

disintegrates it, and then it freely runs away. This party got 150oz. of gold for the previous season, and had at the time of my visit a large paddock stripped ready to lift the wash-drift.

John Ewen.—This gentleman also holds a claim at St. Bathans. He is elevating the material 46ft., and at the time of my visit was making arrangements to put in another elevator in the bottom of the present paddock, and lift the material to a further depth of 45ft. The whole of the material sluiced is composed of old quartz-drift, but there are certain layers in it where most of the gold is found. When this drift was deposited it underwent a process of concentration by the action of running water, and where the river-bed had for a good period remained at or nearly the same level, one can see the layers of material correspondingly; instead of fine drift, pieces of quartz are found in these layers 10lb. in weight, and sometimes larger. The structure of the quartz is extremely crystalline, but greatly foliated, and has every appearance of being auriferous stone, and no doubt it was, or else there would not be so much fine gold amongst the pure quartz-drift. Whatever convulsions of nature has altered the surface of the country since this deposit was made, it is no doubt the denudations from the high mountains which at one time existed that were carried onwards by the action of a large river which underwent certain changes at places; the layers of large washed quartz pebbles indicates that the current was moderately swift, while at other times slips appear to have blocked up the channel, and formed a lake of water, as deposits of beds of pure leaves from trees are found 5ft. and 6ft. in thickness, also indicating that the whole of this country, where no tree is now to be found, was at one time a dense forest.

Mr. Ewen uses a 2½in. nozzle for elevating under a head of 440ft. The elevating-pipe is 14in. in diameter, with a throat of 5in. in diameter. As the elevator is sunk in the quartz-drift for the whole of the distance, it was difficult, so long as the ordinary flume joined on to the top of the elevator, to keep it entirely water-tight, and the small leakage coming down the pipe used to bring the quartz-drift away and caused endless trouble to protect the bank; this has now been got over by having a wrought-iron bend bolted on to the top of the elevator, and a horizontal pipe on the other end of the bend discharging into the sluice-box. Since this was done the place is always thoroughly dry and no leakage occurs. There are two elevators—one lifting the material 45ft., and below this there is another lifting 30ft., but pipes are on the ground to increase the bottom lift, so that the ground can be worked to a depth of 90ft. The main supply-pipes are 18in., 15in., and some of them for supplying the breaking-down nozzle are only 9in. in diameter. The yield of gold for last season was 850oz., representing a value of £3,400. It may be mentioned that 750oz. was produced for seven weeks' work. The rest of the season was devoted to stripping the top material, in which there is very little gold. A large portion is now stripped ready for washing-up after winter, when a large yield is expected.

M. and E. Company.—This company holds two claims, one at St. Bathans and the other at Surface Hill or Muddy Creek. They have two water-races and a supply of about fifteen sluice-heads of water. They were washing-up in the Muddy Creek claim at the time of my visit, but, until the sludge-channel is ready for use at St. Bathans, they cannot work their claim in that locality. They have washed-up in one of their claims this season and got 180oz. of gold, being the result of two years' work.

Scandinavian Company.—This company has also a claim at Surface Hill, where they work by sluicing in the ordinary manner, employing six men. They have a water-race from the western branch of the Manuherikia River, where they get about twelve sluice-heads of water. They sell water to the miners at £2 per head per week for day-water, and £1 10s. per head per week for night-water. What they cannot sell is used in the claim. The yield of gold from this company's claim for the last two years was 430oz. They did not wash-up for the season previous to the last one.

Otago Company.—This is a company of working miners, but they have a very inferior plant, and do not work the ground to the best advantage. This is held to be the case by those acquainted with working this description of material. They have a water-race of their own from the Manuherikia River, and being under no expense in deepening the Muddy Creek channel which they now use, enabling them to work the ground to a much greater depth than formerly, one is inclined to believe that, if the ground were worked to the best advantage, a good return ought to be the result.

Hill's Creek.

At Blackstone Hill, R. Johnstone has been working a claim for a number of years, he having two water-races which he has brought on to the ground, one of them from what the miners term the right branch of the Manuherikia River, that is, looking up towards its source; and the other from the Ida Burn. Each of these water-races in ordinary weather lifts about five sluice-heads or water from these streams, which gives him a good supply of water at his claim. Portions of the water he sells, and uses the rest. His claim is on the left-hand side of the road going from St. Bathans to Hill's Creek, on the top of the saddle, and although workings have been carried on here for these last twenty years, there is not a great deal of ground yet shifted. The wash-drift is old quartz-drift, similar to that found at Muddy Creek and St. Bathans, but it is lying in some places on a puggy bottom, which, when exposed to the atmosphere, gets very soft and spews up, causing the hill-side of the ground to slide away. Very little labour is required in this claim. The water is directed on to different portions of the ground from time to time, and all the material broken up with a jet of water from a nozzle and carried away down the tail-race. If ever a large area of auriferous ground be discovered on the range which divides the watershed of the Manuherikia and Ida Valleys, Mr. Johnstone's water-races would become valuable property, as they are at a high elevation, and could command all the ground on either side of the range.

The Maniototo County Council had, at the time of my visit to this district, completed the valuation of the mining property within the county, which, it states, is only £50,000. This will bring in a very small revenue at 1d. in the pound, which is the extent of their rating powers under "The Gold Duty Abolition and Rating Act, 1890."