

The following table shows the work done by Government prospecting drills during 1912:—

Type of Drill.	Name of Superintendent.	To whom lent.	Minerals sought for.	Number of Holes drilled.	Approximate Depth drilled.	Diameter of Hole.	Character of Country penetrated.	Average Total Cost per Foot, including Transport.	Results of Drilling.
Diamond (Schram-Harker type)	W. Carter	Westport Harbour Board (site, near Addison's)	Coal..	1	Ft. 828	In. 6,* 4†	Clay (marine bottom) saturated sands and boulders; no solid ground	s. d. 21 6	Inconclusive; necessary depth unattainable.
Diamond (Sullivan CN type)	..	Nelson Coalfields (Limited), (site, near Stoke)	.. ..	1‡	50	6	Moutere gravel..	..	..
No. 2 Keystone (placer drill)	G. E. D. Seale	Head and party, Kanieri	Alluvial gold	9	670	6	Gravel (greywacke and granite boulders)	2 7½	Very satisfactory.
Ditto ..	Ditto ..	McLaughlan and party (site, Woodstock)	Ditto	6	236	6	Ditto ..	2 3½	Negative as regards working prospects.
.. ..	.. ..	Tucker Flat Company (site, Kanieri)	..	15	805	6	.. ..	4 6	Very satisfactory.
.. ..	.. ..	State Colliery No. 1, Point Elizabeth (site, Runanga)	Coal..	1	280	12	Marl and sandstone	?	Inconclusive; hole lost.
.. ..	.. ..	Duncan McLean (site, Blackball)	Alluvial gold	5	118	6	Gravel ..	5 0	Negative as regards value of wash.
.. ..	.. ..	Frosty Creek Prospecting Association (site, Rimu)	Ditto	3	348	8, 6	Hard cement with large boulders	15 0	Ditto.
No. 1 Keystone (placer drill)	T. McMath	Golden Bed Gold-dredging Company (site, Ettrick, Otago)	..	42	2,642 (Average, 63 ft.; maximum, 125 ft.)	6	Gravel (mostly schist shingle)	2 8½	Conclusive as regards prospects of dredging.
Ditto ..	..	Koputai Gold-dredging Company (site, Waikaia)	..	76	1,851 (Average, 24.36 ft.; maximum, 88 ft.)	6	Ditto ..	2 11	Ditto.

* To 400 ft.

† To bottom.

‡ In progress.

From the foregoing table it will be seen that there has been considerable demand for Government drills, and that this form of aid to mining development has been most satisfactory, as it places in the hands of small mining parties and companies modern drilling-machines under competent superintendence, thereby enabling a reasonable estimate of the mineral contents of a deposit to be ascertained without much expense. The drills have been utilized in prospecting for lodes, coal-seams, and alluvial wash. As will be seen, a somewhat phenomenal amount of work has been done during the year by the No. 1 Keystone (placer drill) operating in the auriferous gravels (generally schistose) of Otago; in all, 118 holes of 6 in. diameter were drilled and cased, the total depth drilled aggregating 4,493 ft., at an average gross cost of 2s. 9½d. per foot. During the two years and a half ended 31st December, 1912, this drill (with insignificant repairs) has put down 284 holes, aggregating in depth 11,267 ft., nearly all of which was done to test dredging-ground. At the end of the year a new Sullivan (type CN) diamond drill was put into commission to drill for coal near Nelson.

(5.) GOVERNMENT WATER-RACES.

The Mount Ida Water-races continue to serve a few miners in the Naseby district, but the number of working-claims is gradually diminishing, and, as the irrigation of an extensive area of the Maniototo Plains may be carried out by means of these conduits, their purpose will doubtless be changed from mining to agriculture at no distant date. During 1912-13 the receipts from sales of water amounted to £1,147 19s. 3d., the expenditure in upkeep and supervision being £1,836 11s. 9d.

The Waimea-Kumara extensive water-race system on the West Coast has effectively prolonged the life of alluvial sluicing claims in the neighbourhood of Kumara and Waimea.

The newly constructed extension of the Kumara Race by siphon, which crosses the valley of the River Taramakau and delivers 36 cubic feet of water per second, has added a fresh lease to the life of the claims situated on the hills north of that river; and by the purchase by the Government of the privately owned Erin-go-Bragh Water-race, which seriously obstructed the extension of the claims into the terraces at Westbrook, a considerable area of payable ground hitherto unavailable has been rendered accessible.

To increase the capacity of the Waimea Water-race, the construction of a branch race from the Arahura-Wainihinihi Creek to the Kawaka Creek is now in progress, together with a branch race from McPherson's Creek. These conduits are expected to materially assist the development of claims in the Waimea and Stafford districts. In addition, two parties of miners have been assisted in the construction of their branch races from the Government main race.

The receipts for water sold from the Waimea-Kumara Races during 1912-13 were £1,440 1s. 5d., and the cost of upkeep and supervision £1,446 19s. 6d.