between the Howrat Toll-bar and the lofty escarpment of Carbon-

iferous limestone a short distance above the town of Dalry.

3. Notes on some Sections in the Old Red Sandstone and Ballagan Series in Dumbuck Glen. By Mr. John Young.—Mr. Young stated that the sections exposed in Dumbuck Glen belong to the Old Red Sandstone, and to a series of thin-bedded limestone strata, locally known as the Ballagan beds, from being typically developed at the Spout of Ballagan, near Strathblane. The latter are by some geologists considered to be of Carboniferous age, and by others as belonging to the Old Red Sandstone. The only evidences of organic remains yet found in them are fragmentary fish scales, plants, and annelide impressions.—Glasgow Herald, 19th January, 1867.

LITERARY AND PHILOSOPHICAL SOCIETY, MANCHESTER. January 8th, 1867. Edward Schunck, Ph.D., F.R.S., etc., President, in the Chair. Mr. Binney, F.R.S., F.G.S., exhibited two remarkable fossils, discovered by Mr. Joseph Tindall, of Thomas-street, Huddersfield, in the Lower Coal Measures near that town. One was an insect, and, according to Mr. Tindall, belonged to Dr. Dawson's genus Xylobius and probably to his species Sigillaria. It was found in an old deep mine at Cooper Bridge, and is the first instance of a specimen of that genus having been met with in England.1 The other bore some resemblance to the pupa-state of a Coleopterous insect, not much unlike the pupa of a nut-weevil or some such insect. It was found in the Cinderfield Dyke Pit, at Bradley, near Huddersfield. These specimens give us evidence of the former existence of insect life during the Carboniferous epoch which a few years since we should scarcely have expected; but after the discovery of a fossil spider in the German Coal-measures, scarcely to be distinguished from a recent genus, we must expect great additions to be made to the Carboniferous fauna, as doubtless the rich and luxuriant vegetation of that remote period would afford food and shelter for numerous insects.—Proceedings—Lit. and Phil. Society. —Vol. vi.—No. 8—Session 1866-7.

## CORRESPONDENCE.

## THE LATE MR. F. J. FOOT.

To the Editor of the Geological Magazine.

Sra,—Will you allow me to correct some inaccuracies in your obituary notice of my late lamented colleague, Mr. F. J. Foot.

The date of his appointment to the Survey was August 1st, 1854, not 1856.

Sir Henry De la Beche died on April 11th, 1855, but continued his annual visits to Ireland to the last, and I well recollect his expres-

<sup>1</sup> A specimen of Xylobius, discovered two years ago, at Kilmaurs, near Glasgow, by the late Mr. Thomas Brown, was described by Mr. Henry Woodward, before the Glasgow Geological Society, on the 17th January, 1867.—See Report of that Society, at p. 130 of the present Number—Edit.

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. Beefe 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 rainworn 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