

time, if not, all or part from the United States. He said they could be built, delivered and set up within six months.

The full capacity of the two furnaces per diem would be about 60 tons of matte. The matte averages about 17 per cent nickel and 25 per cent copper.

The daily output of nickel at this rate 10.2 tons, and for ten furnaces at the same rate 50.4.

There is at present about 6,500 tons of matte ready for delivery, and the ore on the roast beds will produce about 6,000 tons more, containing 1105 and 1020 tons of nickel respectively.

To run one furnace the following men are required :—

One weigher,
Two engineers,
Two furnace men.
Two slag wheelers,
Two chargers,
One yard man

Total, ten men at an average pay of \$1.80 per diem.

Attached to the furnaces is a well fitted laboratory with F. L. Sperry, chemist, in charge, and two assistants. Here each run of matte is analysed and assays made of ores as needed.

The whole disposition of the plant is well planned for working with economy, and it will be observed that the ores are handled but four times: 1st, into the cars from the mines 2nd, into the crusher, 3rd, off the roast-beds, 4th, into the furnace, at other operations it falls by gravity into or from the bins or cars.

To increase the plant, the company has purchased a Gates Crusher from the Gates Iron Works at Chicago, and it with its accessories, is now on the grounds ready to be set up. It is the largest size they make (No. 8,) and with three apertures 18 inches by 42 inches each and its capacity is stated in the catalogue of the makers 100 to 150 tons per hour. Mr. Gates, whom we saw in Chicago, stated that it would crush 200 tons of the friable ores, of Sudbury per hour. This will give a total per diem capacity at the Canadian Copper Company's mines of 6,000 tons.

THE VICINITY OF THE COPPER CLIFF MINE.

Starting from the hill into which the shaft of this mine is sunk, we rode over a range of hills to the point named on the map "McConnell Mine," a distance along the range of about $2\frac{1}{2}$ miles. On the hill just back of the shaft of the Copper