

*Argo Dredge, Grey County* (A. Fischer, Dredgemaster).—The electrically driven, 5 cub. ft. bucket dredge worked throughout the year, and treated 553,700 cubic yards for a yield of 3,068 oz. 2 dwt. of alluvial gold, valued at £25,424 4s. 1d. The company commenced paying dividends during the year, and £11,200 was disbursed in this manner. Since the commencement of operations 3,656 oz. 14 dwt. of gold has been won, valued at £30,274 17s. 6d. An average of fourteen men was employed. The average depth of the ground was 33 ft.

*Maori Gully Dredge, Grey County* (D. Caithness, Dredgemaster).—This electrically operated 4 cub. ft. bucket dredge worked throughout the year and treated 576,900 cubic yards, which yielded 1,589 oz. 10 dwt. 12 gr. of alluvial gold, estimated to be valued at £11,646 3s. 7d. During the year an average of ten men was employed, and £3,600 was paid in dividends, making a total of £6,000 paid since operations commenced. Since the inception of dredging, 3,029 oz. 6 dwt. 21 gr. of gold, valued at £22,327 12s. 9d., has been won.

*New River Dredge, Grey County* (J. A. Anderson, Dredgemaster).—The diesel-powered dredge was put into commission in August, and treated 63,800 cubic yards which yielded 212 oz. 16 dwt. of alluvial gold, valued at £1,430 18s. 7d. An average number of eleven men was employed while dredging. The dimensions of the wooden pontoon are—Length, 70 ft., width, 30 ft., depth, 6 ft. 6 in. The dredge is equipped with fifty-six 4 cub. ft. buckets, and power is supplied by a 140 h.p. diesel engine driving the various units through belting and counter shafts. The dredge operates in the New River half a mile below Dunganville. The average depth of the ground was 15 ft.

*Nemona Dredge, Grey County* (H. J. Buckland, Dredgemaster).—This electrically driven dredge was put into commission at the end of June, and to the end of December treated 292,780 cubic yards, which yielded 986 oz. 18 dwt. 3 gr. of alluvial gold, valued at £7,969 6s. 3d., out of which £3,000 was paid in dividends. The dredge gives employment to twelve men; it operates in Cockeye Creek, a tributary of New River, near Marsden. The wooden pontoon is 85 ft. long by 31 ft. wide by 7½ ft. deep. The buckets are 4½ cub. ft. capacity, and there are fifty-four buckets and six trays in the line, the speed being twenty-eight per minute. The total horse-power of the electric motors driving the various units is 255, and the dredge is connected with the Grey Power Board's reticulation. Gold-saving is effected by Hungarian riffles and mercury on the top tables, and expanded metal and matting on the bottom tables. The depth of the ground is variable, but averages 18 ft.

*Bundi Dredge, Grey County* (R. Murray, Dredgemaster).—During the year this steam-powered 10 cub. ft. bucket dredge treated 912,460 cubic yards for a yield of 2,978 oz. 16 dwt. 2 gr. of alluvial gold, valued at £21,445. Since the commencement of operations 5,220 oz. 16 dwt. 16 gr. of gold, valued at £38,925, has been won. The average number of men employed is thirty.

*White's Electric Dredge, Grey County* (D. Sutherland, Dredgemaster).—Commencing operations at the end of September this electrically driven dredge treated 70,800 cubic yards which yielded 145 oz. 4 dwt. of alluvial gold, valued at £1,054 17s. 6d. Eleven men are employed while dredging. The dredge is of steel construction, electrically welded throughout. Pontoon dimensions are—Length, 90 ft., width, 40 ft., depth, 5 ft. 2 in.: there are nine water-tight compartments. The buckets are 4 cub. ft. capacity, and there are fifty-seven on the line; the bucket speed can be altered from 10 to 12, 15, or 18 buckets per minute by changeable sprockets, the lower speeds, however, being employed on account of the difficulty in treating the blacksand. Power from the Grey reticulation is carried on board at 11,000 volts and stepped down to 400 volts by a 250 k.v.a. transformer. The total horse-power of the motors driving the various units is 226, of which 105 h.p. is absorbed in driving one 12 in. and one 15 in. centrifugal pump. The gold-saving tables are nearly 2,000 sq. ft. in area, but it is possible that this area will be increased.

*Barrytown Dredge, Grey County*.—The construction of this dredge was commenced during the year, and the erection of the machinery was under way at the end of December. The dredge is being constructed of steel, the weight being approximately 1,500 tons; it will be electrically driven, power from the Grey reticulation being carried on board at 11,000 volts and stepped down to 415 volts for the motors. The total connected horse-power of the various units will be 820. The dimensions of the pontoon are—Length, 148 ft. 5 in., beam, 55 ft., bows stepped to 65 ft. midship and aft; depth, 10 ft. 6 in. at centre. The digging ladder is 100 ft. in length, and will dig to 40 ft. below water-level when at an angle of 47½ degrees. The buckets are one-piece 12 cub. ft. capacity, manganese-steel, replaceable lips being dispensed with; there are eighty in the band. The dredge will operate in inner beach leads at Barrytown, and is equipped with many improved mechanical features, in addition to the "Bendelari" jigs, which are an innovation for this district. It is estimated that at least twenty-six men will be employed when operating.

*Stafford Dredge, Westland County* (D. M. Pettigrew, Dredgemaster).—During the year this electric-powered, 8 cub. ft. bucket dredge treated 500,095 cubic yards, which yielded 1,512 oz. 12 dwt. 7 gr. of alluvial gold, valued at £10,966 9s. 1d. Since the commencement of operations 4,022 oz. 6 dwt. 1 gr. of gold, valued at £32,024 10s. 10d. has been obtained, and £3,750 has been paid as a dividend. During the latter half of the year the dredge worked its way mainly through old tailings, its objective being an area of virgin ground on the western side of the Greymouth-Hokitika Highway. The average number of men employed while dredging was fourteen. The total horse-power of the units on the dredge is 220, power being supplied by Westland Power, Ltd.

*Rimu Dredge, Westland County* (F. B. Lewis, Dredgemaster).—This electrically operated 12 cub. ft. bucket dredge treated 2,512,809 cubic yards, which yielded 11,516 oz. of alluvial gold, the estimated value of which is £97,488. Since the commencement of operations 187,944 oz. of gold has been won, of £1,019,888 estimated value. The dividends paid during the year amounted to £20,834, making the total paid since the commencement of operations £98,716 2s. 4d. During the year an average of forty-two men was employed in connection with the dredging operations. The dredge excavated a superficial area of 31.5 acres, the average depth being 49 ft.; it operated for 5,707 hours 37 minutes, equal to 78 per cent. of the possible digging-time, and treated gravel at an average rate of 440 cubic yards per digging-hour. Continued dry weather at the beginning of the year, and a shut-down for six weeks owing to the dredge becoming submerged in the pond resulted in a loss of 834 hours 15 minutes, which largely accounts for the falling-off in digging-time, yardage handled, &c., compared with the previous year. The total horse-power of the various motors on board is 922, and power is supplied by Kanieri Electric, Ltd., a subsidiary company. The company employed additional men on its new area in the Grey Valley, where active prospecting operations have resulted in the development of an extensive low-grade dredging-area.

*Okarito Five Mile Beach Dredge, Westland County* (D. A. Mitchell, Dredgemaster).—Operated by water-power which drives an improved type of pelton wheel on board, this 5 cub. ft. bucket dredge treated 339,083 cubic yards, which yielded 838 oz. 11 dwt. of alluvial gold valued at £6,112. Since 1931, 12,537 oz. 9 dwt. of gold, valued at £80,764 6s. 3d. has been won, and £31,500 paid in dividends. No dividends were paid during the year. An average of ten men was employed. The built-up buckets on the dredge are being replaced by new one-piece cast 5 cub. ft. buckets with manganese-steel lips.

*Gillespie's Beach Dredge, Westland County* (Geo. Pettigrew, Dredgemaster).—This electrically operated 5 cub. ft. bucket dredge treated 474,199 cubic yards for a yield of 2,715 oz. of alluvial gold, valued at £22,255 9s. 10d. During the year £7,583 6s. 8d. was paid in dividends, making a total of £12,250 2s. 3d. paid since the commencement of operations. Since the inception of the company, 6,072 oz. 17 dwt. of gold, worth £46,681 8s. 7d. has been won. An average of sixteen men was employed. The average digging-depth was increased to 28 ft. during the year. Power is supplied by the company's own hydro-electric plant, the dredge using 225 h.p.