

The intercalation of a thin red band, largely composed of anhydrous sesquioxide of iron, between beds of such different physical character, is difficult of explanation. The line of demarcation is remarkably definite, no gradation existing between the red stratum and the Gault above or the Lower Greensand below.—GEO. M.A.W.

BENTHALL HALL, BROSELY, *May 28th*, 1869.

SINGULAR SUBSIDENCE AT MARTON.

SIR,—In reply to Mr. J. W. Wilson's description of a singular subsidence at Marton, near Northwich, perhaps I may be allowed to remark that the phenomenon is not so rare as may be imagined. When living in Cheshire I frequently heard of similar subsidences taking place. These occurred in every instance on the Keuper formation, and I attributed them to the dissolving away of a good portion of the rock salt, which frequently attains a thickness of nearly a hundred feet, by the percolation of running water. Considering the vast quantity of solid salt held in solution by the brine springs, this can hardly be wondered at. I do not think, however, that the subsidence of the surface usually takes place so suddenly. As a rule it will be in the ratio of the dissolution of the underlying rock-salt beds. It has frequently struck me that some of the small "Meres" in Cheshire have originated under similar circumstances. In Norfolk we frequently have subsidences of the surface by the dissolution of chalk by sand-pipes. In many parts of Lancashire and Staffordshire the surface of the country sinks where mining operations are carried on. This is best told by the great depth of the neighbouring canals, whose banks have had to be built up in order to preserve the level of the water. Near Dukinfield, the canal is in many places over twelve feet deep—the depth being a good index to the amount of subsidence undergone in consequence of the coal having been worked underneath. Newspaper paragraphs relating the sudden sinking of small areas are not rare in Norfolk, the usual vulgar explanation of them being of course earthquake action. Rock salt is much more readily soluble than Chalk, so that it is very probable the subsidences in Cheshire and Norfolk are due to the similar action of water in dissolving and removing the solid matter of the strata beneath.

J. E. TAYLOR.

NORWICH, *June 13*, 1869.

MISCELLANEOUS.

A GIGANTIC OOLITIC LIZARD.—Prof. Phillips has lately recorded the discovery—in a quarry at Enslow Bridge, a few miles north of Oxford—of the femur of a monstrous lizard of the Oolitic age, measuring five feet and a third (sixty-four inches) in length, and 44·25 inches round the distal extremity; while the breadth at the upper end (taken obliquely) is 20·75 inches, and the circumference 46·0 inches. A similar bone (but not nearly so large) in the Oxford Museum was referred by the late Hugh E. Strickland to Prof. Owen's genus *Cetiosaurus*, to which genus no doubt this gigantic femoral belonged.