

sions to myself of satisfaction at Mr. Foot's style of work, in the autumn of 1854, when we were all together in the neighbourhood of Bantry Bay.

There is no mention in your notice of Mr. Foot's paper "On the Distribution of Plants in Burren, Co. Clare." This paper is published in Vol. xxiv. of the *Trans. R. I. Academy*, and is accompanied by a map, which shows at once the precise localities where several rare and interesting plants occur, and the relation between their geographical distribution and the geological structure of the district.

When mentioning Mr. Foot's share in the production of thirteen of our small memoirs called *Explanations*, it should have been added that his name also appears as sole or joint surveyor on thirty sheets of our published maps, and seven sheets of sections.

I am happy also to say that the reading of his paper, containing his botanical and geological observations on a part of Norway, will not be interrupted by his death. The paper, with its illustrations complete, is now in my hands, and it will have been read at a meeting of the Royal Dublin Society before this letter can be published in your next number.—I am, Sir, your obt. servant,

J. BEETE JUKES.

GEOLOGICAL SURVEY OF IRELAND,  
51, STEPHEN'S GREEN, DUBLIN,  
4th February, 1867.

NOTE.—We are requested by Mr. J. BEETE JUKES to make the following corrections to his last letter which appeared in the February Number of this Magazine, p. 87.

At line 10 from bottom of page 87, for "break in the veins," read "break in the series;" at page 88, line 4 from top, insert a full stop after "Pilton beds, etc.;" delete full stop in line 5 from top, and substitute comma.—EDIT.

#### ON DENUDATION AND THE FORM OF THE GROUND.

*To the Editor of the GEOLOGICAL MAGAZINE.*

DEAR SIR,—Had my friend, Mr. Kinahan, bestowed equal attention upon the passages immediately following that which he quotes from your January number, or its plates, he might, perhaps, have gathered therefrom that I had not forgotten such instances as the coast islands of Cork and Kerry. The inference would have been more evident than that, because these islets are now acted upon by the sea, isolated pillars of rock must have been formed by marine denudation. Inverting the case he puts, and supposing any rain-worn pinnacle depressed to form an island, it follows that this situation might sometimes prove but little or nothing with regard to the formation of "isolated rocky pillars" by subaerial or marine denudation.

Leaving aside elevation and depression, as remotely connected with the cases in point, some of the island rocks named are of so great a height (about 600 ft.), that the sea can only reach their most denuded portions in the form of rain-like spray, and it will be admitted that rain does sometimes occur on that coast.

I have heard, indeed, that a water-butt was washed by storm breakers from a considerable height (about 350 ft), near a lighthouse

on the Great Skellig, yet could not rely upon an uncorroborated report as proof of the vertical distance at which the sea can occasionally act upon the weather side of a lofty rock. Its agency in forming some isolated pinnacles has not been denied.

Truly yours, A. B. WYNNE.

LONDON, February 5th, 1867.

#### FISH IN THE DEVONIAN (NOT OLD RED) ROCKS.

To the Editor of the GEOLOGICAL MAGAZINE.

SIR,—As there is still much misapprehension afloat as to the value of the fossil evidence in the case of “Devonian *versus* Old Red,” it is desirable to clear up any doubtful points. I believe it is admitted pretty generally that the greater part (not all, of course, of the so-called Carboniferous shells, crinoids, &c., in our Devonian lists are erroneous identifications, made upon very imperfect specimens. At least I can answer for this in the greater part of those which have come under my review (see the revised names in the lower gallery, Museum P. Geol. Jermyn-street, and their catalogue); and Mr. Davidson has shown us the same thing in his careful monograph of the Carboniferous Brachiopods. There are a few exceptions, and, of course, these multiply in the highest beds.

But what about the Fish? It has been shown by many authors that Old Red fish occur in Devonian strata, and Devonian shells in Old Red Sandstone; and in a memoir laid before the Geological Society (Quart. Jour. Geol. vol. xix., p. 474, *et seq*), some years back, I endeavoured to collate these scattered evidences, and add others from personal survey, which would show that the *Upper Devonian* fossils were found in *Upper Old Red* rocks; *Middle* Old Red fish were found in *Middle* Devonian; and, to complete the evidence derived from fossils, a *Cephalaspid*, from the undoubted *Lower Devonian* of the Rhenish provinces shewed that *Lower* Old Red meant *Lower* Devonian. In the absence of any physical evidence that the strata are not contemporaneous, it seemed to me that these fossil data were sufficient for the affirmative side of the question.

But it is argued by some that *Cocosteus*, found in the Eifel and in Russia with the shells, is, with us, as much an Upper as a Middle Old Red form. And, moreover, that while *Holoptychius* (an undoubted upper Old Red fossil), has been found in the N. Devon rocks in its proper place. *Phyllolepis* has occurred in the lowest portion of the S. Devon series, near Torquay. Does any one know exactly where the specimen is on which this decision is founded? It used to be said that at Polperro, in Cornwall, in the Lower Devonian beds, fish were common. Professor M'Coy determined these to be sponge remains. Has any competent authority seen the *Phyllolepis*, and is the locality certain?

J. W. SALTER.