## SUMMARY OF REPORTS BY INSPECTORS OF MINES.

## NORTHERN INSPECTION DISTRICT (Mr. BOYD BENNIE, Inspector).

Taupiri Collieries Extended Mine.—The mine-workings are partly under the Waikato River and on the western side of that river. The thickness of rock cover overlying the coal-seam at the point where the present workings are situated is approximately 450 ft., consisting mostly of fireelay. There are two coal-seams in this mine, the lower or main seam being about 22 ft. thick and the upper seam from 16 ft. to 18 ft. thick, separated from each other by approximately 40 ft. of fireelay. The quality of the coal is similar in both seams, but only a small area of the upper seam has been worked, and that area is some chains away from the course of the Waikato River. I understand that the management do not intend to work any section of the upper seam where it underlies the river. The mine is worked on the bord-and-pillar system, the bords in this mine being 14 ft. wide and the pillars 24 ft. wide. In the lower coal-seam the height of the bord is from 12 ft. to 17 ft.

A mine-creep and falls of roof coal occurred in the northern dip section of the mine during the year. In August signs of a creep were observed in the No. 4 level, No. 2 tail-rope section, where several heavy falls of roof coal and fireclay took place, there being signs of spontaneous combustion in the fallen debris. Fortunately that section of the mine was only connected with any other part of the mine by two drives, the main haulage-road and the return airway; the working-places were at a lower level than the roads referred to, and, the danger of mine-fire being so apparent, it was decided to flood that portion of the mine with water. This was accomplished in a short time and all danger thereby removed. Brick stoppings were built in the two main drives thus completely closing off the heated area.

At No. 5 level several heavy falls of roof coal and fireclay occurred, falling up to the floor of the upper coal-seam, a height of about 30 ft. The upper seam has not been worked in this section, and a careful examination did not reveal any fractures on this coal-seam. There is about 400 ft. of cover overlying the falls—viz., 20 ft. of coal and 340 ft. of strata—to the river-bed, some of which is good impermeable claystone, fireclay, &c. The greatest danger was from mine-fires due to spontaneous combustion among the fallen coal. The management therefore decided to close off the affected area, being Nos. 5 and 6 levels in the north dip section, and as a temporary precaution eleven brick stoppings were built, and by the end of the year reinforced-concrete dams varying in thickness from 6 ft. to 8 ft. were built outside most of the stoppings.

The present workings and old workings have been carefully and regularly inspected by the company's officials, and periodically by the workmen's inspectors, and found to be safe and free from dangerous accumulations of fire-damp, although small quantities of that gas have frequently been found during the year. Safety-lamps and permitted explosives only are used in the mine. There have been no fatal accidents in the mine for the year. Many minor accidents, necessitating miners being off work, some of them for lengthy periods, have occurred, and these have been a heavy drain on the Coal-miners' Relief Fund.

During the year the company has built a commodious bath and change house, and the workmen are making good use of them. At No. 2 shaft winding-machinery and pit-head frames have been erected for lowering and raising the workmen into and from the mine at this shaft, thus relieving the No. 1 shaft, so that more time may be available for winding coal.

Taupiri Company's Rotowaro Mine.—This mine has worked continuously throughout the year, and although for a portion of that period the daily output has been restricted, yet the coal mined for the year has been substantially increased. The mine is opening out in a most satisfactory manner, the coal-seam being from 16 ft. to 20 ft. thick. There are no features that require special mention. The mine is well ventilated by Sirocco fan. The work of installing the permanent machinery has been going on slowly owing to the difficulty of getting the necessary material. The haulage engine formerly at Ralph's Mine has been removed and erected here, and the steam boilers from the same mine are also being erected at the Rotowaro Mine. A new and up-to-date electric plant is being installed. A change and bath house has been erected and is now in use.

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Pukemiro Colliery.—The mine has worked almost continuously throughout the year. In June the workmen's inspectors thought their right of inspecting all parts of the mine was infringed when the manager closed off a section of the mine when the first working had been completed. This area was not used in connection with the working of any other part of the mine, and to avoid the possibility of workmen wandering into the old workings, and to further reduce the possibility of mine-fires from spontaneous combustion, brick stoppings were built into the roads leading into the said old workings. Two doors were let into the brickwork, and these were locked as required by Special Rule 16. The Miners' Union was informed that the manager was acting strictly in accordance with the Coal-mines Act and the regulations; nevertheless they stopped work from the 4th to the 23rd June. On the 19th June a special inspection of the closed-off portion of the mine was made by the mine-manager, workmen's inspectors, the Inspecting Engineer of Coal-mines, and myself, when we found that there were no dangerous conditions there to endanger either the workmen or the mine. Having satisfied the workmen's inspectors that there was no danger so long as workmen were prevented from entering those old workings, I asked that the doors referred to be removed and the aperture be filled in with brickwork; also that