

is covered with one thickness of hessian, and then cocoanut-matting on top of hessian. Each table is 8 ft. wide by 8 ft. long, fed by a V-shaped box tapering from 1 ft. to 8 ft. The pulp as it goes on to the table passes through a riffle with a diving-board in it, and at the end of the first 4 ft. passes through a second riffle. All the tables discharge into launders, so arranged that the whole stream of pulp again converges immediately under the separating-box whence it left the coarse gravel; the latter, falling over a steeply inclined shoot into the main tail-race, has no opportunity of coming to rest before it is carried away by the rush of water and pulp which has passed over the tables, the boxes at this point having a steeper grade (8 in. to 12 ft.) to enable the pulp to get well under way and thus prevent a block in the tail-race. Just below the tables, when the pulp is moving at a good speed, the grade on the tail-race is reduced to 6 in. to 12 ft.; that is about as flat as it will be possible to run the boxes on account of the class of material treated. The first half of the tables started work about the 20th June, and the second half about a month later; since when 262 oz. 10 dwt. 18 gr. of gold has been recovered from all sources. Of this amount, 71 oz. 7 dwt. 18 gr. has been collected on the tables, representing 27 per cent. of the gross yield. This high percentage is largely due to the fine class of gold met with in the gravel sluiced, practically no coarse gold occurring at all. For the year 1901 379 oz. 19 dwt. 7 gr. of gold was obtained, valued at £1,488 11s. 10d. This was all won from No. 1 face on Humphrey's Gully, and is the result of using water obtainable from Mount Brown downwards (very little water having been taken from the river in 1901). The claim is well lit with two Jandus arc lamps of 800-candle power each, besides a quantity of incandescent lamps ranging from 100- to 16-candle power each. A small rough sawmill has been erected, and is of great service for cutting the timber required for tail-race boxes, &c., and has already paid for itself twice over. At the close of the year preparations were being made for the systematic opening-up of No. 2 face (on the right-hand side of Humphrey's Gully—Guileri's claim). This is where the best results were obtained by prospecting some few years back, and we confidently look forward to meeting better ground here than we have been sending away during the period under review. A small four-roomed house has been built for the convenience of the manager and engineer, in such a spot that the works are easily visible from the residence. No sluicing operations whatever have been carried on in McDonald's Gully during the past year. The expenditure incurred during that period on water-race and claim amounts to £5,793 4s. 10d., and on property to £1,685 7s. 4d."

The most notable feature in connection with the above report is the fact that by the addition of suitable gold-saving tables as supplementary to the ordinary wood- and stone-paved sluice-boxes 27 per cent. of the gold won was recovered from these tables. This gold under the old method went into the tailings-heap, and was lost to the company. Yet not one in four of those who call themselves mine-managers will admit the fact, or, if admitting it, take the necessary steps to prevent this waste—so clearly demonstrated by the above-named company—but grub along in the old fashion, to the manifest loss of the shareholders of the company they represent. This company is now opening out new and richer ground that I trust in the near future will enable them to rank in the list of dividend-paying claims.

On the Hokitika, Kanieri, and Arahura Rivers and flats large areas were taken up as prospecting areas, of which a considerable number have since been converted into special claims; but a much larger number has been allowed to lapse. The bulk of the special claims are under option and have been sent Home for flotation, and I am informed that a mining engineer and expert is now on his way out to examine and report on the option so held.

The Hokitika Company's dredge is the only one at work in this district. This is a powerful and well-appointed dredge, and is on good gold; but the company had to borrow money, having underestimated the cost, and this has not yet been liquidated, hence the absence of dividends. The tightness of the wash and the number and large size of the boulders met with prevents the working of the ground in as rapid a manner as could be wished. Operations have been confined to the north bank of the river, where a large amount of tailings has to be dealt with, as well as the large boulders found in the untouched wash. They have not yet tried the middle nor the south side of the river, and it is premature to give an opinion as to how the venture will turn out. It is possible the ladder may have to be lengthened before reaching the bottom.

Perry's Reward dredge, imported from Otago and erected on Tucker Flat, was at work, but, not being able to contend with the cemented wash, has been shut down for some time.

The Lower Woodstock dredge has just been completed, and is to start to work in a few days.

The Shenandoah and Commissioner's Flat dredges are nearing completion, and should start soon.

The Hauhau dredge at Blue Spur is working steadily, and I understand is on payable gold. This dredge is the smallest, but works well, although hampered for room and bothered with buried timbers.

The Mahinapua dry dredge has not yet started work; the machinery is said to be unsuitable for the work, and I see by the papers that the company have gone into liquidation. This dredge was on one of the old beach leads, but failed in getting a start. Insufficient capital is one of the reasons for the winding-up.

STAFFORD AND GOLDSBOROUGH SUB-DISTRICTS.

The returns from the ordinary sluicing claims in the above-named districts have been fairly satisfactory, and about the same number of men are engaged in this work.

The Stafford-Waimea Gold-dredging Company bought a second-hand dredge in Otago, and had it erected on their claim on the Waimea Creek. This dredge has been at work for some time with varying success. The company has been somewhat unfortunate in meeting with heavier ground and more buried timber than was expected. Through this a number of breakages have occurred, and considerable time has been lost. A much stronger dredge is required for the work; there is every indication that the ground is payable, but stronger machinery is required.