45 C.—3A.

## ROUNDHILL.

The manager of the Roundhill Syndicate (Limited) is energetically pushing on the operations of the company, and a very large amount of work has been done, and a great number of men are employed. One elevator has been working on the company's special claim of 20 acres since last November, and up to date about 6 acres of ground have been sluiced away, with, it is said, paying results. The main line of pipes is 90 chains in length, and the pipes are 13in. in diameter. The elevator is worked with a little over six Government heads of water, with a 5½in. throat, and has a lift of over 50ft. The syndicate have completed the survey of a new water-race thirty miles long from the Pourokino River to the Roundhill. With reference to the sludge-channel, the bush is now cleared from the beach to the railway-crossing, being a length of about 40 chains, and the pile-driving, &c., in connection with the channel has been completed for a distance of 9 chains from low-water mark. A good many miners have recently left the Roundhill alluvial diggings to prospect the country west of the Waiau. Most of the surface-gold, as far as the present fall will allow, has been worked out at the Roundhill; and until the company previously mentioned create an artificial fall, there is very little ground left that individual miners can work profitably, as the natural fall of the country is sludged up. Thus, not only are the Europeans leaving, but some of the Chinese miners also.

## WAIPAPA.

There is nothing special to report, excepting that the Brunton Gold-dredging Company (Limited), not finding the portion of the beach which they occupy payable, have ceased operations and wound up the company.

I have, &c.,

The Under-Secretary, Mines Department, Wellington.

C. É. Rawson, Warden.

## No. 18.

Mr. J. Gow, Inspector of Mines, to the Under-Secretary of Mines, Wellington.

Sir,— Dunedin, 19th May, 1892.

I have the honour to forward my annual report on the alluvial and quartz mines visited

during the year.

Commissioners' Flat Gold-mining Company, Clutha River (22nd January, 1891).—I learn from the manager, Mr. R. W. Smith, that he made the survey and levelled the head-race, which is about five miles long, 5ft. wide, and 22in. deep, with a fall of 11ft. to the mile. The terminal end of the ditching is on the top of a ridge near Coal Creek, where it discharges the water into a reservoir, from which the pipes, 128 chains in length, convey the water to the claim. The first 20 chains of pipes are 18in. diameter, 15 chains of 17in., and 93 chains of 16in. At the time of my visit there were 120ft. of 3½ft.-wide sluice-boxes laid in position, with a fall of 3in. to the 12ft. The tail box was only a few feet above the level of the river, which stream, it was hoped, would scour so much that very little extension of the tail boxes would be necessary. The head box was then within 50ft. of virgin ground. A large quantity of surface had been some time ago roughly sluiced off to a certain gradient to expedite the opening of the claim when the hydraulic plant would be in working-order, which was nearly so at the time of my visit. The outlay by the company at that time was about £8,000.

Island Block Extended Gold-mining Company, Clutha River (23rd January, 1891).—Some little time previous to my visit this company had made a start to open this claim close to the water-level of the river, and on bank side of the shingle-beach. After having sluiced out a paddock about 1 chain square to a point supposed to be near the bottom, all works were suspended for the want of funds, and owing to some disagreement between the directors, manager, and shareholders. The pipes are laid from the head-race to the claim, equal to 78 chains, with a head of 810ft. This head, with the plant on the ground, is capable of doing splendid work in the material in view. The paddock, though not washed to the bottom, yielded 50oz. of gold. Should the yield continue the same throughout the flat, the claim should prove a fairly payable one. The shareholders should not, however, expect dividends for some months after a proper start is made. There is much yet to be done to get the claim in good working-order. I think some of the nozzles and pipes are rather small to do the work speedily. It appeared to me that the claim should have been opened out lower down the river to get it in good working-order quickly. I saw the claim in full work in August last, and learned that it had been working four or five months. It was then more than ever clear to me that the claim was opened out at the wrong place. The whole place was hampered with tailings, and the river-bed filled to near the opposite bank, which placed the workings in a bad position in case of a flood. I have not heard how the claim is paying.

Blue Spur Amalgamated Gold-mining Company (24th January, 1891).—I visited this claim for the first time to-day. The formation where the gold is found is a remarkable deposit, and has the appearance of having been at some remote period of time a river-bed filled in to a great depth (200ft.), since which time great changes have taken place on the surface. The old river-bed or channel has been cut away entirely on the north side of Munro's Gully, and can be traced only a short distance in a southerly direction. Munro's and Gabriel's Gullies have scoured through the old river-bed crosswise and deposited the gold there from down the several gullies in that locality. Some of the gravel in the old river-channel is very hard, similar to conglomerate rock, and through which there is a small quantity of fine gold scattered. This hard compact gravel will have to be crushed up in some economical way in order to sluice it away. Mr. Jackson, the manager, is now perfecting a crushing plant, consisting of rollers, to do this work. I think, however, it will take time to perfect a plant capable of doing a large quantity of the material quickly, and chiefly so as to leave a small margin of profit at the end of the year. The present system of washing away the old tailings is perfect. No other system in mining known to me could do the work so well under the circumstances.