

ON THE *COTYLEDERMIDÆ*.

SIR,—The December Number of your MAGAZINE contains a letter from Mr. Chas. Moore, of Bath, purporting to be a notice of “the genera *Plicatocrinus*, *Cotylederma*, and *Solanocrinus*,” of which he tells us next to nothing, but attempts to make it appear that I made an erroneous diagnosis of the Cotylederm I described in the October Number of the MAGAZINE, and gives an inaccurate account of private conversations which ought not to have been published. Let me narrate, by way of explanation, what did occur.

Late in the evening, at the *Conversazione* held in Colston Hall on the 27th August last, during the Meeting of the British Association at Bristol, my friend Mr. F. Longe, F.G.S., met me in the room, and told me he had found a new fossil in the Lias near Charmouth, and wished to have my opinion upon it. Taking the specimen from his pocket, he said, “Tell me what it is.” I replied, “The light is now so bad that I am afraid I cannot see that small dark object,” but placing it under the dim twinkling of an expiring lamp to examine it, I said, “From what I can make out, it resembles a *Balanus*, for it has adhered to something, has a bent body composed of unequal longitudinal pieces, and has an opening at the top, but the pieces or plates are different in structure and mode of junction from those of any *Balanus* I know. If you will let me have the specimen again when I have a good light, and my pocket lens, to help me, I will endeavour to make out more about it.”

On the following Monday morning I met Mr. C. Moore in one of the railway carriages between Bath and Bristol. He took Mr. Longe’s fossil from his pocket, and showed it to me. I told him I had seen it on Friday evening at the *Conversazione*, and repeated what I had said to Mr. Longe about it (but added that I had seen it in so dim a light it was impossible to make out anything beyond its general outline). I then carefully examined the fossil with my lens, and we talked over the very singular character of the group *Cotyledermidæ*, to which it evidently belonged, and about the structure of which, from that conversation, it appeared we had everything to learn. Mr. C. Moore said he thought he had found separate plates of the same fossil, which however he never showed to me in his museum. He is further mistaken in saying that I had the advantage of consulting Deslongchamps’ “*Memoire sur le couche à Léptæna*,” which I did not see until after my notice had appeared in the MAGAZINE in October, otherwise I should have found that the author had referred this form of *COTYLEDERMIDÆ* to Münster’s genus *Plicatocrinus*, and that on the first sight of the fossil, Deslongchamps had the same impression of its form and affinities as myself; for he says at p. 45: “It has the aspect of a small *Balanus*, and like the *Balanus* is formed of unequal longitudinal plates; but here the resemblance ceases: the plates, which are thick and flat, have their borders placed in simple juxtaposition, and not united by a serrated suture.” From the foregoing, it is evident I gave no opinion on the subject, and this Mr. C. Moore knew from myself, as I told him what I had said to Mr. Longe; therefore I consider it very unfair on his part to state

that I had made an incorrect diagnosis of "a group of fossils, on which I had been so long at work," merely to show that the correction of the error was due to himself.

CHELTEMHAM, 4th Jan., 1876.

THOMAS WRIGHT, M.D.

UPPER BOULDER-CLAY OF THE N.W. OF ENGLAND.¹

SIR,—I am sorry that the very eminent glacialist, Mr. Kinahan, did not see a better specimen of the above deposit than that mentioned in his article.² I have been familiar with it, for many years, in the flat and low-lying districts of Shropshire, Cheshire, Lancashire, and West Cumberland. It is the best-defined, most persistently uniform in its character, and horizontally-continuous of any glacial deposit I have seen. It likewise contains the largest per-centage of flattened pebbles with parallel and perfectly-preserved striae. With regard to the drifts of the Isle of Man, I think they ought to be compared with the magnificent normal sections occurring on the opposite sea-coast of Cumberland, between Maryport and St. Bees, but especially between Ravenglass and Millom. For information on the above subjects, see *GEOL. MAG.* for Dec. 1870, June and July, 1871, and Sept. 1872. See also *Quart. Journal Geol. Soc.*, vol. xxv. p. 407; vol. xxviii. p. 388; and vol. xxx. p. 181.

D. MACKINTOSH.

¹ This letter has been accidentally held over.—*EDIT. GEOL. MAG.*

² *GEOL. MAG.* 1875, Decade II. Vol. II. p. 547.

THE SCARLE BORING, LINCOLNSHIRE.

SIR,—It may interest your readers to learn that this deep boring has at length entered the Coal-measures at a depth of 1,900 feet, after passing through strata from the Lower Lias downwards to the Coal-measures. The Permian beds were found of greater thickness than was expected, and for some time disappointed the expectations of those who hoped the Coal-measures would be reached at a less depth than has actually proved to be the case. The core which was sent to me last week by Mr. J. T. Boot, Mining Engineer, who has superintended the work, consists of grey fine-grained grit, slightly micaceous, containing carbonized plants, but too much rubbed for determination. It came from a depth of 1,906 feet. Judging from the lamination, the dip of the beds is moderate. The boring reflects great credit on the Diamond-Boring Company, and upon the adventurers, who, through much discouragement, have persevered; and it is to be hoped that ere the experiment is abandoned, an actual coal-seam will be pierced through.

I hope to be able to draw up a detailed account of this most interesting attempt to reach coal far beyond the district in which it is worked.

EDWARD HULL.

GEOLOGICAL SURVEY OF IRELAND,

14, HUME STREET, DUBLIN, 17 Jan. 1876.

MISCELLANEOUS.—PROF. A. E. NORDENSKIÖLD AND THE SWEDISH EXPEDITION TO THE POLAR SEA. An Imperial ordinance was officially published at St. Petersburg, Jan. 1st, 1876, directing that the thanks of the Russian Government be conveyed to the Swedish Professor Nordenskiöld, for his exploration of the Polar Sea un to the Yenisei River.