

of the creep will soon settle, so as to enable him to reopen the incline through the crushed ground. The work has been commenced and is being now carried on. The incline is timbered with strong sets of puriri timber, well secured and stayed, and the whole close slabbed. It will, however, take some time to complete the work to the place in the incline near the place where the creep commenced, beyond which the workings are intact. Working at all the places can be resumed as soon as the new road is open. The incline drive is ventilated by air-pipes conveying the air from the intake to the faces, but although a good current is passing through, the air soon becomes hot, and communication with open workings must be effected to provide ventilation as it was before the creep took place. A copy of the plan of the workings of the mine has been sent to me as provided in section 45 of "The Coal-mines Act, 1891." The report-book is well kept and the provisions of the Act fully complied with. The cages are now fitted with the appliances required by section 23 of the general rules. An average of sixty-eight men is employed, fifty-eight underground, and ten on the surface. In consequence of suspension of coal-getting when the creep took place the output for the last quarter of the year was only 108 tons. Total output for the year, 15,652 tons.

WAIKATO DISTRICT.

5. *Waikato Mine*.—This mine, which is situated on the left bank of the Waikato River, and on the opposite side to the railway, is worked from an adit level, where there is no expense in hoisting or pumping. The cost of conveying the coal on punts to the railway-siding is, however, a drawback, and the quantity produced is therefore limited. The workings were safely carried on, and during the year confined to headings and bords, no pillars being taken out. The ventilation is fairly good, although at times a change of wind causes a stagnation, which soon disappears. The books are well kept, and the Act complied with. A copy of the plan of the workings of the mine has been sent to me, as required by the Act. The number of men employed is eight on the surface and on steamer and punts, and nineteen below ground: total, twenty-seven. The output for the year was 4,839 tons.

6. *Ralph's Taupiri Mine*.—The workings in this mine during the year have been: driving the new dip, removing a pillar in the old mine which was under the place where the hauling-engine formerly stood, and sinking a shaft. It was found that, on account of the quantity of water in the new dip, it would be more economical to work the mine by sinking a shaft on the land between the railway and the Waikato River; the dip was therefore abandoned, and the timber drawn. The shaft was then sunk to a depth of 160ft., and through a seam of coal 65ft. in thickness. The cover over the coal was of such a nature that no difficulty was experienced in sinking, as the running drift, found elsewhere in the neighbourhood, did not exist in the shaft. A bore-hole was made near by, and a working shaft about 10ft. by 6ft. is to be sunk with as little delay as possible. The first shaft will be used as a pumping and upcast shaft. At my visit to the mine on the 10th December, I found that no cages were used, and that men were raised and lowered by the engines without being securely stayed to the rope, as provided in section 25 of the general rules. I instructed the manager to see that this precaution was taken in future, and to make the entries in the report-book in a more systematic manner. The provisions of the Act were otherwise fairly well complied with. The average number of men employed was six on the surface, including manager and engineers, and ten men below ground: total, sixteen. The total output for the year was 2,079 tons.

7. *Taupiri Extended Mine*.—The workings in this mine during the year were driving headings and opening fresh bords to the southward, driving a heading to the northward to connect with the second shaft, which was sunk about 10 chains from the main working-shaft. The second shaft, which is 10ft. in diameter, sheathed with cast-iron cylinders, was sunk with considerable difficulty on account of the sandy drift and quantity of water to be contended with. Bore-holes had been made in a circle from the surface down to the coal, and it was found that no obstacles were in the way, as was the case in sinking the main shaft, when trees and branches in the drift caused great delay. Provision was made to put on great pressure to force down the cylinders, which were in segments and built in the top, while the sand and drift were removed by a dredging-machine. No water was pumped from the shaft until the coal had been reached, when a Tangye pump was used to keep the shaft dry whilst the coal was sunk through and the shaft bricked-up. Connection was made with the heading-drive from the main shaft on the day previous to my visit on the 11th December last. The depth of the second shaft is 204ft., the coal being 24ft. in thickness, and as the main shaft is only 174ft. in depth the pumping will be from the deepest one. The ventilation of the mine is good, the fan being still used: 9,070 cubic feet of air per minute was passing through the working places at the time of my last visit for the use of fifty men and one horse below ground. From the 20th September until the second opening was made the mine was worked in shifts in order that not more than ten men were taken below at one time. The report-books are well kept, and the provisions of the Act complied with. A copy of the plan of the workings of the mine has been sent to me as required by the Act. The number of men employed was sixteen on the surface and fifty below ground: total sixty-six. The output for the year was 29,460 tons.

8. *Taupiri Reserve Mine*.—The workings in this mine for the year have been under the Lake Kimihia. A series of bore-holes have been made, showing the depth of the cover, which is from 48ft. to 77ft. in thickness, chiefly strong fireclay. The bords are worked 14ft. in width, and the pillars are 21ft. in thickness. The height of coal worked is 13ft., and not less than 5ft. of coal left for a roof. It may therefore be considered that there is no special danger in working under the lake so long as the thickness of the cover mentioned continues and the pillars are not interfered with. Thirty-seven men are employed at the mine, seven on the surface and thirty below ground. The ventilation was good; 4,408 cubic feet of air per minute passes through the workings, giving 116 cubic feet per minute for thirty-seven men and one horse working in the mine. The report-book is well kept, and a copy of the plan of the workings of the mine has been sent to me as required by section 45, and the other provisions of the Act complied with. The output for the year was 17,221 tons.