considered a constituent of this formation; its extensive dissemination in connection with coal in some parts of Great Britain has been of immense advantage to the ironworks of this country, in many parts of which blast-furnaces for the manufacture of iron rise by hundreds alongside of the coal-pits from which they are fed. In France, as is frequently the case in England, this argillaceous iron-ore only occurs in nodules or lenticular masses, much interrupted; so that it becomes necessary in that country, as in this, to find other ores of iron to supply the wants of the foundries. Fig. 70 gives an idea of

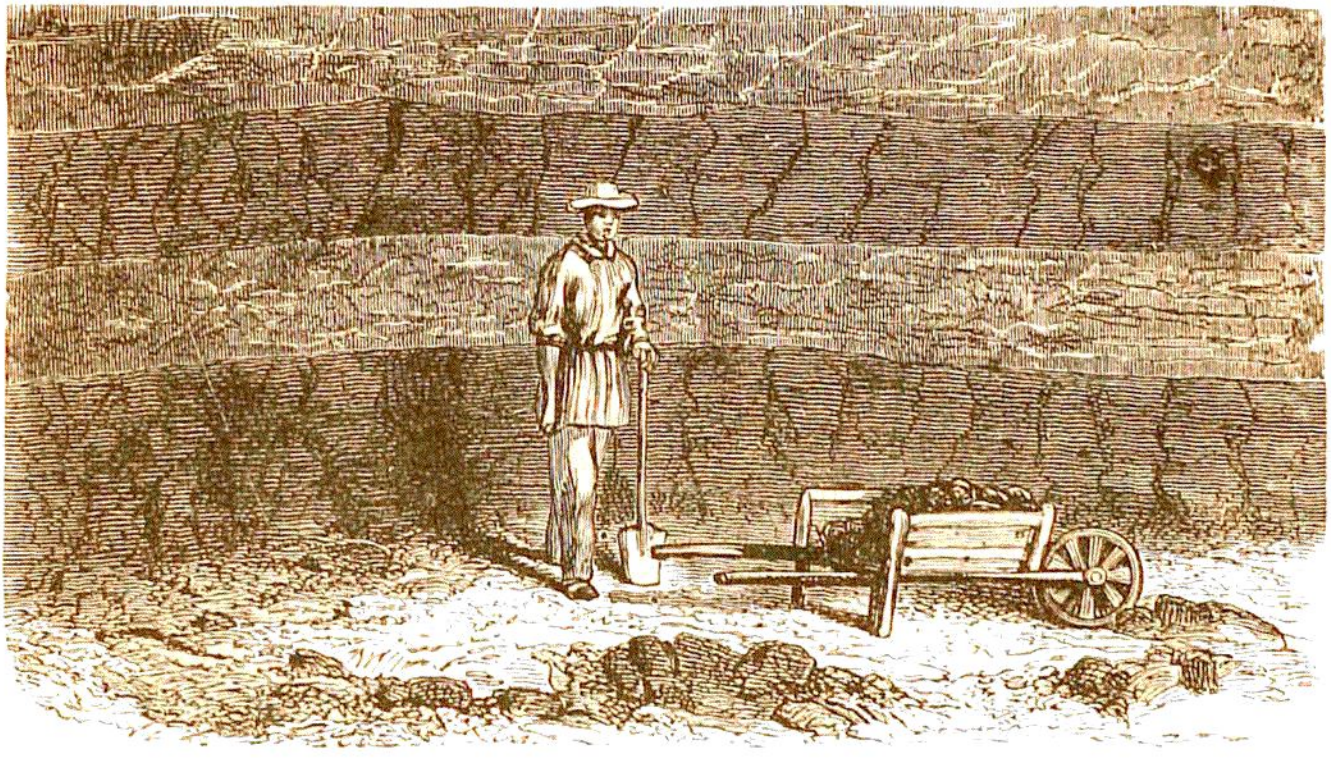

Fig. 70.—Stratification of coal-beds.

the ordinary arrangement of the coal-beds, one of which is seen interstratified between two parallel and nearly horizontal beds of argillaceous shale, containing nodules of clay iron-ore—a disposition very common in English collieries. The coal-basin of Aveyron, in France, presents an analogous mode of occurrence.

The frequent presence of carbonate of iron in the coal-measures is a most fortunate circumstance for mining industry. When the miner finds, in the same spot, the ore of iron and the fuel required for smelting it, arrangements for working them can be established under the most favourable conditions. Such is the case in the coal-fields of Great Britain, and also in France to a less extent—that is to say, only at Saint-Etienne and Alais.