superjacent patches of Boulder-clay to be in place? Unless he refuses credence to the observations of Messrs. Prestwich, H. B. Woodward, and C. Reid, he cannot support Sir H. Howorth.

I have confined myself to denying Sir Henry's contention that Mammoth-bearing deposits are "never underlain by Glacial Drift." I am perfectly prepared to admit that Mammoth-remains do occur under undoubted Glacial deposits, as Dr. Hicks maintains, but that is not the point in question. A. J. JUKES-BROWNE.

EXETER, *Feb.* 7, 1893.

A BORING AT WILLOUGHBY IN LINCOLNSHIRE.

SIR,—I think you will find that the boring at Willoughby, mentioned in the paragraph quoted from the "Morning Post" in the GEOLOGICAL MAGAZINE for February, was made in 1887. I have some particulars of the strata passed through which I hope to publish shortly, and will only now say that it supplies valuable information about the subterranean structure of that part of Lincolnshire. The boring passed directly from Glacial Drift into the so-called Neocomian, without the intervention of any kind of Chalk. Water was found at the top of the Spilsby Sandstone.

EXETER, *Feb.* 7. A. J. JUKES-BROWNE.

SUBTERRANEAN EROSION.

SIR,—In the GEOLOGICAL MAGAZINE for September, 1892, Mr. Morton, F.G.S., criticised a paper I read in December, 1891, before the Geological Society, entitled "The Subterranean Erosion of the Glacial Drift, a probable cause of Submerged Peat and Forest Beds" (Quart. Journ. Feb. 1892, pp. 96–103). So far as Mr. Morton's criticisms partake of the nature of a defence of his theory of the origin of the submerged Peat and Forest-beds of Lancashire and Cheshire as described in his work entitled "The Geology of the Country around Liverpool" I do not propose to discuss, for if Mr. Morton's theory be right then my theory must be wrong, and *vice versa*.

Mr. Morton's remarks, however, go beyond the mere local application of the principle of subterranean erosion. In concluding, he writes, "It is very remarkable that such an active agent has not been observed in Tertiary formations of the South of England where the beds of clay and sand are similar and occur under the same conditions." I go further even than Mr. Morton, viz.—If the principle of Subterranean Erosion be true at all it will prove as true in the past as in the present (under the conditions mentioned) and as wide in its operations as the law of gravitation. In the Quart. Journ. of the Geol. Soc. vol. xlviii. p. 103, I defined Subterranean Erosion as follows:—

"That *wherever* water percolated through such unconsolidated beds as clays, sands, and gravels, *along an inclined plane*, it was constantly carrying the lighter materials of such strata towards the *nearest point of escape. The nearer the approach to the point of escape,*