

than Bunter times, for there is no reason to believe that the Derbyshire limestone was under water from the end of the New Red Sandstone period till the Glacial epoch, and very likely not even then; and if any outliers of Bunter beds were left upon the Mountain Limestone, similar deposits might be forming at the present day.

I am also far from certain that the Ribden deposits are overlaid by true Boulder-clay; what I saw looked quite as much like the covering, often many feet thick, of local rainwash, which spreads over the hill country thereabouts. Of course, some of this may be of the same date as Boulder beds, some is very likely much older, and it is forming now-a-days after every shower of rain.

Yours obediently.

A. H. GREEN.

MONK BRETTON, BARNSELY, June 3rd, 1867.

GRAPTOLITES.

To the Editor of the GEOLOGICAL MAGAZINE.

SIR,—Dr. Nicholson's paper in your last number might suitably have closed the correspondence which you have published between us, but I must ask you for permission to add a word or two.

Your correspondent gives up the relation between the capsules and the graptolites, as originally figured by him, to which I objected, and on which he based the whole of his argument for their being ovarian vesicles, and with this consequently that argument as well. But he has, in the paper in your last number, figured several specimens which prove "conclusively that there is an actual organic connection" between the capsule and the zoophyte. What do these specimens show? On the one species, *Graptolithus Sedgwickii*, he finds the "ovarian capsules" borne on the common cenosarc (Pl. XI. fig. 16) as well as developed from individual polypites! and in the latter case the polypite sometimes is converted into an "ovarian capsule" (fig. 15) the mouth of the hydrotheca narrowing into and being "organically connected" with the capsule, and at other times gives origin to the capsule from the sides of the hydrotheca! (fig. 12-14). The only thing that I know at all comparable to this extraordinary structure is the "ovisac" which is thus so strangely related to the parent, which Dr. Nicholson tells us is a corneous gonophore that becomes a free swimming zooid!

WM. CARRUTHERS.

NOTE.—PROF. HARKNESS requests that the following corrections may be made in his letter, which appeared in our last Number at p. 286. In the heading to his letter for "Upper" read "Lower Llan-doverly," and in the fifth line, for "about" read "above the position."