

SMELTING WORKS.

I learn from the last Quarterly Report of the Board of Directors, that your attention has been again drawn to the subject of smelting. If ever resumed here, I am of opinion that simply reducing the ore to a state of regulus, say of 40 per cent., will be more advantageous than attempting to put it through all the processes necessary to obtain fine copper. If this reduction could be effected, at a moderate cost, directly from the rough ore as it comes from the mine, the introduction of such a process would increase the value of the mine amazingly. This rough ore, after the trap and poor quartz rock is picked out, yields from 4 to 5 per cent. without any dressing. By separating the poorer from the richer portion when spalling and picking the stuff, one half might be obtained of 6 to $7\frac{1}{2}$ per cent. produce. The reduction of ore of even 4 or 5 per cent. to a regulus is quite practicable, if the cost would not be too great. I have a strong impression that such reduction could be accomplished more successfully in a blast furnace than in the reverberatory or draught furnaces formerly used here. It might not be amiss to make inquiry in some really well-informed quarter in regard to this matter.

THE FURNACE BOTTOMS

Have been all taken out and forwarded, with the exception of 5 or 6 tons gathered up late in the fall; this stuff will not yield more than 15 or 16 per cent.

The following is a statement of the furnace bottom stuff shipped last season:—

	Swansea Weight.				
	Tons.	cwt.	qrs.	lbs.	
In masses and pieces . . .	24	3	2	27	estimated at 80 per cent.
Crushed stuff . . .	40	6	2	16	about 40 per cent.
Do. . . .	16	6	1	8	about 16 per cent.
Total . . .	80	16	2	23	

The two large calcining furnaces were simply cleaned out, and with the exception of a slight repair required by one of them, are ready for future use when wanted.