

		Bullion Produced.	
		Tons. Treated.	Ozs.
Cyanide Mills.			
15.	Dominion Reduction		
	Crown Reserve	15,704.0	346,234
	Kerr Lake	5,983.0	130,075
16.	Nipissing	3,447.0	57,875
17.	O'Brien	39,909.5	229,360
		65,043.5	763,544
Total tons milled by water concentrating mills			390,473.0
Total tons milled by cyanide mills			65,043.5
Total tons milled, 1912			455,516.5

In the plants using concentration processes only there is considerable variety. The Coniagas mill has a comparatively simple flow sheet. The flow sheets of the Hudson Bay and Cobalt Lake concentrating plants are of special interest, because these mills are of recent construction.

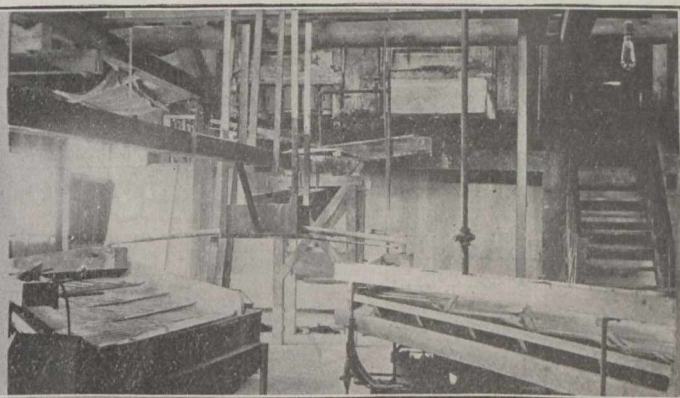
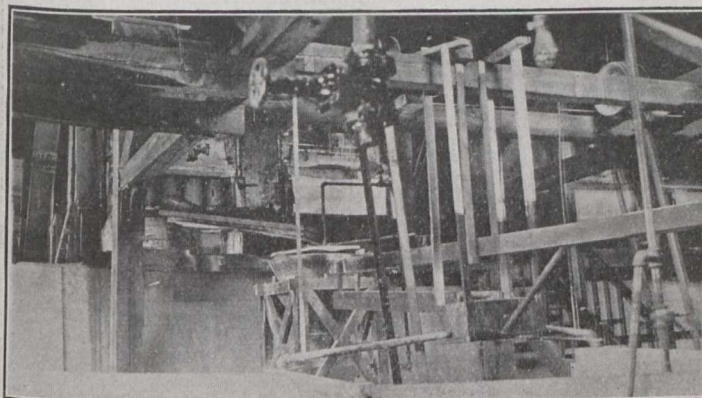
The Coniagas Concentrator.

At the Coniagas property during the past year about 44 per cent. of the silver produced was from ore treat-

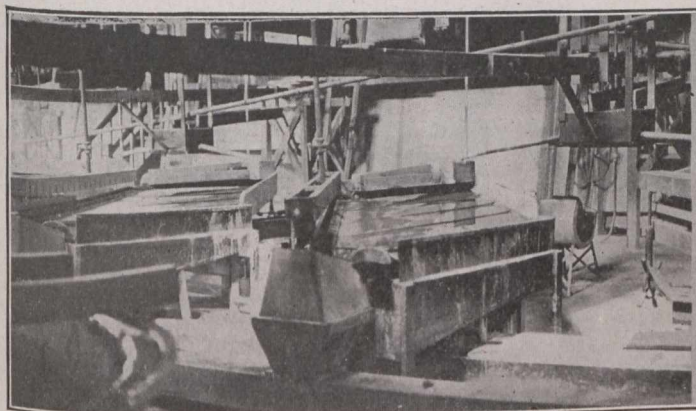
grizzly join this crushed ore, which is then elevated and sized in No. 1 trommel, having 5-16 inch and 1 1/4-inch holes.

The oversize of 1 1/4-inch goes to a sorting belt, where ore averaging 1,500 to 2,000 ounces per ton is picked out by hand. The tails from the sorting belt are conveyed by portable belt conveyor to the stamp bins.

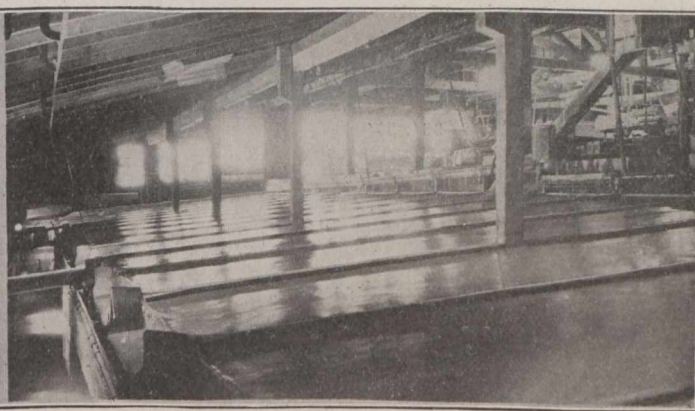
The undersize of 1 1/4-inch and over 5-16 inch goes to coarse jigs.



Two views showing stamps, setting cones, distributors and Deister Tables, Coniagas mill



Deister Tables, Coniagas mill.



Canvas tables, Coniagas mill.

ed in the mill. Fifty-six per cent. was in high grade ore recovered without concentration. The mill output for the year 1911-12 was 803.3 tons high-grade concentrates and 484.2 tons low-grade slimes.

The ore from the mine is emptied from a self-dumping skip into a chute down which it runs to the mill bin. A grizzly, with 1 1/4-inch spaces, screens out the fine ore. The oversize is crushed to about 4 inches in a Blake crusher, elevated to bins and thence fed automatically to a gyratory crusher, the product of which is under 2 inches. The fines from the shaft-house

The undersize of 5/16 inch is sized in No. 2 trommel, which has 3.5 mm. openings. The oversize goes to fine jigs. The undersize is classified in a drag classifier from which sands go to a Wilfley table and slimes to settling tanks. These mine slimes, which average 150 to 200 ounces silver per ton, are collected and shipped to smelter without further treatment.

The tails from all jigs and the Wilfley table unite and are elevated to a drag classifier, dewatered, and conveyed to the stamp bins. The water from the classifier with some slimes runs to a Callow settling tank.