

CORRESPONDENCE.

FRESH-WATER OSTRACODS IN THE LOWER CARBONIFEROUS SERIES OF AYRSHIRE.

SIR.—On Friday last I found a bed of fresh-water Ostracoda in the strata exposed in the Gurdy cutting of the railway from Giffen to Kilbirnie.

The beds exposed are as follows:—

	ft.	ins.
Highest <i>marine</i> limestone seen in the cutting.		
Black shale, tough	1	8
Dark shale	0	8
<i>Dark shale crowded with fresh-water Ostracoda</i>	0	9
Dark shale	1	6
Sandstone with <i>Stigmaria</i>	3	6
Thick bed of dark shale with abundance of <i>marine</i> fossils.		
Limestone with <i>marine</i> fossils.		

Many of the Ostracoda are filled with *pyrites*, but the valves are *calcareous*; and they often fall off when touched with the point of a needle. The carapaces are usually white, giving the shale a sandy appearance; sometimes they are brown. They occur mostly as single valves.

I believe this is the first time that fresh-water Ostracoda have been found in connection with the marine limestones of Ayrshire. The position of the beds is in the upper part of the Lower Carboniferous Limestone Series of Ayrshire.

Mr. Robert Craig has described the strata of the Gurdy cutting in the Trans. Geol. Soc. Glasgow, vol. ix, p. 64. J. SMITH.

MONKREDDING KILWINNING, Sept. 20, 1897.

TRINUCLEUS SETICORNIS.

SIR.—Mr. Marr's letter requires a final answer. When a fossil is not recorded from a certain horizon it is naturally believed that it has really not been found on that horizon. It is almost needless to say that when subsequent research proves an earlier statement to be wrong we consider that the author of it made an unavoidable mistake — unavoidable because of the imperfect knowledge of that time, but a mistake nevertheless in the light of present knowledge. Such mistakes must, of course, be frequent in the progress of any science, particularly in the case of the range of fossils. With regard to the range of the species in question, I have declined to be drawn into an argument, because I find several distinct forms are included under this name by different authors. F. R. COWPER REED.

CAMBRIDGE, October 4, 1897.

A QUESTION OF NOMENCLATURE: CHEMICAL NAME FOR H₂O.

SIR.—In writing of the volatile constituents of an igneous magma, paste, or lava, of which the gas of H₂O forms the greater and most important part, I do not know what term should be used in ordinary parlance, as such words as water, water-gas, steam, vapour, simply imply definite physical states of H₂O. Now in a lava under moderate pressure H₂O may exist as steam in the form of bubbles