Additional note on the specimens described by Mr. Vivian.

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In figs. 5 to 11, plate 1, I have endeavoured to represent some of the peculiarities of Mr. Vivian's specimens.

Fig. 5 represents a fragment of the colored calcite drawn natural size.

Fig. 6 is a sketch of a thin section magnified 20 times linear. It will be seen that the curved ochrey branches have no particular tendency to follow the lines of cleavage as already observed by Mr. Vivian, but they penetrate the calcite indiscriminately in all directions. The oxide of iron must therefore have existed in the original menstruum from which the calcite was deposited, and have been caught up in the act of crystallizing (just as, in a sharp frost, blades of grass are caught up in ice), the cleavage being a result of the action of natural forces at a later period.

In fig. 7 I have sketched a single branch magnified more highly, and in figs. 8 and 9 I have endeavoured to shew the tubular appearance of the branches. This is best seen by viewing the specimens in reflected light.

I have made a partial analysis of a specimen which seemed, under a low power, to be as full of the moss-like forms as it could possibly be, but I found only 1·34 p.c. of metallic iron, or say 2·17 p.c. of hydrated oxide.

In fig. 10 a piece of the quartz enclosing oxide of iron is drawn natural size. Fig. 11 is a part of the same specimen, more highly magnified, in which I have attempted to represent the interlaced structure of the contained ferruginous matter, but with only partial success, on account of its extreme delicacy in the natural specimen.

The third specimen described by Mr. Vivian is illustrated in figs. 12 and 13, but it is so delicate that the figures only very imperfectly represent it. The constant occurrence of such specimens strengthens the evidence already existing that such iron ore deposits as that at Mwyndy, like those in the lodes or cross-courses of Cornwall and Devon, are due to infiltration of ferruginous matter from the surrounding rocks into pre-existing fissures.