

flowed three hundred and six hundred barrels per day. Others flowed a thousand, two thousand, and three thousand barrels per day. Three flowed severally six thousand barrels per day; and the "Black & Mathewson" well flowed seven thousand five hundred barrels per day! Three years later, that oil would have brought ten dollars per barrel in gold. Now its escape was the mere pastime of full-grown boys. It floated on the water of Black Creek to the depth of six inches, and formed a film upon the surface of Lake Erie. At length the stream of oil became ignited, and the column of flame raged down the windings of the creek in a style of such fearful grandeur as to admonish the Canadian squatter of the danger, no less than the inutility and wastefulness, of his oleaginous pastimes. From detailed determinations, I have ascertained that, during the spring and summer of 1862, no less than five millions of barrels of oil floated off upon the water of Black Creek—a national fortune totally wasted, as inherited fortunes are apt to be wasted, by those not educated to an understanding of the amount of labor and time consumed in the accumulation of such fortunes. [See Appendix, Note VIII.]

The general conditions of oil-accumulation may be thus epitomized:

1. A formation containing the material for the production of oil by slow spontaneous distillation.
2. A porous formation or reservoir above the mother rock, or within it, in which the oil may be accumulated.
3. An overlying impervious formation, which shall prevent the escape of the product to the surface of the earth.
4. A dome-shaped conformation of the impervious roof, which shall prevent the lateral escape of the oil, or its dissemination through spaces too extensive.

The failure of either one of these requisites will convert all the other indications into illusory and seductive temp-