CORRESPONDENCE.

THE PRE-CAMBRIAN ROCKS OF ST. DAVIDS AND OF BOHEMIA.

SIR,—I cannot find that the letter of Dr. Hicks in your last issue materially strengthens the proof for the Dimetian age of the gneissic series which underlies the Bohemian Pebidian. Dr. Hicks maintains that the St. Davids Dimetian is a true gneiss. I cannot of course say that the rock in the few sections which I did not see is not foliated; but I saw no true foliation in the principal localities named in his papers, and I cannot discover anything about foliation in the microscopic descriptions of Mr. T. Davies, Prof. Bonney, and Mr. Tawney. It is at any rate certain that if these rocks are schists, their foliated structure is of the obscurest possible character, and quite unlike that of the true gneisses.

I quite agree with Dr. Hicks that we are not to expect " absolute identity," but I deny that there is even a " general resemblance " between the Dimetian of St. Davids and the gneissic rocks of Bohemia, so far as we can judge from Mr. Marr's descriptions. Nor do I think that a similarity of the conditions of deposit, even if proved, goes for much. I presume that most arenaceous rocks, from the Tertiary downwards, were laid down in comparatively shallow water.

That the Bohemian gneiss unconformably underlies the Pebidian, simply proves that it is pre-Pebidian. I do not deny its Dimetian age: indeed, I think it highly probably that Mr. Marr is right; but, as we do not yet know how many gneissic series lie below the Cambrian, I demur to the assumption that any Archæan gneiss group which is not Lewisian must be Dimetian. Any resemblance to the newer gneiss of the Highlands can have no decisive value in our present uncertainty of the age of that formation. These Archæan groups are a very complicated study, and more haste may sometimes prove to be the worse speed. The researches of Dr. Hicks have done much towards unravelling the Archæan mystery, but we must work along our clues with great caution, else we shall become the sport of the Philistines who would condemn· us to grind in the prison-house of an eternal Siluria.   C. CALLAWAY.

WELLINGTON, SALOP, *March 5th*, 1881.

OBLIQUE AND ORTHOGONAL SECTIONS.

SIR,—In my short notice about the section of a folded plane there is an error which Mr. Day has not pointed out. I did not expect that what I had written would have attracted attention; but since it has done so, I may ask to be allowed to say, in the sixth line from the bottom of p. 21, *dele* " $=\theta$," and in the fifth, for " θ " read " $EAB=\theta$ suppose."

I cannot exactly see that Mr. Day's proof gives my second equation, because his a, β, and ϕ do not appear to be the same angles as in my demonstration.

The method of the shadow is ingenious and of course correct.

HARLTON, *4th March*, 1881.   O. FISHER.