

THE BLOODY STONE.

To the Editor of the GEOLOGICAL MAGAZINE.

SIR,—The paper by Mr. Green in the last number of the GEOLOGICAL MAGAZINE on the supposed ice-marks on the Bloody Stone, between Cromford and Bonsall, led me, as Mr. Mackintosh's letter had led him, to pay a visit to the spot, in hopes of discovering something more. My hopes in that respect were however not realised; but I saw what Mr. Green saw, and tried to take some rubbings from the smoothest parts of the grooved rock I could find. I send them to you with this, in case they should prove an additional help, in the absence of better, towards solving the question whether the markings are glacial or not. The three large rubbings are from different parts of the surface marked *F* in Mr. Green's ground-plan, two of them (the two smaller) were taken close to where the line *HK* cuts the rock. The small rubbing is from a fragment of the rock near *D*, it is well polished, and the grooves were nearly at right angles to the footpath. I have sketched in the rest of the specimen in order to show the distinct division between the chert and the Limestone. The grooved rock could be traced some way beneath the path by clearing away the earth and stones, and more could be seen in other places by removing the turf. I could discover no further traces of ice-work in the neighbourhood. A rough observation taken with a pocket aneroid gave about 246 feet as the height of the Bloody Stone above the toll-gate at the foot of the bridle-path to Bonsall, and I should think the Stone would be about 300 feet above the Derwent. May the rounded form of the hill be due to ice-work? The opposite side of the dale consists of steep and well-wooded Limestone cliffs. A small stream widened into ponds runs along the bottom of the dale. The bearings laid down on the rubbings are magnetic.—I am, &c.

J. MAGEUS MELLO, M.A., F.G.S.

ST. THOMAS' PARSONAGE, BRAMPTON,
CHESTERFIELD: Oct. 7, 1865.

NOTE.—We have received the rubbings of ice-markings referred to above, and also a general sketch of the locality, and regret that want of space does not admit our reproducing them here. The rubbings of the striae present all the appearance of having resulted from ice-action.—EDIT.

GLACIATION IN DEVONSHIRE.

To the Editor of the GEOLOGICAL MAGAZINE.

DEAR SIR,—In connection with the interesting record made by Professor Jukes in the October number of the GEOLOGICAL MAGAZINE, I would briefly notice the existence, in North Devon, of what appears to be an extensive deposit of Boulder-clay. At the hamlet of Roundswell, a mill to the SW. of Barnstaple, a well was sunk in 1862 by Mr. J. Bowden through a thickness of 40 feet of clay, the

great bulk of which was devoid of anything like stratification, exceedingly tough and smooth, and in all respects resembling Boulder-clay, excepting that it is browner in colour than that occurring on the North Welsh coast.

At a height of from 30 to 40 feet above the sea, it rests on a continuation inland of the raised shingle-bed on the banks of the river Taw described by De La Bêche. The clay near Upper Roundswell appears to be nearly 90 feet, and from this point, which is given 115 to 120 feet above the sea, it gradually falls away, and thins out to nothing towards the east and west. The clay has for many years been worked near Fremington towards the western extremity of the mass for the manufacturing of earthenware. Mr. E. B. Fishley, the proprietor of the pottery, showed me several large blocks that had been found in the middle of the deposit; they were unaccompanied by smaller stones. One of them, a mass of Basaltic trap $3\frac{1}{2} \times 2\frac{1}{2} \times 2$ feet, weighing many hundredweights, was, at the time of my visit in March 1862, to be seen in the hamlet of Combrew, and a smaller mass of Amygdaloid trap in the yard of Mr. Fishley's pottery. Neither of them bore any marks of glacial striation; but they must have come either from the confines of Dartmoor, a distance of at least twenty miles, or from South Wales; and it appears impossible to account for their position, except on the theory of ice-transport. A fuller description of the Fremington deposit will be found at page 445 of the 20th vol. of the Journal of the Geological Society.—I am, &c.

GEORGE MAW.

BENTHALL HALL, NEAR BROSELEY: Oct. 10, 1865.

THE PHOSPHATE-BED AT FOLKESTONE.

To the Editor of the GEOLOGICAL MAGAZINE.

SIR,—Mr. Seeley, in his paper on the 'Sequence of Rocks and Fossils,' speaks of the '*phosphate-bed* at Folkestone, as being in all probability of plant origin.' As from observation I believe it to be of animal origin, I send you the following facts.

Below the phosphate-bed is a seam of *Ammonites mammillaris*, two or three inches thick, resting on the Lower Greensand. Above the said bed is a seam of *Ammonites dentatus* and *mammillaris*; the two seams and the phosphate-bed forming the junction-bed of the Greensand and Gault.

This junction-bed contains rolled water-washed *Ammonites*, with nodules of phosphate adhering to them; drifted wood, containing *Pholas*, *Teredo*, *Fistularia*, vertebræ of *Ichthyosauri*, and the phosphatic nodules, which, in nine cases out of ten, are plainly Molluskite, generally *Rostellariæ* and *Pterocera*. On the little phosphate seams between the beds of the Folkestone Gault I can give further detail, if of interest.

Sir, yours, &c.

C. E. R.

BEAMINSTER.