141 C.—3.

a probability of finding payable ground on the east side of where the prospecting is going on. The dredge, which is in good order, and capable of doing a large amount of work, is driven by a 30-horse-power compound horizontal surface-condensing engine.

Lowburn, Clutha River.

The Wanaka dredge, at Lowburn, is owned by Messrs. N. P. Kloogh, W. Talboys, and H. Bruce, who hold a claim one mile in length along the Clutha River. Dredging is done by means of a current-wheel, worked by the force of the stream, calculated at about 8-horse power, and lifting 25 tons per hour.

Bowman's Flat, Clutha River.

The Bowman's Flat Company hold a prospecting area of one mile near Bowman's Flat, on the Clutha River, and have spent £3,900 on a dredge, which, with the pontoons, 82 ft. long, have been all made in Dunedin.

Earnscleugh Flat.

The Earnscleugh Flat Dredging Company (Messrs. C. Weaver, P. Weaver, J. Kelman, A. Black, and J. McPherson) have an area of 33 acres at Earnscleugh Flat, on which six men are employed. Rough gravel is worked in the face with a bucket-dredge, driven by a 12-horse-power steam-engine, and lifting about 8,000 yards per week, giving an average of 2 gr., of the value of 2½d.

Waipori.

Messrs. McNeil and party, who own the Perseverance dredge, at Waipori, which is worked by a 10-horse-power steam-engine, have a claim of 84 acres, and employ six men.

The Jutland Flat Gold-mining Company (Limited) hold 187 acres at Jutland Flat, Waipori. The ground is worked by regular faces and paddocks, and enclosed within dams to maintain the requisite level for floating purposes. Cement occurs in irregular patches, bands, and beds, and at different levels, and varies in its different positions as ferruginous and argillaceous, occasionally passing into soft arenaceous conglomerates, the latter being chiefly found near the main bottom at the side of the valley. The drift consists of quartz-gravel, more or less rounded, vari-coloured sands and clays overlying schist and lacustrine deposits of pebble-beds, soft sandstones, quartz-grits, clays, and slates, with bands of partly-carbonised driftwood, &c. The estimated yield is 1.49 gr. of gold per cubic yard, value 3d., and the cost of dredging 1.38d. per cubic yard. There is a modern and improved plant, driven by 18-horse-power compound vertical surface-condensing engine.

In addition to the districts mentioned, dredging operations are being instituted in the Nevis,

Waikaia, Waikaka, Gore, Naseby, Waitahuna, Wetherstone's, Glenore, and other districts.

The work of building dredges has given an impetus to the engineering trade in Dunedin, and the various foundries are kept employed in furnishing the extensive machinery required for their equipment. The cost of one of these dredges varies from £4,000 to £6,000, and the weekly cost of working is estimated at £30. Six men are found sufficient to man a dredge in ordinary work, but under certain circumstances one or two additional hands have to be employed. The future yield of gold from the Otago District will be largely augmented by the yield from dredging operations, and, although the whole of the land taken up may not be payable, a number of the claims will prove sufficiently rich to afford a handsome profit for working.

This method of working river-beds is being adopted in other countries. The success attendant on this branch of the industry is causing inquiries to be made as to the latest improvements

adopted on the New Zealand dredges.