THE SETTLE CAVE DEPOSITS.

SIR,—Mr. Tiddeman's description of the older deposits in the Victoria Cave at Settle encourages me to ask him through your pages kindly to consider whether the laminated glacial clay that he has so well made out, as occurring between the upper cave earth and the bone-bed with the older cave mammals, may not be an indication of that last glacial period which I have so often advocated in your pages; but without the success in drawing attention to the subject which I could wish.[1]

It is plain from Mr. Tiddeman's paper, "On the Ice-sheet in North Lancashire," that the term which I gave to the moraine profonde of that particular period, viz. "Trail," has reached his ears; but I doubt if he has read my papers: otherwise he would not have applied the term to "a subaerial drag" or "trail" of soft beds to a lower level, under the softening and loosening influences of rain and frost,[2] and argued for a glacial origin of a phenomenon which I have always maintained *has* that origin.

The particular reason which induces me to suspect that the laminated clay of the Settle Cave belongs to the period of *the* "Trail" is because it occupies the right position in time, as being subsequent to the Cave Mammals. I have shown that that deposit is none other than the river gravels, which contain the same fauna as the caves. I must confess that I do not quite understand what date Mr. Tiddeman assigns to the ice-sheet which he has described. I have not had time to read his paper in the Journal so carefully as I could wish, but I perceive that in that paper, as well as in the MAGAZINE, he uses the expression, "*The* Glacial Period." One is inclined to ask, "Which?" There is a remarkable passage in Mr. Dawkins's paper on the "Classification of Pleistocene Strata," which strongly in my opinion supports my view of this late ice-sheet, and also that the laminated clay of the Settle cave belongs to it. It is that in which he insists on the magnitude of the interval between the late Pleistocene and the Prehistoric ages in Britain, during which nineteen species disappeared, and five at least became extinct.[3]

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OBITUARY.

BY the death of Mr. JOHN BOLTON, of Sedgwick Cottage, Swarthmoor, near Ulverstone, the geology of Furness has sustained a great loss, and palæontology a most enthusiastic collector. His passion for fossils originated in 1795, when a child of seven years old, from sauntering, near an excavation for a well in the Mountain Limestone of Urswick Green, where he observed and obtained the stems and separate joints of Encrinites, the "fairy cheeses" and "queer things" of his playfellows. From this date his interest in Nature never seems to have flagged, notwithstanding that he was two years later sent to a weaving-shed in Ulverstone, and afterwards to Barnsley, where he effected an important improvement

[1] GEOL. MAG., Vol. III. p. 483; Vol. IV. p. 194; Vol. VIII. p. 65, etc., etc.
[2] Journal of Geol. Soc. vol. xxviii. pp. 480, 482.
[3] Geol. Journ. vol. xxviii. p. 414.