

UPPER DEVONIAN IN S. DEVON.

To the Editor of the GEOLOGICAL MAGAZINE.

DEAR SIR,—As my friend Mr. Pengelly asks me a question, having answered mine, it is but courtesy to reply. In speculating on the possibility of explaining the presence of these fish remains in the neighbourhood of Torquay and Looe, I said that the Uppermost Devonian (Upper Old Red) might occur in unconformable patches round the older rocks. We actually have the Upper Devonian at Newton Bushell. Phillips long ago figured the Upper Devonian *Phacops lævis* from thence, and Mr. Pengelly himself explained the way in which, having coiled themselves comfortably for a nap, they were smothered and decapitated in their beds. Newton Bushell is about as near to Torquay as Teignmouth; so, if my friend will not admit the presence of *Clymenia* pebbles at Shaldon to be a proof that the Upper Devonian lies immediately beneath the New Red there, I am sorry for him, but I cannot stop to argue the point. He may take Newton Bushell instead. Only, of course, the neighbourhood of Upper Devonian does not prove the neighbourhood of Uppermost Devonian,—it only makes it more likely.

My friend certainly told me the fish defences were from Looe Island; it now appears that one of them only came from thence. Will he describe and figure them, and give us the whole of the scattered (not to say buried) information in a tangible form?

Yours truly,

J. W. SALTER.

DISTRIBUTION OF WHITE SANDS AND CLAYS SUBJACENT TO THE BOULDER-CLAY.

To the Editor of the GEOLOGICAL MAGAZINE.

SIR,—I shall be much obliged if you will allow me to add a word or two to the excellent paper in your June number, by Mr. Maw, on "The Clays and Sands subjacent to the Boulder-clay." I was able a few months ago to pay a hurried visit to a large pit in these deposits at the foot of the Weaver Hills, I believe the Ribden Pit, and one thing struck me very forcibly which seems to have escaped the notice of Mr. Maw and Mr. Edwin Brown. The mass of the materials seemed to me to be undoubtedly *derived from the Pebble beds of the Bunter, and not from Millstone Grit*. The description written on the spot in my note-book runs thus:—"The deposit consists of unstratified masses of clean mottled sand, incoherent pebble-beds, and little patches of clay, mixed together in the most confused manner. With the exception that the pebbles are all of quartz-rock, instead of flint, the mass is exactly like one of the mixtures of brick-earth, gravel, and sand, that lie in pipes in the Chalk." In both cases it seems that the underlying limestone has been dissolved by water, and that masses of the rock alone, Lower Tertiaries, or Bunter-beds, have been gradually let down into the hollow, while the insoluble earthy part of the limestone remained behind and furnished the clay.

If this view be correct, the deposits may be of any age later