Even under these extreme disadvantages with respect to the facts, the theory of mineral veins might have been more rapidly advanced, had a right method been followed in the interpretation of them; but this subject fell under the general misfortune of geology, and was considered rather as a boundless arena for Neptunists and Plutonists, for Wernerian and Huttonian controversy, than as a storehouse of more curious truths than those contained in the rude notions of injection by heat, or solution by water.

In the unfortunate dissociation of reasoners and observers, which is not even yet remedied, the imperfections of the closest speculations were too apparent to the miner to leave him the slightest confidence in the explanations proposed; and when, moreover, to every general rule regarding the position and contents of veins, gathered from observation, and seemingly established, further experience brought exceptions, how can we wonder that practical men gave up the problems as desperate, rejected mechanical and chemical causes altogether, and, resolute in ignorance, believed the veins to be contemporaneous with and an essential part of the stratified rocks, *in whose history they felt no interest?* This was the "vulgar notion" in the time of Agricola (1556), but it has been revived among men of science in the 19th century.

This, in fact, is the fundamental question in the theory of mineral veins; and though the state of knowledge on the point is so much advanced since the days of Werner and Playfair, that Macculloch thought, and most geologists feel, the question to be completely decided, we do not think it unnecessary to substantiate the truths which they have rather assumed than proved, and examine the objections which they neglected.

Veins are posterior to the Rocks which they traverse.

Werner, in his definition already given, assumes as a truth, that veins are of posterior date to the rocks which