

flint; they are mostly arrow-heads with some knife flakes. I have also a large round flattish hammer-head (with a round hole in the centre), from the same locality, the weight of which is about two pounds.

JAMES R. GREGORY.

ON *HETEROPHYLLIA MIRABILIS*, DUNCAN.

SIR,—In the GEOLOGICAL MAGAZINE of this month (October, 1868), Mr. John Young, speaking of *Heterophyllia mirabilis*, and *H. Lyelli* (as described by Dr. Duncan in the Transactions of the Royal Society), suggests that the error, as he considers it, of representing the hook-shaped processes attached to *H. mirabilis* as articulated, may have arisen from the specimens examined being worn or indefinite. This was not the case. The corals, which I believe were the property of Mr. Thomson of Glasgow, were perfectly sharp and distinct. The bulb or tubercle, with a pit in its centre, and the slight concavity at the base of the hooklet being too decided to admit of any doubt or misconception. Besides, in nearly every case the hooklets had separated at the bulb. Supposing the articulation to be a mistake, these fragile appendages would hardly break invariably at that point where they are stoutest and strongest. Yet in all specimens that I have seen—and I have seen many—such is the rule. At the time the plates for Dr. Duncan's paper were drawn I had been intimately acquainted with corals, examining them day by day for a space of six years, and the conviction is strong upon me that I must have possessed sufficient discrimination to distinguish between a fracture and an articulation. That a Zoophyte has no right to this articulation is a point about which I know nothing. Like other creatures, it is possible they may occasionally exhibit eccentricities.

G. R. DE WILDE.

ON *HETEROPHYLLIA MIRABILIS*, DUNCAN.

I have, at the request of my friend Mr. Henry Woodward, very carefully examined, under the microscope, several specimens of this curious coral (described by Dr. Duncan in the Philosophical Transactions for 1867) forwarded to Mr. Woodward by Mr. John Young, Under-Keeper of the Hunterian Museum, Glasgow.

Not having seen the specimens figured by Mr. De Wilde in Dr. Duncan's plate, I cannot venture on any positive assertion as to whether or not those particular specimens have been rendered with that artist's customary accuracy;—but I have no hesitation in stating that it is easy to select specimens from those sent by Mr. Young, which present rows of tubercles, the exact counterpart of those figured by Mr. De Wilde.

On the other hand, however, there are amongst Mr. Young's specimens, some which present characters differing greatly from those figured in Dr. Duncan's plate, and in which the hooklets are broken off at various distances from the costæ—in some cases even close up to the body of the coral, leaving a concave cicatrix instead of a tubercle.