

to a geologist, they being usually covered up by sand. I also saw, in the Chichester Museum, a rolled elephant's tooth, found somewhere near Selsey, which I take to belong to *E. meridionalis*. I believe the common Elephant of these deposits to be *E. antiquus*. This association of species agrees with that in the Forest-bed at Cromer. I dare say you know that there is a great part of a very fine individual of *E. antiquus* in the Chichester Museum.—Yours, &c.,
O. FISHER.

MALTESE BONE-CAVES. Extract from Letter, dated August 4, 1864, from Dr. A. LEITH ADAMS, Surg. H.M.S. 22nd Reg., F.G.S., &c.

‘NEXT winter I mean to work especially at the *Elephas Melitensis*, and draw up a concise account of the deposits in which the remains have been found, together with a complete summary of all the specimens of the animal yet discovered. I have in my own possession a goodly collection already, mostly brought together by dint of very hard work, comprising some eight or nine specimens of teeth of different individuals; an upper jaw with teeth in place; portion of a tusk, 8 inches long by $6\frac{1}{2}$ in greatest circumference, composed of beautiful ivory; vertebræ; a scapula; fragments of long bones, &c. No doubt these islands (Malta and Gozo) have been re-elevated. We find all their large Mammalia, such as the *Hippopotamus*, &c., either in breccias, in fissures, or in stony soils at low levels in hollows and depressions, where, from the sub-angular fragments (many scored deeply, and a few well-rounded and even polished, are distributed throughout the red earth in gaps and hollows, the bigger stones being at the bottom), it is clear that in all probability they had been washed by the sea downwards as the land was rising or sinking. I look to the situations of the alluvial gravels as significant; more especially as the denudation of the soil is complete everywhere on slopes; and, excepting in hollows and sheltered nooks, there is certainly no alluvial deposit in the island (I mean *in situ*: man has carried it to any height).

‘No doubt our Elephant is distinct; my collection shows that; as I have teeth of all ages almost. They are much fractured, however, and have evidently been knocked about a good deal. One skeleton was found *in situ*; that is, so far so that I collected parts from the

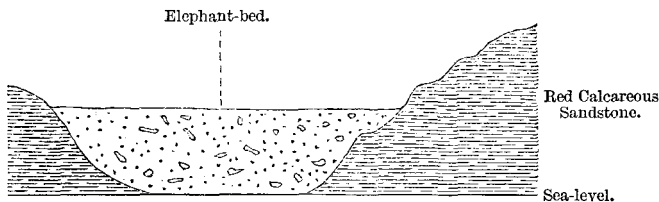


Fig. 1.

tail-bones to the skull on a cutting along the face of a bank about three yards in length. The abundant remains of the animal in one hollow, of the above shape (fig. 1), in the "Calcareous Sandstone" are

quite extraordinary. Remains of as many as seven individuals were found at divers levels on the face of the bank, which is about 30 feet in perpendicular height, and about 100 feet in its greatest breadth. Several shells (all, I think, belong to *Helix*) were also found. I have sent them to Mr. Woodward. From the manner in which this gap is filled up with red earth and rounded stones, there is every likelihood that all had been washed from higher lands; the bones are very fragmentary. There was no trace of man here; but a stone implement was discovered forty years ago in a fissure filled with clay, and a very clear description of the discovery has been preserved.

'I think I mentioned in a former letter that I had discovered a cave on the coast of Malta containing abundant remains of the fossil *Myoxus* I had formerly described from another cavern in the neighbourhood, containing also *Hippopotamus* and Land-shells. The vein-cavern is situated on the same terrace-cliff with the last-named, and is firmly packed with red earth and stalactite, so that it requires a great amount of labour to clear it out. I have penetrated only about 6 feet inwards, making a section 14 feet high and about 8 feet square. I give a rough sketch of the deposits (fig. 2). I wish very much

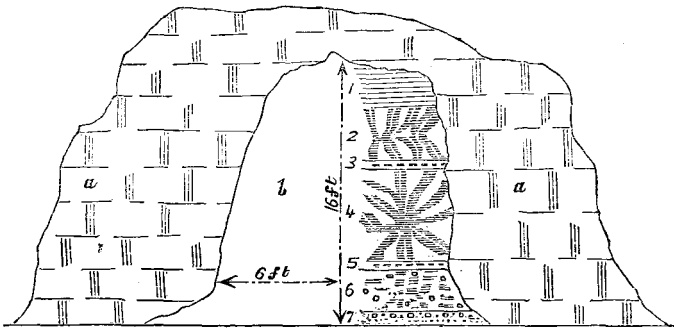


Fig. 2.

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| 1. Stalactite. | 2. Red loam and stalactite. |
| 3. Remains of <i>Myoxus Melitensis</i> , Birds' Bones; with <i>Helix</i> , <i>Clausilia</i> , and <i>Bullimus</i> (all existing shells). | 5. Yellow loam. |
| 4. Red loam and stalactite. | 6. Red loam, with a few nodules of stalactite, and abundant remains of a Rodent (undetermined). |
| 7. White stalagmite, containing a tooth of <i>Carcharias megalodon</i> and Fish-bones. | |
- a. Lower Limestone of Malta. b. Undisturbed portion of the cave.

to clear the whole out, as I feel confident that there will be found some interesting remains; but the expense is more than I can afford. Possibly the cavern runs many yards inwards; and nothing could be more suitable for the preservation of organic remains; and the fact of finding Fish-bones and the serrated tooth of the great Shark (common in the Calcareous Sandstone) on the floor would point to something like human occupation. If I could obtain a grant from any of the Museums or Societies, the cavern might be cleared out, also the other mentioned gap, where I have found so many remains

of the little Elephant; I believe that £30 would do for the two; of course the fossils would be sent home, and a full description of the proceedings.'

THE PRESENT STATE OF THE BRIDLINGTON CRAG.

To the Editors of THE GEOLOGICAL MAGAZINE.

MR. S. P. WOODWARD has stated, in his paper on the Bridlington Crag, upon the authority of Mr. William Bean, of Scarborough, that 'the whole mass has been entirely removed or built over,' and that 'the only remaining chance of obtaining the fossils consists of dredging in the harbour.' I beg to state that, during the prevalence of south-east winds, large tracts of the Bridlington Crag are exposed by the removal of the sand and gravel which generally lie over it from low to high water-mark, leaving it bare sometimes for weeks together. At other times, however, it remains covered up beneath thousands of tons of sand and gravel; and I have waited for years, hoping the sea would remove the surface, but it did not do so. At length, in January last the tide laid bare about 150 yards of the Crag for nearly a fortnight, and I collected a good series of fossil shells, &c. Only the upper portion of the deposit immediately under the cliff has been walled up; all the rest can be seen at intervals when exposed by the sea between tide-marks. I send you a Bear's tooth which was obtained from the Bridlington Crag.*—
Yours, &c. EDWARD TINDALL.

Old Guildhall, Bridlington, 24th July, 1864.

NOTE FROM MR. S. P. WOODWARD, F.G.S., &c. &c., ON THE BRIDLINGTON CRAG.

IN my paper last month, *Montacuta bidentata* is mentioned as a Bridlington Fossil in Dr. Bowerbank's collection, on the authority of Professor Edward Forbes. I have just obtained the very specimen, and it is labelled on the *back* of the tablet 'Nar Valley' (Norfolk), where it was found by Mr. C. B. Rose.—S. P. W.

MISCELLANEOUS.

DISCOVERY OF AN AÉROLITE, AND VISIT TO A PETRIFIED FOREST IN NORTHERN QUEENSLAND. — At the monthly meeting of the Queensland Philosophical Society, on the 2nd of February last, Mr. Le Gould read a paper entitled 'Geographical and Geological Observations in Northern Queensland.' We extract the following:—

Mr. Le Gould says, 'When two days' march beyond the Isaacs, a beautiful stream, and the first branch of the Mackenzie River, passing along a rocky valley, covered with large ferns and some good-sized trees growing about, I came upon a large gum-tree,

* The tooth referred to is a canine tooth of the Brown Bear (*Ursus arctos*), hitherto only obtained from the fens of Cambridgeshire, &c.—EDTT.