As some of the features of this district (which Mr. Salter properly suggests, are deserving the attention of Geologists), have already had some attention paid them by myself, you will, perhaps, allow me to say that, in 1859,<sup>1</sup> I described the various beds of which this hill is made up, noticing some of their peculiarities and rarer fossils. In 1863, in a paper of mine on "The Bala Limestone of North Wales and its associated beds,<sup>‡</sup>" I classed the Upper Limestone of the hill as "Hirnant Limestone," as Mr. Salter now proposes.

In a section which accompanied that paper, I represented the overlying schists "Pale shales very fossiliferous," as I called them (the No. 5 of Mr. Salter's letter) as conformable to the underlying beds. In a letter which I afterwards received from Professor Sedgwick, that gentleman-the value of whose labours in North Wales I estimate very highly-said, "the order of superposition is quite clear, yet there is, I believe, a break in the order of succession;" and he adds I should be grateful to you for more information respecting the group of "pale shales very fossiliferous." These remarks led me to review the matter, and the result was that I found the "pale shales of the Pentre hill and round about, to be unconformable to the Bala group below, as Mr. Salter now wagers that, upon examination, they will be found to be; and if your readers will refer to the GEO-LOGICAL MAGAZINE for 1865, page 344, they will find, in a section of the beds referred to, that I have named the uppermost band of limestone, "Hirnant Limestone;" and that I have represented these pale shales of the Pentre as unconformable to those below.

Mr. Salter truly says, that working this district is like working a museum; and I may mention, in addition to the fossils he enumerates, a beautiful one once examined and named by himself *Ischadites tessellatus*, which I quite expected to see in the excellent plates of fossils that adorn Professor Ramsay's admirable memoir on North Wales.

Plenty yet remains to be done there, and I promise any geologists who may be willing to hammer for a day or two about Mynyd Fron Frys, a charming time of it. If gentlemen, who would like a joint meeting for the purpose of more fully exploring the spot, will communicate with me, I shall be glad to make the necessary local arrangements, and to join them on the occasion.

I am, Sir, yours very truly,

D. C. DAVIES.

CONEY-GREEN HOUSE, OSWESTRY, May 3rd, 1867.

## FISH IN DEVONIAN ROCKS.

To the Editor of the GEOLOGICAL MAGAZINE.

SIR,—Can you favour me with space for a few friendly remarks on the P.S. of Mr. Salter's letter in your May number,

The fish defence spines in my collection are two in number, one from Looe Island, and one from Looe; not both "from the

<sup>1</sup> Vide Proceedings of the Oswestry Field-club, pages 32-35. <sup>2</sup> Ibid., page 71. See also for section, Proceedings of the Liverpool Geological Society, 1863-4; for list of fossils, ibid., 1864-5.

284

island." It will be found, by turning over the Reports of the Brit. Assoc., the Trans. Roy. Geol. Soc. of Cornwall, and the "Geologist," that my "valuable data" have not been "long buried." Will Mr. Salter be so good as to say what is the evidence that "near Teignmouth we have the Upper Devonian beds ?" I have no doubt that his reply will be that pebbles containing Clymeniæ are abundant in the Triassic Conglomerate at Shaldon, near Teignmouth, and that the Upper or Clymenia limestone must have existed close by. This, however, if admissible, would be evidence of not what is, but what But is it admissible? The Clymeniæ are found only in wellwas. rounded pebbles, which have clearly travelled long-perhaps far; whilst the ordinary materials are but sub-angular, and are of immediate derivation. The Chesil beach at Portland contains, it is said, pebbles from the Torbay limestones. They must have travelled at least thirty-five miles, more likely double that distance, since, in all probability, they followed the sinuosities of the coast; a fact which suggests caution in drawing inferences from pebbles respecting the WM. PENGELLY. whereabouts of their parents.-I am, etc.

TORQUAY, May 2, 1867.

## FOSSIL INSECTS IN THE CARBONIFEROUS ROCKS.

## To the Editor of the GEOLOGICAL MAGAZINE.

DEAR SIR,-I see in the March number of the GEOLOGICAL MAGAZINE that you mention the occurrence of the "Xylobius Sigillaria?" in the Upper Coal Measures at Kilmaurs, in Scotland; and in the same number Mr. Binney records the discovery of the same myriapod in the Lower Coal Measures near Huddersfield, and also the remains of a supposed Coleopterous insect. Now as the German and Belgian Carboniferous formations, especially the latter, and the American Coal fields have yielded in places numerous insects, and our own occasionally, I have very little doubt that a more careful search would largely increase the number; and I hope the many zealous collectors in our Coal-districts will keep a sharp look-out for any Annulosa which they may fairly expect to find associated with the plants in the shales and ironstones, especially in the latter, where they usually occur. The fine Curculionideous beetle in ironstone from Coalbroke Dale, and the scorpion from Cholme in Bohemia, long since figured and described by Buckland in the Bridgewater Treatise, are well known. There is also a fine wing of a "Corydalis" in the British Museum, from the same locality, figured and referred to in Murchison's "Siluria." I have in my collection a wing of a gigantic Neuropterous insect, in ironstone from the Derbyshire Coal Measures. Professor Dana, in the "American Journal of Science" (vol. xxxvii. January, 1864), describes and figures a remarkable fossil insect nearly entire, which he states to be like the Semblids among the Neuropters, and especially the Chauliodes, and a mutilated wing of another Neuropter, which approximates to the genus Hemerobius. Both these specimens were discovered by Mr. J. G. Bronson in the Carboniferous beds at Morris, Illinois. Sir