

## CORRESPONDENCE.

## PTEROCONUS MIRUS, HINDE.

SIR,—Last Spring Mr. Upfield Green allowed me to see the fossils to which he afterwards gave the name *Nereitopsis Cornubicus* in the Trans. Roy. Geol. Soc. Cornwall, vol. xii, p. 227, regarding them as Annelids. While studying them, point after point came out which forced me to the conclusion that they belonged either to *Orthoceras* or to a closely allied genus. The surface ornament, the contour, the septa, and other details seemed thus, and only thus, explicable. The chief perplexity was that, while the other parts were crushed and partially obliterated, the siphuncle remained rigid; but the consideration of *Actinoceras*, and still more *Huronia*, seemed almost to clear this away, and I felt able to tell Mr. Green that they were in my opinion certainly Cephalopoda.

With these fossils, or some of them, Dr. Hinde identifies those collected by Mr. Howard Fox at Bedruthan, to which he has given the name *Pteroconus mirus* on p. 149 of the present volume of the GEOLOGICAL MAGAZINE, regarding them as Hyolithidæ. These fossils he has very kindly shown to me, and with the identity of three of the specimens (his figs. 2, 3, 4) I agree, though still venturing, in spite of such weighty authorities as Dr. Hinde and Mr. Crik, to believe that I see in them Cephalopoda. The fossil represented by his fig. 1, I confess that in my hurried examination of it I could not fully decipher; nor did I feel quite certain that it was the same as the rest; but at the same time some Devonian Orthocerata which I have seen did appear as if they might go some way toward explaining it.

Fossils in such an extremely obscure state of preservation may, I think, allow of a different interpretation without disrespect to the authority of my valued friends; and, indeed, I think that my difference of view is mainly due to my regarding them as masked and distorted by the processes of fossilization to a very much greater extent than they appear to consider. G. F. WHIDBORNE.

## FOSSILS IN DEVONIAN ROCKS OF NORTH CORNWALL.

SIR,—The fossils figured by Mr. Green in the Transactions of the Geological Society of Cornwall under the name of *Nereitopsis Cornubicus* being very interesting ones, their further illustration and description in the more widely circulating GEOLOGICAL MAGAZINE is a matter of congratulation. But is the renaming of them quite in accordance with accepted rules of nomenclature? Dr. Hinde in his paper<sup>1</sup> mentions the fact that Mr. Green did not fully describe it; but many accepted names rest on figures alone. He also states that as, in his opinion, the fossils could not “in any way resemble any species of *Nereis*,” the name is “misleading and should be changed.” But has not the author of a genus the right to express in the name what the form reminds him of, even if the resemblance be fanciful?—e.g. *Ophiopsis*, *Pileopsis*, *Galeopsis*. And would not the new name proposed (*Pteroconus*) be open to the same objection,

<sup>1</sup> GEOL. MAG., Dec. IV, Vol. VII, p. 149.

the first half comparing the “flap- or fin-like extensions” to a *wing*, which is not a serial organ, and the second half suggesting a relationship to a genus of shells? As to the specific name, Mr. Green gave the name *Cornubicus* to his specimens as a group, regarding them as specifically one; but if they are to be divided, then his statement that a certain specimen “differs from the others” indicates that the “others” are regarded as the type. As Dr. Hinde says he is “undecided” whether his specimens are different from these others, it follows that the statement *sp. nov.* after the name he gives is quite unproved. I would also point out, what cannot have struck Dr. Hinde, that the name *mirus* implies that the specimens so named are the first discovered. One is not astonished at further examples of a known form, however wonderful, turning up, and Mr. Green showed his specimens to his friends, Cornish and others, and recognized examples in the Penzance Museum before the beginning of last year, when Mr. Fox’s specimens were found. In justice, therefore, to Mr. Green the new name ought to be relegated *in toto* to the synonymy.

As to the nature of the organisms represented, there will probably continue to be a difference of opinion. The use of the word ‘shell’ in Dr. Hinde’s description is an assumption, as it is admitted that nothing now remains but “some compound of iron,” which may be derived, as in the case of the chalk *Ventriculites*, from other things than shells. The irregularity of the outline indicates rather a soft-bodied animal. The downward bend of the flaps in one specimen, their upward bend in another, and the straight direction of their bases in a third indicate that they were flexible. Dr. Hinde seems to think that downward-bending flaps on both sides might appear as upward-bending if the fossil were turned round on its median axis, but this is impossible. He also states that we cannot tell whether the dorsal and ventral sides are alike or not; but as in one specimen each later flap “dips slightly *under*” the next preceding, we can tell that we are looking at the opposite side in any other specimen if, as appears to be the case in his second figure, the later flap lies slightly *over* the next preceding. The supposed rod may very well be the remains of the intestine filled with matrix, or mere folds in the shrunken integument. In Mr. Green’s specimens the bases of the flaps are somewhat swollen, and the distal lines are slightly radial rather than absolutely parallel.

If, then, we figure a soft-bodied animal, lineally elongated, with a series of flexible organs on each side consisting of oblique flaps ending distally in slightly radiating prolongations, the description fits so well with that of a polychætal annelid, as exhibited by many larvæ and by the adult of *Aphrodite*, and so ill with that of any other known group of organisms, that this interpretation of the fossils seems the most reasonable, especially as we have reason to believe that this group was well established before the Devonian period.

J. F. BLAKE.

ERRATUM.—On p. 147, line 19, for “adunate” read “inadunate.”