

To take the total number of hours that the whole of the elevators have been working, it equals one elevator being worked continuously for 274·4 days, and taking the quantity of material lifted, with the number of sluice-heads of water used on elevating-jets, it equals $\frac{76\cdot62}{41\cdot5} = 1\cdot846$ cubic yards for every sluice-head used in jet; but, as the No. 2 elevator is only lifting the material from No. 2B, this should not be taken into the calculation; it would, therefore, be $\frac{76\cdot62}{29\cdot5} = 2\cdot6$ cubic yards for every sluice-head of water used in elevating-jets. It will be seen, however, that the height that the material is lifted is 62·5 feet by No. 1 elevator, which is equal to raising the material 15·5 per cent. of the hydraulic head of the water; and as the No. 2 elevator lifts 63·5ft. with 408ft. of head, the percentage is the same in both cases.

It is quite a pleasure to inspect this company's workings, as all the plant is kept in good working order, and the manager is always ready and willing to afford any information in regard to the quantity of material that can be operated on by elevating-plants of this description, which are of modern invention, and can be used with great success wherever a good head and supply of water can be obtained to work ground by hydraulic sluicing, where there is not sufficient fall and dump for tailings by the ordinary method. There are fifty men employed on this company's works.

Local Industry Company.—This company is still working the bed of Gabriel's Gully with success. Its operations are confined to the side of the gully next to the range between Gabriel's and Weatherstone's. This side of the gully was not worked by either the Gabriel's Gully Sluicing Company or by the Blue Spur Company, so that there is a large amount of ground still left if the whole of it prove payable for working, between the present face and the place where the run of gold in the gully cut out, opposite the Blue Spur Company's workings.

Weatherstone's.

The area of breccia-conglomerates at Weatherstone's is greater than that of the Blue Spur, and the thickness of the deposit (at least 500ft.) is also greater. The gravels, however, do not appear to be so rich in gold as at the Blue Spur, and, as a consequence, not more than one or two claims are being worked in the undisturbed beds, the other parties working within this area confining their attention to ground that has already been worked, or to the superficial gravels that constitute a re-wash of the breccia-conglomerates.

The Weatherstone Basin, like that of the Blue Spur, is bounded to the eastward by the principal fault or slide already described, while the lower beds of the breccia-conglomerate crops out on the hill slopes to the north-west and west, and, dipping south-east into the deep ground of the flat, appear to suddenly terminate, by the up-rising of the schist rocks to the south and east.

Very little work is now being done in this locality. A few years ago a company was working the same description of brecciated material which occurs at the Blue Spur, but the method of working this deposit here was too slow to make it a payable venture. Nevertheless, taking the average yield of the ground worked, it would be fully as rich as the Blue Spur deposit. The Prospecting Association sunk a shaft, and did considerable work in trying to pick up the same run of ground as the company referred to were working, but were not successful in their operations.

Waitahuna.

During the early part of the year, Mr. Perry had a dredging-plant on the Waitahuna River, opposite the Town of Havelock. This, however, dealt only with the more superficial deposits. Clays, lignites, and quartz-drifts underlie the modern river-gravels over Waitahuna Flat, but the lower beds of these have never been prospected. In the lower grounds this would be a work of some difficulty, on account of the presence of water in greater quantity than could be easily dealt with; but towards the margins of the basin it might be possible to reach bottom. In the meantime nothing is being done towards the prospecting of these beds.

The principal work carried on in this neighbourhood is being prosecuted in connection with a similar deposit to that of the Blue Spur, situated in Waitahuna Gully, or the valley of the first creek of any consequence joining the Waitahuna from the south, in following the river upwards from the main road to Lawrence. Two large sluicing-claims have been worked in this valley, both of them dealing with the breccia-conglomerate deposit. The most northerly of these, on the west side of the valley, is still at work; but that at the upper end of the valley has for the present ceased operations, the water-power of the company now being used in connection with an elevating plant, dealing with part of the flat opposite the post-office.

Waipori.

Work here is chiefly confined to the flats along the river-beds, Lammerlaw Creek, and the points of some of the spurs on the north side of the valley above the township. A heavy, rough wash occurs south of the township, at the source of Pioneer Creek. Some time ago a claim was opened out in this deposit, but it is not now working. The greater part of the deposit in the low grounds consists of quartz-gravel, with beds of clay and lignite. It is commonly understood amongst the miners that there are two separate and distinct formations of quartz-drift, and this seems to be supported by the upper gold-bearing gravels resting on a lower, that may be quartz-drift, clay, or lignite, and of which the higher beds of quartz-drift has not been proved auriferous to any extent. The hydraulic elevator at work in the mouth of Lammerlaw Creek, in having worked to the bed-rock, does not clearly show any distinction between the upper and lower parts of the drift-deposit, and the works at that place are now well advanced into the broader valley of the Waipori.

It is certainly remarkable, as noted by Mr. McKay, that within the Upper Waipori Valley the quartz-drifts are confined to the low grounds of the valley itself, and never appear on the high lands adjoining, as is almost always the case in other parts of the Otago district.