APPENDIX.

'Thirteen are species abundant in British seas, and ranging northwards, but not of frequent occurrence to the southward, such as—

> Mya truncata Venus casina Littorina littorea Lacuna vincta Purpura lapillus Buccinum undatum Fusus gracilis and F. antiquus Mangelia turricula.

'Mr. Darbishire has carefully re-measured the height of Moel Tryfaen, and confirms Mr. Trimmer's estimate of 1,392 feet above the level of the sea. The highest level reached by the fossil shells is 1,360 feet.'

As shells are almost invariably wanting in porous drift like that of Moel Tryfaen, we naturally enquire by what accident they can have in this instance escaped obliteration. Mr. Darbishire suggests that an overlying yellowish brown sandy clay, 1 ft. 9 in. thick, which underlies the superficial peaty soil, and covers all the beds of gravel and sand with shells, may, by its impermeable nature, have preserved the fossils. The antiquity of drift upraised to such a height must be very great, and we can hardly imagine that so many shells could have escaped being dissolved by rain-water, had it been able to percolate freely, for countless ages, from the peaty covering through beds of sand and pebbles, remarkably loose in their texture.

Η

ON THE EXISTENCE OF MARINE ANIMALS AT VARIOUS DEPTHS IN SEAS ABOUNDING IN FLOATING ICE, IN ARCTIC AND ANT-ARCTIC REGIONS.

WHEN discussing the probable causes of the dearth of fossil shells and other organic remains in glacial formations, even where the deposits seem to have been of submarine origin, I have spoken of the results of recent deep-sea dredgings. It is now ascertained that in order to reach the zero of animal life we must sound much deeper than the late Edward Forbes inferred from his Mediterranean experiments.