

Redcliffe Towers, at the level where similar mollusca now exist (an occurrence which may, however, be due to a recent mixing of deposits), the author pointed out that as the coast is known to have undergone no change of level for nearly 2000 years, it is unlikely that it can have been raised forty feet, and again depressed to the same extent, since the beginning of the Bronze period, not more than about fifteen centuries earlier. It is more probable that the clay bed was deposited in a shallow mere or marsh, of land-water kept back by the sea-beach, which was then some hundreds of feet further to seaward, and that the forest, which consisted chiefly of willows, grew on the marsh. The mammoth tooth may have been derived from an older deposit, all other remains of mammalia obtained from the Forest-bed belonging to animals still existing.

CORRESPONDENCE.

NOTES ON THE SO-CALLED BUNTERSCHIEFER.

SIR,—Will you kindly afford me space for the purpose of recording a recent important discovery in connection with the lowermost strata of the German Trias, the so-called Bunterschiefer? In the July Number I drew attention to some important facts relating to the Dyas and Trias of Germany, and referred to the paper which has since appeared in the Quarterly Journal of the Geological Society, in which a further account is to be found of some sections which I made notes of on the spot during last year. I wish to draw particular attention to those which illustrate the succession of the Zechstein and the Bunter near Meerane, in Saxony. Since I gave an account of this, as it is exhibited in the quarries between that town and the village of Hainichen, the sections have been examined by Prof. Geinitz in company with Herr Dittmarsch, the Director of the Saxon Bergschule. In a letter to me, dated Dresden, September 3rd, Prof. Geinitz says:—"It will now interest you to know that in the first quarry between Hainichen and Meerane I have found, in the thin-bedded sandstones of the so-called Bunterschiefer, only a few metres above the Plattendolomit (Upper Zechstein), large casts of footprints of *Cheirosaurus Barthi*, many small footprints of Saurians, a few Sponges, and in particular a *Rhizocorallium*, which indicates significantly enough that we have here to do with the *lower strata of the Bunter Sandstone* (the so-called lower Röth), and not with the strata of the Dyas."

As Prof. Geinitz proposed to give a full account of this at the recent meeting of the German Geological Society at Hanover, those who are interested in the question may look to the "Proceedings" of that Society for further particulars.

A. IRVING.

EVENLEY, BRACKLEY.

THE SECTION AT HOPE'S NOSE

SIR,—I do not feel sure that the section, formerly examined by Mr. Horace B. Woodward, is the same as that, of which I have given a diagram; because he speaks of a *quarry*, whereas my section

was seen in a *cliff*. Upon looking also at the passage to which he refers in a former number of the *MAGAZINE*, I find a "quarry" mentioned, and it is stated that "the cliffs are for the most part abrupt, and can only be studied by the aid of a boat." There is, however, no difficulty in walking to the spot which I visited, and in viewing the cliff from the rocks at low water. Perhaps the same break in the strata can be seen at two neighbouring localities, and even if it should be, as Mr. Woodward thinks, due merely to a fault, still, as he justly observes, the bearing of the phenomena upon the question of cleavage "is in no way affected."

My diagram was made from a photograph, which shows likewise the "raised beach."

O. FISHER.

HARLTON, CAMBRIDGE, 4th Nov.

ADDITIONAL NOTE TO SIR WILLIAM DAWSON'S PAPER ON THE GEOLOGY OF EGYPT.

SIR,—In Number IV. of these notes, that on the Crystalline Rocks of Upper Egypt, I have mentioned the apparent absence of limestone from the Laurentian series as seen at Assouan. I should have added, however, that some of the crumbling schists seen in the low land east of the railway cutting resembled very closely the calcareous schists associated with the Grenville bed of Limestone on the Ottawa River, and gave the impression that Crystalline Limestone might not improbably occur in that vicinity.

ADDITIONAL ERRATA.

Page 440—line 3rd from top, for "of" read *for*.

Page 441—line 9 from bottom, for "two" read *also*.

Page 442—line 9 from top, for "cones" read *cover*.

J. W. DAWSON.

UNDER WHAT CIRCUMSTANCES IS AN ISLAND TO BE CONSIDERED "OCEANIC" ?

SIR,—If I correctly apprehend Mr. Fisher's reasoning, it is impossible to determine whether an island is "Oceanic" or not until it be known whether at any period in its geological history it has been connected with an existing continent. This is unfortunate; for the advocates of the permanency of oceans and continents insist that "oceanic islands" throw great light upon the problem. It would appear that they have been, as I pointed out in my first communication, arguing in a circle and from "phrases," not ascertained facts.

PARK CORNER, BLUNDELLSANDS,
Nov. 6th, 1884.

T. MELLARD READE.

WE regret to record the deaths of three well-known geologists—Mr. Robert Alfred C. Godwin-Austen, B.A., F.R.S., F.G.S., of Shalford House, Guildford, on the 25th inst., in his 76th year; Dr. Thomas Wright, F.R.S., F.G.S., on the 17th inst., at St. Margaret's Terrace, Cheltenham, also in his 76th year; and Mr. (late Prof.) James Buckman, F.G.S., F.L.S., of Bradford-Abbas, Sherborne, Dorset, on the 21st inst.