

1st. A shock at Valparaiso, noticed in the "Illustrated London News," for January 5th.

2nd. The great earthquake at Algeria, on the 2nd inst., through which the villages of Chiffa el Affran, El Ain Ben Rasmi, and Mouzaïaville were almost destroyed, and the town of Blidah greatly damaged. At Mouzaïaville 37 people were killed and 100 injured, and other mischief done.

3rd. A second shock in Algeria on the 4th January.

4th. A prolonged shock, experienced at San Salvador.

5th. An earthquake causing loss of life and property, and destroying Lixuri, at Cephalonia, on the 5th of February. This shock was also felt at Zante and Patras.

6th. Two shocks felt at Malta, during a calm, on the 4th February.

Yours, etc., L. C. CASARTELLI.

THE CRESCENT, SALFORD,
February 18, 1867.

FISH IN THE DEVONIAN (NOT OLD RED) ROCKS.

Mr. Pengelly has the pleasure to inform Mr. Salter, in reply to the queries contained in his letter which appeared in the GEOLOGICAL MAGAZINE for March last (p. 134), that the information he desires has already been published in the Reports of the British Association for 1862, Trans. Sec., p. 85; in the Geologist, vol. v. p. 456; and in the Trans. Roy. Geol. Soc. of Cornwall, vol. vii. p. 441. The specimen (which consists of a single scale of *Phyllolepis*) is in Mr. Pengelly's private collection.

It was seen and examined by the late Dr. S. P. Woodward, and by Professor Owen, and identified by Mr. W. Davies as the *Phyllolepis concentricus*, of Agassiz, with the figure of which species it agrees well.

The fossil was found by Mr. Alfred Pengelly in the gritty slate, at the foot of the cliff, between Meaford beach and Hope's Nose, Torbay.

Mr. William Pengelly was present, and assisted his son in extracting it from the matrix.

LITHODOMOUS PERFORATIONS IN LIMESTONE CLIFFS.

With reference to Mr. D. Mackintosh's letter on Denudation,—which appeared in the GEOLOGICAL MAGAZINE for March, 1867, pp. 136–139,—Mr. Pengelly calls attention to the fact of his having read a paper in Sept. 1864, "On Changes of Relative level of Land and Sea in South-Eastern Devonshire, in connexion with the antiquity of man" (which under the title of "Early Man in Devonshire," was printed, nearly in full, in the "Reader" of Nov. 19, 1864).

Mr. Mackintosh's earliest paper on Denudation appeared in the GEOLOGICAL MAGAZINE, Vol. II. April, 1865, p. 154, and therefore subsequent to Mr. Pengelly's communication.

Mr. Pengelly has no doubt the perforations mentioned by him in his paper (quoted above), to which Mr. Mackintosh refers in his letter, were drilled by marine mollusks; but he has not ventured to refer them to any species of *Pholas*.

[The Editor has had the pleasure, on three occasions, to see and examine Mr. Pengelly's interesting rock-specimens, exhibiting Molluscan borings, and he has no hesitation in referring them to *Pholas*, as they agree perfectly with specimens in the late Dr. Woodward's cabinet, which still contain the valves of *Pholas* within the cavity.]

[We are requested by Mr. Mackintosh to correct his letter in our last No. as follows:—Page 137, line 16, for “planes,” read plains—line 30 for “These,” read Those; page 138, line 1 (in notes) for “these,” read those—line 4 (in notes) delete “which”—line 16 (in notes) for “duallogical” reasoning, read analogical reasoning.]

AGE AND POSITION OF THE DRIFT DEPOSITS OF THE EASTERN COUNTIES.

To the Editor of the GEOLOGICAL MAGAZINE.

SIR,—You will, perhaps, allow me to explain, and correct, an opinion which Mr. Maw, in his paper in the last number of the Magazine, has attributed to me.

He quotes (page 99) my expression that the Chillesford beds are evidently part of the Middle Drift; but he seems to have overlooked a qualification of that opinion which I subsequently made. When the remarks which Mr. Maw quotes were written, I had traced the Till and Contorted Drifts of the Cromer coast (*a* and *b* of Mr. Maw's fig. 1), from the Weybourne extremity of the coast section into a marl, which passed inland under the Middle Drift (or bed D of the figure), until I found it thin out against the Chalk, before the Crag district was reached. Hence, as the Middle Drift was a capping bed common to these beds, the Crag, and the Chillesford clay, alike, I was induced from the appearance of the latter at Chillesford, Sudbourn, and Orford, to regard them as belonging to the lower part of the Middle Drift formation. Subsequently to this, however, I succeeded in tracing the beds of the Cromer coast from the other, or Hasboro', extremity of the coast section (which I had previously only traced under the Middle Drift sands as far as North Walsham) completely over the Chillesford clays, and the Fluvio-marine Crag of Norwich.

In doing so, I availed myself of the labours of Mr. Harmer, of Norwich, who systematically worked out and mapped a considerable area on the east and north of that city. This gentleman found that the Green Clay worked for bricks, into which the Cromer beds pass from Hasboro', by North Walsham, to the Bure Valley, had an extensive spread beneath the Middle Drift on the north of Norwich; and with it passed under the Upper Drift, at Trowse and Arminghall, on the south of the city. This green clay in the Bure Valley is overlaid by a sand containing pebble beds, which, at Coltishall and Wroxham, yields a small proportion of the shells of the Fluvio-marine and Red Crag, and of the Chillesford bed. Mr. Harmer and myself found this green clay to pass over the Crag, a pit of it occurring on the hill above the Thorpe pit, and close to it.