

The materials of this hill differ considerably from those of the lower, clean-rolled, and cast-up-beach in its vicinity, though they were, doubtless, accumulated under water and disturbed by waves, when they formed the shore or beach, while being elevated to their present position. Had I the means of reference here, I dare say it would be easy to show, from heights upon the Ordnance six-inch map, that the slope of the boggy valley is gradual from higher levels inland towards the sea, and, probably, charts of the coast would permit nearly the same slope to be carried out beneath Youghal Bay. Upon such a slope peat could be formed when the land stood higher, and if depression occurred the results would be exactly those which now appear; without the necessity for so strong an assumption as that the valley was cut down by rain and rivers to 30ft. or 40ft. below sea level at low water, during a period at which sea water was obliging enough to forego the law of seeking its own level in order to allow a deep growth of peat to accumulate.

I regret to add that I have no copy of "Rain and Rivers" to which I might refer for answers to the above questions; one of the old edition was lent to me a long time ago, but I have, unfortunately, never been able to obtain the last, although I have made several efforts to do so.

The Chalk flints may be quite according to rule, but their occurrence is peculiar in this, that they are not usually found in the detrital deposits of the south of Ireland, or other parts of the coast. How far they extend from Youghal eastwards is not, so far as I am aware, as yet discovered.

A. B. WYNNE.

BHOOG KUTCH, WESTERN INDIA, July 25th, 1868.

FOSSILS FROM BUFFALO RIVER, BRITISH KAFFRARIA.

SIR,—Permit me to explain the seeming discrepancy which occurs at pages 202 and 204 of the May number of the GEOLOGICAL MAGAZINE. At page 202, under the heading "Explanation of Geological Sections," the 800 feet refers to the height at which marine shells have been *observed*, (viz., St. Luke's Mission Station, Newlands, British Kaffraria). At page 204, under the heading "List of Fossils," the 220 feet refers to the height at which the *specimens sent were obtained*, (viz., Panmure, British Kaffraria). GEO. M'KAY.

EAST LONDON, CAPE OF GOOD HOPE,
26th June, 1868.

THE PLEISTOCENE FRESHWATER DEPOSIT AT HACKNEY DOWNS.

SIR,—My attention has only just been directed to a statement by Mr. Alfred Tylor, which appeared in the GEOLOGICAL MAGAZINE, August, 1868, p. 392, in reply to which I can only say that Mr. Tylor must have been misinformed, as I never received the series of specimens referred to from Mr. Skertchly, nor have I the pleasure of knowing that gentleman. The species of Land and Fresh-water Mollusca enumerated in the Natural History Repertory, were collected by myself in company with my friend, Mr. J. W. Bailey, of Fenchurch-street.

Had they been given me, as stated by Mr. Tylor, I should not have committed myself by publishing the list without first obtaining Mr. Skertchly's permission, and without due acknowledgment. I must ask you, therefore, to insert this, in correction of Mr. Tylor's statement, which is erroneous.

GEORGE J. SMITH.

ISLINGTON, September 5, 1868.

ORMEROD'S GEOLOGICAL INDEX.

A Second Edition of this work, including the papers contained in the Quarterly Journal for 1868, will shortly be published. Geologists are requested to communicate notices of any errors or omissions that exist in the first edition to the author, at the following address,

G. W. ORMEROD, Esq.,
Chagford, Exeter.

FOSSILS FROM THE COAL-MEASURES.

SIR,—I have recently collected, or had forwarded to me, thousands of specimens of fossil jaws, teeth, scales, spines, ribs, vertebræ, and other fish-remains from the Low Main Coal Shales of Northumberland.

As a matter of course, several of the specimens are duplicates, and are not required for the cabinet. I shall therefore have great pleasure in forwarding a tooth or scale to any of your readers who will send me a stamped and addressed parchment luggage label.

The fossils collected are for the most part of the following genera:—*Rhizodus*, *Megalichthys*, *Rhizodopsis*, *Ctenodus*, *Ctenoptychius*, *Pleuracanthus*, *Gyracanthus*, *Strepsodus*, *Acanthodopsis*, etc., myriads of *Entomostraca*, and a few reptile remains.

T. P. BARKAS.

NEWCASTLE-ON-TYNE, September 8, 1868.

DISCOVERY OF *BOS PRIMIGENIUS* IN THE LOWER BOULDER-CLAY OF SCOTLAND.

SIR,—In my humble opinion, it is doubtful if Mr. Geikie is correct in placing the discovery of the above fossil in the true Till or Lower Boulder-clay of Scotland.¹ He says that "the fossil was imbedded some few feet deep, in a soft clay or mud, interlaminated with lines and beds of sand, and occasional layers of fine gravel." Mr. Geikie takes this bed as being intercalated, with the Lower Boulder-clay, whereas the Lower Boulder-clay rises up through this stratified bed, (if I may so speak), throwing it out altogether, for more than one hundred yards in the cutting,—a fact that Mr. Geikie has overlooked, both in his sketch section, Fig. 1, and in the letterpress description. This has led him to consider the clay that underlies the stratified bed as identical with that which overlies it. They are certainly distinct. The clay that is seen rising from under the stratified bed is the true Till; and consists of a tough dark blue clay, full of stones and quite free of sand. It is seen rising from under the stratified bed, near the place where the fossil was found, and occupying the

¹ See Mr. James Geikie's article in the September Number of the GEOLOGICAL MAGAZINE, p. 393 (with two woodcut sections).