

4. *Conophrys* is probably the same as *Shumardia*, Billings, and as *Buttus pusillus*, Sars.

I can say nothing to this, as I have been unable to obtain the published descriptions of the forms referred to.

Dr. Linnarsson seems to infer from the presence of *Conocoryphe monile* that the Shineton Shales are Upper Tremadoc. Even if his opinion of the affinities of this species were correct, we could not ignore the presence of two species of *Olenus*, of *Dictyonema sociale*, and of other Cambrian forms. Nor must we overlook the fact that in the Malvern district the Shales with *Dictyonema* immediately overlie the black *Olenus* Shales. I think that, with our present evidence, it will be safest to correlate the Shineton Shales with the Lower Tremadoc. I have just had the good fortune to detect them in force between the Longmynd and the Stiper Stones, the higher beds forming the base of the Stiper Stones escarpment. The dip is in the same direction as the overlying Arenigs; but towards the top of the series (where it grows more arenaceous and flaggy, as in the Shineton area) the beds are contorted and much jointed. I will not venture upon theory on the strength of one hour's work. It is gratifying to find my previous evidence from fossils so clearly confirmed, and to throw in the teeth of the unbelieving stratigraphists another proof that palæontology is not quite exploded.

WELLINGTON, SALOP, *May 9th*, 1878.

CHARLES CALLAWAY.

ORTHIS REDUX IN MIDLAND BUNTER PEBBLES.

SIR,—In reply to the letter of Mr. J. H. Jennings in the May Number of the *GEOL. MAG.* it may interest him to know that the Rev. P. B. Brodie has drawn attention to the occurrence of fossiliferous pebbles in the drift near Warwick similar to those which occur at Budleigh Salterton, in the *Quart. Journ. of the Geol. Soc. of London*, vol. xxiii. (1867), p. 210.

The Drift of the Midland Counties is mainly composed of the redistributed Bunter Conglomerate, a formation which, as far as the pebbles which it contains are concerned, is lithologically and palæontologically identical with the Conglomerate of S. Devon. The stratigraphical position and relation of the two deposits, so far as I have examined them, in both districts appears much the same.

In the Museum of the Midland Institute is an extensive series of Bunter material, collected from the gravel around Birmingham, which I presented in 1872 to the Birmingham Naturalists' Society, as well as of specimens for purposes of comparison from the Bunter Conglomerate itself. In 1875 I gave a beautiful series of fossiliferous pebbles to the Jermyn Street Museum, also from the Birmingham Drift. *Orthis redux* is, as at Budleigh, one of the commonest fossils.

SPENCER GEORGE PERCEVAL.

HENBURY, BRISTOL, *May 11*, 1878.

WHAT IS AN ERRATIC?

SIR,—Under this title, in your April Number for the current year, my esteemed colleague, Mr. Wynne, argues that I am wrong in restricting the term to fragments which have been transported by

ice, and maintains that it is equally applicable to pebbles and boulders, instancing the flints on the Irish coast and the constituents of the Chesil Bank as *erratics*, in his sense of the word. If the bulk of geologists agree with Mr. Wynne in this, I confess I shall feel surprised. Mr. Wynne also disputes certain views of mine touching minor details of geology in the Salt Range, but it is not my intention to notice these, as, the ground being unknown to the bulk of your readers, the discussion would be both tedious and unprofitable.

In justice to myself, however, I cannot permit the second paragraph of Mr. Wynne's letter to pass unchallenged, as it contains a complete and incomprehensible misapprehension of my meaning. The passage runs thus: "In these remarks,¹ Mr. Theobald restricts and applies the term '*Erratics*' exclusively to certain blocks supposed to have been ice-transported, advocating the idea also (*vide* foot-note) that the word is *only applicable in describing recent phases of geology.*"

Of course I neither said nor meant any such thing as the extraordinary statement I have italicised above. What I *did* say was: "Under these circumstances, therefore, I do not think that these red granite boulders can be termed '*erratics*,' unless we fall back on the hypothesis that all of them have been erratics during a former and wholly different phase of geological life than that which we at present have to describe and deal with." (*l.c.*)

Now I deny that my words can fairly be twisted so as to yield the extraordinary sense, or rather nonsense, which Mr. Wynne attributes to me; and had my MS. not received some mutilation (unknown to me) in passing through the press in Calcutta, this misapprehension of my colleague could hardly have happened. I originally wrote some such explanatory sentence as the following: "Unless on the principle of once a parson always a parson, we hold that once an erratic, always an erratic." Of course the Chesil Bank boulders may at one time or another have been erratics; but *unless on the principle of the above proverb*, they can, I think, be termed so no longer.

As this is the exact opposite of the ridiculous view Mr. Wynne fathers on me, I wish to repudiate the mistake in the same pages wherein it appears, to my great discredit if uncontradicted.

MARREE, PANJAB, *May 13th*, 1878.

W. THEOBALD.

WHAT IS AN ERRATIC?

SIR,—I should have called attention in the second paragraph of my letter, in your April Number, 1878, p. 185, to the passage in my friend Mr. Theobald's remarks which reads thus: "Under the head '*Erratics*' my colleague describes others, which are not only, in my opinion, not '*erratics*' at all, but belong to diverse geological epochs."

This, together with his footnote, to which I referred, left the impression that, according to him, "*erratics*" must belong to but one and that a recent geological epoch.

A. B. WYNNE.

¹ Records of the Geological Survey of India, vol. x. part iv. p. 223.