

they traverse, *because they fill fissures in them*, but he was aware of the opinion which had, and still has, supporters, that veins were formed at the same time, and are of the same age, as the rocks in which they occur. He takes the trouble to examine this point, and to establish the origin of veins by the filling up of originally open fissures as a fundamental point of theoretical and practical importance. He offers *nine proofs* in support of this unequivocal statement, hoping to “remove all doubt of its truth from the mind of every intelligent and unprejudiced geognost and miner.” These proofs, though not very skilfully managed, appear sufficient to establish the conclusion as far as regards the phenomena described by Werner, and commonly met with in mining experience. Practical miners, in all but a few districts, seldom express the slightest doubt of the truth of the Wernerian postulate, from which we have here retrenched the part which affirms that the veins were *open in the upper parts*.

Those who in modern times reject this origin of veins, and revive the notion that they are contemporaneous with, and a part of the rock formation, in which they lie, are influenced in their views, first, by the difficulty of explaining, according to simple mechanical laws, the displacements which, on the Wernerian supposition, the fissured rocks must have experienced; secondly, by the admitted fact, that there is some general, and often some special, affinity between the contents of the vein and the nature of the including rock; thirdly, there are cases in which substances of the same nature as those in veins, and combined in the same manner, are found in cavities which are unconnected with veins.

These circumstances have been regarded as of much importance, especially in Cornwall, where numerous veins, occurring under various circumstances, and inclosing a vast variety of minerals, have been worked extensively to unusual depths, by men of great experience. If, then, in a country so favourably circumstanced,