

two ordinary workmen, turns out about a ton of blooms in twenty-four hours. The wages amount to eight dollars, and the consumption of coal, including waste, and all really *paid for*, can seldom be estimated at much less than 300 bushels. Of the charcoal, such as I saw at the works, 250 bushels ought to be enough. The expenses of manufacture may then be estimated as follows :—

Estimated cost of a ton of blooms made on the Lake Shore.

2 tons of ore, quarrying and hauling 12 miles, at \$2 . . .	\$4 00
Roasting same, at \$1	2 00
Stamping and screening, at 50c.	1 00
250 bush. Charcoal, at 8c. (actual cost)	20 00
2 bloomers at \$3, 2 helpers at \$1, or same amount as by actual contract	8 00
Repairs \$1, Superintendence \$1, Interest \$1	3 00
General expenses	2 00

Cost on Lake Shore \$40 00

Shipping, freight, carting, storage and commission, say . . . 15 00

Cost when sold at Cleveland \$55 00

Estimated cost of making Charcoal Pig Iron at Detroit, in large blast furnaces, railroad to the mines, and canal built.

1½ tons of ore at \$4	\$7 00
130 bush. charcoal at 4c.	5 20
Flux 50c., labor \$2	2 50
Repairs 50c., superintendence 50c.	1 00
Interest, general expenses	1 00

\$16 70

On the Island of Elba are found large bodies of ore similar to those of Lake Superior. The furnaces for smelting them are on the opposite shore of Tuscany. They are small, and of very peculiar construction, different from any other furnaces, but by their extraordinary yield they have proved to be extremely well adapted for smelting this kind of ore.

THE FOREST CITY IRON WORKS.

The Forest City Iron Works, controlled chiefly by Messrs. Hayes, Moore, McLelland, Renton, and others, will immediately commence the erection of their works on the Lake shore, about one mile east of the dock in Cleveland. They have secured eight acres of ground, a space ample for the most extensive operations, upon which they will commence during the present week, a large smelting and refining works and rolling mill, the former to employ twelve of James Renton's improved ore-welding furnaces, capable of