

deposit—and pointed out that, so far as appearances went, the drifts here were fully as likely to contain gold as at Cambrian's, Vinegar Hill, or at St. Bathan's, Mr. Lindsay promised to do something in the way of prospecting the quartz drift in his neighbourhood, and, as we were on a very promising outcrop of the beds, direction was given where and in what manner prospecting should be carried on. More recently it was reported that Mr. Lindsay had found gold, and was supposed to be making wages, but was very reticent as to the nature of the find that had been made. If with the means available Mr. Lindsay thought it worth while to work the beds, with a fuller supply of water the quartz grits at this place would pay well. The drifts here belong to the older series of quartz gravels, and do not contain slaty breccias nor white cement boulders, as is the case where younger, though somewhat similar, auriferous beds are found in other parts of the Manuherikia Valley. The quartz drifts should cross Waikerikeri Creek between four and five miles above the main road, and, if continued in a direct line as set out between Clyde and Waikerikeri, this line continued would coincide with that which connects the Devonshire Diggings, Tinker's, Drybread, and all the auriferous localities along the base of the Dunstan Mountains.

*Lower Manuherikia to Chatto Creek.*—Mention has already been made of the line of quartz drifts present in Conroy's Gully, and of that which from Butcher's Gully is continued along the main road towards Alexandra. The line along the south-east side of Conroy's Creek, when it reaches the broader valley of the Molyneux, either passes under the more recent deposits of the alluvial plain, or changes its direction and follows the rocky ground, bordering the plain at its southern end, to Alexandra. But, whether continuous or not, the same beds are proved by dredging to occur in the bed of the river at Alexandra, and they are present in the bed and banks of the Manuherikia above the junction, where they occur on both sides of the river. On the right bank clays and quartzose gravels are traceable, sometimes at the surface and sometimes sectionally exposed under younger sandstone gravels to Chatto Creek, along the lower part of which the quartz sands are clearly seen. Between Chatto Creek and the Manuherikia a low but rugged range of schist rock interposes, and beyond Chatto Creek there is a valley depression between this range to the south and the Chatto Hills on the north side of the valley.

*Chatto Creek.*—Above the bridge on the main road Chatto Creek has cut deeply into the sandstone conglomerates and underlying clays, thus forming a deep narrow gorge. Although the schist rock is seen at the bridge, the quartz drifts appear to be absent, and the clays mentioned rest hard on the older rocks, while the sandstone gravels form the tops of the hills, which slope north into lower grounds covered with recent shingle. Towards the north-east the beds forming the Chatto Hills have a dip to the north-west, and beds of quartz drift are likely to appear at the bottom of the series in that quarter.

*Devonshire Diggings.*—These are on the line of deep involvement along the base of the Dunstan Mountains. The superficial gravels at present being worked for gold form a coarse creek-wash of considerable thickness, which has been brought down from the mountains to the north-west. Underneath this, of older date, and highly unconformable thereto, there is a slaty schistose wash, dipping towards the range. This could be seen in one claim only, and, though this lower wash was reckoned gold-bearing, it was not being worked. So far as could be made out, the Devonshire Diggings are not likely to afford much deep ground, like that at Tinker's and Drybread—not, at least, until the superficial gravels have been worked over, thus laying bare and affording means for the prospecting of the lower beds.

*Tinker's.*—Tinker's is an important mining locality. Formerly mining was carried on chiefly in the more modern drifts of the creek-beds, and terraces formed of recent or comparatively young material, but since the comparative exhaustion of the superficial deposits, and the discovery of deep and very rich ground striking along the foot of the Dunstan Mountains, the energies of the miners have been mainly directed to, this. Writing in 1890, Mr. Gordon remarks, Tinker's "is the richest field for its size there is in the colony, and the area of the rich auriferous deposit is not yet defined, as the area of auriferous ground that can be worked is entirely dependent on the available water-supply on the field. There is apparently a run of old quartz-gravel drift, or what is known as the granite-wash, going along the foot of the range and extending to near Clyde in the one direction, and will no doubt be traced to Cambrian's, Vinegar Hill, St. Bathan's, Naseby, Mount Buster, and on to Maraewhenua. At Tinker's it seems to be confined to a comparatively narrow run, which lies at a considerable angle against the Maori bottom, or Old Man Reef, on the side next the flat, and dips on the other at a corresponding angle underneath the schist rock in the main range. The bottom of this quartz has never been reached. A shaft was put down near the boundary of the Mountain Race Company, the Undaunted Company, and Reid and party's claims to a depth of 240ft., and showed that the whole of this wash-drift contains sufficient gold to pay for working by hydraulic sluicing and hydraulic elevators. The Mountain Race Company has sluiced off to such a level as the tail-races will admit, except the portion underlying the schist rocks at the foot of the main range, in order to get the whole of the wash-drift here. The schist rock overhanging the wash-drift comes down in slides, and interferes with the sluicing operations considerably."\* In his report for 1891 Mr. Gordon further remarks, "Near the foot of the range there are four claims—namely, Reid and party's (known as the Sugar-pot Claim), the Mountain Race, Ewing's, and Symes and Morgan's. These claims have a rich run of quartz grit wash-drift going through them. This seems to be comparatively a narrow run of ground following the foot of the range, and at the time it was deposited the range must have been steeper than at present, as it is now partly underlying the foot of the range. This means that slips have come from time to time as the quartz drift was being deposited, and kept extending over the deposit further every time a slip occurred. This makes the drift difficult to take out of the underlying position in which it is now found, as in doing so a large quantity of

\* Report on the Mining Industry of New Zealand, 1890, p. 76.