

In Otago the Kaitangata Colliery has about maintained its output. Development to the south and eastward has proved the continuity of the coal for a considerable distance, and the reserves in sight appear to be larger than formerly. The ventilation and safety precautions at this mine are satisfactory. It is proposed to further improve the ventilation by the installation of an electrically driven Sirocco fan. A new main haulage-road is now being driven, which, when completed, will materially shorten the distance by which the coal is delivered at the railway.

There has been an increase in the output at the Nightcaps Colliery (Southland). At No. 1 mine all underground work has been concentrated on the upper, or 18 ft. seam, the two lower seams being reserved for the future. At No. 2 mine work has been confined to the middle and upper seams.

The numerous lignite-pits in Otago and Southland have slightly increased their aggregate output, but in brown coal there has been a small decline. As this coal is used only for local consumption, it is reasonable to suppose the output will increase slowly as the districts become more settled and local industries are established.

VENTILATION AND SANITATION.

In the report of the Royal Commission on Mines the Commissioners stated that they were pleased to find that the majority of the collieries of the Dominion were well ventilated, which conclusion was, in their opinion, substantiated by the fact that during the previous fifteen years only one life had been lost as the result of an explosion of firedamp. They, however, reported that they had in a few instances observed inadequate distribution of air by splitting, insufficient use of air-stoppings and brattice. At all collieries but those of insignificant proportions they found that ventilation was produced by fans of modern type, thirty of such being then installed.

The above complimentary remarks must be very gratifying to the Inspectors of Mines and colliery-managers of the Dominion. One of the most important subjects which the Commission were instructed to consider was the ventilation and underground sanitation of mines. In their recommendations the Commission propose that the existing sections as regards ventilation in the Coal-mines Act be amended by substituting, with slight alterations, the provisions contained in the British Coal-mines Act of 1911, as follows:—

Proposed Standard of Ventilation for New Zealand Coal-mines.

“An adequate amount of ventilation shall be constantly produced in every mine to dilute and render harmless inflammable and noxious gases to such an extent that all shafts, roads, levels, stables, and workings of the mine shall be in a fit state for working and passing therein, and in particular that the intake airways, up to within 100 yards of the first working-place which the air enters, shall be kept normally free from inflammable gas: Provided always that an abandoned road or level not used in connection with the working of the mine shall, if properly fenced off, not be deemed to be a road or level within the meaning of this section.

“In the case of mines required to be under the control of a manager the quantity of air in the main current and in every split, and at such other points as may be determined by the regulations of the mine, shall at least once in every month be measured and entered in a book to be kept for the purpose at the mine, and the ordinary number of persons and horses in each split at one time shall be entered in such book.

“For the purpose of this section a place shall not be deemed to be in a fit state for working or passing therein if the air contains either less than 19 per cent. of oxygen or more than 1 per cent of carbon-dioxide: Provided that the Minister of Mines may, by order, exempt any mine or mines from the foregoing provision on the ground that they are liable to spontaneous combustion of the coal, but subject to any conditions specified in the order.

“Special rules under the Act shall provide for the classification of mines according to the amount of inflammable and noxious gases in the main return airway, and the amount of air passing into the mine shall be such amount, proportionate to the number of men and animals employed underground in the mine, as may be prescribed by the special rules with regard to mines of the class to which the mine belongs, but in no case shall less than 150 cubic feet of air per minute be provided for every person, and 600 cubic feet of air per minute for every horse, while employed underground.

“All air-measurements shall be taken at the entrance to each ventilation-section, and shall there be not less in volume than the minimum statutory allowance per man and horse per minute. The total number of men employed ordinarily in any ventilation-section shall not exceed fifty at one time.

“The obligation imposed by this section shall be in addition to, and not in substitution for, the obligation to provide an adequate amount of ventilation imposed by the foregoing section.”

The Commissioners also recommended as follows: That a ventilation plan be kept at all mines. That dumb drifts be constructed at all existing underground furnaces, but that no fire or furnace shall be placed underground at any new mine in future. That the principal mechanical ventilators be not placed underground, and that means be provided for reversing the air-current at fans.

As regards sanitation, recommendations were made for necessary hygienic improvements, and the establishment of change and bath houses for miners is recommended, such houses to be built to a specified design in the manner followed on the Continent of Europe and being established in Great Britain.