are indeed some masses of drift-gravel and chalk wash at and near the top of the Boulder-clay, which seem to have been formed on the spot; but these contain no shells. 3. Fragments of Secondary deposits occur in the clay in the same way as these shelly patches. See Prof. Phillips's description of a large mass of Lias with fossils (which did not live where they occur) on the beach at Bridlington; (Geol. of Yorkshire, 3rd ed. p. 85); Mr. Mortimer's, of a mass of chalk with lines of black flint, at Easington (Proc. Yorkshire Geol. Soc. 1881, p. 375); and my own, of Neocomians at Flambro (Proc. Yorks. Geol. Soc. 1880, p. 245), and at Dimlington (GEOL. MAG. Dec. 1881, p. 541). 4. The whole aspect of the clay shows that the drift has *not* been *from* the land. The proportion of chalk in it is not great, the flints are nearly always black or red, and not grey like those in the Yorkshire Chalk, strange igneous rocks are plentiful, and Lias and Neocomian remains are relatively far too abundant to have been carried over from the opposite side of the Wolds.

The evidence is also against the view that the confusion in the beds may be attributed to the passage of later ice; for though there are signs that this has had its local effect, yet as the Basement Clay retains its peculiar features where beds of sand, gravel, or laminated clay come between it and the overlying Boulder-clay, its character cannot have been greatly altered.

The sands and gravels connected with the *Purple* Clay, to which Mr. Wood at first referred these shells, have evidently in most cases been deposited where they now lie, and formed from the same materials as the clay. But if Mr. Wood has not seen the shelly beds I described, and has had his impression that they are in place confirmed by my paper, I fear my descriptions must be misleading, and I beg leave now to correct them on this point.

It must always be remembered that at Dimlington there is a great space between the Shelly Boulder-clay and the Chalk which is as yet entirely unaccounted for, and it is very probable that traces of undisturbed shell-beds may some time be found lower down in the section.

G. W. LAMPLUGH.

BRIDLINGTON QUAY.

HIGH-LEVEL DRIFTS IN NORTH AMERICA.

SIR,—In answer to Mr. Lesley's important letter on high-level drifts, I would beg to state that those I discovered on Minera mountain, North Wales, contained marine shells up to about 1280 feet above the present sea-level, while shells had previously been found on Moel Tryfan up to 1370 feet. I have not yet heard of shell-bearing sand and gravel in North America at a higher level than 700 feet. Is this their extreme altitude?

D. MACKINTOSH.

ERATUM.—On page 320, in the fourth column, the first three lines should not read as printed with the brace, but as follows:—

Overlying Zone of *Ammonites planorbis*.

{ Kössener Schichten and Dachstein Series.
{ 'Hauptdolomit' of Tyrol, and 'Plattenkalk.'