

441 ft. to 606 ft.; east of north section junction the lode has been driven on from 129 ft. to 370 ft. Winzes: Snake, Slug, Worm, Nite, Snail, and Frog Passes have been sunk to No. 6 level.

No. 4 level.—Crosscuts: No. 1 shaft north-west crosscut was advanced from 168 ft. to 263 ft. from No. 1 shaft and a connection made to No. 2 filling-shaft; Skinners south-east crosscut was extended from 462 ft. to 676 ft. from Welcome Lode. Martha Lode, north section: A level was driven on this footwall of lode from 153 ft. to 461 ft. east of No. 1 shaft, north-west crosscut.

No. 3 level.—Crosscuts: A north crosscut was driven from Royal Lode to Royal filling-shaft a distance of 225 ft. Martha Lode, north section: The level has been advanced from 209 ft. to 267 ft. east of No. 2 shaft, north-west crosscut, on the footwall of lode; east of No. 1 shaft, north-west crosscut, the level has been advanced partly in the country and partly in the sulphide ore for 279 ft.; Bullson Pass sunk to No. 4 level; Bullson Pass was also risen to No. 1 level. Empire Lode west of Albert junction: 151 ft. was driven on course of lode; Hicks, Perry, and Jo Passes were sunk to No. 4 level. I Lode, east of No. 2 shaft, south-east crosscut: A length of 100 ft. was opened up; Dunstan and Martin Passes have been sunk to No. 4 level. L Lode, north of No. 2 shaft, south-east crosscut: A length of 185 ft. was opened up; Benny's Pass was sunk to No. 4 level. Victoria Lode, north section: The east face has been connected with the Surprise Level.

No. 2 level.—Crosscuts: A crosscut was run from Martha Lode to No. 2 filling-shaft, a length of 39 ft. Empire Lode: The west face of level was advanced 95 ft.; Jo Pass was connected to No. 3 level. Albert Lode: The north face has been advanced from 130 ft. to 271 ft. north of J Lode junction; Menzie Pass has been connected to No. 3 level. Victoria Lode, north section: The east face has advanced 75 ft. from Truscott Pass.

No. 1 level.—Crosscuts: South-east crosscut from Martha Lode near Bell Pass was driven a total distance of 161 ft. during the year; at 17 ft., quartz 18 in. wide was intersected; at 123 ft. a reef 12 in. wide was driven through; at 143 ft. quartz 2 ft. wide, at 160 ft. quartz 3 ft. 6 in. wide, and at 177 ft. quartz 12 in. wide. North-west crosscut from Welcome Lode near Scott's Pass has been driven a total of 51 ft. Martha Lode, west of Merrie's Pass, has been driven on from 582 ft. to 660 ft. Bell Pass was risen to upper smithy level. Welcome Lode: Corne's No. 2 and Twomey's Passes have been risen to surface. Empire Lode west of Muir's Pass: The lode was driven on 155 ft.; Jo Pass was connected to No. 2 level.

Adit level.—Martha Lode: Footwall section of lode was driven on 33 ft. east and 26 ft. west of No. 2 shaft, north-west crosscut.

Upper smithy level.—Martha Lode, south branch, has been driven on east of western side of Martha Hill from 186 ft. to 502 ft.; Gordon Pass was sunk 65 ft.; Ward Pass was risen to No. 1 drive; Bell Pass has been risen to surface; Fugill Pass has been risen 55 ft.; right-hand branch of Welcome Lode has been driven on 240 ft.

Surface cuts.—The following filling-passes have been sunk:—No. 2 filling-pass, situated opposite No. 1 shaft in footwall of Martha Lode, has been sunk vertically a total of 473 ft., or 23 ft. below No. 5 level; this is now in use. Kerz Pass, situated in Albert Lode, has been sunk 243 ft. and is now in use. Royal filling-pass, situated 120 ft. south of No. 5 shaft, has been sunk 434 ft.; this is now in use.

Shafts.—No. 1 shaft: Sinking was resumed on the 15th October, and, up to the end of the year, a further depth of 81 ft. was sunk, making a total depth of 653½ ft. from surface, or 98 ft. below No. 6 level; at 69 ft. below No. 6 level, quartz came in from south side of shaft and exists at bottom; the new winding-engine (two 18 in. by 36 in. cylinders, geared to one 9-ft.-diameter drum) has been in use since June. A new brace of 9 ft. above old one has been erected. No. 2 shaft: No sinking has been done; the bottom is now free of water (732 ft. from surface); steel helical spur-and-pinion wheels have been placed on the winding-engine. No. 4 shaft: Sinking was resumed on the 5th November, and, up to the end of the year, a further depth of 70 ft. was sunk, making a total depth from surface of 631½ ft., or 87 ft. below No. 6 level; at 80 ft. below No. 6 level, the Empire Lode came in, dipping 1 in 2 north, and is 4 ft. wide where quartz is exposed; at 32 ft. below No. 6 level the shaft enters the solid reef-bearing andesite rock; steel helical and pinion wheels have been placed on the winding-engine. No. 6 shaft: Sinking was resumed on the 19th July and stopped on the 15th October, and, during this period, 110 ft. was sunk, making a total depth of 555½ ft. from surface, or 10 ft. below No. 6 level; this shaft is only used for sending down filling-material for the Martha east-end stopes. No. 5 shaft: No sinking has been done; "C" pump was started in April; a travelling-way from Nos. 6 and 7 levels has been made through Lloyd Pass; a large volume of water was struck on the 14th September, and both "B" and "C" pumps were run together until the 22nd October, when "C" pump was sufficient.

Mine-development and deadwork.—Crosscuts through country, 2,819 ft.; on course of lode, 6,249 ft.; crosscuts in lode, 1,099 ft.; winzes sunk, 10,083 ft.; shafts sunk, 261 ft.: total number of feet, 20,511 ft., or 3·9 miles.

Report of milling operations during 1904.—Product: A total of 259,978 tons of quartz (dry weight of 2,240 lb. per ton) has been crushed during the year, which exceeds by 28,655 tons the total of 231,323 tons crushed during the year 1903. The whole of this has been wet-crushed. The product was 928,050·2 oz. bullion, exclusive of concentrates and slag tailings, which were shipped. Five shipments of slag tailings, amounting to practically 39½ tons in all, have been made during the year: the total assay value of these five shipments amounted to £1,542 18s. 11d. A total of 1,992·19 tons of concentrates was treated at the Victoria Mill and produced 149,915 oz., of a value of £53,835 16s. 8d. 778,135·2 oz. of bullion (excluding concentrates and slag-tailings shipped), £599,654 10s. 4d.; 149,915 oz. of bullion (making a total of 928,050·2 oz.) from concentrates plant, Victoria Mill, £53,835 16s. 8d.; assay value of 367·60 tons on concentrates shipped, £18,068 2s. 5d.; assay value of 39·46 tons slag tailings shipped, £1,542 8s. 11d.: total, £673,101 8s. 4d. A total of 118,778 tons was passed over amalgamated copper plates and vanners before being cyanided, a further 141,200 tons was cyanided direct, making a total of 259,978 tons.