#### Southern Inspection District.

Castle Hill Mine, Kaitangata. Kaitangata No. 1 Mine. Kaitangata No. 2 Mine. Wairaki Mine, Ohai. Birchwood Mine, Ohai. Linton Mine, Ohai. Ohai Coal Co.'s mine, Ohai.

## (d) Dangerous Occurrences reported.

### (Regulation 82.)

The following is a short account of the most serious of these. A full list is contained in the District Inspectors' reports.

In the last week of November a severe "creep" occurred in the lower workings of the Birchwood Mine, and a few days later a fire broke out in the upper level. It was than found necessary to seal off the whole of the mine by building stoppings in the main intake and main return. Early in January the fire broke through the stopping on the return side, and an explosion occurred, no men, of course, being in the mine. The total amount of coal lost by the "creep" and subsequent fire is estimated to be over 40,000 tons.

# (e) ELECTRICITY AT COLLIERIES.

## (Regulation 243.)

The following is a summary of the annual returns, in accordance with Regulation 243 (c), regarding electrical apparatus at collieries:—

Number of collieries at which electrical apparatus is inst	$_{ m talled}$	 	32
Number of continuous-current installations		 	13
Number of alternating-current installations		 	22
Number of collieries electrically lighted		 	23
Number of colleries using electrical ventilating-machines	٠. ١	 	25
Number of collieries using electrical pumping plants		 	23
Number of collieries using electrical haulage plants		 	19
Number of collieries using electrical screening plants		 	10
Number of collieries using electrical miscellaneous plant	s	 	17
Number of collieries using electrical locomotives		 	1
Total horse-power employed from motors on surface		 	4,781
Total horse-power employed from motors below ground		 	3,246

### (f) Prosecutions.

There were four prosecutions by the Department's Inspectors during the year.

On the 11th July a shot-firer was convicted and fined for failing to see that all persons in the vicinity had taken proper shelter before he fired the shot, as required by Regulation 228 (1).

On the 12th August three miners were convicted and fined for failing to bring out the explosives remaining in their possession at the end of the shift, as required by Regulation 224 (4).

On the 12th September the mining manager and mine-manager of a mine were convicted and fined for failing to provide adequate ventilation as required by section 91 of the Coal-mines Act.

On the 21st November the mine-manager and the deputy in a mine were convicted and fined for failing to provide stop-blocks, as required by Regulation 94.

# SECTION V.-LEGISLATION AFFECTING COAL-MINES.

The most important provision in the Coal-mines Amendment Act, 1927, is one which makes wages, payable for a period not exceeding six months, a charge on the land on which the mine is situated and on the mining plant, and also, with certain provisoes, gives wages priority over existing and subsequent mortgages. Other provisions in this Act refer to the surveys required for coal-mining rights, to the distribution of the ventilating-current throughout the workings of a mine, and to the finances of the State coal-mines.

I desire again to acknowledge the efficient help and co-operation which I have received throughout the year from the District Inspectors. In recent years endeavours have been made to get better methods of mining adopted in all coal-mines, the object being to increase the safety of the mines, to reduce the risk of underground fires and to deal promptly with these when they occur, and to lessen the excessive loss of coal which has obtained in the past. Efforts in this direction were continued throughout the year and met with a certain measure of success. The improved methods already adopted at several collieries are now showing by their results that they give increased efficiency and safety. At many of the older mines the extensive workings and thick seams present a very difficult problem. In its solution the managers of the mines concerned and the Inspectors are co-operating, and there is little doubt that better results will shortly be obtained than formerly. In the past less than 40 per cent. of the coal was extracted; the newer methods demonstrate that over 60 per cent. of the coal in an area can be got without increasing the cost of working or lowering the standard of safety.

I have, &c., J. A. C. BAYNE, Inspecting Engineer and Chief Inspector of Coal-mines.