

The total number of mines returned as being at work during the year is 177, of which twenty-eight employ more than twenty persons, and therefore require to be under the supervision and control of a manager holding a first-class certificate. Mines employing over six but not exceeding twenty persons number twenty-six, and for their management the holders of second-class certificates may be engaged. For mines at which not more than six persons are employed a suitable man, holding a permit from the Inspector of Mines for the district, can act as manager. These small mines are very numerous in the Southern District, where numerous deposits of lignite exist from which supplies are drawn for the gold-dredging and other industries, as well as for general domestic requirements. Many lignite-pits being worked opencast by quarrying, the number of men employed at such is included in that of persons employed above ground.

The approximate quantity of coal, &c., raised from the several mines throughout the colony up to the 31st December, 1905, is returned at 21,701,419 tons.

The number of persons ordinarily employed at all the mines to which the Coal-mines Act applies is returned at 833 above ground, and 2,436 below ground, making a total of 3,269, which number, divided into the tonnage returned, gives an average output of 485·08 tons per person employed. This, as has been pointed out in previous reports, is admittedly high in comparison with the average of many coal-mining countries, and is accounted for by the thickness of the seams worked in New Zealand, which admits of a greater output per man than can be attained in the working of thin seams.

#### ACCIDENTS.

During the year accidents attended with fatal results occurred to six persons. Of these, one was on surface railway-works, one at an opencast mine, and the remaining four in connection with underground workings. All were duly investigated by officers of the Department. The fatalities were at the rate of one for every 264,292·6 tons raised and 544·8 persons employed.

It may be noted that among those who lost their lives by accidents underground was Mr. R. S. Jordan, general mining-manager of the New Zealand Coal and Oil Company's Collieries at Kaitangata. Mr. Jordan was superintending operations for the suppression of a fire which had broken out in the Castle Hill Mine when he was overcome and suffocated by heat and smoke.

Of the non-fatal accidents reported, only one may be classed as of a permanently serious nature; a few others occurred by which men were off work for somewhat lengthy periods, but the majority were of a simple character, such as are incidental to ordinary conditions of mining-work.

Taken as a whole, very great care is exercised by managers of mines and their officials in the interests of safety of life and limb.

#### PROSECUTIONS.

Action was taken by the Inspector of Mines for the West Coast District against three employees of the Blackball Coal Company (Limited), for neglecting to sprag their coal whilst holing (in contravention of special rule 36, the Coal-mines Act). The charge was sustained, and the offenders each mulcted in a fine of £1 with costs.

Considering that accidents from falls of coal are not uncommon, it is to be hoped that the proceedings referred to will have a salutary effect, and cause men to recognise that a legal obligation rests on them to pay attention to conditions affecting their own safety.

#### GENERAL.

The mechanical ventilation of mines by centrifugal fans is now general at the most important collieries, the only exception to this practice at any of the larger mines being at Castle Hill Colliery, Kaitangata, where ventilation by furnace is adopted, conditions being favourable to this method. During the year ventilating-fans have been put to work at Blackball and Puponga Collieries, and more powerful plant of this class installed at the Westport Coal Company's Denniston Colliery.

There is also a disposition on the part of the owners of smaller mines to adopt the system, and so obtain more reliable currents than is possible with natural ventilation, or ventilation induced by furnaces in shallow upcast shafts, or the heat from steam-pipes placed in a return airway.

For the drainage of mines the system of water-level adit is generally adopted where the collieries are situated in high country admitting of this arrangement, and the completion of a water-level tunnel has enabled the Blackball Coal Company to dispense with the use of the electrically driven pumps lately employed to drain the dip workings. At both of the collieries belonging to the New Zealand Coal and Oil Company (Limited), at Kaitangata, treble-ram pumps, placed at the bottom of the main inclines, are worked by endless ropes which are independent of the haulage-ropes. This method gives very satisfactory results. The system of rope transmission for pumping purposes was also introduced at the Alexandra Coal Company's pit, Alexandra (Otago), but the distance for transmission of power being