

to 441 ft. from No. 5 shaft south-east crosscut ; eastward 129 ft. was driven, making a total of 320 ft. : the average width of the lode is 9 ft.

Shafts.—No. 1 shaft : No sinking has been done. The bottom of the shaft is 572½ ft. from surface. New guides—5½ in. by 4 in. have been placed in the winding-compartments. A new set of poppet-legs have been placed over the shaft. A Babcock and Wilcox boiler has been built in. A new winding-engine is about to be erected. No. 5 shaft : No sinking has been done. The second plunger of B pump has been placed in position at the 704 ft. level, also an auxiliary 14 in. diameter drawlift. A balance-bob was put in at No. 4 level. The shaft was divided into three separate compartments, and new dividing-pieces had to be put in from top to bottom. This was done to introduce a larger pump on the east end of shaft called C pump. At the 704 ft. level, the cistern chamber has been excavated for the first plunger gear. The bottom part of the plunger-lift has been placed in position, also 90 ft. of the rising main. A 20-ton capstan has been erected, also 4 Babcock boilers. The winding-engine has been altered to suit the requirements of the single winding-compartment. No. 6 shaft has been sunk from 166½ ft. to 443 ft., making the distance sunk during the period 277 ft. An 18 in. filling-pipe has been placed in the ladder-compartment which delivers the filling at No. 4 level for the Martha east-end stopes.

Mine-development and deadwork.—Crosscuts through country, 3,733½ ft. ; on course of lode, 8,563½ ft. ; crosscuts in lode, 530 ft. ; winzes sunk, 5,921 ft. ; shafts sunk, 289 ft. : total, 19,039 ft., or 3·6 miles. At No. 5 shaft the erection of the new pumping-engine known as C pump has been proceeding for some months. The capacity of this pump is 1,500 gallons per minute from a depth of 1,500 ft. Very massive concrete foundations were necessary owing to the nature of the ground. The high-pressure cylinder, bed, guides, and cross-head are erected in position : the large plummer-blocks for trunnion of beam fixed in position, and the beam (which was delivered in three lengths) is now being riveted together. The low-pressure cylinder, weighing with its wooden lagging some 23 tons, was delivered at the shaft in December. The concrete walls of the pump-buildings are approaching completion.

Product.—A total of 214,508 tons was treated during the year, which was obtained in the following proportions from the various reefs worked : Martha reef, 94,296 tons ; Empire reef, 46,216 tons ; Welcome reef, 29,499 tons ; Regina reef, 7,895 tons ; Magazine reef, 5,763 tons ; Princess reef, 5,531 tons ; Albert reef, 5,210 tons ; Victoria reef, 5,109 tons ; reef J, 4,750 tons ; reef I, 4,173 tons ; reef L, 2,014 tons ; Surprise reef, 1,637 tons ; Royal reef, 1,346 tons ; No. 2 reef, 1,089 tons ; reef H, 53 tons ; reef C, 37 tons ; total, 214,508 tons. The whole of this has been wet-crushed. The product was 677,873 oz. of bullion exclusive of concentrates and slag-tailings which were shipped. A total of 1,784·73 tons was shipped, the total value of which, according to assay, was £82,402 6s. 4d. The value of the total product was as follows : 677,873·1 oz. of bullion, excluding concentrates and slag-tailings, £519,445 10s. 1d. ; assay value of concentrates shipped, £82,402 6s. 4d. ; assay value of slag-tailings, £1,319 12s. 4d. ; total, £603,167 8s. 9d. A total of 78,881 tons was passed over amalgamated copper plates ; the average value of the bullion per ounce was 15s. 4d. or 1s. 9d. lower than the preceding year, a better extraction of the silver-contents having been obtained.

Reduction-works.—The respective tonnage crushed at the mills amounted to 214,508 tons. The total average number of stamps running during the year, exclusive of Sundays and the period at Christmas, during which the mills were stopped, was 317,470 out of a total of 330 stamps. The total average duty per stamp per diem was 2·406, an increase of 0·288 over the preceding year.

Waihi Mill (90 stamps).—Twenty-eight Union vanners have been erected, and are in use. Towards the end of the year another press was obtained from Martin and Co., making five of this make of press now in use. A new dynamo was erected, and electric light cables have been run throughout the plant wherever extensions or alterations were necessary.

Victoria Mill (200 stamps).—A third turbine of 100-horse power which was in stock, has been erected, and was brought into use during the month of August. Since then very little steam-power has been required. A mechanical chain-grate stoker was obtained from England, and has now arrived at the Victoria Mill. Several machine tools have been added to the machine-shop. A series of trials for the treatment of concentrates at the Victoria Mill, instead of shipping them, have been carried out for some months. Tenders were called for ten steel agitating-vats 6 ft. in diameter and 15 ft. 9 in. in depth. The vats have since been received, and erected upon timber trestling and the necessary V boxes were constructed. The tube-mill came to hand in October, and was erected. The shafting for driving it, and an air-compressor and pumps, together with a pressure-tank were also installed. Work in connection with the whole plant has just been completed.

Union Mill (40 stamps).—The Babcock and Wilcox boiler formerly used at the No. 1 shaft of the Union Mine was removed to this mill, and re-erected as the single Babcock and Wilcox boiler in use was overtaxed. A settling-tank and filter was made to improve the quality of the boiler-feed water. A new turbine was procured, and brought into use for driving the agitators.

An average of 1,120 men were employed by the company. The large sum of £250,000 was paid in dividends during the year, totalling £1,257,189 17s. 6d. since commencing work.

Waihi Grand Junction Gold-mining Company (Limited).—This company have two claims. One is situated on the western side of the Waihi Company's mine, and the other on the eastern side, and they comprise 90 acres and 190 acres respectively. As the claims do not adjoin each other, they have to be worked as two separate mines. At the beginning of the year, the company were carrying on prospecting-work in both mines, but after a few months' work, not meeting with the success anticipated, it was decided to apply for protection for the western claim, and direct the whole of their attention to the mine on the eastern section, where most encouraging prospects were being obtained. While working on the western mine, a large amount of sinking, driving, and rising was done to effect communication between the B and C shafts for ventilation, and when this was accomplished, a crosscut drive was put in a distance of 56 ft., where the reef was intersected, and driven through and found to be 14 ft. wide,