

## WOODSTOCK IRON WORKS.

The Woodstock haematite beds, where the works now referred to are located, were discovered, in the year 1836, by Dr. C. T. Jackson, of Boston, during a geological survey conducted under his guidance, by the authority of the State of Maine. Their value was at once recognised, and, from the date of their discovery, they have been well known and highly prized, for their extent, and the fine quality of the iron which they yield. When first made known by Dr. Jackson, in his Report to the Governor of Maine, in 1837, the bed was described as being nearly nine hundred feet wide, and of unknown length. The following calculations were then given as to its probable productive capacity.

"The ore," says Dr. Jackson, "is the compact red haematite, and will yield 44 per cent. of pure metallic iron, and 50 per cent. of cast iron. Allowing its specific gravity to be 3.5, and some of it will range still higher, a cubic foot of the ore will weigh two hundred pounds. If the ore were wrought to the depth of one hundred feet, and five hundred feet in length, we should have for the cubic contents,  $900 \times 100 \times 500 = 45,000,000$  cubic feet of ore. Every cubic foot yielding 50 per cent. of cast iron, we should have 225,000,000 pounds, as the amount of cast iron that can be wrought from this bed, within these narrow limits."

I am indebted to Mr. Norris Best, one of the proprietors of the property, for the following interesting particulars, as well as to the seventh Annual Report of the Maine Board of Agriculture, where, in a letter from Mr. George L. Goodale, Secretary of the Board, to the Governor of Maine, some interesting details are given, which will be found below.

The ore upon which the Company is at present engaged, is a reddish compact peroxide of iron, generally known as *haematite*, but, judging from the quantity of water which it contains, more properly termed *limonite*. There are, however, two localities from which the ore has been obtained, one of which, according to Mr. Goodale, contains a true compact red haematite, the other a hydrous per oxide, or limonite. These ores are found, according to Mr. Best, over the greater part of the northern and north-eastern portions of the County of Carleton. The spot, where the ore is now raised, is in Jacksontown, situated about two and a half miles from the furnaces, and about three or three and a half from Woodstock. The ore occurs in beds or veins, included, I believe, in calciferous and manganesian slates, having, with the latter, a strike nearly N. E. and S. W., and with a thickness varying from six inches to as much as eight feet. The greater part of them are about three and a half feet in width. The depth is entirely unknown, as no shafts have yet been sunk, but Mr. Best informs me that he has found "from surface inspection," the same vein they are now engaged upon, at a level of two hundred feet below the present workings. These veins or beds (as they should more properly be called,) are found very close together, often not separated to a distance of more than three feet, and are strongly adherent to the slates which enclose them. They are nearly vertical in position, but