all being published. We called attention to the fact that Sheet 12 of this map (London Basin and Wealden area) was issued last year at the greatly reduced price of 2s. 6d., *printed in colours*. We are glad to announce that three other sheets have now been similarly published, viz.: Sheet 6 (East Yorkshire), Sheet 9 (Eastern Counties), and Sheet 15 (Sussex Coast). The price is uniformly 2s. 6d.