

coal formation, the greatest portion of which lies within our own limits; and the more so, on account of several of its accessories, whose importance has not been perhaps hitherto fully appreciated.

One of these is the *Iron-ore*, with which it abounds. The occurrence of iron-ore, associated with coal, has been considered the most prolific source of commercial prosperity possessed by Great Britain. Her political economists have long been accustomed to ascribe the extent of her manufactures to the abundance and cheapness of both these substances; by which are furnished, not only fuel for working the steam engines which put into operation their machinery, but the material, also, for the construction of this machinery. The time will come when a similar ascription shall apply to the United States, and when the western county of Maryland shall be looked upon as the Wales of North America.

On the Yohogany, the iron-ore exists of the best quality and in the greatest abundance. It is of the variety described by mineralogists under the specific head of *argillaceous oxide of iron*. The following extracts, taken from notes made on the spot, will give an idea of the circumstances under which it is found to occur.

"1st. Iron-ore bank, on the western shore of the Yohogany.—*Argillaceous iron-ore* lying under sandstone; above which, at an elevation of about thirty feet, there is a bed of coal three feet thick, overlaid by a stratum of slate ten feet thick; and above this again, a deposit of clay, with nodules of iron-ore. The coal in the upper part of this bed is much mixed with shale, and this with iron pyrites.

"2d *Nodular argillaceous iron-ore*, at the mouth of Bear creek; occurring in a bed, the depth of which has not been ascertained, and lying under a mixed deposit of debris of *clay-slate* and *sandstone*; the whole covered by a heavy superstratum of ferruginous sand, and a deep vegetable soil.

"3. *Extensive deposit of clay*—on the slope of Winding ridge, east shore of the Yohogany. This deposit contains nodules of *argillaceous iron ore*. It rests upon the sandstone, and is covered by continuous stratum of *calcareous marl*.—The ore, promiscuously extracted from the bed, has been found to smelt by itself."

Associated with these deposits, there has been observed in the stratum of ferruginous clay, overlaying the coal, (as remarked in note 1st; above,) nodules of a mineral substance, consisting of lime, clay and oxide of iron, answering very nearly the description of what by English writers