existed where oceans are now spread out; and clear and open oceans may have existed where our continents now stand." (Quoted from 3rd ed. 1861, p. 335; 1st ed. published in 1859.)

This and similar statements in the same chapter were then regarded as pure assumptions on Mr. Darwin's part, made to evade a difficulty which the author himself admitted "may be truly urged as a valid argument against the views here entertained." The inference in the first half of the quotation given above will probably now be accepted by most geologists; that in the second half may not yet gain so general a belief. The "Record" of Palæozoic life has been carried far back since the publication of the "Origin of Species," but the difficulty remains much as it did, and can probably only be explained in the manner stated by Mr. Darwin.

Geological Survey Office, London,
September 25th, 1880. W. Topley.

POST-GLACIAL.

Sir,—In a letter in your last Number under the above heading, Mr. Dalton referred to the mention of a burnt stone, or what appeared like one, found by me at Lexden brickpit, and argues from it that Palæolithic Man, the contemporary of these great beasts, was, as man is now, a "cooking animal." But this burnt stone, if such it was, was not found in the same stratum with the pachyderms, but in brick-earth overlying it. I believe I made this sufficiently clear in my paper upon the deposit (Quart. Journ. Geol. Soc. 1863, p. 396).

I am rather disposed to think that this brick-earth is considerably more recent than the peat, in and beneath which the bones of elephants and rhinoceroses were so abundant. O. Fisher.

Harlton, Cambridge, 6 *Nov.*

"FOSSILS OTHERWISE THAN ON BEDDING PLANES."

Sir,—Since the appearance of my letter in your September Number, I have been confirmed in my view by several other observers, and I would especially mention two who have kindly furnished me with definite instances in point. Mr. Ussher lately sent me a specimen from the Lower Lias near Newark, showing *Ammonites planorbis* occurring nearly vertically to the bedding; and by this morning's post (Oct. 26th) I have received from the same locality, through the kindness of Mr. Dalton, a drawing of two specimens of *Ammonites semicostatus* traversing the bedding, the one at an angle of about 45°, the other at an angle of about 30°.

I have already suggested what appear to me certain *veræ causæ* for the occurrence of fossils in such positions. I will only now add that if conditions should hereafter supervene which should alter the character of these Liassic beds, obliterating the bedding and superinducing cleavage, rendering them in fact mineralogically similar to the Silurian slates before referred to, the only fossils visible in them would as a rule be those which happened to coincide with the cleavage planes. W. Downes.

Kentisbeare, Collumpton,
October 26th, 1880.