## SOUTHERN INSPECTION DISTRICT (J. HADDROFT, Inspector of Coal-mines).

I have the honour to submit my annual report covering the mining activities in the Southern District for 1938 :-The total output for the district, which includes Canterbury, North Otago, Central Otago, South Otago, and Southland, was 474,982 tons, which was a decrease from the previous year of 49,091 tons.

The following summary shows the output and number of men employed during the year, and also the changes

in these from the previous year:-

Output Returns.

	District.						1938.	Increase.	Decrease.
land only my						Tons.	Tons.	Tons.	Tons.
Canterbury	• •	• •	• •	• •	• • •	22,580	19,639	• •	2,941
North Otago		• •				13,647	12,064		1,583
entral Otago						4,777	3,982		795
outh Otago						191,116	172,343		18,773
Southland	••			••		291,953	266,954		24,999
Totals						524,073	474,982	4.6	49,091

Net decrease, 49,091 tons.

## Number of Men Employed.

District.						1937.	1938.	Increase.	Decrease.
Canterbury North Otago Central Otago South Otago Southland						$\begin{array}{c ccccc} . & & 61 & & 5 \\ . & & 34 & & 2 \\ . & & 20 & & 1 \\ . & & 387 & & 39 \end{array}$	57 27 16 392 459	   5	4 7 4  22
Totals	••	••	••			983	951	5	37

Net decrease, 32 men.

Canterbury District.--The output from this district for 1938 was 2,941 tons less than for 1937, and very little development work was done at any of the mines.

North Otago District.—There were practically no changes in this district.

Central Otago District.—Most of the mines are openeast, and there were very few changes in this district.

South Otago District.—This district shows a considerable drop in output compared with the previous year. This is not the result of any mining difficulty, but is rather a matter of finding markets for the coal. With the exception of Kaitangata, where some development and prospecting work has been done, little development is being carried out to take the place of the present workings, which are nearly all on pillar-extraction.

Southland District.—The output from the Southland mines was 24,999 tons less than during 1937. For some years past the development was far behind what it should have been and has caused much concern. However, it is pleasing to report that a good deal of prospecting, boring, and driving have been done in this district.

it is pleasing to report that a good deal of prospecting, boring, and driving have been done in this district during the year and, in most cases, the results have been very encouraging, particularly in the Linton, Wairaki, and Mossbank Mines. The outlook for the future of this district is much better than it has been for some years past.

The safety precautions connected with coal-mining generally have been well carried out. The use of "hard hats"

is steadily increasing, particularly in the high working-places in the larger mines.

During the year mining classes have been continued at the Ohai School of Mines and candidates prepared for examinations for certificates under the Coal-mines Act.

## CANTERBURY MINES.

Bonanza Mine.—Development was continued on the south-west side of the dip to a distance of approximately 10 chains, when the coal thinned and development work was stopped. The greater part of the output for the year

or being driven, from near the bottom of the dip, on the strike of the seam. The north-east level has been driven 8 chains and the south-west level 5 chains. During the year a steam-engine and a 10 h.p. generator have been installed and electric power is now used for pumping.

Lucknow Clay-mine (Homebush Brick and Tile Co.).—This mine is being worked intermittently from the

south-west level.

south-west level.

\*\*Rlondyke Mine.\*\*—The three levels, being driven in a north-east direction, have been stopped temporarily owing to the coal-scam getting thinner. The levels have been driven approximately 22 chains from the dip and the coal at the face is 10 ft. thick and very steeply inclined. The main dip has been developed a further 6 chains and levels broken away on both sides. The coal has maintained its thickness and quantity, and the grade of the scam has eased from 60° to 50° in the portion of the dip development. There has been a reduction in the number of men employed at this mine owing to shortage of trade.

\*\*Yukon Mine.\*\*—A little development is being done in a 3 ft. seam of coal, which is one of the upper seams of the area previously worked by the Bush Gully Mine.

\*\*Bush Gully Mine.\*\*—No mining has been done this year.

\*\*Homebush Clay-mine.\*\*—A small amount of clay has been won from openeast workings.

\*\*Homebush Mine.\*\*—Very little mining has been done on this area. The coal-seam is very thin in ground which is heavy and waterlogged.

Homebush Mine.—Very little mining has been done on this area. The coar-scale is very that in ground is heavy and waterlogged.

Sheffield Clay-mine.—Two places are being worked intermittently in a south-westerly direction from the bottom of the dip, and are being driven 6 ft. high by 6 ft. wide.

Malvern Mine.—A dip drive has been driven a distance of 4 chains in the coal-scam, which is steeply inclined. Two levels are being developed from the bottom of the dip, one to the south and the other to the north. A portable steam-engine is used for haulage and a steam-pump for pumping.

Sandown Mine.—The main dip drive was continued to a distance of 3 chains from the surface, and two levels are being driven in a westerly direction, the distance from the dip to the face being 7 chains. The coal-scam is 10 ft. thick and of fairly good quality. The grade of the seam is 1 in 1.