

spot, and found our anticipations more than realized; for it turned out to be the tusk of a "great Mammoth," such as is very rarely found in this country.

The specimen is in a fine state of preservation, and measures 2 feet in circumference, and 9 feet in length. It lay at the bottom of a very old drift-gravel, and on the true bed of the Keuper marl, at a depth of 11 feet from the surface.

It is very interesting to find Mammoth bones on the virgin-surface of an old formation, as it establishes to my mind, beyond a doubt, the existence of the Mammoth before the "drift."

Some have doubted whether the Mammoth really was an inhabitant of this country; but this has been long set at rest; and here is undoubted evidence of the fact of its local existence. The specimen is very little water-worn.

I do not know that any further remarks are necessary. The specimen in the course of this day will be lodged in the Leicester museum.

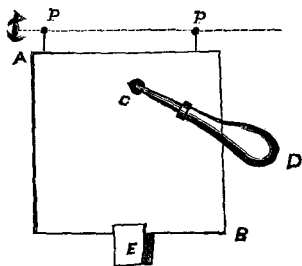
I am, dear Sir, yours very truly,

FRANCIS DRAKE, F.G.S.

30, Market St., Leicester, 27th Oct., 1863.

#### *Geological Section Making.*

SIR,—Perhaps you may think it worth while to mention in your journal a very simple contrivance which I devised for the purpose of laying down the contour of a piece of ground, of which I desired to make a geological section. From its extreme simplicity, combined with very tolerable efficiency, I think it would often be found useful where mathematical exactness is not required.



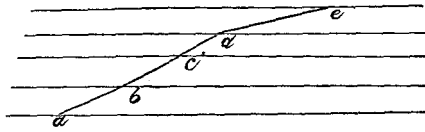
*AB* is a square piece of board, —accuracy of form is immaterial. It may be of any size, say six inches square. *E* is a piece of lead, bent so as to embrace the lower edge, and capable of being made to slide tightly along it. *D* is an awl passing loosely through a hole at *C*. *PP* are two common pins, stuck into the upper edge of the board.

To adjust this instrument, it is only necessary to slide the weight *E* along the edge of the board, until the heads of the two pins rest in a horizontal line, when it is suspended by the handle *D*. This may be done either by fixing a mark at the level of the eye, and looking at it from a little distance along the line *PP*, taking care that the feet are on the same level as when fixing the mark, which may be ensured by standing on the shore of a pond or the sea; or else the adjustment may be effected by sliding the weight until the *same* point of a distant object is seen along the line *PP*, when the two pins are interchanged by bringing first one and then the other next the eye.

The proper position of the weight having been determined, the instrument is ready for use.

Suppose the contour of a hill desired. Take your stand at the lowest point at which the section is required to commence; hold one of the pin-

heads near the eye, and notice the point in the hillside where the line *PP* falls; pace to the spot, and note down the number of steps. Start afresh from that point to the next similarly determined, and again noting the number of steps; and so on. Thus on your note-book you will have entered a series of numbers; and that, in each of the intervals so noted, you have ascended by the height of your own eye above the point at which you started. Should the hillside be too steep to pace it, a measuring tape may be used. By ruling on a piece of paper parallel lines at the distance of the height of your eye to the scale you wish to use, it is extremely easy to lay down the contour of the hill from these notes.



I remain, Sir, faithfully yours,  
O. FISHER.

Elmstead, Colchester, November 3rd, 1863.

## BRITISH ASSOCIATION MEETING AT NEWCASTLE.

(Continued from p. 395.)

### ON SOME FOSSIL AND RECENT FORAMINIFERA COLLECTED IN JAMAICA BY THE LATE MR. LUCAS BARRETT, F.G.S.

BY PROFESSOR T. RUPERT JONES, F.G.S., AND W. K. PARKER, ESQ.

In 1862 Mr. L. Barrett, F.G.S., late Director of the Geological Survey of the West Indies, gave Messrs. Jones and Parker some fossil and recent Foraminifera from Jamaica, comprising a few new forms—some that were previously but little known, and some in finer condition of growth than usual. The recent specimens, from their ascertained habitats, illustrate, to some extent, the conditions under which the fossil forms were deposited.

One sample of these fossil Jamaican Foraminifera consisted of several specimens of *Amphistegina vulgaris*, and another of a few of the same species, with one *Textularia Barrettii* (a new variety of *Textularia*). No locality nor geological horizon was indicated for these. A third sample, from "South Hall Cliff," consisted of two large specimens of *Vaginulina legumen*. Fourthly, a much larger series of Foraminifera, from the "Pteropod-marl" of Jamaica, affords *Nodosaria Raphanistrum*, *Dentalina acicula*, *Vaginulina striata*, *Frondicularia complanata*, *Cristellaria calcar*, *C. cultrata*, *C. rotulata*, *C. Italica*, *Orbitolina vesicularis*, *Bulimina ovata*, *Cuneolina pavonia*, *Vertebralina striata*, and *Lituola Soldanii*. These, however, can be regarded only as an incomplete Rhizopodal fauna.

From the recent Foraminifera obtained by the late Mr. Barrett from different sea-zones, between 15 and 250 fathoms, on the Jamaica coast, we learn that *Amphistegina vulgaris*, *Textularia Barrettii*, *Dentalina acicula*, *Frondicularia complanata*, *Cristellaria*, and *Lituola Soldanii* indicate at least 100 fathoms, and probably more, as the depth at which the Pteropod-marl and the *Amphistegina*-beds were deposited in that region. Pteropods are found in some sea-muds at similar depths.

Of the recent Jamaican specimens (evidently only the larger and more