

of ore was crushed and treated for 532 oz. 5 dwt. recovered by amalgamation, value £332 7s. 7d.; and 3,262 oz. 8 dwt. recovered by cyanide, value £479 16s. 2d.: or a total value of £812 3s. 9d. As will be seen by the above return, it was a low-price bullion. Owing to the ore treated from the upper levels not turning out as well as expected, and the funds becoming exhausted, the battery was stopped and only a limited number of men kept on in the mine, pending a reconstruction of the company for the purpose of providing capital to prove the reefs at a depth, as it was found the ore was increasing in value going down. I am informed work is to be resumed with renewed vigour. An average of eleven men were employed.

*Waitekauri Extended.*—This mine has been steadily worked. Operations have principally been confined to driving, sinking, and stoping on the reef at and over the back of No. 3 or low level, where the reef has an average width of 12 ft. On the north and south of the crosscut at No. 3 level, large blocks of ground are opened up on the reef between Nos. 2 and 3 levels, which are connected by a rise on the reef. As the levels named are 200 ft. apart, an intermediate level was driven from the rise, about half-way up, for the purpose of more thoroughly proving the value of the reefs opened up. The ore in the stopes over the back of the No. 3 level becoming poorer as the stopes ascended, all work here was stopped, and the operations then directed to prospecting and proving the value of the reef under the No. 3 level. An underhand stope was carried along the bottom of the level to a depth of 5 ft., and a winze sunk on the reef to a depth of 50 ft., from which it is said good payable ore was obtained all the way down. The battery was closed down in the month of December, pending the development of the reef at deeper levels, it having been decided by the company to sink a shaft from No. 3 level to a depth of 200 ft., for which preparations are being made. At this depth a level will be opened out and the reef intersected. Should the prospects be of a satisfactory character the shaft will then be sunk to a depth of 500 ft. A chamber is being cut out in the level for the machinery where the shaft is to be sunk. The present little temporary plant will be used for sinking for a time, but, as this will not be sufficient to cope with the water to any great depth, a more powerful machine is to be erected. 2,255 tons of ore was treated by the cyanide process for 2,117 oz. 6 dwt. of bullion; value, £2,223 3s. Forty men were employed.

#### KOMATA.

*Komata Reefs.*—During the last nine months the only work carried on has been the completion of the No. 4 level tunnel, and connecting the same with No. 3 level (a vertical distance of 300 ft.) by means of a rise put up to meet a winze sunk from No. 3 level on the reef; also opening up the reef at No. 4 level, and driving an intermediate between No. 4 and No. 3 levels. Alterations are being made to the battery, and it is expected that crushing will be commenced about the middle of March. The process to be adopted will be amalgamation, concentration, and cyaniding of the tailings. A considerable amount of outside work has been done in connection with the water-race and ground tramway. A small amount of bullion was produced during the period under review; this was obtained from cleaning up around the battery from a small parcel of high-grade ore treated. 4 tons of tailings were treated for 134 oz. of bullion; value, £299 6s. 2d. Thirty-five men were employed.

#### KARANGAHAKE.

*Woodstock Mine.*—Considerable development-work and improvements have been carried on during the past nine months. The dam and penstock to which the new pipe-line (extension of old line) is to be connected has been completed. The dam is 140 ft. long over all, has 120 ft. overflow, and in flood-time has carried a crest of 8 ft. of water. The grade-line for this new pipe-line of about 1,800 ft. has been completed, being built up of rubble-work, walling, and trestling. To carry the pipe across the Ohinemuri Gorge a Warren truss-bridge of 80 ft. span has been built. This bridge has a 7 ft. wide decking in the clear between the trusses, and the bottom chord is 24 ft. above ordinary water-level, and 6 ft. above the highest known flood-level. The water-pipe which this bridge carries is 3 ft. 9 in. in diameter, and is now being connected up on the grade-line. This extension gives a head of 80 ft. at the Pelton wheel (which is to be erected under the battery building), more than doubling the old pressure-head. The old water-power main has been shifted to a lower level at the battery end in order to make room for the air-compressor and steam plants. Two air-compressors are to be erected—one of 1,000 and the other of 40 cubic feet free air per minute, the former an Ingersoll-Sergeant and the latter a Schram compressor. The Pelton wheel to be installed is 11 ft. 2 in. in diameter over all, and is to drive the air-compressors and battery during the greater part of the year. It is intended to install an auxiliary steam plant to give the necessary power when the water is deficient in the summer months. The large turbine by which the mill was recently driven has been removed, as it was quite unsuitable to the increased head of water. The excavation for the air-compressors and steam-engine and boilers is 63 ft. by 57½ ft., the foundations being upon solid rock. The extreme height or depth of this excavation from surface at the back of battery to the bottom of the wheel-pit is 74 ft. of rock. The arrangement of machinery is so designed that the battery or air-compressing plant may be driven separately by either steam- or water-power, or both together may be driven by either of these powers, or the water and steam plants may be coupled together to drive the whole of the machinery. A new tail-race 69 ft. long under the mill, and below the old tail-race, has been driven and timbered so as to gain the utmost pressure-head. The old bridge across the Waitawheta Stream (connecting the battery with mine tram-line) has been taken down, as it was much decayed and too light for the economical ore-supply to the battery. A new and more substantial bridge going direct to the battery ore-hopper has now been almost completed. This bridge is 180 ft. long over all. It is designed for the transmission of horse and train of trucks as they come from the mine, and will carry such a distributed load aggregating 10 tons. In the mine, developments have been confined to the extension southwards