

confirm Weigand so far as this is concerned. It must be remembered that Weigand's paper appeared in 1875, at a time when the notion that all serpentines were altered olivine-rocks was becoming very general in consequence of the researches of Sandberger and Tschermak, published some eight or nine years previously.

I may take this opportunity of referring to Col. McMahon's paper in the same number of the *GEOLOGICAL MAGAZINE*. I have no new facts of any importance to add on the subject referred to, and I do not think that any useful purpose would be served by my attempting to remove the objections raised by Col. McMahon. I cannot explain why foliation has been developed in some cases and not in others. The apparently capricious manner in which foliation comes in is equally striking in the Scourie Dyke and in the Lizard gabbros. If I am right in one case, I am right in the other; and if I am wrong in one case, I am wrong in the other. I believe with Col. McMahon that foliation may be produced in connexion with the intrusion of plutonic rocks; but I cannot explain the foliation of the Lizard gabbros in this way.

Col. McMahon quotes Prof. Bonney as saying that the serpentine is "free from all signs of disturbance." This is true of the serpentine locally, as it is of the gabbro; but it is not true generally. There are the same signs of disturbance in the serpentine as there are in the gabbro. I have a polished slab of serpentine from Porthalla, which shows precisely the same structural features as the figured slab of augen-gabbro from Karakelews. Abundant signs of pressure metamorphism occur also in the serpentine near Mullion Cove.

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BORING AT BLETCHLEY.

SIR,—The London and North-Western Railway Company have for some time been carrying out a trial-boring for water; and if they have not found what they were in search of, they have made a discovery which is interesting to geologists in reference to the underground structure of the central and eastern parts of England. I have not yet the full details before me; but, from the information furnished by Mr. C. Bowen Cooke, it would appear that the boring-rods, after penetrating the Jurassic Clays (called by my informant the "Oxford Clay"), struck on a very hard rock, of which three small specimens were sent to me for identification. On examining them I had no difficulty in giving a reply. The specimens appear to consist of finely-crystalline quartz-felsite, with some green mica, and evidently form a portion of the old Pre-Triassic ridge, which, as all underground borings combine to prove, underlies the Mesozoic formations of this part of England.

I hope ere long to have a complete series of the cores brought up from the boring, and to be able to give fuller details.

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