

dislocation in a horizontal direction along nearly vertical planes. (These drawings are from Mr. William's paper on Huel Peever Mine, in the Geol. Transactions, vol. iv. plate 7.)

The mine in question was supposed to present an unusual complication of phenomena ; and, in fact, the practical men were baffled by the "accidents" to which the veins were found subject in the course of the workings. It will be seen that the horizontal displacements indicated on the plan follow, in this plane, the general law given in Vol. I. p. 40. for a vertical plane, thus bringing the Cornish veins in this respect into analogy with those of other districts, as, for example, Aldstone Moor, in Cumberland. There is no difficulty in this respect.

On turning to the vertical section across the veins from north to south, we find three apparent displacements : one to a small extent, at the intersection of *b* and *a*, which is contrary to the common law above referred to ; a second, of twice the extent, at the intersection of *c* and *b*, and *c* and *a*, which agrees with that law ; and a third, of small extent, where *d* and *a* meet, which is again exceptional. Now, that the movements supposed are possible, without inconsistency, in this case, any one can satisfy himself by a model ; and that the result, *i. e.* the *new position* of all the *masses*, is perfectly explained by such movements, is obvious from the following facts : first, the displacement of each of the veins *b* and *a*, on the line of fissure *c e* is *equal* ; in the next place, the divided parts retain their *parallelism* ; and, which is not of least importance, they agree in their characteristic contents.

Such cases do not oppose, but strongly confirm, the opinion that veins are posterior to the rocks which they traverse, and of unequal antiquity as compared with one another. But it must not be thought that the Cornish geologists, who have revived the opinion of Stahl, that the veins are contemporaneous with the rocks, have no stronger case than that of Huel Peever.