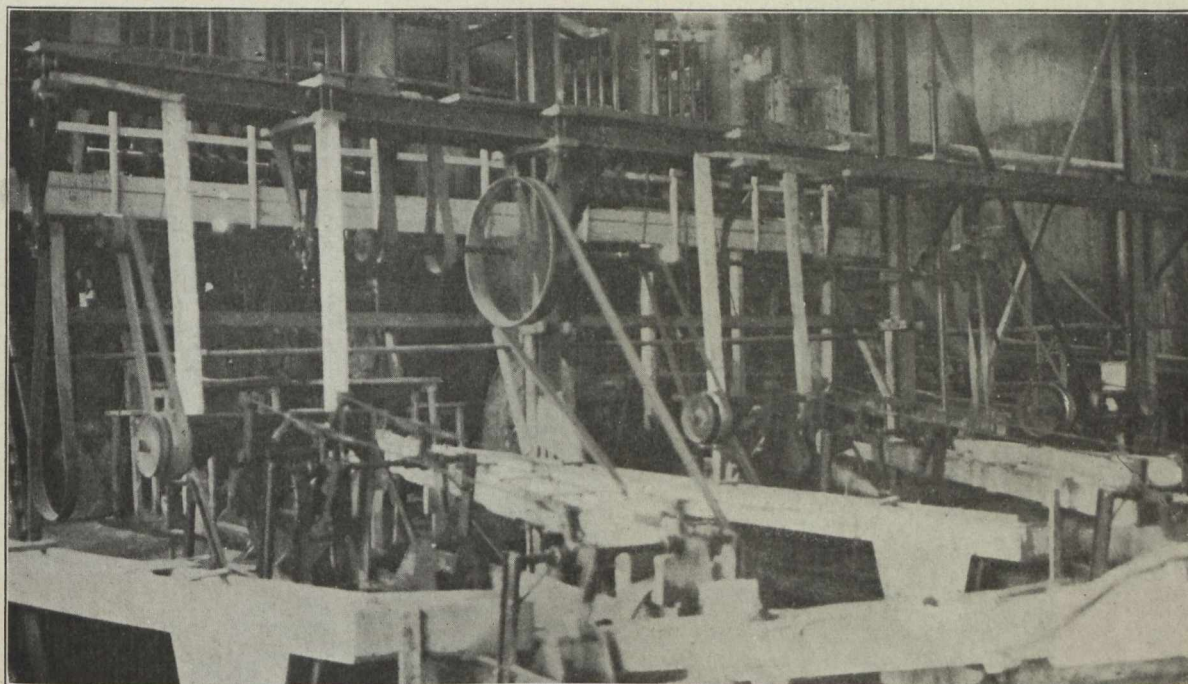


mation was obtained the stamps were giving a duty of only 6.8 tons per day, and the slime treated by the secondary plates was of such a fineness that 85 per cent. would pass a 200-mesh screen.

The lowest recoveries by amalgamation were noted over periods in which the stamp duty was at a maxi-

Merrill concentrating cones which trap the coarse concentrate and any amalgam or coarse gold that may have escaped from the secondary plates, the coarse concentrate is then returned to the tube mills.

The tube mills are run at 26 to 28 r.p.m. by slip-ring motors coupled direct to the tube mill pinion



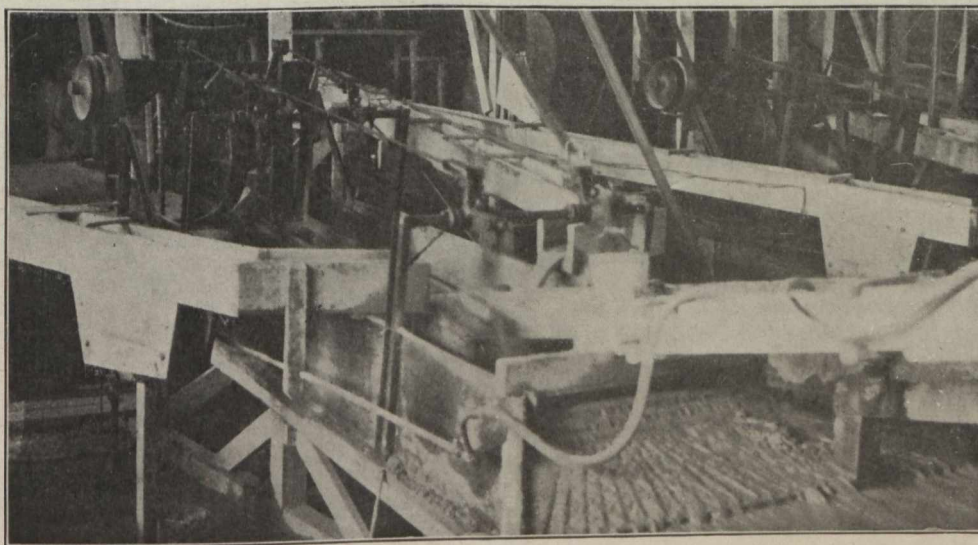
View of Classifiers and Stamps. Dome Mill.

mum, and only 65 per cent. of the slime treated on the secondary plates would pass a 200-mesh screen.

Classification and Tube Milling.

Classification.—The pulp discharged from the batteries goes to four duplex Dorr classifiers, the sand product of which passes to four 5' x 22' tube mills.

shafts. Each mill takes approximately 70 h.p. The linings used are of the El Oro type made of chilled cast iron. The discharge of each tube mill is elevated, and returned to the corresponding classifier on the floor above it by means of an 8" x 40" Frenier sand pump. When the fineness of the slime is such that 75 per cent. will pass a 200-mesh screen, it has been



View of Dorr Classifier, Dome Mill. Note Slime Overflow Running onto Amalgamating Plate.

The slime product of the classifiers is carried over four secondary amalgamating plates, one for each classifier. These plates are 108" x 144" in size and have a slope of about 1½ inches per foot. After leaving the plates, the slime is passed through sets of

found that the most economical results are obtained taking into consideration both the total recovery of the gold and the milling cost per ton of ore treated.

Thickening.—The slime is at a dilution of about 10 tons of water to one ton of solids. The water is re-