

It is not unlikely, also, that these subterranean waters must often have been warm, seeing that they sometimes lay deep in the interior of the earth, and came within the influence of internal heat, whatever may be its origin. If so, it is all the more likely that the ores which we meet with in these cracks or lodes were formed by infiltration of solutions, followed by deposition; for strings of copper, lead, and tin, for example, occur in the mass, just in the same way that we find mixed with them strings of carbonate of lime or quartz. This being so, then, just as the lime and silica may have been derived from the percolation of water through the rocks that form the country on each side of the lode, so the metalliferous deposits seem to have been derived from metalliferous matter minutely disseminated through the neighbouring formations. We are, however, still in the dark as to many of the conditions under which the process was carried on.

Ores of iron are common in lodes, and in hollows or pockets, both in the limestones of the Devonian and Carboniferous periods. In North Lancashire, at and near Ulverstone, rich deposits of hæmatite lie among the joints and other fissures of the limestone, and often fill large ramifying caverns deep underground. A vast trade has sprung up in the district in consequence of these discoveries within the last twenty-five years.

In the Coal-measures, however, we have our greatest sources of mineral wealth, because they have been the means of developing other kinds of industry besides that which immediately arises from the discovery of the minerals which the Coal-measures contain. In the great coalfields of this formation occur all the beds of coal worth working in Britain. In the South Wales coalfield there are more than 100 beds of coal, about