

The deep lead alluvial workings at the western end of Cromwell Flat proved very disappointing. The Bell-Kilgour mine workings ran into barren ground and the adjoining Bell-Hooper Mine was shut down after all auriferous wash that could be worked economically in that company's area had been blocked out. At other places on the Flat further sinking and boring have been carried out, and boring is being continued.

At the King Solomon Mine 3,670 oz. of gold was recovered in 1935, making a total, since mining commenced, of 17,448 oz. valued at £119,909. The workings to the north met a large upthrow fault. Prospecting is being continued in the southern end of the mine where some cross faulting was encountered.

Work on the restoration and extension of the Humphrey's Gully water-race was continued throughout the year. An exceptionally heavy fall of rain in February scoured out many of the gullies in the top section from Mount Brown Creek to the Milltown Dam, and the consequent additional work will add greatly to the cost of the work as many additional bridges had to be built and short tunnels driven. The reservoir at Milltown has been enlarged by increasing the height of the dam by 4 ft. The timber supports on the long syphon line have been renewed and repairs to the pipes are being made. In the third section of the race, the six mile extension, eleven tunnels had to be driven, the longest being 62 chains in length. The first four tunnels have been completed and the fifth, in fairly difficult ground, is in about half way. The next tunnel, the 62 chain one, is in about 10 chains and is being driven from both ends. The remaining five tunnels are all short ones and are all being driven. The open portions of the race are in some places 15 ft. deep and about one-fifth of the open race has to be supported by timber.

Many power-driven drills, some privately owned and others hired from this Department, were widely used in 1935. In the southern inspection district 453 boreholes totalling 26,431 ft. in depth were put down by such drills and of that number 305 holes totalling 19,959 ft. were drilled in Southland County.

In the West Coast District seven mining companies holding 71 areas, put down 1,321 boreholes totalling 50,356 ft. in depth. On twenty-nine other areas 372 boreholes of a combined depth of 10,461 ft. were drilled during 1935.

## V. MINERALS OTHER THAN GOLD.

### IRON.

Smelting operations were carried on at the Onakaka Ironworks until the end of May, 1935, but since then the works have been idle. During the first five months of the year 10,646 tons of iron ore was mined from which 4,902 tons of pig iron was produced.

### ASBESTOS.

A small sample of cobbled fibre was brought in from the asbestos-bearing area, which is difficult of access, and near the headwaters of the Takaka River.

### SULPHUR.

No work of importance was done at any of the sulphur-deposits during 1935.

### QUICKSILVER.

Further retimbering was done in the old levels of the N.Z. Quicksilver Mine, owned by Mercury Mines (N.Z.), Ltd., at Puhipuhi, and a short crosscut was driven off the main drive. At the treatment plant 27 tons of cinnabar ore was put through, yielding a little more than 5 cwt. of mercury, valued at £132.

### TUNGSTEN.

From the Glenorchy district 196 tons of scheelite ore was mined, which yielded 32½ tons of concentrates, valued at £3,675. Of that quantity the Glenorchy Scheelite Mining Coy., Ltd., produced 7 tons 11 cwt. of concentrates, valued at £755.

At Macraes 300 tons of ore was mined in 1935, from which 7 tons 2 cwt. of concentrates, valued at £1,044, were produced.

### PLATINUM.

From Round Hill and the Orepuki Mining Syndicate's area in the Southern District 14½ oz. of platinum, valued at £79, was recovered during 1935.

### PETROLEUM.

No drilling was done during the year by the Moturoa Oilfields, Ltd. The flow of oil was continuous from their Nos. 1 and 4 wells, from which 18,288 gallons and 49,373 gallons were obtained respectively. Bailing had to be done at intervals at the No. 2 well, from which 118,123 gallons were obtained. At Kotuku 312 gallons of crude oil was collected from seepages. No boring was done there, nor by Southland Oil, Ltd., during the year.

## VI. STONE-QUARRY INSPECTION AND STATISTICS.

By section 2 of the Stone-quarries Amendment Act, 1920, the application of the Stone-quarries Act, 1910, was extended to include every place, not being a mine, in which persons work in quarrying stone and any part of which has a face more than 15 ft deep. The Act also applies to any tunnel in the construction of which explosives are used, but it does not apply to any Government operations, or any road or railway cutting, or excavations for buildings.