

mens from Trethurgy Moor was a portion of a vein having the wall of granite attached. I am informed that specimens have been traced to a particular spot in the moor where they cease to occur. It is probable that the veins might, after some examination, be found *in situ*. It appears, therefore, that this variety occurs in veins of schorl rock, traversing granite like the common oxide of tin.

XI.—NOTICE RELATIVE TO THE FORMATION OF SWIMMING STONE.

Amongst a great number of specimens of this substance, which have been discovered within a few years past, scarcely any have been found which have exhibited more than a skeleton of siliceous matter, except perhaps a little sulphuret of copper. The minuteness of the cells, together with the arrangement of their plates, are doubtless the causes of its buoyancy on water. It is evident that these cells must, at some period or other, have been filled with other matter, more easily and generally soluble than silex.

I beg to exhibit to the Society a specimen which was some time since found in Pednandrae mine, near Redruth, which appears to me to contain a complete illustration of the formation of swimming stone. This specimen

seems to have been originally nothing but fluor spar, the parts of which were very loosely connected, as is evident from the fluor which still remains. It will be observed, however, that almost all the crevices throughout the mass of fluor, are filled by the matter of silix, which has been deposited there, perhaps by the passing of water through them.

On one side the fluor has been dissolved, and the siliceous matter remains just in the form in which it appears in the swimming stone.

It is well known that sulphuric acid has the power of disengaging the fluoric acid in the state of gas. Whether, therefore, this acid gas, by its action on the silix, could have produced the peculiar appearance of the swimming stone, I presume not to decide.

The mines which have produced the swimming stone in the greatest quantity, are Relistian in Gwinear, and Huel Alfred in Phillack, neither of which is now at work. In the former mine was found a still rarer substance: swimming sulphuret of copper, which I believe has not been found any where else.
