

Bowerbank's patient and generous teaching, and his subsequent rise to Dr. Bowerbank's kind introductions and encouragement. The society itself may be said to owe its formation to him, for when it was proposed to figure the fossils of the London clay, he asked the pertinent question, "Why not figure the whole of the British fossils?" The idea was seized and acted on, and the works which the Palæontographical Society publish annually are sufficient proof of the value of the suggestion.—*Land and Water*, November 9, 1867.

CORRESPONDENCE.

THE VALLEY OF THE OUSE AT BUCKINGHAM.

To the Editor of the GEOLOGICAL MAGAZINE.

SIR,—In a paper by Mr. Searles V. Wood, junr., in the last number of the Quarterly Journal of the Geological Society, there is the following foot-note (p. 309):—

"The section of the valley at Buckingham, given in the Memoir of the Geological Survey at sheet 45, appears to me quite at variance with the actual structure of it. So far from there being any evidence of the existence of an actual valley in this part prior to the Glacial period, the mode in which the valley of the Ouse is cut through the Glacial-beds shows the valley to have been wholly formed since the deposition of the Glacial-clay."

Will you allow me to call attention to a few facts which seem to have escaped Mr. Wood's notice when he wrote the above?

The section to which Mr. Wood alludes was drawn from the following evidence:—First, a quarry on the Stony Stratford-road, just outside Buckingham, on the eastern side of the valley, showed the following section:—

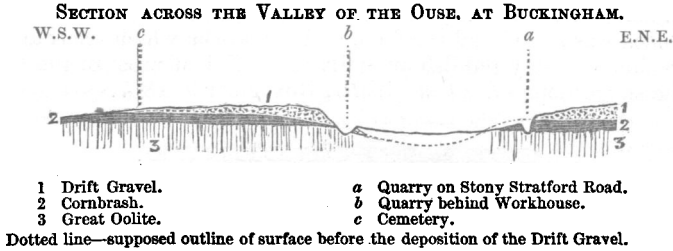
Drift-gravel,
Cornbrash,
Great Oolite.

Secondly, a quarry behind Buckingham Workhouse, on the opposite side of the valley, showed Drift-gravel resting directly on Great Oolite, *without any Cornbrash between*. Thirdly, at the Buckingham cemetery, a little further to the west, we have a section exactly like the first, namely, Drift-gravel, resting on Cornbrash, with Great Oolite below.

Now these three sections seem to me to show conclusively that, before the deposition of the Drift-gravel, a valley must have run between the first and third, at least, as deep as the thickness of the Cornbrash. I believe the central quarry showed that the hollow had also cut down into the Great Oolite; but I have not my notebook now with me, and cannot speak certainly on this point from memory. These little points of evidence are so minute that no one can be blamed for overlooking them; but even if they had not been forthcoming, I do not think Mr. Wood's reasoning very convincing, when he argues that, because the river has cut a valley through the Glacial-beds, therefore there could have been no valley there before.

Errors of omission are pardonable enough, but such a bit of logic as this he must allow me to cry out against.

I add a sketch section, which will perhaps make my meaning clearer.



Yours obediently,

A. H. GREEN.

MONK BRETTON, BARNSELY,
 Nov. 18th, 1867.

AGE OF THE THAMES VALLEY DEPOSITS.

. To the Editor of the GEOLOGICAL MAGAZINE.

SIR,—Mr. Searles Wood, jun., in his essay on the structure of the Post-glacial deposits of the south-east of England, published in the last Quarterly Journal of the Geological Society, Vol. xxiii. p. 394, has made some remarks relative to a paper of mine, on the Lower Brick-earths of the Thames Valley, which ought not to pass without notice. Into the merits of his arc-theory, in explanation of the inequalities of the present surface of the ground, I do not intend to enter, nor into the question of the supposed existence of the faults in certain gravels and brick-earths. What immediately concerns me, is the assertion that the Thames gravel, *x* 4 of section twelve, of his essay, p. 409, overlies the mammaliferous brick-earths of Stonehams pit near Crayford, and his inference therefrom that there is no parallel between the brick-earths of Grays and those of the great pit near Crayford, which was stated to exist in my essay. In coming to my conclusion, so far from neglecting the evidence of super-position, I have gone over the ground repeatedly with Dr. Spurrell and Mr. Flaxman Spurrell, who have obtained a magnificent collection of mammals from it, and know it better than perhaps anyone else, and I have failed to detect the slightest proof of the Thames gravel in question actually overlying the brick-earth. Professor Morris also is fully persuaded of the exact parallelism in in point of time between the brick-earth at Crayford and that at Gray's Thurrock. I see therefore no reason for modifying my belief on that point. Mr. Wood assumes that the deposit on the south of Dartford Heath, and at Hill House, is of the same age as the fossiliferous beds at Crayford; but he adduces no proof of it whatever. Whether they be or not is perhaps an open question, but the fact that the brick-earths in the railway-cutting, immediately to the north of Mile End Terrace, and not more than half a mile from