

THE INTERNATIONAL NICKEL COMPANY OF CANADA LTD.

The molten slag and matte from the furnace flow into the settler close to the side and nearer the back of the settler where the slag overflows than the front where the matte is tapped. This is far from being an ideal arrangement, but was the best that could be done in the existing building (without incurring excessive expenditure) when the settlers were enlarged to provide for pouring converter slag into them. A greater distance of travel for the furnace slag before overflowing would be a decided improvement. However, for the converter slag, the maximum distance of travel is provided.

The slag from the settlers overflows into pots of 225-cubic foot capacity, standing on standard-gauge tracks. When full, they are drawn away to the slag dump where the liquid slag is poured. The turning down of the pots is done by an electric motor. Before being placed under the slag stream, the pots are given a lime wash to aid in the removal of the 'skull' at the dump.

Before adopting the practice of pouring the converter slag into the settlers, a long series of experiments was undertaken. Two settlers, connected to furnaces smelting similar charges, but one having converter slag poured into it, were sampled independently over a period of nearly two years. Not only were the usual ladle samples taken at the settlers, but channel samples of the dump were also taken. This duplicate sampling gave added confidence in the results obtained.

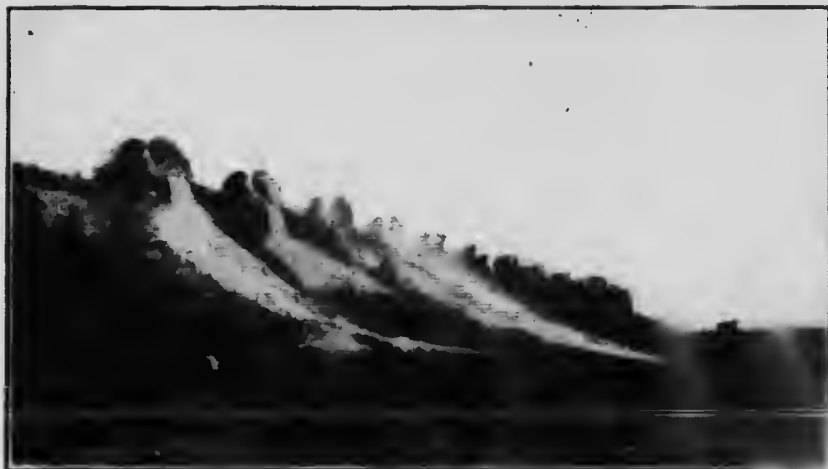


Photo by British and Colonial Press, T
Plate XXII.—Slag cars at dump.