

the beginning and end of the wind, excessive speed when winding men. Other devices prevent the sudden application of the brakes when winding at speed, and enforce correct retraction after the operation of the overwind devices.

The winder has just completed twelve months' service, and has shown a saving of some thousands of pounds per annum in operating costs, in addition to providing much more safety to the men using it, more speed to those operating it, and less maintenance for those in charge, with the result that the complete electrification of the mine is now in hand.

#### BORING.

During 1936 boring operations in this field decreased by approximately 10½ per cent. compared with the previous year.

A schedule showing the activities of each of the various companies and syndicates engaged in this work is set out hereunder:—

##### *N.Z. Prospecting and Mining, Ltd.*

(1) *Kahinoor (Mikouui) Ross*.—Situation: On O.P.L.'s Nos. 3200–3202, held by V. J. Robinson; Nos. 3251, 3257–60, held by British Developments, Ltd., and renewals thereof, in Block I, Totara Survey District. Drillers J. Waters, E. Matheson, and W. Coleman operated two Keystone machines, using 6 in. casing and 7½ in., 7½ in., and 7¾ in. cutting-shoes. Operations on this area were commenced in 1935, but were suspended between December, 1935, and July, 1936. Twenty-four holes were drilled in 1936, making a total of thirty-eight holes drilled on this area to the end of December, 1936. Operations were still in progress at the end of the year.

(2) *Kauhaka*.—Situation: Freehold of H. Olderog, in Block III, Kanieri Survey District. O.P.L.'s Nos. 5491, held by C. Caliar, and Nos. 5592–96 were also prospected. Drillers G. McIntosh and J. Cowan, operating two Keystone machines, with 6 in. casing and 7½ in. and 7¾ in. cutting-shoes respectively, drilled twenty-five holes. This area was drilled in 1935 by Alluvial Tin (Aust.), Ltd. N.Z. Prospecting and Mining, Ltd., commenced operations in June, 1936, and such were still in progress at the end of the year.

(3) *North Barytown*.—Situation: On Application No. 48/36 for a special dredging claim of 694 acres 21 poles, by C. G. McKechnie, in Block I, Punakaiki Survey District, and Block I, Waihero Survey District. Driller G. MacPherson, using a Keystone No. 7 machine, with 5 in. casing and with 5 in. and 6½ in. cutting-shoes, put down one hundred and twenty-two holes. Boring was also carried out on adjacent freehold land. Operations were still in progress at the end of the year.

(4) *Mawhera-iti*.—Situation: On O.P.L.'s Nos. 8432 and 8361, Reefton Registry, held by the company and by A. Smith and J. Reiha respectively, Driller S. Vickers used one of A. and T. Burt's No. 6 drills to bore fourteen holes; 6 in. casing with 7½ in. and 7¾ in. cutting-shoes were used. An additional eighteen holes were bored on adjacent freehold land.

(5) *Kanieri*.—Situation: On O.P.L.'s Nos. 5570, 5598, and 5599, and on freehold of John McKenzie, Section 628, Block V, Kanieri Survey District. Driller W. Coleman, using a Keystone No. 3 drill, with 6 in. casing and a 7¾ in. shoe, put down six holes.

(6) *Three Channel Flat*.—Situation: On freehold of S. de Phillipi in Section 1, Block VI, Inangahua Survey District. Using A. and T. Burt's No. 6 machine, with 6 in. casing and a 7¾ in. cutting-shoe, S. Vickers drilled thirteen holes.

(7) *Golden Gate, Moonlight*.—Situation: In Block III, Mawheranui Survey District. The following licenses were held over the area: Amalgamated Claim No. 8248, Special Alluvial Claim No. 8231, and O.P.L.'s Nos. 8494–97, 8538, and 8562 in the name of the Moonlight Goldfields Co., Ltd. Drilling was continued from 1935 operations by British Developments, Ltd. During 1936 the drillers engaged were Messrs. W. Coleman, R. Hunt, S. Vickers, J. Waters, G. Duston, and J. Cowan. The following types of drills were operated: Keystone No. 1, 6 in., 7¾ in., 7¾ in.; Keystone No. 2, 6 in., 7¾ in., 7¼ in.; Keystone No. 3, 6 in., 7¼ in., 7¾ in.; Bandwheel McDougall's No. C. 1, 6 in., 7½ in., 7¼ in.; Bandwheel McDougall's No. C. 2, 6 in., 7½ in. Eighty-nine holes were drilled during 1936, making a total of one hundred holes for the area.

(8) *Taiupo*.—Situation: On O.P.L.'s Nos. 2419 and 2420, held by W. C. Guy, in Block VIII, Turiwhate Survey District, and Block V, Otira Survey District. Operating a Surge Drum No. 9 machine, with 5 in. casing and a 6½ in. cutting-shoe, Driller A. Stuart bored one hole in December. At the end of the year the second hole was being drilled, and operations were carried on into 1937.

##### *Austral Malay Tin, Ltd.*

(1) *Landing Creek*.—Situation: In Blocks XII and XIII, Inangahua Survey District, O.P.L.'s Nos. 8043–46, 8060–65, and 8074, held by N. A. Wallis, and freehold of L. J. Bell, Sections 9 and 10, Block XIII, Inangahua Survey District. Using a Keystone Model 70 drill, with 6 in. casing and 7½ in. and 7¾ in. cutting-shoes, a Keystone, 6 in., 7¾ in., and a Dodge plant, 6 in., 7½ in., Drillers P. Griffen, L. Wilcock, H. S. Hobbs, and D. D. Smart bored twenty-nine holes during 1936, making a total of thirty-one holes on this area.

(2) *Ahaura*.—Situation: On Hahn's freehold and O.P.L.'s, near the junction of the Grey and Ahaura Rivers, in Block IV, Mawheranui Survey District. Drillers D. D. Smart and L. Wilcock, using a Keystone No. 1, 6 in., 7½ in., and a Dodge No. 2, 6 in., 7¾ in., put down fifteen holes on this area.

(3) *Waitahu*.—Situation: O.P.L.'s of Bowron and Cogblan in Blocks X, XI, and XV, Reefton Survey District, and on freehold of H. Lockington, Sections 79, 89, and 90, Block X, Reefton Survey District. Using two machines, a Government No. 1 and one owned by the company, each with 6 in. casing and a 7½ in. shoe, Drillers J. Manson and J. P. O'Brien bored twenty holes. The area was divided into two sub-areas separated by a narrow gorge.

(4) *Petley and Bowater's Area*.—Situation: O.P.L. No. 8298, Petley and Bowater; No. 8101, A. G. Petley; freehold of J. Andrew in Block II, Reefton Survey District. Drillers L. Wilcock, A. Brydon, and D. D. Smart, using two Keystone plants, each with 6 in. casing but with 7½ in. and 7¾ in. cutting-shoes respectively, put down thirty holes.

(5) *Nelson Creek*.—Situation: On O.P.L.'s Nos. 8502 and 8503, held by Dennehy and Comerford, in Block IX, Ahaura Survey District. Driller J. P. O'Brien, using the company's drill, with 6 in. casing and a 7½ in. shoe, bored seventeen holes.

(6) *Burke's Creek*.—Situation: On Claim (Mineral) License No. 8279, held by C. J. Willis, in Block X, Reefton Survey District. Operating a hand rig, with 3½ in. casing and a 4¼ in. shoe, Driller J. Manson bored two holes. Hole No. 3 was being sunk at the end of the year.

##### *Burma-Malay Tin Ltd.*

(1) *Pine Creek*.—Situation: Freehold of Wm. Perry, in Block IV, Mahinapua Survey District. Driller N. S. Bartlett, operating a machine owned by the Brown Boring Co., Ltd., and using 6 in. casing with a 7½ in. shoe, commenced boring early in December, and by the end of the year had completed eleven holes. Operations were still in progress at the end of the year.

(2) *Fuchsia Creek*.—Situation: On O.P.L.'s Nos. 261–63, held by A. R. Perry, in Block VIII, Waimea Survey District. Driller N. S. Bartlett, operating a machine owned by the Brown Boring Co., Ltd., and using 6 in. casing with a 7½ in. cutting-shoe, put down twenty holes.

(3) *Landing Area*.—Situation: Inangahua River, on O.P.L.'s Nos. 8096–98, held by J. O'Regan, in Block XII, Inangahua Survey District. Operations were commenced late in 1935 and continued in 1936. Messrs. D. Chant and A. Holden, Drill Superintendents, put down nineteen holes with a Westland Alluvial Developments No. 2 drill, using 6 in. casing and a 7¼ in. cutting-shoe, making a total of twenty-three holes on the area.