up to the small tarn on the shoulder of the hill. Higher still is the huge prism of porphyry, rising steep and rugged all around." In this manner would the first mountains be formed. In this way, also, might some metallic veins be ejected through the smaller openings, true injections of eruptive matter produced from the interior of the



Fig. 15.-Metallic veins.

globe, traversing the primitive rocks and constituting the precious depository of metals, such as copper, zinc, antimony, and lead. Fig. 15 represents the internal structure of some of these metallic veins. In this case the fracture is only a fissure in the rock, which soon became filled with injected matter, often of different kinds, which in crystallising would completely fill the hollow of this cleft, or crack ; but sometimes forming cavities or geodes as a result of the contraction of the mass.