

tity or none at all of that substance ;” and this generalisation is confirmed by several facts communicated to Mr. Fox by the intelligent mine agents of Cornwall.

Werner used the same method of classification as that employed by Mr. Carne, for the phenomena which attend the mineral veins in a district as rich in metallic treasures as Cornwall ; and the examination is the more valuable in comparison, because the treasures are generally different, and lie in different strata. Gneiss is the great repository of metallic veins in the Freyberg district, and argentiferous lead ore the principal product. The ancient mining district in question is only about two German miles long, and one broad ; yet, within these limits, Werner observed at least eight principal deposits of metallic veins, perfectly distinct from one another, and for the most part containing different metals. Of the veins which are thus distinguished, the first four intersect one another, so as to give a definite scale of antiquity, but the last four are obscurely characterised in this respect from other considerations.

The first, and decidedly the most ancient, of these deposits, which yields argentiferous lead glance (galena), is one of the most important of the whole district, having constantly yielded, since the earliest period of working the mines of Freyberg, a large quantity of lead and silver, and a smaller of copper. It consists of coarse granular lead ore, with silver in the proportion of $1\frac{1}{2}$ to $2\frac{1}{2}$ oz. in the quintal ; common arsenical pyrites ; black blende in large grains ; common iron and liver pyrites ; a little copper pyrites ; a little sparry ironstone. The veinstones are quartz ; and sometimes a little brown spar, and calc spar. The various substances here named are not believed by Werner to be all of the same antiquity, but to have been formed successively in the vein, the oldest being nearest the sides.

These veins are from $2\frac{1}{2}$ to 6 feet across, and are chiefly *northern veins*.

The second metalliferous deposit yields lead mixed with a larger proportion of silver than any other. It