MINES STATEMENT.

CONTENTS.

APPENDICES TO THE MINES STATEMENT—*continued.*

1926.

NEW ZEALAND.

MINES STATEMENT

BY THE HON. G. J. ANDERSON, MINISTER OF MINES.

MR. SPEAKER,—

I have the honour to present to Parliament my sixth annual statement on the mining industry of the Dominion for the year ended the 31st December, 1925.

The following statement shows the quantity and value of the production of metalliferous mines, stone-quarries under the Stone-quarries Act, and of coal-mines during 1925 and 1924 :—

Mineral.	1925.		1924.	
	Quantity.	Value.	Quantity.	Value.
		£		£
Gold and silver*	625,626 oz.	546,026	652,855 oz.	607,253
Tungsten-ore	$11\frac{5}{20}$ tons	64	3 tons	126
Sulphur	269 ,,	1,154	..	..
Iron	1,289 ,,	8,701	630 ,,	4,725
Stone	..	463,667	..	373,827
Pumice	2,532 ,,	7,672	1,629 ,,	4,956
Coal	2,114,995 ,,	2,114,995	2,083,207 ,,	2,083,207
Totals	..	£3,142,279	..	£3,074,094

* The gold-silver bullion is generally exported unseparated.

The value of minerals, including kauri-gum, exported and of the coal used in the Dominion, which is shown in table No. 1 accompanying this statement, amounted to £3,170,828, as compared with £3,237,331 during 1924. The total value of such minerals exported to the end of 1925 amounted to £159,676,343.

GOLD AND SILVER MINING.

The following statement shows the quantity and value of bullion-production, the dividends paid by registered companies, and the number of productive claims and gold-dredges during 1925 and 1924 :—

Class of Gold-mining.	Production of Bullion.				Dividends paid by Registered Companies.		Number of Productive Claims and Dredges.	
	1925.		1924.		1925.	1924.	1925.	1924.
	Oz.	£	Oz.	£	£	£		
Quartz	604,044	460,042	625,162	490,850	62,390	50,790	22	23
Alluvial ..	11,545	44,990	14,357	57,863	1,950	6,180	248	273
Dredging ..	10,037	40,994	13,336	58,540	3,283	6,566	5	5
Totals ..	625,626	546,026	652,855	607,253	67,623	63,536	275	301

The quantity of gold bullion produced during the year was 27,229 oz. less than in the previous year, and the value less by £61,227. This reduction was principally due to the diminished returns from quartz-mining in Waihi Borough and Tauranga County, though decreases were also shown in the gold got from dredging and from alluvial mining.

COAL-MINING.

The output of several classes of coal mined in each inspection district is summarized as follows:—

Class of Coal.	Output of Coal during 1925.				Total Output to the End of 1925.
	Northern District (North Island).	West Coast District (South Island).	Southern District (South Island).	Total.	
	Tons.	Tons.	Tons.	Tons.	Tons.
Bituminous and sub-bituminous	131,540	913,186	...	1,044,726	37,983,397
Brown	540,863	37,771	332,791	911,425	19,901,452
Lignite	...	439	158,405	158,844	3,834,494
Totals for 1925 ...	672,403	951,396	491,196	2,114,995	61,719,343
Totals for 1924 ...	637,525	990,612	455,070	2,083,207	59,604,348

There were 2,114,995 tons of coal produced during 1925, as against 2,083,207 tons during the previous year, an increase of 31,788 tons. This increase was wholly of brown coals, of which the output was 72,408 tons greater than in 1924.

The output of bituminous coal declined by 40,278 tons, and lignite was less by 342 tons.

During the year the coal-mines in the Dominion have been practically free from any serious industrial trouble, and ample supplies of coal have been available for all the requirements of the country. The coal market, however, was dull during most of the year and short time was worked at some of the mines.

PERSONS EMPLOYED IN OR ABOUT MINES AND STONE-QUARRIES.

The following table shows the number of persons employed in each inspection district during 1925 and 1924:—

Classification.	Inspection District.			Totals.		
	Northern (North Island).	West Coast (of South Island).	Southern (rest of South Island).	1925.	1924.	Increase or Decrease.
Gold, silver, and tungsten ore	788	536	342	1,666	1,830	Dec. 164
Ironstone	..	83	..	83	28	Inc. 55
Coal	1,326	2,394	1,057	4,777	4,869	Dec. 92
Stone-quarries under the Stone-quarries Act	1,424	136	412	1,972	1,748	Inc. 224
Totals	3,538	3,149	1,811	8,498	8,475	Inc. 23

MINING AND QUARRY ACCIDENTS.

In metalliferous mines, at which 1,749 men were ordinarily employed, there were three fatal accidents and one serious non-fatal accident whereby one person was seriously injured.

At stone-quarries under the Stone-quarries Act, employing 1,972 men, there were three persons killed and five persons met with serious injuries.

There were 4,777 persons ordinarily employed about the coal-mines, and there were eight persons killed and twenty-five persons seriously injured.

SOCIAL AMENITIES AT MINING TOWNSHIPS.

It is most gratifying to be able to record that in addition to the provision of bathhouses, &c., for the health and sanitation of the employees at coal-mines some of the coal-mine owners have recognized the benefits that would be obtained by providing facilities for those engaged in athletic sports. At Rotowaro, Pukemiro, and Glen Afton tennis-courts and cricket and football grounds have been provided, and at Glen Massey tennis-courts have been laid down. At Runanga a tennis-court and bowling-green have been provided, and steps are about to be taken to make a croquet-lawn. At Blackball, Tuatara, Shag Point, Ngakawau, Millerton, Granity, Kaitangata, and Nightcaps, tennis-courts are available, and in addition bowling-greens at Kaitangata and Nightcaps. At some of the places not only the miners but the local residents were largely responsible for arranging to provide these facilities.

While much has been done to improve the conditions at many of the mines there is still room for improvement at some of the mining towns.

It may also be mentioned that where tennis-courts and bowling-greens, &c., have been provided such have been made use of to a considerable extent, and those responsible for making such facilities available are to be highly commended for their efforts.

INVESTIGATIONS, NEW ZEALAND COALS.

The experimental work on the briquetting of coals which had been commenced in the Dominion Laboratory towards the close of 1924 was continued during 1925. A large amount of work was done, most of the more important coals in New Zealand being examined. It was found that good briquettes could be made from most of the lignites tried (Mataura, Bannockburn, Charleston, Taratu, &c.) without the use of any binder, but that this was not the case with brown coal and bituminous coal. A large number of binding agents were tried with the latter coals, and it was found that the best and most economical briquettes were obtained by using coal-tar pitch or bitumen. Briquettes made from bituminous coal with either of these binders are of very good quality and of moderate cost. In the case of brown coals such briquettes stand handling and weathering very well, but crumble in the fire. Experiments showed that this defect could be entirely removed by mixing the brown coal with about 20 per cent. of a bituminous coal. Briquettes made with such a mixture and a suitable amount of pitch or bitumen are of moderate cost and of excellent quality in every respect for household use. If the proportion of bituminous coal is increased to 50 per cent. of the mixture, the briquettes are free from the tendency to sparking so characteristic of Waikato brown coals and should furnish an excellent locomotive fuel.

Full particulars of the work done in this investigation are given in Appendices I and Ia to the Fifty-eighth Annual Report of the Dominion Laboratory.

With a view to investigating the possibilities of increasing the market for small coal, representative samples of coal from Waikato, Reefton, Otago, and Southland were forwarded for special investigation and report upon their commercial and economic uses to Professor W. A. Bone, D.Sc., Ph.D., F.R.S., of the Imperial College of Science and Technology, London, the recognized authority in the Empire on the low-temperature carbonization of coal.

Professor Bone has since completed his investigations and has reported upon the results obtained to the Government.

The samples selected by Professor Bone for his investigations were from the Kaitangata, Mataura, Reefton, Waipa, and Rotowaro Collieries, the coal from these mines being considered representative of the coal in the respective districts.

The major portion of such report refers to a description of the samples, the moisture contents thereof, the proximate analysis of the dry coals, etc., and it is not necessary to repeat the details thereof in this Statement, but merely to refer to the conclusions arrived at, in respect of which the report reads as follows:—

"In my opinion the best prospect of utilizing these coals commercially would be either (i) as pulverized fuels for the firing of boilers or reverberatory furnaces, or (ii) as briquettes, after being crushed and briquetted with the addition of some 4 per cent. or 5 per cent. of pitch or other suitable binder. Speaking generally, probably a

suitable process of low-temperature carbonization (say at 550° to 600° C.), when such becomes commercially available, would be the best means of "up-grading" these coals; because, in addition to yielding satisfactory amounts of fuel oils, the residues, which would be free-burning and smokeless in their combustion, could readily be used either as pulverized fuels for steam generation and the like or as briquetted fuels."

Further investigation as to the commercial and economic value of coal in the Dominion is being made, and to this end a sample of Waikato coal has recently been forwarded to Messrs. Vickers Limited, London, for preliminary test by low-temperature carbonization at that firm's laboratories at Dartford to determine the yield of oil, gas, and coke, also the properties of oil obtained.

A private syndicate, for whom Messrs. Dansey and Co. (Limited), Engineers, Auckland, are acting, are also having experiments made with Waikato slack, and have sent a parcel of 75 tons of this coal to Antwerp for treatment by distillation process by Messrs. Head, Wrightson, and Co. (Limited), Stockton-on-Tees, England, in conjunction with a Belgian firm with works at Antwerp. In order to ascertain the merits and details of this process the Government has been fortunate in obtaining the services of Sir Richard Redmayne, at one time Chief Inspector of Mines and Chairman of Governors of the Imperial Mineral Resources Bureau, to report fully thereon.

GEOLOGICAL SURVEY.

During the field season ended 31st May last surveys of the Motueka district in Nelson and of the Kaitangata - Green Island district in eastern Otago were completed, and detailed reports on these areas are now being written. A survey of the country in North Auckland north of the Dargaville district was begun, but the geologist in charge (Mr. H. T. Ferrar) had to be diverted to urgent soil-survey work in Central Otago, and consequently the North Auckland survey was temporarily discontinued.

The soil-survey in Central Otago is necessary in order to determine the general character of the soils in areas that are now being irrigated or about to be irrigated, and to assist the irrigation engineers in the solution of drainage problems, one of which is the dispersal or avoidance of accumulations of harmful salts in low-lying places. The cost of soil-survey in comparison with the large sum that has necessarily to be spent on irrigation works is trifling.

Owing to the activity displayed in oil-prospecting during the past year the Geological Survey was frequently called upon to supply information on districts supposed to be oil-bearing.

Valuable work of a specialized nature is being done in the palæontological branch of the survey. The fossil collections being examined are mainly Tertiary. As in former years, help has been given by outside workers, both in New Zealand and abroad, and the Geological Survey, so far as possible, reciprocates.

During the year Bulletin No. 27 (The Geology of the Whangarei - Bay of Islands Subdivision) and the Nineteenth Annual Report of the Survey were published. Bulletin No. 28 (The Geology of the Huntly-Kawhia Subdivision) was ready for issue at the end of May. Detailed reports on Cretaceous and Tertiary foraminifera and on Triassic fossils are now in an advanced stage of printing and will shortly be published. Geological maps of the Waiapu Subdivision (East Cape district) have been published, and the report thereon is nearly ready for the printer.

The detailed report on the Egmont Subdivision is now in the printer's hands, and several other reports are almost ready for publication.

STATE AID TO MINING.

As in previous years, considerable use was made of the Government prospecting-drills. They were hired by seven parties, and a total of 9,403 feet was drilled

For the year a total of £9,795 6s. 7d. was expended in subsidies for prospecting, and 106 persons were employed in connection therewith.

£6,033 was expended by way of direct grants and subsidies for roads and tracks.

The expenditure on schools of mines amounted to £4,004, against £3,501 11s. 3d. during the previous year.

The cash received for water sold from the Waimea-Kumara Government Water-races, constructed to assist alluvial-gold mining in the Kumara district, amounted to £914 6s. 3d. (including royalty on timber), and the expenditure to £1,298 15s. 5d. Gold to the approximate value of £1,283 was obtained.

MINER'S PHTHISIS ACT, 1915.

The benefits under this Act are administered by the Pensions Department, and the following is a statement supplied by the Commissioner of Pensions showing the amount and the number of pensions payable, in force, and granted to the 31st March, 1926.

	£
Amounts paid since inception until 31st March, 1926—	
From 1st November, 1915, to 31st March, 1925 ..	218,999
For year ended 31st March, 1926	40,239
	£259,238
Number of new grants for year 1925–26	96
Annual value of new grants	£6,851
Number of pensions in force at 31st March, 1926 ..	640
Annual value of pensions in force at 31st March, 1926 ..	£40,482
Average pension payable per annum	£63 5s.
Total number of pensions granted to 31st March, 1926..	1,259
Total number of pensions granted to 31st March, 1926, includes the following :—	
To unmarried miners	239
To married miners	487
To widows of miners	533
	1,259

STATE COLLIERIES.

Output and Sales.

The operations of the State coal-mines and State coal-depots for the year ended 31st March, 1926, are briefly reviewed hereunder.

Liverpool Colliery.—The gross output for the year was 107,277 tons, as compared with 116,175 tons for last year, a decrease of 8,898 tons.

James Colliery.—The gross output for the year was 26,781 tons, as compared with 28,995 tons for last year, a decrease of 2,214 tons.

A comparative statement for the two years is shown hereunder :—

Mine.	Output in Tons, 1925–26.		Output in Tons, 1924–25.	
	Gross.	Net.	Gross.	Net.
Liverpool	107,277	102,400	116,175	111,487
James	26,781	24,735	28,995	26,445

Note.—The difference between the gross and the net output is the allowance for mine consumption and waste. In addition to the above 2,206, tons of coal were purchased for resale, of which 210 tons were purchased from co-operative parties on the West Coast.

The disposal, inclusive of stock on hand at the beginning of the year, was as follows : Supplied to—Depots, 30,728 tons ; railways, 6,338 tons ; other Government Departments, 6,150 tons ; shipping, 15,350 tons ; gasworks, 62,212 tons ; other consumers, 5,073 tons : total, 125,851 tons.

The total sales of State coal from the Liverpool Mine for the year amounted to 102,953 tons, value £149,978, as compared with 112,197 tons, value £168,600, for last year—a decrease of 9,244 tons, with a decrease in value of £18,622.

The average price realized by the mine on the total sales for the year was £1 9s. 1·62d., a decrease of 11·03d. on last year's average.

The total sales of State coal from the James Mine for the year amounted to 22,898 tons, value £34,762, giving an average of £1 10s. 4·35d. per ton, an increase of 7·57d. on last year's average.

The sales of coal, &c., through the medium of the depots totalled 98,326 tons, value £198,745, as against 104,486 tons, value £210,619, for last year.

The profits at the mines were £2,693, and at the depots, &c., £3,722, making a net profit of £6,415. £4,552 was applied to the Sinking Fund Account.

Items from Balance-sheet.

The following items taken from the balance-sheet, which has been audited, will prove of interest as indicating the more important items of expenditure, and for reference in respect to the position of Capital Account, reserve funds, and other accounts shown therein :—

	£
The amount written off for depreciation for the year was	16,654
The payments for interest totalled	9,252
The payments for sea carriage of coal amounted to	49,482
The cost of railway haulage amounted to	28,997
The total wages paid for coal-winning were	76,834
The amount paid for management and office salaries (Head Office and mines) totalled	3,617
The gross capital expenditure on the whole undertaking to the 31st March last was	594,871
The total depreciation written off to date (equal to 59 per cent. on the gross capital expenditure) amounts to	352,478
The debenture and loan capital stands at	227,601
The net profits of the State Coal-mines Account from inception to the 31st March, 1926, are	109,573
The net profit for the year ended 31st March, 1926, was	6,415
The sinking fund is in credit	48,199
General reserve stands at	64,953
The amount at credit of Profit and Loss is	1,863
The cash in hand and in the Public Account at the 31st March last was (last year £12,888)	2,115
The present net book value of permanent or fixed assets is	242,393

TABLES TO ACCOMPANY MINES STATEMENT.

No. 1.

TABLE SHOWING THE QUANTITY AND VALUE OF GOLD AND OTHER MINERALS EXPORTED DURING THE YEARS ENDED THE 31ST DECEMBER, 1924 AND 1925, AND THE TOTAL VALUE SINCE THE 1ST JANUARY, 1853. THE COAL-OUTPUT IS ALSO INCLUDED.

Name of Metal or Mineral.	For Year ended the 31st December, 1925.		For Year ended the 31st December, 1924.		Total from the 1st January, 1853, to the 31st December, 1925.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
Precious metals—	Oz.	£	Oz.	£	Oz.	£
Gold*	114,696	472,364	133,631	551,788	23,290,787	91,887,192
Silver	495,268	60,773	578,217	71,981	25,128,176	2,965,424
Total gold and silver ..	609,964	533,137	711,848	623,769	48,418,963	94,852,616
Mineral produce, including kauri-gum—	Tons.	£	Tons.	£	Tons.	£
Copper-ore	..	..	..	..	1,504	19,390
Chrome-ore	..	..	..	..	5,869	38,002
Antimony-ore	..	..	..	..	3,781	55,045
Manganese-ore	..	..	6	36	19,380	61,994
Hæmatite ore	..	..	..	..	77	469
Tungsten-ore	$31\frac{8}{20}$	2,255	$14\frac{19}{20}$	1,156	$2,371\frac{6}{20}$	304,125
Quicksilver	..	..	..	..	$16\frac{12}{20}$	8,336
Sulphur (crude)	..	..	..	..	4,927	13,241
Mixed minerals†	2,566	8,419	$1,971\frac{18}{20}$	12,692	$74,872\frac{13}{20}$	315,226
Coal (New Zealand) exported	138,083	235,047	88,981	161,432	5,607,743	5,920,146
Coke exported	50	157	182	444	17,354	27,009
Coal, output of mines in Dominion (less exports)	1,976,912	1,976,912	1,994,226	1,994,226	56,111,600	36,530,522
Oil-shale	..	..	..	..	14,444	7,236
Kauri-gum	5,370	414,901	5,261	443,576	394,422	21,522,986
Total quantity and value of minerals	$2,123,012\frac{3}{20}$	2,637,691	$2,090,642\frac{17}{20}$	2,613,562	$62,258,361\frac{11}{20}$	64,823,727
Value of gold and silver, as above	..	533,137	..	623,769	..	94,852,616
Total value of minerals, including gold and silver	..	3,170,828	..	3,237,331	..	159,676,343

* In respect of gold, ounces of the fineness of 20 carats and upwards. † Including pumicestone and pumice-sand, 2,532 tons; also marble of weight unspecified by the Customs Department.

No. 2.

TABLE SHOWING THE QUANTITY AND VALUE OF GOLD EXPORTED FROM NEW ZEALAND FOR THE YEARS ENDED THE 31ST DECEMBER, 1925 AND 1924, AND THE TOTAL QUANTITY AND VALUE FROM 1857 TO THE 31ST DECEMBER, 1925.

District and County or Borough.	Year ended 31st December, 1925.		Year ended 31st December, 1924.		Total Quantity and Value from January, 1857, to 31st December, 1925.	
	Quantity.	Value.	Quantity.	Value.		
AUCKLAND—	Oz.	£	Oz.	£	Oz.	£
County of Tauranga	..	..	4,593	19,330		
County of Coromandel	191	559	29	112		
County of Ohinemuri	2,212	8,564	256	952		
Borough of Thames	339	1,251	405	1,577		
Borough of Waihi	69,350	291,003	77,474	325,961		
	72,092	301,377	82,757	347,932	7,236,109	28,074,102
WELLINGTON	..	..	..	..	188	706
MARLBOROUGH—						
Borough of Blenheim	..	..	23	92		
County of Marlborough	569	2,138	4	18		
	569	2,138	27	110	106,948	412,892
NELSON—						
County of Collingwood	84	310	77	299		
County of Murchison	21	88	71	277		
	105	398	148	576	1,741,206	6,903,761
WEST COAST—						
County of Buller	184	735	366	1,452		
County of Inangahua	27,736	110,862	25,556	101,429		
County of Grey	53	201	819	3,288		
County of Westland	9,449	38,420	9,614	39,013		
Hokitika Borough	..	..	2,312	9,417		
Greymouth Borough	94	381	..	..		
	37,516	150,599	38,667	154,599	6,446,432	25,588,958
CANTERBURY—						
County of Selwyn	20	79	13	50	155	611
OTAGO—						
County of Tuapeka	250	991	2,553	10,169		
County of Vincent	646	2,635	1,873	7,630		
County of Maniototo	503	2,005	1,803	7,178		
County of Waihemo	2	9	333	1,211		
County of Waitaki	61	237	29	118		
County of Lake	34	140	707	2,862		
County of Wallace	922	3,662	1,156	4,813		
County of Southland	1,191	4,926	2,997	12,169		
	3,609	14,605	11,451	46,150	7,752,119	30,871,427
Unknown	785	3,168	568	2,371	8,530	34,735
Totals	114,696	472,364	133,631	551,788	23,290,787	91,887,192

No. 3.

TABLE SHOWING THE OUTPUT OF COAL FROM THE VARIOUS COALFIELDS, AND THE COMPARATIVE INCREASE AND DECREASE, FOR THE YEARS 1925 AND 1924, TOGETHER WITH THE TOTAL APPROXIMATE QUANTITY OF COAL PRODUCED SINCE THE MINES WERE OPENED.

Name of Coalfield.	Output.		Increase.	Decrease.	Approximate Total Output up to 31st December, 1925.
	1925.	1924.			
	Tons.	Tons.	Tons.	Tons.	Tons.
North Auckland	131,540	129,927	1,613	..	4,517,979
Waikato (including Mokau)	540,863	507,598	33,265	..	8,549,232
Nelson	9,718	10,843	..	1,125	417,423
Buller	576,252	597,749	..	21,497	19,368,121
Inangahua	37,276	34,659	2,617	..	534,936
Grey	328,150	347,361	..	19,211	11,657,324
Canterbury	12,165	15,164	..	2,999	921,667
Otago	229,633	229,145	488	..	11,268,302
Southland	249,398	210,761	38,637	..	4,484,359
Totals	2,114,995*	2,083,207	..	..	61,719,343

* Increase, 31,788 tons.

No. 4.

TABLE SHOWING THE OUTPUT OF DIFFERENT CLASSES OF COAL.

Class of Coal.	Output.		Increase.	Decrease.	Approximate Total Output to the 31st December, 1925.
	1925.	1924.			
	Tons.	Tons.	Tons.	Tons.	Tons.
Bituminous and semi-bituminous	1,044,726	1,085,004	..	40,278	37,983,397
Brown	911,425	839,017	72,408	..	19,901,452
Lignite	158,844	159,186	..	342	3,834,494
Totals	2,114,995*	2,083,207	..	..	61,719,343

* Increase, 31,788 tons.

No. 5.

TABLE SHOWING THE INCREASE OR DECREASE IN THE ANNUAL PRODUCTION OF COAL AND OIL-SHALE IN THE DOMINION, AND THE QUANTITY OF COAL IMPORTED SINCE 1878.

Year.	Coal and Shale raised in the Dominion.		Coal imported.		
	Tons.	Yearly Increase or Decrease.	Tons.	Increase over Preceding Year.	Decrease below Preceding Year.
Prior to 1878	709,931	..	..	..	..
1878	162,218	..	174,148	..	..
1879	231,218	*Inc.* 69,000	158,076	..	16,072
1880	299,923	„ 68,705	123,298	..	34,778
1881	337,262	„ 37,339	129,962	6,664	..
1882	378,272	„ 41,010	129,582	..	380
1883	421,764	„ 43,492	123,540	..	6,042
1884	480,831	„ 59,069	148,444	24,904	..
1885	511,063	„ 30,232	130,202	..	18,242
1886	534,353	„ 23,290	119,873	..	10,329
1887	558,620	„ 24,267	107,230	..	12,643
1888	613,895	„ 55,275	101,341	..	5,889
1889	586,445	*Dec.* 27,450	128,063	26,722	..
1890	637,397	*Inc.* 50,952	110,939	..	17,124
1891	668,794	„ 31,397	125,318	14,379	..
1892	673,315	„ 4,521	125,453	135	..
1893	691,548	„ 18,233	117,444	..	8,009
1894	719,546	„ 27,998	112,961	..	4,483
1895	726,654	„ 7,108	108,198	..	4,763
1896	792,851	„ 66,197	101,756	..	6,442
1897	840,713	„ 47,862	110,907	9,151	..
1898	907,033	„ 66,320	115,427	4,520	..
1899	975,234	„ 68,201	99,655	..	15,772
1900	1,093,990	„ 118,756	124,033	24,378	..
1901	1,239,686	„ 145,696	149,764	25,731	..
1902	1,365,040	„ 125,354	127,853	..	21,911
1903	1,420,229	„ 55,189	163,923	36,070	..
1904	1,537,838	„ 117,609	147,196	..	16,727
1905	1,585,756	„ 47,918	169,046	21,850	..
1906	1,729,536	„ 143,780	207,567	38,521	..
1907	1,831,009	„ 101,473	220,749	13,182	..
1908	1,860,975	„ 29,966	287,808	67,059	..
1909	1,911,247	„ 50,272	258,185	..	29,623
1910	2,197,362	„ 286,115	232,378	..	25,807
1911	2,066,073	*Dec.* 131,289	188,068	..	44,310
1912	2,177,615	*Inc.* 111,542	364,359	176,291	..
1913	1,888,005	*Dec.* 289,610	468,940	104,581	..
1914	2,275,614	*Inc.* 387,609	518,070	49,130	..
1915	2,208,624	*Dec.* 66,990	353,471	..	164,599
1916	2,257,135	*Inc.* 48,511	293,956	..	59,515
1917	2,068,419	*Dec.* 188,716	291,597	..	2,359
1918	2,034,250	„ 34,169	255,332	..	36,265
1919	1,847,848	„ 186,402	391,434	136,102	..
1920	1,843,705	„ 4,143	476,343	84,909	..
1921	1,809,095	„ 34,610	822,459	346,116	..
1922	1,857,819	*Inc.* 48,724	501,478	..	320,981
1923	1,969,834	„ 112,015	445,792	..	55,686
1924	2,083,207	„ 113,373	674,483	228,691	..
1925	2,114,995	„ 31,788	572,573	..	101,910

No. 6.

TABLE SHOWING THE TOTAL QUANTITY AND VALUE OF COAL IMPORTED INTO AND EXPORTED FROM NEW ZEALAND FROM AND TO EACH COUNTRY DURING THE CALENDAR YEAR 1925.

Imports.

Country whence imported.	Tons.	Value.
		£
United Kingdom	1,990	2,810
Australia	570,383	679,681
United States of America, via East Coast ..	200	220
Totals	572,573	682,711

The values shown are the current domestic values in country of export plus 10 per cent.

Exports: Bunkers.

Country to which exported	Produce of New Zealand.		Produce of other Countries.	
	Tons.	Value.	Tons.	Value.
		£		£
United Kingdom	81,389	151,575	..	..
Canada, via West Coast	1,398	1,509	..	..
United States of America, via East Coast	3,442	3,740	2,175	7,819
United States of America, via West Coast	210	404	..	..
Australia	31,252	49,033	4,451	13,261
Fiji	1,591	2,400	..	..
Nauru Island	1,352	1,391	..	..
New Caledonia	390	731	..	..
Western Samoa	306	288	..	..
Tutuila	1,425	1,576	..	..
France	3,590	4,487	..	..
Norway	2,200	4,400	..	..
Totals	128,545	221,534	6,626	21,080

Exports: Cargo.

Country to which exported.	Produce of New Zealand.		Produce of other Countries.	
	Tons.	Value.	Tons.	Value.
		£		£
United Kingdom	11	7	..	..
Australia	2	3	..	..
Fiji	305	579	..	..
Tonga	..	2	..	..
Western Samoa	4	16	1	3
Society Islands	1	5	..	..
Tutuila	9,215	12,901	..	..
Totals	9,538	13,513	1	3

No. 7.

NUMBER OF PERSONS ORDINARILY EMPLOYED AT OR ABOUT MINES OTHER THAN COAL-MINES DURING THE YEAR ENDED 31ST DECEMBER, 1925.

County or Borough.	Number of Persons ordinarily employed at				Total.	
	Gold-quartz Mines.	Gold Alluvial Mines.	Gold-dredges.	Mines other than Gold and Coal.	1925.	1924.
NORTHERN INSPECTION DISTRICT.						
County and Borough of Thames	13	..	..	..	13	52
County of Ohinemuri	64	..	..	..	64	64
,, Coromandel	19	..	..	..	19	33
Borough of Thames	40	..	..	..	40	..
,, Waihi	623	..	..	..	623	775
County of Tauranga	29	..	..	..	29	39
,, Whangarei	..	..	..	..	..	4
WEST COAST INSPECTION DISTRICT.						
County of Marlborough	20	10	..	..	30	27
,, Takaka	..	..	..	..	..	1
,, Collingwood	..	9	..	83	92	32
,, Murchison	..	24	..	..	24	41
,, Buller	2	16	..	..	18	15
,, Inangahua	272	12	..	..	284	299
,, Grey	..	20	2	..	22	23
,, Westland	..	61	88	..	149	121
SOUTHERN INSPECTION DISTRICT.						
County of Taieri	..	1	..	..	1	2
,, Tuapeka	..	55	..	..	55	65
,, Vincent	3	39	9	..	51	49
,, Maniototo	..	59	..	..	59	57
,, Waihemo	2	..	..	..	2	6
,, Waitaki	..	8	..	..	8	9
,, Lake	2	80	..	..	82	44
,, Wallace	..	28	..	..	28	37
,, Southland	..	48	8	..	56	62
,, Ashburton	..	..	..	..	..	1
Totals	1,089	470	107	83	1,749	1,858

Summary of Persons ordinarily employed in or about New Zealand Mines during 1925 and 1924.

	1925.	1924.	Increase or Decrease.
Gold, silver, and tungsten mines	1,666	1,830	Dec. 164
Other metalliferous mines	83	28	Inc. 55
Coal-mines	4,777	4,869	Dec. 92
Totals	6,526	6,727	Dec. 201

APPENDICES TO THE MINES STATEMENT.

APPENDIX A.

REPORTS RELATING TO METALLIFEROUS MINES AND STONE-QUARRIES.

The INSPECTING ENGINEER OF MINES to the UNDER-SECRETARY OF MINES.

SIR,— Wellington, 26th May, 1926.

I have the honour to present my report on metalliferous mines and stone-quarries, together with statistical information, for the year ended 31st December, 1925.

In accordance with the usual practice, the tables showing expenditure on roads, bridges, tracks, prospecting operations, &c., are for the period covered by the financial year—viz., from the 1st April, 1925, to the 31st March, 1926.

The reports, &c., are divided into the following sections :—

I. Minerals produced and exported.
II. Persons employed.
III. Accidents.
IV. Gold-mining.
  (1.) Quartz-mining.
  (2.) Dredge Mining.
  (3.) Alluvial Mining.
V. Minerals other than Gold.
VI. Stone-quarry Inspection and Statistics.
VII. State Aid to Mining.
  (1.) Subsidized Prospecting.
  (2.) Government Prospecting-drills.
  (3.) Subsidized Roads on Goldfields.
  (4.) Government Water-races.
  (5.) Schools of Mines.

Annexures :—
(A.) Summary of Reports by Inspectors of Mines.
(B.) Summary of Report by Water-race Manager.
(C.) Summary of Report by Inspector of Quarries.
(D.) Mining Statistics.

I. MINERALS PRODUCED AND EXPORTED.

The following statement shows the quantity and value of the production of metal-mines and of stone-quarries under the Stone-quarries Act during 1925 and 1924 :—

Mineral	1925.		1924.	
	Quantity.	Value.	Quantity.	Value.
	Oz.	£	Oz.	£
Gold and silver (estimated)	625,626	546,026	652,855	607,253
	Tons cwt.		Tons cwt.	
Tungsten-ore	1 15	64	3 0	126
Iron	1,289 0	8,701	630 0	4,725
Stone	..	463,667	..	373,827
Pumice	2,532 0	7,672	1,629 0	4,956
Sulphur	269 0	1,154	..	..
Totals	..	1,027,284	..	990,887

The following statement shows the value of New Zealand minerals (other than coal) exported from the 1st January, 1853, to the 31st December, 1925 :—

—	1925.	1924.	Increase or Decrease.	Total from the 1st January, 1853, to the 31st December, 1925.
	£	£	£	£
Gold	472,364	551,788	Dec. 79,424	91,887,192
Silver	60,773	71,981	Dec. 11,208	2,965,424
Tungsten-ore	2,255	1,156	Inc. 1,099	304,125
Kauri-gum	414,901	443,576	Dec. 28,675	21,522,986
Sand, lime, and building-stone ..	7,968	7,625	Inc. 343	511,703
Other minerals	451	5,103	Dec. 4,652	
Totals	958,712	1,081,229	Dec. 122,517	117,191,430

II. PERSONS EMPLOYED.

The following statement shows the number of persons ordinarily employed in or about the metalliferous mines of the Dominion during the year :—

Classification.	Inspection District.			Total, 1925.
	Northern.	West Coast.	Southern.	
Gold, silver, and tungsten	788	536	342	1,666
Ironstone	..	83	..	83
Totals for 1925	788	619	342	1,749
Totals for 1924	967	559	332	1,858

III. ACCIDENTS.

During 1925 three fatal and one serious but non-fatal accidents occurred in or about metalliferous mines, at which 1,749 persons were ordinarily employed.

Cause.	Fatal Accidents.		Serious Non-fatal Accidents.	
	Number of Separate Accidents	Number of Deaths.	Number of Separate Accidents.	Number of Persons injured.
Falls of ground	..	..	..	..
Explosives	..	..	1	1
Miscellaneous, on surface	3	3	..	..
Miscellaneous, underground	..	..	..	..
Totals	3	3	1	1

The following is a short description of the fatal accidents :—

On the 15th March Sue Too, employed at the Nokomai Hydraulic Sluicing Company's claim, received serious injuries to his head, and died in hospital on the same day. He had turned on the water to a hydraulic nozzle, which swung round and threw him against a valve on a branch line, fracturing his skull.

On the 22nd July William Angel, employed in the blacksmith's shop at the Waihi Mine, was struck by a beam falling from the roof, and died of a fractured skull in the Waihi Hospital on the following day. A beam, 6 in. by 4 in., had been resting with one end on the top wall-plate of the building and the other end on a roof principal, and when first put in place had been nailed at both ends. The timber had shrunk and had either loosened or pulled out the nails at one end. At the time of the accident the weather was stormy, and a very heavy gust of wind struck the building and probably distorted it sufficiently to take away the support from one end of the beam, which fell, striking the deceased, who was passing below at the time.

On the 13th October Lawrence Welsh, employed at the Kawarau Falls Dam, was drowned in the Kawarau River. Deceased was engaged in dismantling a footbridge when he fell into the river and was carried away by the current, the river being high at the time.

IV. GOLD-MINING.

The following statement shows the value of the bullion-production, also the dividends declared, number of persons employed, and the number of gold-mines and dredges :—

—	Production of Bullion, 1925.* (All Mines.)		Dividends paid, 1925. (By Registered Companies only.)†	Number of Persons ordinarily employed at Productive and Unproductive Mines.	Number of Productive Quartz-mines, Alluvial Mines, and Dredges, 1925.
	Quantity.	Value.			
	Oz.	£	£		
Quartz-mining ..	604,044	460,042	62,390	1,089	22
Dredge mining ..	10,037	40,994	3,283	107	5
Alluvial mining‡ ..	11,545	44,990	1,950	470	248
Totals, 1925 ..	625,626	546,026	67,623	1,666	275
Totals, 1924 ..	652,855	607,253	63,536	1,829	301

* In addition to the gold produced from the gold-mines, silver was obtained from them, hence the word "bullion" is used in preference to "gold."

† The profits of privately owned dredges and mines are unobtainable, which renders this statement incomplete.

‡ The bullion-production is from 248 alluvial claims, but the dividends are only ascertainable from those few that are the property of registered companies.

The value of gold produced during 1925 was less by £61,227 than during 1924. This decrease is made up of a decrease of £30,808 from quartz-mining, due to the reduced production from Waihi Borough and Tauranga County, a decrease of £17,546 from dredging, and a decrease of £12,873 from alluvial mining.

(1.) QUARTZ-MINING.

Inspection District.	Statute Tons of Ore treated.		Value of Bullion.		Dividends paid (by Registered Companies only).	
	1925.	1924.	1925.	1924.	1925.	1924.
			£	£	£	£
Northern	193,907	209,481	348,703	374,085	49,591	49,590
West Coast	53,254	51,467	111,210	115,652	12,799	1,200
Southern	40	97	129	1,113	..	..
Totals	247,201	261,045	460,042	490,850	62,390	50,790

The average value per ton of ore treated during 1925 amounted to £1 17s. 3d., as compared with £1 17s. 7d. during 1924.

At the Waihi Mine 192,337 tons of ore were crushed for a return of 570,594 oz. of bullion, an increase of 1,697 tons of ore, and of 4,497 oz. of bullion. A very large amount of development-work was done during the year, without, however, disclosing any large body of ore comparable with the reef bodies in the upper levels. The total footage amounted to 13,894½, and in addition there were 1,214 ft. of boring by diamond drill. The results of the development-work in the low levels are particularly disappointing so far.

At Muir's Gold-reefs Mine the crosscuts to the Muir's and Massey reefs were advanced a total of 875 ft. without striking payable ore. Both crosscuts got into very broken country. No. 3 winze was sunk to a distance of 200 ft. below No. 3 level, and a crosscut showed the reef to be 15 ft. wide, carrying values up to £2 per ton.

Great trouble was experienced through the amount of water that had to be pumped. Eventually the water increased beyond the capacity of the pumps, and work had to be discontinued at the mine. A new pumping plant of ample capacity has since been ordered.

At the Blackwater Mine 37,939 tons of ore were crushed for a return of 18,604 oz. of bullion, valued at £74,423, a decrease of 201 tons of ore and £4,887 in value. Less development-work was done than in the previous year, the total footage being 1,037 ft., of which, however, 629½ ft. were on reef averaging about 16 dwt. over a width of just over 2 ft. A roasting plant, for the treatment of concentrates previously sent to Australia, was installed during the year and promises to be a success.

At the New Big River Mine 3,976 tons of ore were crushed for a return of 3,432 oz. of bullion, valued at £13,497. Most of the ore came from the stopes on No. 12 level. The development-work amounted to 421 ft., and consisted principally of intermediate levels and rises and winzes between Nos. 11 and 12 levels.

(2.) DREDGE MINING.

The following is a statement showing the capacity, production, and profits of bucket gold-dredges during 1925. (NOTE.—The profits made by privately owned dredges are not obtainable for publication.)

Name of Dredge.	Locality.	Capacity of Dredge-buckets, in Cubic Feet.	Number of Buckets discharged per Minute.	Nominal Horse-power of Engines.	S = Steam. E = Electrical.	Average Depth of Ground dredged.	Value of Bullion obtained during 1925.	Dividends declared.	
								During 1925.	Total.
Otago and Southland.						Ft.	£	£	£
Nevis Crossing	Nevis River ..	3½	10	12	S	10	1,370	..	..
McGeorge's Freehold No. 3	Waikaka Valley ..	6½	9	20	S	35	3,578	..	..
Molyneux Electric* ..	Molyneux River ..	5	11	16	E	40	12	..	..
West Coast.									
Rimu	Rimu	10	19	325	E	55	35,720	3,283	13,132
Awatuna	Awatuna Beach ..	8	15	32	S	25	314	..	..
Totals, 1925 ..	..	..	..	..	..	..	40,994	3,283	Unknown.
Totals, 1924 ..	..	..	..	..	..	..	58,540	6,566	Unknown.

* Formerly known as Manuherikia.

The Rimu Flat dredge operated continuously throughout the year. The gold won by this dredge amounted to 8,714 oz., compared with 10,606 oz. for the previous year, a decrease of 1,892 oz. The latter is accounted for by the fact that the dredge was operating on a poorer section of the claim; the yardage dredged was about the same as in the previous year. The company prospected other areas in the district during the year, but without success.

(3.) Alluvial Mining.

The following is a statement showing the value of production and dividends declared from alluvial gold-mines during 1925 :—

Name of Company.	Estimated Value of Gold produced.	Dividends declared.	
		During 1925.	Total to End of 1925.
	£	£	£
Scandinavian Water-race Company	1,524	..	..
Gabriel's Gully Sluicing Company	2,229	..	17,615
Lawrence Sluicing Company	1,648	..	2,000
W. R. Smyth	1,339	..	..
Golden Crescent Sluicing Company	1,632	787	13,649
Sailor's Gully Sluicing Company	1,931	..	7,520
Graham and Party	1,883	1,163	4,063
Nokomai Hydraulic Sluicing Company	2,547	..	54,684
Round Hill Mining Company	4,034	..	..
Hohonu Gold Sluicing Company	1,839	..	..
Stubbs and Steel	1,193	..	..
G. M. Powell and Sons	1,045	..	..
All other claims	22,146	..	..
Totals	44,990	1,950	Unknown.

V. MINERALS OTHER THAN GOLD.

Iron.

Smelting was resumed at the Onakaka Iron and Steel Company's furnace at Onakaka in September and continued without interruption till the end of the year, during which period 2,579 tons of iron-ore were smelted and 1,290 tons of pig iron produced. The pig iron was of fair quality, and the analyses of three samples shows its average composition to be as follows: Graphite carbon, 3·02; combined carbon, 0·48; silicon, 2·11; sulphur, 0·07; phosphorus, 0·32; manganese, 0·76; and iron (by difference), 93·24 per cent. The number of coke-ovens was increased and the method of storing coal improved. The company is having difficulty in marketing its product in open competition with low-priced pig iron imported from India.

Sulphur.

Another attempt is being made to work the White Island sulphur deposits, this time by the White Island Agricultural Chemical Company (Limited). Operations were commenced late in the year and comprised the testing and preparing for opencast working of the sulphur deposit, the provision of a safe anchorage and loading-facilities for small craft at Crater Bay, and the building of accommodation for the men employed on the island. A small quantity of high-grade sulphur was shipped to Auckland and liquefied out at 99·8 per cent. pure. It is at present proposed to work the crude sulphur and market it as a fertilizer. In this connection the company has acquired a site on Tauranga Harbour, and is constructing a wharf and erecting a crushing and bagging plant.

White Island also contains several guano deposits, but no reliable estimate has yet been made of the quantity and quality available. Wireless communication is maintained between the island and the mainland.

Petroleum.

An Australian Company, the Taranaki Oilfields (Limited), was formed in 1924 to further test the Taranaki Oilfield. Drilling operations were commenced at the beginning of 1925, and two wells were started, one at Tarata and another on the foreshore at Moturoa. By the end of the year the Tarata Well was down 4,130 ft., without, however, meeting more than traces of oil. The Moturoa Well got a good show of oil at 930 ft. At 1,550 ft. gas at high pressure was struck, but the analyses of the gas showed that it contained 72 per cent. of carbon dioxide and only about 25 per cent. of methane and its homologues, so that the gas was valueless as a fuel. From the records of other wells in the vicinity it was expected to strike an oil-sand at about 2,200 ft., but this anticipation was, unfortunately, not realized. Good shows of oil were got between 2,150 ft. and 2,600 ft., but nothing to indicate the presence of oil in commercial quantities. By the end of the year the Moturoa Well had reached a depth of 3,192 ft. Detailed field-work by expert oil geologists was carried on continuously in other parts of the Taranaki field with a view to discovering areas whose structure is favourable for the retention of oil.

A great deal of field-work was done during the year in the Gisborne district and several favourable structures located. It is proposed to start drilling at an early date.

A number of oil-seepages occur near the Mangles River in the Murchison district, and a company has been formed to drill this area. Plant has been procured, and drilling will be commenced early in 1926.

VI. STONE-QUARRY INSPECTION AND STATISTICS.

By section 2 of the Stone-quarries Amendment Act, 1920, the application of the Act was extended to include every place, not being a mine, in which persons work in quarrying stone and any part of which has a face more than 15 ft. deep, and also in any tunnel in the construction of which explosives are used. The Act, however, does not apply to any Government operations, or any road or railway cutting, or excavations for buildings.

The following is a table showing the number of quarries under the Stone-quarries Act, also the number of persons ordinarily employed thereat, and the annual output and value of crude stone during 1925 :—

Provincial District.	Name and Address of Government Inspector of Stone-quarries.	Number of Working Quarries under the Act.	Number of Persons ordinarily employed.	Output of Stone.							
				Stone or Gravel for Macadamizing or Ballast.	Stone for Harbour-works.	Building or Monumental-stone.	Limestone for Agriculture.	Limestone for Cement or Mortar.	Phosphate for Agriculture.	Miscellaneous.	Value at Quarry.
				Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	£
Auckland ..	James Newton, Mines Dept., Auckland	138	887	476,997	8,746	5,720	20,865	222,670	..	1,520	204,330
	M. Paul, Mines Dept., Waihi (Hauraki Mining District only)	22	175	148,566	350	623	..	..	..	..	47,104
Hawke's Bay	James Newton, Mines Dept., Auckland	17	78	19,401	1,803	400	10,692	..	..	1,886	9,709
Taranaki ..	Ditto	14	65	21,382	6,844	..	..	..	..	..	8,910
Wellington	,, ...	36	219	95,981	15,670	2,300	8,689	..	..	..	33,813
Canterbury	J. F. Downey, Mines Dept., Reefton ..	14	112	88,378	7,502	2,593	4,885	..	..	438	36,960
Nelson, Westland, Marlborough	Ditto	12	136	3,084	47	279	2,601	36,418	..	1,184	11,813
Otago, Southland	A. Whitley, Mines Dept., Dunedin	36	300	104,333	11,287	14,708	86,957	46,394	..	617	111,028
Totals 1925	..	289	1,972	958,122	52,249	26,623	134,689	305,482	..	5,645	463,667
Totals 1924	..	260	1,748	855,958	103,781	19,174	138,734	260,957	1,575	1,150	373,827

There were 29 more men employed than during the previous year, and the value of the stone produced was greater by £89,840.

Quarry Accidents.

The following is a summary of serious accidents during 1925 at quarries under the Stone-quarries Act :—

Cause.	Number of Accidents.		Number of Sufferers.	
	Fatal.	Serious.	Killed.	Seriously injured.
Explosives	..	1	..	1
Falls of ground	2	1	2	1
Miscellaneous	1	3	1	3
Totals	3	5	3	5

Of the fatal accidents the following is a short description :—

On the 30th July Rehu Ngarimu, employed at the Hemo Gorge Quarry, fell over the face of the quarry and received serious spinal injuries, from which he died in hospital on the 18th August. He had been engaged stripping back overburden, and had discarded the life-line, when a small fall occurred, in getting clear of which he fell over the edge of the quarry.

On the 7th December Edward Long, working in Whitney's quarry, received serious injuries to his head, and died in hospital three days later. The cause of the accident is somewhat uncertain, as deceased was working by himself, but it is probable that he was struck by a stone falling from the quarry-face.

On the 15th December Edward Sparks, employed as foreman at the Cobden Quarry, received serious injuries to his head, and died in hospital on the same day. Deceased was assisting in the shunting of some trucks when a piece of stone slipped off one of the trucks and struck him on the fore-head, causing him to fall and strike his head against a rail.

VII. STATE AID TO MINING.

(1.) Subsidized Prospecting.

Upon subsidized prospecting operations 106 persons were intermittently employed during the year.

The following is a statement showing the results of prospecting operations as reported by the Inspectors of Mines.

Name of Prospecting Party.	Number of Prospectors.	Locality of Operations.	Amount of Subsidy granted.	Amount of Subsidy expended.	Distance driven or sunk.	Nature of Claim.	Character of Operations.	Remarks.
Northern Inspection District.			£ s. d.	£ s. d.	Ft.			
Sylvia Gold-mining Company	6	Thames ..	200 0 0	185 18 0	429	Quartz ..	Rising	Work suspended.
Caledonia - Kuranui - Moanataiari Gold-mining Company	7	„ ..	216 13 4	171 3 4	395	„ ..	Driving	Testing reef system on western side main fault; so far nothing of payable character has been discovered.
Monowai Syndicate	2	„ ..	130 0 0	130 0 0	300	„ ..	„	Large reef intersected carrying low values.
Majestic Gold-mining Company ..	8	Maratoto ..	3,000 0 0	2,901 7 0	1,049	„ ..	Driving and crosscutting	£1 for £1. Work in progress; in low-grade ore.
Ohinemuri Gold and Silver Mines ..	10	„ ..	47 13 4	..	..	„ ..	Driving	Driving on large lode; promising bands of ore met with.
Alburnia Gold-mining Company ..	4	Thames ..	216 13 4	..	..	„ ..	„	Work in progress.
Muir's Gold-reefs	29	Te Puke ..	5,000 0 0	4,314 7 8	..	„ ..	Driving and sinking ..	„
Four-in-hand Gold-mining Company ..	..	Waikoromiko ..	86 13 4	..	..	..	..	No work done.
Imperial	2	Karangahake ..	250 0 0	125 13 7	250	Quartz ..	Crosscutting	Several quartz veins of low value intersected.
West Coast Inspection District.								
Britannia Mine (Fry's)	2	Mokihinui ..	53 6 8	53 6 8	100	„ ..	Driving	Reef exposed; said to be payable.
H. F. Chaffey	1	Takaka	20 0 0	18 10 0	..	..	Prospecting	Nothing of value discovered.
Dominion Consolidated Development Syndicate	..	Wakamarina ..	86 13 4	69 13 4	182	Quartz ..	Driving	..
Hart and Ahern	2	„ ..	35 2 0	..	..	..	Prospecting	No work reported.
Linkwater Prospecting Syndicate ..	2	Mahakipawa ..	101 8 0	39 0 0	..	Alluvial ..	„	Nothing of value found.
Mahakipawa Goldfields (Limited) ..	..	„ ..	362 19 2	362 19 2	..	..	Drilling	Subsidy on past expenditure.
Murray Creek Mine (G. Kremmer) ..	4	Reefton ..	120 0 0	80 17 0	..	Quartz ..	Repairing	Small pay-shoots located.
New Keep-it-dark Mine (Moyle) ..	5	„ ..	53 6 8	53 6 8	..	„ ..	Prospecting	Drive on reef-track; gold-bearing boulders found, but nothing solid.
New Keep-it-dark Mine (Wilson) ..	..	„ ..	250 0 0	127 19 2	..	„ ..	Development	..
Rice, Browning, and Kearns	3	Ngakawau ..	50 14 0	11 14 0	..	..	Prospecting	Work in progress.
South Big River Mines (Limited) ..	6	Big River ..	466 9 3	73 3 10	..	Quartz ..	Driving	Nothing of value located.
Wealth of Nations Mines (Limited) ..	..	Reefton ..	1,500 0 0	736 12 3	..	„ ..	Driving and shaft-repairs	Pay reef developed.
Wise, Haynes, and Grace	3	Baton Valley ..	35 2 0	8 15 6	..	..	Prospecting	Work in progress.
H. R. Young (Strathconor Reefs Syndicate)	..	Seddonville ..	43 6 8	..	..	Quartz ..	Driving	„
Southern Inspection District.								
R. T. Horner	2	Longwood Range	90 16 8	90 16 8	200	„ ..	Driving	No reefs found.
Mount Moore Gold-mining Syndicate ..	2	Stoneburn ..	156 13 4	109 10 0	130	„ ..	Sinking	Work in progress.
Reid and Lynch	2	Skipper's ..	128 16 8	67 2 7	139	„ ..	Driving	Gold-bearing reef located.
E. Oxenbridge	2	Twelve-mile, Lake Wakatipu	124 12 2	63 10 2	400	Alluvial ..	„	Work in progress.
H. and E. Barker	2	Mount Pisa ..	50 14 0	..	..	„ ..	Prospecting	„
	106	..	12,877 13 11	9,795 6 7				

(2.) Government Prospecting Drills.

The following table gives details of the drilling done and the results obtained for twelve months ended 31st December, 1925 :—

Drill Superintendents: W. H. Warburton, E. A. Wilson, R. Pengelly, G. Andrews, F. Carter, and H. Butland.
Drills used: Schram-Harker diamond and Keystone drills.

Number of Holes drilled.	Total Depth, in Feet.	Diameter of Hole.	Mineral sought.	Character of Rocks drilled through.	To whom lent.	Cost per Foot of Drilling.	Cost per Foot of Transport.	Cost per Foot of Carbon's Wear.	Results.
	Ft.	In.				s. d.	s. d.	s. d.	
1	842	3	Coal	Sandstones, shales, grits, and clays	New Zealand State Coal-mines	4 3	1 6	2 10	Unsatisfactory.
1	376	3	*	Mudstones, sandstone, shales, and grit	Manderson and party	8 2	2 6	0 8	Satisfactory. Good flow of water.
1	756	2¾	Gold	Andesites and tuff	Waihi Grand Junction Gold Company (Ltd.)	38 1	0 5	10 0	Inconclusive.
49	2,367	6	Gold	Clay, blacksand, and sandstone	Clutha Development Syndicate	..	..	..	Fair. Unfinished.
156	2,367	2¼ & 3	†	..	Napier Harbour Board	13 6		..	..
61	2,509	6	Gold	Gravels ..	Rimu Gold Dredging Company (Ltd.)	8 3		..	Unfinished.
4	186	6	‡	Greywacke, &c. ..	Public Works Department	81 1	12 4	..	Satisfactory.

* Drainage. † Harbour-works. ‡ Hydro-electric scheme.

(3.) Subsidized Roads on Goldfields.

The expenditure in the form of subsidies and direct grants upon roads on goldfields amounted to £6,033, as compared with £4,126 during the previous year.

(4.) Government Water-races.

The Waimea-Kumara water-races, constructed by the Government for the purpose of assisting alluvial gold-mining in the district of Kumara (Westland), showed a loss for the year ended 31st March, 1926, of £384 9s. 2d. Water was supplied to claims employing in all an average of 6·08 persons, and gold to the value of £1,283 9s. 6d. was obtained.

The following is a statement showing the cash received by the Government for water sold, and the expenditure on the upkeep of the races, together with the average number of miners supplied with water, and the approximate quantity and value of gold received for the year ended 31st March, 1926 :—

—	Receipts. (Sales of Water.)	Expenditure.	Debit Balance.	Average Number of Miners supplied with Water.	Approximate Quantity and Value of Gold obtained.	
	£ s. d.	£ s. d.	£ s. d.		Oz.	£ s. d.
Waimea-Kumara Water-races ..	914 6 3*	1,298 15 5	384 9 2	6·08	327	1,283 9 6

* Including royalty on timber.

The amount outstanding on the Waimea-Kumara water-races on the 31st March, 1926, was £933 2s. 3d., an increase of £87 16s. 8d. on the previous year.

(5.) Schools of Mines.

The expenditure on Schools of Mines for the year ended the 31st March, 1926, was £4,004, against £3,501 11s. 3d. during the previous year. This included a grant of £750 to the University of Otago for the Otago School of Mines.

The Schools of Mines continue to do very useful and necessary work; but at schools on the goldfields very few of the students take mining and allied subjects, with the result that in these districts the schools are technical schools rather than Schools of Mines.

I desire to acknowledge the efficient help and co-operation which I have received from the Inspectors during the past year.

I have, &c.,
J. A. C. Bayne,
Inspecting Engineer of Mines.

ANNEXURE A.

SUMMARY OF REPORTS BY INSPECTORS OF MINES.

NORTHERN INSPECTION DISTRICT (Mr. M. PAUL, Inspector of Mines).

Quartz-mining.

Waihi Gold-mining Company (Limited), (J. L. Gilmour, Manager).—No. 15 Level (1,880½ ft.).—North crosscut from No. 4 shaft was continued to 425 ft. At 285 ft. the south section of Martha lode was met, width 28 ft. and value low. At 356 ft. the north section of Martha lode was met, width 15 ft. and value low. At 390 ft. the crosscut intersected faulted country 3 ft. wide, direction 66 degrees (true), and dipping 1 in 2 south-east. From thence onwards to the face of the crosscut is disturbed country. A borehole was drilled horizontally from the end of the crosscut for a length of 20 ft. and showed no change in the country. On the north section of Martha lode a total of 85½ ft. was driven east. The lode is very disturbed and the enclosing country unfavourable. Work was suspended, and driving was commenced westward on the main crosscut on a reef situated at 241 ft. in. At 29 ft. a fault was met, course 325 degrees (true). From this point the drive was continued in firm country to 98 ft., where the south section of Martha lode was met, width 45 ft. The quartz is very hard and low in value.

No. 14 Level (1,752 ft.).—On the north section of Martha lode Moon winze, at 26 ft. east of No. 4 shaft north crosscut, was sunk 79½ ft. At 47 ft. unfavourable country appeared on the north side of winze, cutting off the payable ore which existed down to this point. South section of Martha lode: The west drive was continued to 421 ft., where the drive was turned into the foot-wall country for better progress. Edward lode: At 853 ft. the Edward lode was intersected, width 23 ft., of which 7 ft. is payable. Driving south on the course of the lode was commenced from the point of intersection, a total of 89 ft. being done to the end of the year. At 80 ft. crosscutting is in progress from the Edward lode to connect with No. 2 shaft, and 161 ft. has been driven. A change to oxidized country occurred at 20 ft. in this crosscut, and is similar to the country in the present bottom of No. 2 shaft.

No. 13 Level (1,578 ft.).—Martha lode: The drive was extended to 666 ft., bringing it to the east boundary. At 600 ft. a south crosscut was driven 67½ ft. At 58 ft. there is a vein of quartz 2½ ft. wide, assaying £1 10s. 10d. per ton. At a point 250 ft. west of No. 4 shaft north crosscut a diamond-drill hole was bored horizontally north-west for 415 ft. The country was not favourable. Edward lode: North from Bates crosscut a total of 68½ ft. was driven in payable ore; a total of 331 ft. was driven south, the first 123 ft. being in payable ore.

No. 12 Level (1,448 ft.).—At a point 280 ft. east of Bath crosscut on Empire lode a crosscut called Martyn south-east crosscut was driven 99 ft. At 84 ft. the south branch of Dreadnought lode was intersected, width 5 ft.; a total distance of 34 ft. was driven west on the course of this lode; the value is low.

No. 11 Level (1,301 ft.).—Edward lode: The south drive was carried to 1,220 ft. In this section a payable length of about 150 ft. was opened up. From 1,180 ft. the drive followed a cross-lode for 40 ft. south; the width was small and the value low. At 1,180 ft. a south-east crosscut was driven 82½ ft. At 53 ft. the main part of Edward lode was met, width 14 ft., assay value 5s. 3d. per ton. Drives north and south were commenced on this section of the lode. A total of 53 ft. was driven south, where the lode pinched out in disturbed country. Northward a distance of 41½ ft. was driven, the quartz being of low value. Salmon west crosscut: At 240 ft. in, driving south-west and north-east was commenced on an irregular formation of quartz and country. South-west a total of 28 ft. was driven, and north-east 23 ft. No payable results were disclosed. Leather north crosscut was commenced from the Empire lode at 232 ft. east of No. 2 shaft crosscut and at 80 ft. met the Martha lode. The full width of reef here is 70 ft., of which 20 ft. on the north wall has an average assay value of £1 12s. 6d. per ton. Driving on its course was done for 90 ft. east and 157 ft. west, and has exposed a considerable run of payable ore.

No. 10 Level.—Edward lode: At a point 1,622 ft. south a diamond-drill hole was bored horizontally for 228 ft. on a course of 307 degrees (true). The country rock is favourable, but no payable quartz was intersected. Drilling was stopped and a crosscut commenced on a line of the borehole and is out 29½ ft. Lawrie north crosscut: Commenced at 75 ft. east of No. 2 shaft south-east; crosscut intersected the south section of Martha lode at 182 ft. The width is 37 ft., of which 15 ft. has an assay value of £1 4s. 8d. per ton. A total distance of 33 ft. west and 241 ft. east was driven on its course. London north crosscut: Commenced at 50 ft. west of No. 4 shaft north, crosscut was driven a total of 229 ft. Several small veins were intersected, the largest being 3 ft. wide of low value.

No. 9 Level.—A connection was made to the Grand Junction workings from the east end of Royal lode, which improved the ventilation. A foot-wall gangway along the Martha lode has been commenced with the object of winning ore from the Martha lode under No. 8 level.

No. 7 Level.—60 ft. sub-level: Ore is being won from arches at three places. 40 ft. sub-level: Ore is being won from arches at four places. North leader: North-east of a point 144 ft. east of No. 2 shaft north-west crosscut. This was followed to 424 ft. Up to 316 ft. the width varied between 1 ft. and 4 ft., and from thence onwards reduced to a few inches. Assay value was erratic.

No. 6 Level.—No. 2 reef: Commencing at Pink winze, a total of 86 ft. was driven east on the course of this reef. The average width is 2½ ft., and grade is high.

No. 5 Level—North branch of Martha lode: 235 ft. was driven on the course of this lode during the year. The width varied from 1 ft. to 8 ft.; the grade is payable. Western Smithy level: On west side of Martha Hill. A considerable amount of driving and stoping was done during the year.

No. 4 Shaft.—No sinking was done, but a considerable amount of repair work was carried out.

No. 2 Shaft was sunk 268½ ft., making 141 ft. below No. 13 level, or 1,787½ ft. from the surface.

Ventilation.—Connections were effected to the Grand Junction workings at Nos. 9 and 13 levels, and as a result the ventilation showed a distinct improvement.

At No. 10 level on the Royal lode 200 ft. west of No. 5 shaft crosscut a Sirocco fan is being installed, capacity 50,000 cubic feet of air per minute. This will ventilate the workings on the south end of Edward lode.

A total of 215,418 short tons of ore were crushed and treated, and was obtained in the following quantities from the undermentioned reefs: Martha, 67,920 tons; Edward, 38,731 tons; Royal, 33,504 tons; Martha, north branch, 18,434 tons; Empire, 16,530 tons; Alexandra, 8,756 tons; North, 6,122 tons; Surprise, 5,717 tons; Jellicoe, 5,342 tons; No. 2 reef, 4,720 tons; Dreadnought, 3,088 tons; Empire, north section, 2,568 tons; Martha, south branch, 2,035 tons; Welcome, south branch, 879 tons; Welcome, 322 tons; Victoria, 321 tons; Cross, 250 tons; Dreadnought, 149 tons; Princess, 30 tons: Total, 215,418 short tons.

Total footage, 13,894½; 1,214 ft. also bored by diamond drilling-machine.

Water pumped to the surface from No. 15 level was 511,388,560 gallons.

Waihi Grand Junction Gold-mining Company (Limited,) (A. J. Walker, Manager).—No. 2 borehole having failed to locate the Martha or Empire lodes work was suspended early in the year, and owing to the straitened financial position protection was applied for and granted.

Rising Sun Gold-mining Company, Owharoa (A. McGruer, Manager).—Work during the year has again been confined to stoping south of No. 1 and No. 3 reefs. 1,107 tons of ore treated yielded gold valued at £5,761 9s. 6d.

New Zealand Crown Mines, Karangahake (G. N. McGruer, Manager).—The Rose crosscut has been extended a total distance of 824 ft. Several lodes and numerous veins of quartz of low grade were intersected, and some driving was also done on a reef formation 14 ft. in width at 202 ft., with no better results.

Woodstock Claim, Karangahake.—A considerable amount of surface prospecting has been done by J. B. Morris and party, and several lodes of varying width have been located, but samples sent for assay are erratic in value.

Imperial Gold-mining Company, Karangahake.—Two men have been continuously employed extending crosscut to interset the Imperial lode. Several small leaders have been passed through, ranging in value from a few shillings to £2 8s. 6d.

Maoriland Gold-mining Company.—A start has been made to clean out and retimber the low level in order to further test the Maoriland reef, which it is said gave assay values up to £3 per ton over a width of 4 ft. when work was suspended.

Ohinemuri Gold and Silver Mines, Maratoto (J. W. O'Sullivan, Manager).—The south drive on the Camoola reef is the most important work on hand; this has been advanced a total distance of 1,618 ft. A crosscut was put in at 1,510 ft., and the foot-wall was reached at 102 ft. At this point the reef is considerably disturbed owing to the intrusion of a branch lode coming in from the hanging-wall; the final 26 ft. was driven in solid quartz. Some nice sulphide ore was exposed in seams in this crosscut, but not large enough to bring the whole up to commercial value. This crosscut is approximately 210 ft. north of the point corresponding with the north end of the chute met with at No. 2 level 200 ft. overhead, which should be reached in another 95 ft. of driving.

Majestic Gold-mining Company, Maratoto (J. A. J. McLaren, Manager).—The drive south has been extended 1,284 ft. from the main crosscut, with the object of reaching the random of the chute of ore existing in the United section 140 ft. overhead, which will necessitate about 1,000 ft. further driving. The present face is approaching elevated country, and is in oxidized ore showing a gradual improvement in value. The reef where fully exposed is 16 ft. in width, and from its appearance is a strong permanent body. The drive north has been extended 161 ft. The reef in this direction contained occasionally nice streaks of sulphide ore, but owing to the necessity of concentrating all expenditure on the south drive work had to be suspended. Pay Rock section: A crosscut to intersect another promising reef on this property was driven for 90 ft., but for reasons mentioned above was suspended.

New Waiotahi Gold-mining Company, Thames (H. F. Shepherd, Manager).—Driving and stoping on two reefs from the winze 50 ft. below the adit level has been in progress during the year. Seventeen loads of general ore and 50 lb. of picked stone treated yielded gold valued at £98 18s. 6d. 550 ft. of crosscutting was also done to locate the displaced portion of the famous Waiotahi-Cambria reef. The face has been extended 25 ft. beyond the estimated distance without any sign of quartz.

Alburnia Gold-mining Company, Thames (Thomas Gillon, Manager).—What is known as the Orlando level has been cleaned up and retimbered for a distance of 1,030 ft., and a start made to drive on the Orlando reef for the purpose of intersecting its junction with the Star of the South and Success reefs; the distance is approximately 500 ft.

Nonpariel Gold-mining Company, Thames.—Work in this mine consists of driving on the Cambria reef from the bottom of a winze sunk to a depth of 50 ft. below the adit level and prospecting the Shamrock lode; the latter is 2 in. in width, and strong colours of gold have been seen in the ore broken out.

Caledonia-Kuranui-Moanatairi Gold-mining Company, Thames (S. G. Baker, Manager).—The drive on Cambria reef hillward was extended until the slide was intersected, and was continued through it for 50 ft.; crosscuts were then projected east and west. 280 ft. has been driven east without intersecting payable ore, and the west crosscut extended for a distance of 259 ft.; a low-grade reef formation about 10 ft. in width was passed through. A considerable amount of work has also been done on the Cambria, Caledonian, and No. 9 reefs on the hillward side of the slide without disclosing anything carrying values. Work now in progress is confined to testing the reef system on the seaward side of the slide.

Kuranui Gold-mining Company, Thames (J. H. Benny, Manager).—At 120 ft. in the main crosscut what is known as the Ross reef was intersected, width 1 ft.; this had been driven upon for 107 ft. west and 155 ft. east, giving fair dish prospects. Some work has also been done on cross-leaders met with. 188 tons of ore treated yielded gold value at £25 16s.

Occidental Claim (F. Sawyer).—The low level has been cleaned up for a distance of 1,500 ft., and some fossicking done in the old workings. 20 tons of ore treated yielded gold value at £123 10s.

Joker Claim (George Fisher).—Work in this claim consists of surface prospecting, 7 tons of ore treated yielded gold valued at £57 0s. 6d.

Lucky Shot Gold-mining Company, Thames (A. Christie, Manager).—Work in progress consists of driving on the Moanatairi cross-lode with the object of testing its junction with other well-known reefs which in the past have been noted gold-producers.

Sylvia Gold-mining Company, Thames (H. H. Adams (Manager).—During the year the Missouri low level was cleaned out and retimbered, and a crushing broken out of the Sylvia lode produced 10 tons 17 cwt. of concentrates, which have been shipped to Germany for treatment under agreement with those people who hold an option over half of this property.

Zeehan Consolidated (Limited), (W. H. Burton, Manager).—The north drive on No. 5 level was, on Mr. Stanfield's recommendation, continued and the Zeehan lode picked up beyond the break. 266 ft. has been driven upon this lode, which is wider than the drive, in a complex ore containing lead, zinc, copper, silver, and gold, and having a very promising appearance. A winze has also been sunk south of the break to a depth of 50 ft. in ore of similar character. Some work has also been done in the Paroquet crosscut and several small leaders intersected. A staff of men was also employed getting a battery ready, which consists of ten head of stamps, but, unfortunately, during a heavy gale on the 22nd January, 1926, it was completely wrecked.

Monowai Mine, Thames (R. W. Adams).—At 246 ft. in the lower level crosscut a lode 4 ft. in width was intersected and driven upon for 85 ft. On the hanging-wall there is a narrow band of heavy mineralized ore, but, unfortunately, assays taken proved it to be of low value.

Four-in-Hand Gold-mining Company, Coromandel (W. J. Patterson, Manager).—A considerable amount of prospecting was done in the Four-in-hand, Tainui, and Cuirassier sections of this mine, but, unfortunately, results proved most disappointing. 155 tons treated yielded 217 oz. 15 dwt., valued at £621 17s. 3d.

Winnipeg Claim, Coromandel (Charles Hovell).—Work in this mine has been confined to cleaning up and repairing levels. I am informed that this has been formed into a company known as the Tiki-Talisman, and that sufficient capital has been raised to give the reef system a fair trial. Operations are to commence as soon as the survey is completed.

Renown Gold-mining Company (Murphy's Hill), Coromandel.—A company was formed to test a reef varying in thickness from 5 ft. to 15 ft., situated on what is known as Murphy's Hill, about five miles from Kuaotunu. A trial crushing of 18 tons treated by the Ross Mill only yielded 1 oz. of bullion, which proved most disappointing, as the assay values over a small area gave payable results.

Muir's Gold-reefs, Te Puke (W. McConachie, Manager).—During the early months of the year efforts were concentrated upon crosscutting the Massey and Muir reefs, until on 28th May the level became flooded out by an increased flow of water under heavy pressure, being tapped in the crosscut.

During the latter half of the year work was confined to putting additional pumps in the shaft, enlarging No. 3 winze, and erecting an air-driven winch over it to facilitate sinking. Crosscut to Massey lode advanced 522 ft., making a total of 1,150 ft. from the shaft. As a result of the crosscut having been diverted to the west at 800 ft. from the shaft it passed through the line of the reef very much north of the original objective and in country which was unexplored in the workings of the surface levels.

Crosscut to Muir's reef: This crosscut was advanced 353 ft., making a total of 758 ft. from the shaft. At 550 ft. a fault-fissure, dipping 2 in 5 to the west, was encountered. The fissure was filled in with mud, and broken country, and an increased volume of water was tapped. At 660 ft. this fault passed into the roof of the crosscut and firmer country was met with to 617 ft. From 617 ft. to 740 ft. is lode-matter, consisting of quartz and country rock. At

740 ft. there is evidence of faulting, and at 754 ft. another slide was met with, striking north and dipping to the east. At 754 ft. the eastern boundary of the lode formation, through which a distance of 137 ft. had been driven, appears to have been reached. Whilst drilling in the face at 758 ft. water was tapped in sufficient quantity to increase the flow beyond the capacity of the pumps. No. 3 winze was sunk a further 56 ft. below No. 3 level; the eastern wall of the lode is exposed. Assays from 146 ft. to 200 ft. varied from 8s. 6d. to £1 9s. 3d. per ton for a width of 42 in. A crosscut at 200 ft. exposed both walls. The lode is 15 ft. wide: the values obtained were: First 5 ft. from east wall, 17s. 6d. per ton; second 5 ft. from east wall, 2s. 4d. per ton; third 5 ft. from east wall, 7s. 3d. per ton.

A drive south of the winze at 200 ft. below No. 3 level was driven 7 ft. along the east wall of the lode, and gave the following values: At 4 ft. south of winze, £2 0s. 6d. per ton; at 7 ft. south of winze, 12s. 4d. per ton.

This winze has been enlarged and retimbered to a depth of 200 ft. in order that larger buckets may be used for the haulage of the rock, and also to enable the workmen to be raised and lowered instead of using the ladders. A suitable winch has been secured and placed in position at the winze.

In March the volume of water from Muir's crosscut increased until it was more than the electric pumps could handle, and the air-driven Cameron pumps, which were previously used during shaft-sinking operations, were installed to give additional pumping-capacity. During May there was rarely less than 30 in. of water on the floor of the chamber 500 ft. down the shaft, and work was subject to constant interruptions, due to irregularity of the electric-power supply and trouble with pumps and motors. A stationary electric pump was put into commission early in November, being supplied by one electric sinking-pump only; a second electric sinking-pump was put into operation a few days later, and the three pumps gave a satisfactory trial run. It then became necessary to lower the sinking-pumps to follow the receeding water. While carrying out this operation an accident occurred which resulted in the cable-winch on the surface, and also the electric cable which supplied power to the motor of the pump, being disabled and rendered practically useless. The pumps were brought to the surface, and all work suspended pending negotiations for the purchase of a more efficient pumping plant.

Copper-mining.

Ruahine Copper-mines Syndicate.—A considerable amount of surface prospecting-work was done during the year, including a tunnel which was driven for 250 ft. The results, however, proved most disappointing. It is now proposed to clean out and retimber the old low-level tunnel, put in by Mr. Tansy some years ago, in which it is reported the lode contained high-grade copper-ore. Seven men have been kept constantly employed.

Quicksilver-mines.

Mount Mitchell Mercury-mine, Puhipuhi.—The only mining operations carried out during the year have been surface prospecting and driving a level for 50 ft. for the purpose of proving conditions below a promising surface outcrop. The results, however, showed no improvement.

New Zealand Quicksilver-mine, Puhipuhi.—No work has been done in this mine during the year.

Rising Sun Quicksilver-mine, Puhipuhi.—No work has been done in this mine during the year.

Oil-wells.

Taranaki Oilfields (Limited).—The various wells, plant, and buildings formerly owned by the Taranaki Oil Development Company (Limited) have been taken over by this company.

No. 1 Well, Tarata: On 31st January, 1926, this well had reached a depth of 4,215 ft. Drilling was continued through the same class of material that had been found higher up—namely, a soft shale, varying in colour from grey to blue. The 8¼ in. casing was run down to 4,167 ft., and at this depth it was set in cement with the object of shutting off the water and thereby enabling drilling to be carried on in what is termed a "dry" hole, under which circumstances much better progress can be expected. Unfortunately, a satisfactory shut-off was not effected. After allowing the cement to set an effort was made to lower the level of the water in the well by bailing, but after the depth was lowered to a considerable extent the water came in again. It was then considered more advantageous to continue drilling at a comparatively slow rate with the well full of water, rather than to incur the delay involved in withdrawing the casing and resetting it in cement. It seems likely that, owing to the softness of the formation at the point where the string of casing was set, the water under the heavy pressure forced its way through the ground behind the cement.

No. 2 Well, Moturoa: Actual drilling of this well commenced on the 11th February and has now reached a depth of 3,480 ft. A certain amount of difficulty was experienced in getting through the first 200 ft. or so, owing to the presence of hard boulders set in soft material, which had the effect of deflecting the tools. At 930 ft. a good show of oil was found, about four barrels of oil being bailed, after the well, which was full of water, had stood idle for a day. Apart from some minor troubles, no further incident of note occurred until 3rd June, when at 6.30 p.m. a violent blow-out of gas took place, which blew everything out of the well. No one was injured in any way, and repair work was commenced immediately. A strong flow of gas, amounting to more than 4,000,000 cubic feet per twenty-four hours, issued from the well for more than three weeks, and during that time showed no sign of diminution. On capping the well the gas-pressure was found to be 625 lb. per square inch. On analysis this gas was found to consist of 72 per cent. of carbonic-acid gas, and only about 25 per cent. of hydrocarbon gas, mostly methane. This being so, the gas had no commercial value, so that earlier plans for utilizing it were put aside and steps taken to mud off the gas to enable drilling to be resumed. This has been done, apparently effectively. Records of old bores in this vicinity are incomplete and probably not entirely reliable, but there is sufficient evidence to indicate that the principal oil-sand at or about this horizon was to be expected at some depth between 2,200 ft. and 2,300 ft. but as the nearest of the old wells is several hundred feet away and there is no definite information with regard to the amount or direction of the dip of the strata it was considered wise to make provision for testing this sand at 2,100 ft. The 10 in. casing, therefore, was landed at 2,056 ft., and at that point set in cement. Some difficulty was experienced owing to the fact that the high-pressure gas at 1,555 ft. showed a tendency to blow out from time to time, issuing from the space between the 10 in. and 12½ in. strings of casing. The process of cementing necessitated the keeping of this annular space open to the extent of allowing the circulation of the water or mud fluid through it, and the adjustment of conditions so as to provide for this circulation, and at the same time prevent the gas from blowing out, called for the exercise of a good deal of patience and skill. Satisfactory conditions having been obtained at last, the operation of cementing was carried out on the afternoon of the 23rd September, and the cement was given until the morning of the 12th October to set. The Perkins method of cementing was practised, of which the following is a brief description: The string of casing was resting on a hard ledge of rock at 2,056 ft., the space below having been filled or "bridged" with pieces of soft rock. The casing was then lifted about 2 ft. The well at the time was full of mud fluid, and of this about 100 ft. was bailed out. A soft wooden plug about 3 ft. long, tapered at the top, was then dropped in on to the top of the mud fluid. The space above this plug was then filled with cement grout, just thin enough to be handled by means of a pump. Another plug, cylindrical in shape and 2 ft. long, was placed on the cement, and a cap firmly fixed on the top of the string of casing. Both plugs were fitted with gaskets to make them fit the casing snugly. Water was then pumped into the top of the casing through a 2 in. branch pipe, which had the effect of forcing the two plugs carrying the cement between them down to the bottom of the well, the mud fluid passing up meanwhile through the annular space between the 10 in. and 12½ in. strings of casing. As soon as the bottom plug reached the seat prepared for the casing it stopped, but the top plug continued on its downward course, forcing the cement out of the bottom of the casing. The taper on the top of the lower plug provided an opening through which the cement passed from the inside of the casing and thence upward, filling the space between the outside of the casing

and the wall of the well. When the cement had all been forced out of the casing the top plug came down and met the top of the tapered plug, this stage in the operation being marked by a sudden rise in the pressure against which the pumps were working. The plugs and rock used in making the "bridge" were drilled out, and, after cleaning out the hole to bottom, bailing was commenced, and on the 13th October an excellent show of oil was obtained. A considerable amount of gas was also in evidence, and when the level of the fluid in the well was lowered sufficiently by means of boiling, the gas-pressure blew the rest of the material out of the well, carrying with it a spray consisting of oil and water. It was thought at first that this water had been absorbed by the coarse sand at 2,100 ft. during the operations of drilling and cementing, but after waiting some few days in the hope that it would exhaust itself, the conclusion had to be accepted that it was natural water issuing from some fissure or bed of sand below the point at which the casing was set. The pressure of the gas in this lower sand was 375 lb. to the square inch—not much more than half the pressure of the gas met with at 1,555 ft. This difference in gas-pressure serves to prove that there is no fault or leak in the 10-in. casing or in the cement, otherwise on shutting in the well the full pressure of 625 lb. would have been developed. The results obtained in the vicinity of the 2,300 ft. horizon fell far short of anticipation, for while a nice show of oil was got in the sand at 2,150 ft., and oil was seen all the way down to about 2,600 ft., production on a commercial scale was never realized. On one occasion, after the well had been standing idle for six hours, about four barrels of oil were bailed, and altogether the oil so bailed and blown out from time to time by gas or otherwise brought to surface may have approximated sixty or seventy barrels. The oil when sampled was found to be of excellent quality—similar in general character to that obtained from old wells in the locality.

It is proposed to continue this well down to about 4,200 ft. with the object of testing the sands, the existence of which had been demonstrated in the Blenheim Well.

Sulphur.

The White Island Agricultural Chemical Company (Limited).—Receiving and transmitting wireless is in operation, with masts 57 ft. high, making the station one of the most powerful in the North Island. A bathhouse has been erected near the well, and the men can daily indulge in the luxury of a warm shower. Properly constructed latrines are situated in the timber near the camp. The company has provided a completely equipped medical stores chest under the care of a trained man. There has been no sickness and only a very few minor accidents. Every man before proceeding to the island is medically examined, and the company is fully covered against accident and sickness by a policy with the South British Insurance Company (Limited). 300 tons of high-grade sulphur were fossicked out in the first six weeks from surface deposits in and near the flat contiguous to Crater and Wilson Bays. Of this, 100 tons were shipped to Auckland and has liquified out at 99·8 per cent. pure; the balance is on hand. This work was done during prospecting by any men who could be spared from the urgent work of trail-cutting and erecting camp. A traverse cut 10 ft. wide, 8 ft. deep, and 150 yards long has been opened up across the crater-bed, running north and south 100 yards west of Troup Head. This was done so as to get down to the level of the old crater-bed (as it existed prior to the disaster). Only volcanic mud was expected throughout this area until the old bed was reached, but heavy showings of sulphur were found, and all the material taken out analyses similar to the original fertilizer, varying only in actual sulphur content. The bottom of the cut is still 5 ft. above the old crater-level. Time will be given this cut to cool before going deeper. Ten tunnels or open cuts have been driven into East Cliff near the Wilson Bay side and into Troup Head. These vary in depth from 10 ft. to 25 ft. and are remarkably uniform in sulphur content. The cliffs are alive and very hot, so work has to stop from time to time as the tunnels proceed in order to let the material cool. In several cases there was struck rock sulphur of 95 per cent. purity. A hopper dump has been cleared at Crater Bay buttress, and this place is now connected with the Troup Head workings by a well-graded 2 ft. gauge tram-line. Some 400 yards have already been laid, and the rails and sleepers have been landed for two extensions. A grade has also been commenced at East Cliff, many deep cuttings having to be made to get the tramway up to the workings-dump. It having been decided to concentrate on the winning of the mineral fertilizer, men have been kept excavating, and there is now 500 tons of fine-quality fertilizer on the dump at Troup Head. This is constantly being added to. In course of quarrying, when pure rock sulphur is come upon, this is separately dumped in such a way as to interfere as little as possible with the Troup Head deposit. A dump-site has been blasted out of the adjoining rock, and the tramway runs immediately under the dump.

It is reported after a recent survey that the guano deposits are very much more extensive than originally supposed. The perpendicular cliffs on the north side of the island and north-west Point are capped with deserted rookeries centuries old and some showing 40 ft. faces. The upper strata has become timber-covered, and this timber area is honeycombed with the burrows of countless thousands of mutton-birds (the grey-headed puffin). Sampling of the guano from all depths and from all the beds is nearly completed, and those surface samples already analysed are satisfactory in manurial value. With the exception of four rookeries between Crater Bay and Bungalow Beach, the beds are in exposed positions, but over deep water. Special shoots or towers will have to be constructed for loading. When the present buttress and grid have been completed and are in operation the company can safely count on continuous and regular shipping except in such severe weather as makes Crater Bay unworkable. Seven weeks from the date of commencing operations 100 tons of sulphur were shipped to Auckland. This consignment of sulphur cost £3 19s. 8d. per ton on wharf, Auckland; it liquified out 99·8 per cent. pure. It was decided to purchase a suitable site for the works and to handle the local fertilizer trade at the Port of Tauranga. These works comprise a crushing and bagging plant and are under construction at the present time. The site, including an old building (45 ft. by 110 ft.), covers one-third of an acre, has foreshore rights, and is conveniently situated at The Spit, Tauranga, and adjacent to the main-line station. Access of 7 ft. of water will be given by a light jetty to be constructed next month.

The average wages on the mainland are 15s. 6d. per day, and on the island 16s. The number of men employed is twenty-five.

Accidents.

One fatal accident and one serious but non-fatal accident occurred during the year.

Fatal Accident, Waihi Mine.—William Angell, married man, aged 63 years, died in the local Hospital on the 23rd July, 1925, as a result of being struck on the head by a falling beam on the 22nd July. Deceased, who had been employed by the above-named company for twenty-eight years attending to the delivery of blunt tools and seeing that the sharp tools were sent down to different contractors, was sitting having his crib, and rose with the object of going over to the other men, who were sitting on the other side of the building, and had just got under a beam, 6 in. by 4 in. which rests on top of the principals 21 ft. above, and is used to lift the cover off one of the drill-sharpening machines set directly underneath this beam, when a sudden gust of wind occurred, which struck the building, causing the beam to fall, striking deceased on the head and seriously fracturing his skull. My inspection disclosed the fact that the principals, which are 6 in. in width, had warped, due to the heat from the furnaces used to heat the drills. One end of the beam had two skewered nails driven into the principal, but on the other end, owing to the principal having warped, was only resting on 3 in. and not nailed, and it is quite evident that the gust of wind struck the building with such force that it lifted this beam out of position and caused it to fall on deceased. At an inquiry the following verdict was returned and with which I agree: "William Henry Angell died at Waihi on the 24th July, 1925, from injuries received by a falling of an overhead beam in the Waihi Gold-mining Company's workshop on the 22nd July, 1925, and that the said beam that fell was not properly secured, and that in our opinion all overhead beams and stagings should be securely cleated and bolted."

Serious Accident, Waihi Mine.—On the afternoon of the 10th June a timberman named Joseph Mannix lost his little finger and next finger of his left hand. Mannix and his mate, G. Leather, were engaged repairing an old pass on the Royal lode, and whilst in the act of replacing a cribbing Mannix noticed a detonator in the old filling. He

picked it up and, climbing down the level, walked about 10 ft., where he stooped down to pick up some tools with his right hand, the candle and the detonator being in his left hand. There was no fuse attached to this detonator, nor can Mannix explain how the accident occurred; but it is quite evident that, unknown to him, his candle must have come in contact with the detonator, which exploded and blew off two fingers. Apart from this and shock he was not seriously injured.

West Coast Inspection District (J. F. Downey, Inspector of Mines).

Quartz-mining.

MARLBOROUGH DISTRICT.

Dominion Consolidated Mine.—Operations at this mine were carried on regularly during the year, but not by the original company. For portion of the time a syndicate, representing, I understand, the debenture-holders, made an effort, by introducing shrinkage stoping and making various improvements to the mine and plant, to work the mine profitably. It was found, however, that the values in ore were too low to admit of this, and the syndicate ceased work. A tribute party, headed by A. Brough, then took the mine over and worked it for several months with evidently no better results. Finally, towards the end of the year the property was taken over by Thomas Harrison, and another small tribute party formed by him is now making an endeavour in the same direction. During the year some 3,615 tons of quartz were crushed under the various managements, which yielded 787 oz. 10 dwt. 17 gr. of gold, valued at £2,857 3s. 10d. This yield would be equal to a recovery of a little over 4 dwt. per ton. All of the stone came from stopes over No. 2 level, Golden Bar section.

REEFTON DISTRICT.

Blackwater Mine.—During the year this mine was worked continuously, an average of 144 men being employed. Less development-work was carried out than in 1924, the total being only 1,037 ft. Of this, however, 629½ ft. were on reef averaging 15·92 dwt. over 24·8 in. This footage was made up of 353 ft. of driving, 366 ft. of rising, 293½ ft. of winzing, and 24½ ft. of crosscutting. The following are the details of the work:—

No. 6 level north extended 7 ft. in blank; No. 8 level intermediate drive north from rise 900 ft. south, 22 ft. in blank; No. 9 level north, 93 ft., 27½ ft. of which was on reef averaging 8·34 dwt. over 23 in., 65½ ft. being in blank; No. 10 level north, 198½ ft., all on reef averaging 15·52 dwt. over 32·7 in.; No. 10 level south, 32½ ft., of which 25 ft. were on reef averaging 24·8 dwt. over 23 in., 7½ ft. being in blank.

No. 8 level, rise 1,670 ft. north, 61 ft., 19 ft. being on reef averaging 23·97 dwt. over 23 in.; No. 8 level, rise 900 ft. south, 58 ft., 47 ft. being on reef averaging 14·77 dwt. over 13 in.; No. 9 level, rise 1,180 ft. north, 82 ft., 54 ft. being on reef averaging 15·8 dwt. over 22 in.; No. 10 level, rise 360 ft. south, 81½ ft., all on reef averaging 28 dwt. over 20 in.; No. 10 level, rise 700 ft. north, 83½ ft., all on reef averaging 11·2 dwt. over 26 in.

No. 7 level, winze 1,470 ft. north, 7½ ft. in blank; No. 7 level, winze 1,670 ft. north, 69½ ft., 15 ft. on reef averaging 3·74 dwt. over 20 in.; No. 9 level, winze 440 ft. north, 76½ ft., all in blank; No. 9 level, winze 360 ft. south, 74 ft., 30½ ft. of which was on reef averaging 15·02 dwt. over 19 in.; No. 9 level, winze 700 ft. north, 66 ft., 48 ft. on reef averaging 7·83 dwt. over 17 in.; all these winzes were holed through to corresponding rises.

No. 10 level, crosscut off rise 360 ft. south, 6 ft. in blank; No. 7 level, crosscut from rise 1,670 ft. north, 10½ ft. in blank; No. 9 level, crosscut from winze 440 ft. north, 8 ft. in blank.

During the year 37,939 tons of quartz were crushed and treated, for a recovery of 18,603 oz. 16 dwt. gold, valued at £74,423 5s. 9d., of which amount 16,224 oz. 3 dwt. were won by amalgamation, 2,354 oz. 3 dwt. by cyanidation, and 25 oz. 10 dwt. by roasting and treatment of concentrates. Adjustment of old account with an Australian smelting company added a further £492 2s., making the total revenue for the period £74,915 7s. 9d. Both the quantity crushed and the values recovered showed a small falling-off on the figures for the previous year.

Towards the end of the year the new Edward's roasting plant for the treatment of accumulated and current concentrates was completed, and an experimental run served to show that this addition to the plant promised to be a decided success. A considerable quantity of concentrates is on hand which at the present high shipping and treatment rates is scarcely rich enough in gold to dispatch overseas, but which, treated on the spot, will now yield a good profit to the company.

After an interval of some years the mine became again a dividend-payer, £12,499 12s. being distributed, making the total dividends paid to date by the company £187,493 2s.

For the year 144 men in the average were employed.

North Blackwater Mine.—This mine has been idle for the full year, the company evidently not having been able to raise the further capital necessary to enable it to resume active mining operations. Negotiations for the sale of the property are now, I understand, in progress.

Murray Creek Mine.—In the early part of the year this mine was taken over on tribute by a party of four miners, headed by George Kremmer. From a point in a rise near the extreme north end of No. 2 (battery) level, and a short distance below the old No. 1 (surface) level, this party took out a parcel of 124 tons of quartz which on treatment gave a return of 101 oz. 17 dwt. gold, valued at £372 8s. 9d. This stone was evidently a remnant of a shoot which was worked years ago from a winze put down from the surface level. Two other shoots were known to be underfoot on this same level, but owing to the fact that there was at the time no convenient means of getting this stone out no work was done there. The tribute party is now, with the aid of Government subsidy, repairing 200 ft. of the rise mentioned, and intends sinking on these shoots and, if they prove worth the work, to extend an intermediate level to them from the rise. The party also did a considerable amount of work in trying to find the upward continuance of the shoot near the old "30 ft. block," to which reference was made in my last year's report, and which had been lost by faulting. A rise was put for a considerable distance along the fault, but only occasional small boulders of quartz were met with.

New Big River Mine.—Development at this mine was confined wholly to Nos. 11 and 12 levels, and consisted mainly of the driving of intermediates between the two levels and connecting them with rises and winzes. The total development of this nature amounted to 421 ft. On the whole, the development has not been as satisfactory as could have been hoped for, the stone below No. 11 level being evidently very broken and not nearly in such quantity as in the levels above. On the bottom level, No. 12, the reef-track was picked up and driven on for about 100 ft. So far it has been small, but promises to open out ahead. During the year 3,976 tons were crushed and treated for a recovery of 3,431 oz. 15dwt. gold, valued at £13,497 5s. 7d. The stone may be said to have come mainly from No. 12 level stopes. On an average forty-two men were employed.

New Keep-it-dark Mine.—In this property no work was done in the Keep-it-dark Mine itself, but a tribute party of five men has carried out considerable prospecting in the old Golden Ledge section which has lain untouched for very many years. The two old adits, known as Nos. 1 and 2, were picked up, and the latter was driven a further 125 ft. along a reef-track which is considered to be the same as that on which the valuable shoot of stone known as the Old Duke shoot was worked in the very early days of the mine. Boulders of quartz carrying gold were met with along the whole course of this new driving, but nothing in the way of solid reef was met with. A leading-stope was taken off the first 40 ft. of the new extension of the adit, but the stone, on treatment, did not prove to be payable. In picking up No. 1 adit quartz from 3 ft. to 4 ft. wide was found to be going underfoot, and a winze was sunk on it to a depth of 20 ft. just inside the adit-mouth. The stone from this was crushed, but the values did not prove satisfactory. During the course of the prospecting and repair work 164 tons of stone were recovered from the drives, the leading stope, and the winze referred to, which in treatment by amalgamation and cyaniding yielded 66 oz. 4 dwt. 18 gr. gold, valued at £204 18s. 6d.

A subsidy has been granted the tributers, Moyle and party, to continue the No. 2 adit, and as there is still a stretch of approximately 400 ft. of virgin ground between the present face and the Old Dark workings referred to there is a possibility of a pay-shoot being picked up. The party are now convinced that any stone left in the old stopes above the adits is not of sufficiently good grade to work, but they intend to push the No. 2 adit further.

North Big River Mine.—Two men were employed throughout the year in further prospecting. At a point about 600 ft. from the mouth of No. 3 adit a crosscut was put in easterly for a distance of 205 ft. At 145 ft. a small track was cut with a 5 in. leader said to carry a little gold, and on this a drive was extended north for 136 ft. The track in the face widened out to between 3 ft. and 4 ft., showing a number of small quartz stringers carrying a little gold.

New Millerton Mine.—No work was done in this mine, the company preferring to concentrate its efforts on another of its properties, the South Blackwater Mine.

South Blackwater Mine.—The work at this mine consisted in the starting of a new main shaft, 12 ft. 6 in. by 4 ft. 6 in. in the clear, at a point about 6,765 ft. from the Blackwater main shaft in a direction S. 30° W. Up to the end of the year this new shaft had been sunk to a depth of 99 ft. A substantial poppet-head was erected, together with engine and boiler house, change-room for miners, storeroom, blacksmith shop, &c. An average of twelve men was employed.

Down to 53 ft. the shaft was in sand and gravel, at which depth it passed into prevailing country rock, greywacke. It is proposed to sink this shaft 500 ft. before opening out. With the exception of one or two small outcrops in which very little work has been done, no defined reef is, as far as I can learn, known to exist within a considerable distance of the shaft, consequently the results likely to accrue from the proposed work are of a highly problematical nature.

South Big River Mine.—Some six men were employed continuously throughout the year. From No. 3 adit a rise was put up which made connection with the winze known as No. 3, sunk from No. 2 adit. No. 3 adit itself was extended north north-westerly a further 34 ft. on reef-track, and a drive was also extended southerly on the same track for about 12 ft. Very little solid stone was showing in either extension. An eastern crosscut which had been started years ago from a point on No. 3 adit about 755 ft. from its mouth has also been extended, to the end of the year, a distance of 188 ft. The purpose in carrying out this latter work was to try and pick up another line of reef which was believed to exist to the east, but so far no reef has been met with, although the crosscut appears now to have been extended sufficiently far to cut it.

Scotia Mine.—No work was done here. Evidently the syndicate found it impossible to raise the extra capital necessary to enable it to make use of the Government subsidy promised during 1924, and has since gone into liquidation.

Progress Mine.—No mining-work of any kind was done, but retreatment of the old tailings was continued, gold to the value of £431 10s. being recovered, while an adjustment of old treatment accounts with an Australian smelting company added a further £519 8s. 8d. to the revenue from the mine.

Wealth of Nations Mine.—Up till the end of October mining and development work was carried on actively, some thirty-eight men being employed. Until the end of July the work was not very profitable, the stone mined being of rather poor grade, especially that coming from the stopes over No. 13 level south. In September, however, the grade improved greatly, and for that and the following month the crushings showed a decided profit. Towards the end of October the company had the misfortune of having the upper part of its shaft collapse, bringing all work other than restoration of the shaft to a standstill. This work was still in progress at the end of the year, and promised to occupy several months in the New Year.

For the period worked 6,790 tons of quartz were mined and treated, for a yield of 2,889 oz. 6 dwt. gold, valued at £11,550 13s. 5d. The only development of any consequence carried out consisted in the putting-out of an intermediate drive between Nos. 12 and 13 levels on the 400 ft. south block of stone, and the sinking of a winze for about 30 ft. in the same block from No. 12 level.

Alexander River Reefs.—Work was carried on actively, some twelve men on an average being employed. Beyond the putting-out of an intermediate level above the original adit little development has been done, the syndicate having devoted practically all its energies to stoping out the block of stone occurring between the adit and the surface. For the period 645 tons were mined, which yielded, by amalgamation only, 1,646 oz. 19 dwt. gold, valued at £6,636 8s. 1d., equal to a return of £10 5s. 9d. per ton, while it is estimated that approximately 1 oz. gold per ton still remains in the tailings, which have been stacked for future treatment. The output of stone was not nearly so large as it might have been under favourable circumstances. Many breakdowns occurred in connection with the small hydro-electric plant installed to operate the battery, and as there was no storage-room for broken quartz the delays thereby caused resulted in frequent stoppages of actual mining operations. On the whole, therefore, the small syndicate owning the mine are to be congratulated in having produced as much gold as they did and proved so effectively the high value of the reef.

A movement is now afoot to form a company to work the mine, and it is to be hoped that this is successful and money provided for a more active development of the property. The mine is situated in a part of the district entirely without roads, and as it is not at all likely that the Government will find the large sum of money necessary to make a road to the mine until the reef has been proved to continue both on its strike and in depth the importance of pushing this development on without delay is evident.

No work was done for the year in Perseverence Mine, New Discovery Mine, Ready Bullion Mine, and Big River Extended Mine.

WESTPORT DISTRICT.

Britannia Mine.—A small syndicate has carried out a certain amount of work on this property, chiefly in the adit put in years ago by the old Stony Creek Gold-mining Company. This adit was extended about 100 ft., some 43 ft. of which was on reef averaging about 3 ft. 6 in. in width and said to be highly payable. Efforts are now being made to pick up the stone beyond a fault movement which came in. Two men were employed. This was the only quartz-mine in which any work was done in this part of my district.

Dredges.

Rimu Flat Gold-dredge.—This dredge has continued in active operation, turning over about the usual quantity of ground. The amount of gold recovered was, however, less than in 1924, for the reason that the dredge was on a section of the company's area rather poorer than the average. Nevertheless, some 8,714 oz. were won, valued at £35,720, making the value of the total recovery to the 31st December, 1925, £190,070. Further dividends to the extent of £3,283 were paid, bringing the total of the amount disbursed to £13,132. An average of forty-seven men was employed. The company continued its prospecting efforts in the hope of locating a further payable area in the Hokitika district, but without any better success than formerly.

Awatuna Dredge.—This dredge worked for portion of the year only. It was found that operations could not be carried on profitably, and as a result the company went into liquidation. The dredge and mining privileges were subsequently disposed of to F. G. Dunn, of Christchurch, but the latter has since surrendered most of the rights.

In the early part of the year when the dredge worked, 78 oz. 19 dwt. 18 gr. gold were recovered, valued at £313 19s. 3d.

New River Dredge.—A new company, known as the New River Gold-dredging Company (Limited), has been formed during the year to work an area of some 800 acres of alluvial ground in the neighbourhood of the old mining town of Dunganville. A large dredge formerly worked for a time in the Arahura River, a few miles above the town of that name, was purchased, and has now been removed to this new area. It is, however, the intention of the company to do away with the steam plant with which the dredge was formerly equipped and use electric power for working it, the current being supplied by the Grey Power Board. Some thirty men were employed for a good part of the year in removing and re-erecting the dredge. At the end of the year the pontoon had been practically completed, opportunity being taken during the re-erection to materially strengthen it. All the necessary machinery, with the exception of the electrical apparatus, had also been delivered. A paddock had also been excavated in which to float the dredge. In past days a good deal of work had been done on the area it is now proposed to dredge, many drives having been put in both from the New River and Eight-mile Creek sides, but it is stated that there is still a large area of pay-ground left which the old miners had not been able to work owing to lack of fall for their races.

Alluvial Mining.

Throughout the district this branch of mining has been fairly quiet. A few less men were employed, the figure being 152, as against 167 for the previous year, and the amount and value of the gold won was somewhat less being 2,799 oz. 2 dwt. 15 gr., valued at £10,908 7s. 6d., as against 3,592 oz., valued at £14,267 2s.

Mahakipawa.—The Mahakipawa Goldfields (Limited) has been busy getting plant, &c., on to its holdings on this old field. Many years ago a very rich lead was worked here, but the claims were small and were on private property, and owing to the difficulty of providing, on such small claims, plant of a suitable nature for keeping the water down, and to the gradual deepening of the lead, work had to be abandoned. The present company has secured the whole of the freehold property the lead is likely to pass through. A number of holes were put down with a Keystone drill with a view of testing the ground down the lead from the old workings, and in at least one of these the lead appears to have been struck, good gold having been got in it at a point about 700 ft. below any previous workings. It is intended by the company to sink a shaft near the site of this drill-hole. Poppet-heads are in course of erection, and all the necessary pumping, air-compressing, and winding plant has been secured and brought to the property. As the sinking will be only about 130 ft. it should not be very long before a start is made to once more bring this field to a producing stage.

Howard Diggings.—The returns to hand show that sixteen men were employed, winning 136 oz. 16 dwt. 19 gr. gold, valued at £541 15s. 8d.

Murchison (including Lyell, Matakitaki, Newton Flat, and Ariki).—Thirteen men were employed, winning 84 oz. 17 dwt. 13 gr. gold, valued at £325 2s. 5d.

Grey Valley (including Ahaura, Nelson Creek, Blackball, Totara Flat, Moonlight, Stillwater, &c.).—Some eighteen men were employed. 73 oz. 17 dwt. gold being won, valued at £291 3s. 3d.

Barrytown, Greymouth, Cobden, Rutherglen, and Dunganville.—On these various fields some 97 oz. 7 dwt. gold were recovered, valued at £381 10s. 7d.

Collingwood (including Rockville, Slate River, and Parapara).—In these localities eleven men were employed, winning 208 oz. gold, valued at £688.

Kumara (including Stafford, Greenstone, and Callaghan's).—Some thirty-eight men were employed, recovering 1,274 oz. 8 dwt. 11 gr. gold, valued at £4,949 6s. 4d. The Hohonu Gold Sluicing Company at Greenstone was the largest producer, with 468 oz. 12 dwt. 18 gr. gold.

Reefton (including Capleston, Black's Point, Merrijigs, and Waiuta).—On these fields 70 oz. 12 dwt. gold were won valued at £283 14s. 5d.

Hokitika (including Rimu, Seddon Terrace, Kanieri, Arahura, and Blue Spur).—Some eighteen men were employed, recovering 313 oz. gold, valued at £1,246.

Ross (including Mikonui).—Gold valued at £88 4s. 7d. was won.

Okarito (including Waiho and Gillespie's Beach).—Some eight men were employed, winning 144 oz. 6 dwt. 9 gr. gold, valued at £564 18s. 10d. Most of this gold was recovered from the beaches.

Westport (including Charleston, Waimangaroa, North Beach, and Wareatea).—On these fields eighteen men were employed, winning 377 oz. 12 dwt. gold, valued at £1,498 7s. 6d. G. M. Powell was by far the largest producer, with 261 oz., valued at £1,045. This gold was won from a cement formation.

Minerals other than Gold.

Iron.—The Onakaka Iron and Steel Company which ceased operations for some months during the year, pending the erection of a tram-line connecting the works with the wharf erected at Onakaka Inlet, resumed active operations about September, and up to the end of the year had treated 2,579 tons of crude ore for a production of approximately 1,290 tons of pig iron of excellent quality. The following are the results of three analyses of the iron made from samples taken by me :—

	(1.)	(2.)	(3.)
Graphitic carbon	3·54	3·01	2·50
Combined carbon	0·14	0·71	0·60
Silicon	2·03	1·63	2·67
Sulphur	0·04	0·05	0·11
Phosphorus	0·32	0·33	0·32
Manganese	0·85	0·71	0·71
Iron by difference	93·08	93·56	93·09
	100·00	100·00	100·00

A number of new coke-ovens were added to the plant, and bins were erected both at the ovens and at the wharf to keep the coal reasonably dry, with the result that coking operations were carried on much more satisfactorily than previously. A mechanical pig-iron bed was also installed, and this, combined with other improvements introduced, enabled a substantial reduction to be effected in the treatment costs, the cost per ton of pig iron produced being more than £ less than in 1924. As operations are now conducted it is said that pig iron can be produced in competition with English makers, but the same cannot be said with regard to the Indian iron of which so much is now coming into the Dominion.

Petroleum.—No boring was done in the district during 1925, but a company which has taken up an area at Murchison for the purpose has been making preparations for drilling on the Mangles River. A rig has been procured, and all the necessary machinery, with the exception of the casing, has been brought to the ground. As a number of oil-seepages occur in the locality, it is hoped that the boring operations which will commence early in the New Year will be productive of good results. At the Mangles River the conglomerates and sandstones which cover the arkose grits to a depth of thousands of feet over a great part of the Murchison district have been completely eroded, so it is expected that the boring to reach the possible oil-sands will not be very deep.

General Remarks.

Mining.—In a general way it may be said that the industry has remained in much the same position as last year. In the alluvial branch gold to the value of £10,908 7s. 6d. was won, as compared with £14,267 in 1924. In quartz-mining 27,586 oz. 11 dwt. 11 gr. gold, valued at £111,210 0s. 9d., were won, as compared with 27,574 oz. 14 dwt. 12 gr., valued at £115,651 18s. 4d., in the previous year. A total of 51,469 tons of quartz was crushed, being an increase of 1,787 tons on the 1924 figures, but the stone was evidently of slightly lower grade than usual. There was a slight falling-off in the number of men engaged in both branches of mining. The collapse of the Wealth of Nations shaft, at Reefton, in October, reduced the output of quartz and consequently of gold. With the restoration of this shaft in the New Year, and the development that may be expected at the Alexander Reefs, the outlook for 1926 should be much brighter as far as gold-production in the district is concerned.

During the year the dividends paid greatly exceeded those for a number of years, the amount disbursed being £12,799 12s. Of this amount the Blackwater mine paid £12,499 12s.

Quarries.—In the various quarries in the district there was a slight increase in the number of men employed, the total being 248, as against 234 for 1924, but the value of the product decreased from £55,121 to £48,773. A good deal of this decrease was attributable to the closing-down of the Kairuru quarries from which the marble for the Parliament House building was obtained.

Prospecting.—Comparatively little work of this kind has been done. The Rimu Dredging Company put a large number of Keystone drill-holes down on an area near Stafford, but the results were not satisfactory. A small amount of field-work was done in several localities, but nothing of a payable nature was discovered. A few applications for assistance were received, but the majority were declined, for one reason or another.

Accidents.—No accidents were reported from either quartz or alluvial mines, but one fatal accident occurred in quarrying. This was at the Greymouth Harbour Board's quarry at Cobden. Edward Sparks, the foreman, was superintending the shunting of some trucks of stone destined for harbour-protection work when a piece of stone apparently fell off one of them, striking him and throwing him down, with the result that his head came in violent contact with a tram-rail, causing injuries from which death resulted. An inquest was held, and a verdict of accidental death returned.

Southern Inspection District (Mr. A. Whitley, Inspector of Mines).

Quartz and Alluvial Mining.

WAITAKI COUNTY.

Livingstone and Maerewhenua.—A few small parties of miners continue to work the alluvial deposits in these localities. The yield of gold for the year amounted to 233 oz., valued at £863.

WAIHEMO COUNTY.

Mount Moore Gold-mining Syndicate (Stoneburn).—This company's prospecting-shaft was sunk to a depth of 130 ft. from the surface. A chamber has been excavated at 120 ft. and driving commenced to cut the Golden Bar reef.

MANIOTOTO COUNTY.

St. Bathan's Gold-mining Company (St. Bathan's).—This company was formed early in the year to acquire the Kildare Hill Claim from the Scandinavian Water-race Company for the purpose of working the Kildare lead by sinking and driving. A vertical shaft to cut the lead at 300 ft. from the surface was sunk 120 ft. Water and running ground proving troublesome at this depth sinking was suspended. A drive was started from the Scandinavian Company's elevating-paddock to drain off the water from the shaft, but after driving 170 ft. running ground was met, and the drive was abandoned. A small shaft was then sunk 50 ft. from the bottom of the paddock, in the foot-wall of the lead, and driving therefrom is in progress to prospect the lead and, if possible, drain the ground to allow the sinking of the main shaft to proceed. Electric-power plant, comprising 135 horse-power generator at 2,100 volts, transformer for reducing the voltage to 230, a 50 horse-power motor for winding and equipment for lighting, has been installed at the main shaft. Water from the Scandinavian Water-race is used for generating the power.

Scandinavian Water-race Company (St. Bathan's).—During the early part of the year elevating was in progress on the north end of the Kildare lead with satisfactory results. The Kildare Hill Claim was sold to the St. Bathan's Gold-mining Company, and an agreement was made with the United M. & E. Company to work the latter company's claim on tribute with high-pressure water from the Scandinavian Water-race. 386 oz. gold, valued at £1,524, were recovered.

Vinegar Hill Sluicing Company (Cambrian).—Morgan's lead was worked to a depth of 60 ft. by hydraulic elevating, gold valued at £875 11s. 6d. being recovered for the year's operations. The lead continues to carry good values at depth, but it cannot be profitably worked by sluicing and elevating owing to the increasing height of valueless overburden which has to be removed by this system of mining.

Nicholson and party were working a deposit of auriferous quartz drift for payable returns.

Naseby and Kyeburn.—Twelve sluicing claims employing sixteen men were in operation during the year. The yield of gold amounted to 663 oz., valued at £2,570. A. and G. Brown were the principal producers with 195 oz., valued at £762.

Patearoa.—Four men were employed at alluvial mining in this locality. Gold valued at £631 was recovered.

TUAPEKA COUNTY.

Lawrence Sluicing Company (Blue Spur).—Sluicing and elevating were carried on in a block of auriferous cement close to the boundary of the Gabriel's Gully Claim. As the cement is dipping towards the latter claim a high lift of 102 ft. was required to provide fall for tailings. Six men were employed, and the yield of gold was valued at £1,648.

Gabriel's Gully Sluicing Company (Blue Spur).—One elevator was employed treating tailings on the south side of Gabriel's Gully, and sluicing was carried on in the cement on the west side of the claim. An attempt was made to work the block of cement on the northern boundary, but this could not be done without encroaching on the Lawrence Company's claim. Towards the latter part of the year the two companies combined for the purpose of working the cement, and as the whole of the available water will be used in this direction it is thought that profitable results will be obtained. The gold won for the year amounted to 572 oz., valued at £2,229. Fourteen men were employed.

Golden Crescent and Golden Rise Claims (Weatherstone).—A block of ground at Ballarat Hill on the boundary of these claims could only be worked with high-pressure water from the Golden Crescent Race, and the owners agreed to work the two claims conjointly. The water was brought on to the ground, and sluicing was in progress throughout the year for a return of gold valued at £2,972. Dividends amounting to £787 were paid by the Golden Crescent Company.

Sailor's Gully Sluicing Company (Waitahuna).—This company is working part of the old Waitahuna Gully Township. A number of sections were purchased and the buildings removed therefrom to sites near Havelock. The year's operations resulted in the recovery of 508 oz. gold, valued at £1,931.

Tallaburn Hydraulic Sluicing Company (Horseshoe Bend).—Operations were resumed in the latter part of the year after having been suspended for a period of about two years. Hydraulic elevating is being carried on in an old channel of the Clutha River.

Waipori.—The Dunedin City Corporation having been empowered to construct a dam or weir across the Waipori River mining operations in the locality have practically ceased. All claimholders likely to be affected by the construction of the dam received full compensation for the loss of their mining privileges.

VINCENT COUNTY.

Advance Mine (Old Man Range).—Driving and stoping were carried on from a winze on White's reef 35 ft. below the battery level. 40 tons of quartz were crushed for a return of 31 oz. gold, valued at £129. The mine is owned and worked by R. T. Symes.

Black's Gold-mining Company (Poolburn).—A prospecting-shaft 6 ft. 3 in. by 4 ft. in the clear was sunk 70 ft. through clay and fine sand to prospect for a lead of auriferous quartz drift. At 50 ft. from the surface water was met, which increased in volume until at 70 ft. the flow amounted to 700 gallons per hour. Difficulty in sinking was experienced after meeting the water, and as no provision was made to deal with running ground the lower 20 ft. of the shaft subsided. Sinking operations were suspended, and the shaft will probably be abandoned.

The Clutha Development Company (Limited), (Lowburn).—Prospecting operations were carried on continuously during the year. The bed of the Clutha River above Lowburn is being thoroughly tested by drilling, and the results are stated to be satisfactory.

Kawarau High Levels Gold-mining Company (Waitiri).—Five small prospecting-shafts (30 ft. to 63 ft. deep) were sunk through gravel to bed-rock. The gravel from the shafts yielded 2½ gr. of gold per cubic yard. A contract has been let to drive a tunnel through a spur between the company's claim and Doolan's Creek to bring water on to the claim for sluicing.

Varcoe and Party (Cromwell).—This party is sinking a shaft on the south side of Cornish Point to prospect for a run of gold which is said to have been followed into the river-bank by dredges. It is generally considered that an old channel of the Kawarau River will be found in the locality.

Nevis.—Six alluvial claims, employing twenty-three men, were in operation during the year. The gold recovered amounted to 943 oz., valued at £3,606. Graham and party 489 oz., S. C. Fache 195 oz., and Adie and party 182 oz. were the principal producers. A proposal to amalgamate the Ben Nevis, Fache's, and Graham and party's claims and work the ground by dredging is under consideration.

LAKE COUNTY.

Kawarau Gold-mining Company.—The work of constructing the dam at Kawarau Falls for controlling the flow of water from Lake Wakatipu was carried on continuously during the year. Eight of the eleven piers required for the dam and four spans of the overhead bridge were completed. The lake remained at a low level during the winter months, enabling good progress to be made with the work. The melting of the snow in the high country caused a gradual rise, until at the end of the year there was a difference of 8 ft. between the winter and summer levels. This rise has had the effect of retarding the erection of the three remaining piers, and the time of completion will depend to a great extent upon the level of the lake. An average of fifty-nine men were employed. H. Vickerman, of Vickerman and Lancaster, Wellington, is engineer for the company.

Shotover River.—The whole of the river-bed between Branches Flat and the Kawarau River was pegged out as dredging or alluvial claims, but very little work has been done. The alluvial claims held by the Sandhills Gold-mining Company, Upper Shotover, and J. McMullan, Arthur's Point, were the only claims in active operation during the year.

Sandhills Gold-mining Company (Upper Shotover).—This company's water-race was extended to command the old channel which is being sluiced out for the purpose of diverting the Shotover River, and a tunnel was driven through the ridge of rock separating the channel from the present bed of the river to provide an outlet for tailings.

Reid and Lynch (Sawyer's Creek).—A reef 3 ft. wide which gives good dish prospects and shows colours of gold in the quartz was cut in this party's prospecting-drive at 128 ft. from the surface.

Oxenbridge and Party (Twelve-mile Creek).—This party is driving in the west bank of Twelve-mile Creek to prospect for a run of alluvial gold.

SOUTHLAND COUNTY.

Nokomai Hydraulic Sluicing Company (Nokomai).—Sluicing and elevating was carried on in the company's No. 2 claim in Victoria Gully, and some blocks of ground in the Nokomai River which had been left from previous workings were also worked. The gold won for the year amounted to 683 oz., valued at £2,547. The claim formerly held by the Lion Gold-mining Company was prospected with a Keystone drill, and payable wash was found at depths of 84 ft. and 96 ft. No. 2 Water-race is being extended to bring water on for working the claim.

Copeland and Party (Nokomai).—This party produced 188 oz. gold, valued at £735. Four men were employed.

King Solomon Gold-mines (Limited), (Waikaia).—This company was formed to work the Break-em-all Claim at Winding Creek, which was formerly held by the Waikaia Deep-lead Mines (Limited). It is proposed to sink a shaft and drive out the auriferous wash.

Athol.—Returns from this locality show that the yield of gold amounted to 384 oz., valued at £1,627. Five men were employed.

WALLACE COUNTY.

Round Hill Mining Company.—A block of ground in Ourewera Creek above the Colac to Pahia Road was worked by sluicing and elevating. Fifteen men were employed, and the gold won amounted to 1,002 oz., valued at £4,034. The company ceased operations at the end of the year, and sold all mining rights and plant to Mr. James Armstead, of Auckland.

Orepuki.—This old goldfield provides employment for a few small parties of miners. Seven men engaged in alluvial mining during the year produced gold valued at £830.

G. Shaw and Party (West Waiau).—Four sluice-heads of water were brought on for working a deposit of clay and gravel on a terrace near the sea-beach in Tewaewae Bay. Ground sluicing for gold and platinum was carried on during the year. The value of the gold and platinum recovered amounted to £55.

Dredge Mining.

Shotover Gold-dredging Company (Maori Point).—The construction of the company's dredge was delayed by difficulty in getting the machinery carted to the site, and by the frost and snow of the winter season, when operations had to be suspended for several months. The pontoons were completed and the machinery partly installed. It is expected that dredging will commence about April, 1926.

Molyneux Electric Gold Dredging Company.—This company was formed in Dunedin to work a claim on the Clutha River below Alexandra. A bucket dredge which was formerly owned and worked by the Manuherikia and Gorge Gold-dredging Companies was purchased and put into commission. Dredging commenced on the 27th July, but after working eight days operations had to be suspended owing to a rise of 4 ft. in the level of the river. Before the river rose the dredge was working at a depth of 52 ft., but had not reached the bottom. No further dredging was done during the year.

McGeorge's Freehold dredge, at Waikaka Valley, worked steadily throughout the year.

The Nevis Crossing dredge at Lower Nevis was idle for about four months during the winter season.

Seventeen men were employed at this class of mining, and the yield of gold amounted to 1,243 oz., valued at £4,960.

Minerals other than Gold.

Tungsten.—A number of mineral licenses have been applied for in the Glenorchy district consequent on an increase in the price of this mineral to £1 3s. per unit. There is a probability of active mining operations being resumed in the near future.

Platinum.—This mineral occurs with gold in the alluvial claims in the Orepuki district. The value of the platinum recovered during the year is estimated at £126.

Phosphate Rock.—The Milburn Lime and Cement Company's works at Clarendon have been closed down temporarily.

Accidents.

Two fatal accidents occurred during the year.

On the 18th March, Sue Too, aged 41 years, was killed in the Nokomai Hydraulic Sluicing Company's claim through being struck by a nozzle which jumped and swung round suddenly when the water was turned on at the valve. The manager of the claim was prosecuted and fined for failing to report the accident.

On the 13th October Lawrence Welsh, aged 24 years, employed on the Kawarau Gold-mining Company's dam at Kawarau Falls, lost his life by drowning. Deceased was one of a party engaged in dismantling a footbridge across the main channel of the Kawarau Falls when he slipped and fell into the water, and was swept away by the current, which runs very swiftly at this place.

ANNEXURE B.

SUMMARY OF REPORT OF GOVERNMENT WATER-RACE MANAGER.

WAIMEA–KUMARA WATER-RACES (MR. JAMES ROCHFORD, Manager).

Waimea Water-race.

The cash received for sales of water from this race for the year ended 31st March, 1926, was £200 2s., and the expenditure on management, gauging, maintenance, and repairs amounted to £795 0s. 6d., showing a debit balance of £594 18s. 6d. on the year's transactions. The average number of miners supplied with water was 1·83, a decrease of 3·42 on that of the previous year, and the approximate quantity of gold obtained was 80 oz., valued at £314, a decrease of £1,008 14s. 6d. on that of the previous year. The sales of water, which only amounted to £287 18s. 8d., were the smallest for the past twenty-seven years, and showed a decrease of £251 16s. 3d. as compared with the previous year. In addition to the above sales, water to the value of £10 was supplied free of charge to Blackmun and party and Parker Bros. and Williams as remuneration for work done by them in connection with repairing the break in the race at Hatter's Terrace.

The falling-off in the sales of water was principally due to the fact that the Linklater Sluicing Syndicate's claim at Scandinavian Hill, Stafford, which was under lease to Mr. W. Linklater, only used water during the first four months of the year, after which he abandoned the property owing to non-payable gold returns, and presumably for the same reason, Blackmun and party ceased sluicing operations early in January, 1926. A contributory cause of the reduced sales was the two rather serious breaks in the race, one in a tunnel at Fox's, which took place on the 24th August, and the other in the open ditching at Hatter's Terrace, near Stafford, which occurred during the big flood on the 21st November. These two breaks had the effect of completely cutting off the supply of water from Blackmun and party and Parker Bros. and Williams, sawmillers, for forty and twenty-five days respectively.

As this goes on, however, it becomes increasingly evident that practically all the payable sluicing-ground commanded by the old original Waimea Water-race, which was completed about the end of 1874, has been worked away, and there appears little probability of a mining revival taking place in the vicinity of this once-famed gold-producing locality.

Messrs. Parker Bros. and Williams worked their sawmill at Gillam's Gully throughout the year, but owing to loss of time occasioned by the breaks previously mentioned, and the lack of orders during two or three months of the year, when they carried on with half a team of men, they only purchased water to the value of £185 2s., a reduction of £20 on the previous year. The different sections of open ditching and fluming on this race are in fair order, but some of the old timbered tunnels in the vicinity of Fox's and Goldsborough will require careful supervision and occasional repairs, otherwise serious breaks can be expected. There was an excellent supply of water from the race, and the Waimea inverted siphon was practically running full all the year.

The cash received was £216 11s. 2d. less than the previous year, and the expenditure showed a decrease of £14 12s. 2d.

Branch Race to Callaghan's and Middle Branch Flat.

The cash received for sales of water from this race for the year ended 31st March, 1926, was £64 11s. 8d., and the expenditure on management, gauging, maintenance, and repairs amounted to £482 8s. 6d., showing a debit balance of £417 16s. 10d. on the year's transactions. The average number of miners supplied with water was 2·25, and the approximate quantity of gold obtained was 146 oz., having a value of £573 1s., a decrease of £439 12s. on that of the previous year.

Havill's claim was worked throughout the year, and a certain amount of sluicing was done in each month, but they only purchased water to the value of £64 11s. 8d., a reduction of £37 5s. 10d. on the previous year. As pointed out in previous reports, this party is seriously handicapped owing to lack of pressure from the Callaghan's Water-race, but, even taking this drawback into consideration, the quantity of water purchased by them was far from satisfactory,

During the year a considerable amount of repair work was carried out by the staff to the flumings on this race, but further repairs will be necessary from time to time, as the superstructure of most of them is in a rather bad state.

The cash received was £37 1s. less than the amount received during the previous year, and the expenditure for the same period showed an increase of £6 7s. 3d.

Kumara Water-race.

The cash received from sales of water from this race amounted to £130 13s. 4d., for royalty on timber cut on the Reservoir Reserve £428 1s. 3d., and for sale of old 26 in. pipes £90 18s., making a total revenue of £649 12s. 7d. The expenditure on maintenance and repairs amounted to £21 6s. 5d., thus showing a profit of £628 6s. 2d. on the year's transactions.

No miners were supplied with water from this race during the year, the whole of the revenue derived from sales was received from the Okuku Sawmill Company for water supplied for power-development.

A small number of intermediate sets of timber and some lining-boards were placed in position in the Kumara Head-race Tunnel during the year, but there are still some dangerous sections in this tunnel, and at the present time a number of additional intermediate sets are required to ensure safety. With the exception of the sections of tunnel above referred to, the Kumara Water-race and the Nos. 1 and 2 Kapitea Reservoirs are in good order.

Kumara–Trans-Taramakau Water Races.

The only party supplied with water from this race was the Payne's Gully Sluicing Company, which carried on sluicing operations from the beginning of the financial year until the middle of November, when a serious break took place in the trans-Taramakau pipe-line on the river-flat on the north side of the pipe-bridge, which completely cut off their water-supply. By arrangement with the Mines Department this company had to maintain the pipe-line in question and do its own gauging, and in consequence was being supplied with water at a reduced rate. The maintenance of the pipe-line has been a rather expensive proposition for the company, owing to the frequently recurring breaks in the steel sections of piping, which, apart from the cost of repair, were a serious drawback to the efficient working of their property. The water supplied to the Payne's Gully Sluicing Company is not included in the sales, as it was supplied in lieu of cash expended by the company on repairs to the trans-Taramakau pipe-line some years ago.

Wainihinihi and Waimea Additional Supply Water-races.

During the year a number of intermediate sets of hewn timber were prepared and placed in position in the tunnels by the staff, but a further number will be required in the near future to ensure safety. The open ditching in both races is in good order.

Waimea–Kumara and Callaghan's Water-races.

The following is a summary of the revenue and expenditure of the above water-races for the year ended 31st March, 1926: Sales of water, £483 3s. 8d.; cash received, £914 6s. 3d. (including royalty on timber and sale of pipes); expenditure, £1,298 15s. 5d.; approximate value of gold obtained, £1,283 9s. 6d.; average number of miners employed, 6·08. The sales of water show a decrease of £309 2s. 1d., and the cash received a decrease of £316 1s. The total expenditure on the combined races amounted to £1,298 15s. 5d., as against £1,318 19s. 5d.—a decrease of £20 4s. Comparing the cash received with the expenditure, the combined races show a loss of £384 9s. 2d., but from this should be deducted the sum of £64, for water supplied to the Payne's Gully Sluicing Company in reduction of its account, which reduces the net loss to £320 9s. 2d.

ANNEXURE C.

STONE QUARRIES.

SUMMARY OF REPORT BY INSPECTOR OF QUARRIES FOR THE NORTH ISLAND (MR. JAMES NEWTON).

During inspection I have found that generally operations have been carried on in a reasonably safe manner and with due regard to the requirements of the law. Much improvement has been noticeable, especially with regard to keeping down the dust at the crushers; and in a number of quarries, where the industry is operated on anything like permanency, axial water-feed drills have been installed in order to comply with Regulation 64. With regard, however, to this latter matter—*i.e.*, the use of water-feed drills when boring in surface quarries—I am of the opinion that the regulation as it now stands is too mandatory, for in many cases, and especially in quarries that only operate intermittently and for only a few weeks in the year, I find that the quarries are so situated that it would be necessary to install long ranges of pipe-line or else install pumping machinery. It has to be remembered that in order to be efficient it is necessary that the water be delivered to the drill with a sufficient pressure to wash the drilling out of the hole. In very many cases this cannot be accomplished without a good deal of expense and at a price prohibiting the working of the quarry altogether. It is well to remember that surface boring is altogether different to underground boring, where the space is confined between four walls and where the ventilation is somewhat sluggish. In surface quarries if the driller is careful he can generally place himself in such a position when boring that the movement of the atmosphere will carry the dust from him. Another objection to the compulsory use of water under pressure in drill-holes is that where the ground is shattered and very jointy, such as the stone around about Auckland, the water loosens the shattered pieces of stone and they fall into the drill-hole behind the bit, in consequence of which the drill cannot be removed from the hole, and has to remain there until another hole is drilled and fired in order to loosen the stone. I have had many complaints to this effect from owners who have installed the drills in quarries about Auckland. In my opinion I think it would be better if Regulation 64, with regard to surface quarries, was altered to give the Inspector discretionary powers. I am also of the opinion that in very many cases a dust-shield can be advantageously used to prevent the dust from rising in the air. I have on several occasions experimented with such a screen, and it has acted admirably. The shield is simply a piece of any light material through which the drill works, and is placed about 3 in. above the top of the hole, and as the dust rises out of the hole it strikes the shield which prevents its rising into the air; of course, where it is reasonably practicable, and where the water can be had, and where the stone is suitable, the Inspector should still have the right to demand that it shall be used when boring.

The output of stone for all purposes has been materially increased. Compared with the year 1924, the Auckland Province shows an increase of 75,565 tons, the Wellington Province 14,606 tons, Hawke's Bay 1,663 tons, and Taranaki 8,849 tons. The quarries operated show an increase of twenty-three, whilst the increase of persons employed is 219.

A good deal of clerical work has been entailed in connection with answering correspondence from numerous applicants wishing to be examined for quarry-managers or foremen's permits, and a fair amount of time has been spent in the examination of candidates. The examinations have been conducted in the various districts on the occasion of my inspection visits, and have been held at the most convenient time and place to suit the candidates, who mostly have been found to be married men with families, and who are dependent on daily wages for their support, and could ill afford to lose working-time or incur expenses for travel. Some have elected to travel to Auckland, but not many.

I regret that the year under review has not been free from distressing fatalities and other serious accidents.

On the 30th July a Maori workman named Rehu Ngarimu, employed in the Hemo Gorge Quarry, Rotorua, whilst engaged stripping the loose earth away from the top of the quarry fell over the face of the quarry and injured his spine, which injury resulted in his death in the Rotorua Hospital on the 18th August.

On the 7th December, a quarryman named Edward Long met with an accident in an abandoned quarry known as "Whitneys," Normanby Road, Mount Eden, Auckland. He apparently had been working by himself when he was injured in the head. He died three days later, the cause of death being toxæmia, due to acute meningitis following a fractured skull, death resulting after operation in the Auckland Hospital. It was quite impossible to say positively what caused the accident, seeing that he was operating alone.

On the 10th October, a tunneller received a broken leg in the Arapuni Diversion Tunnel (W. Tervit). He and his mates were handling heavy timber and a piece rolled on to his leg and caused a simple break above the ankle.

On the 16th November a tunneller named James Sproul received a broken leg in the Arapuni Diversion Tunnel. He was walking along the floor of the tunnel at the change of shifts when he accidentally stumbled into one of the openings between the sections of concrete on the floor of the tunnel, the opening being 3 ft. wide and 2 ft. deep.

ANNEXURE D.

MINING STATISTICS.

Table 1.

STATEMENT SHOWING THE QUANTITY OF QUARTZ CRUSHED AND GOLD OBTAINED IN THE HAURAKI MINING DISTRICT FOR THE YEAR ENDED 31ST DECEMBER, 1925.

Locality and Name of Mine.	Average Number of Men employed.	Quartz crushed.	Gold obtained.		Value.
			Amalgamation.	Cyanide.	
THAMES COUNTY AND BOROUGH.					
Tararu Creek—		Tons cwt. qr. lb.	Oz. dwt. gr.	Oz. dwt. gr.	£ s. d.
Sylvia	4	..	..	212 14 0	56 14 0
Tairua—					
New Monarch	1	..	78 0 0	..	175 19 7
Waiotahi Creek—					
New Waiotahi	5	17 0 0 0	36 14 0	..	98 18 6
Moanataiari Creek—					
Kuranui	4	88 0 0 0	10 12 0	..	25 16 0
Karaka Creek—					
Occidental	3	20 0 1 14	90 6 0	..	226 15 0
Joker	2	7 0 0 0	24 15 0	..	57 0 6
Adelaide	1	175 0 0 0	101 17 0	..	243 16 10
Prospectors	6	..	4 4 0	..	10 10 0
Totals	26	307 0 1 14	346 8 0	212 14 0	895 10 5
WAIHI BOROUGH.					
Waihi—					
Waihi Gold-mining Company* ..	616	192,337 10 0 0	..	570,593 12 0	341,075 16 6
Waihi Grand Junction ..	7	..	..	2,233 16 0	284 4 2
Totals	623	192,337 10 0 0	..	572,827 8 0	341,360 0 8
OHINEMURI COUNTY.					
Owharoa—					
Rising Sun Gold-mining Company	20	1,107 0 0 0	1,815 9 0	982 13 0	5,761 9 6
COROMANDEL COUNTY.					
Waikoromiko—					
Four-in-hand	6	155 0 2 4	217 15 0	..	621 17 3
Matawai—					
Winnipeg	2	0 0 0 18	24 10 0	..	64 17 6
Totals	8	155 0 2 22	242 5 0	..	686 14 9

* Gold won from Waihi Mine valued at £4 4s. per ounce; silver, 2s. per ounce.

SUMMARY.

		Tons cwt. qr. lb.	Oz. dwt. gr.	Oz. dwt. gr.	£ s. d.
Thames County and Borough ..	26	307 0 1 14	346 8 0	212 14 0	895 10 5
Waihi Borough	623	192,337 10 0 0	..	572,827 8 0	341,360 0 8
Ohinemuri County	20	1,107 0 0 0	1,815 9 0	982 13 0	5,761 9 6
Coromandel County	8	155 0 2 22	242 5 0	..	686 14 9
Totals, 1925 ..	677	193,906 11 0 8	2,404 2 0	574,022 15 0	348,703 15 4
Totals, 1924 ..	875	209,480 17 0 25	1,846 14 0	595,459 14 0	374,084 18 2

STATEMENT SHOWING THE QUANTITY OF QUARTZ CRUSHED AND GOLD OBTAINED IN THE WEST COAST INSPECTION DISTRICT FOR THE YEAR ENDED 31ST DECEMBER, 1925.

Locality and Name of Mine.	Average Number of Men employed.	Quartz crushed.	Gold obtained by		Value.
			Amalgamation.	Cyanide and Concentrates.	
NELSON.					
Waiuta—		Tons cwt. qr.	Oz. dwt. gr.	Oz. dwt. gr.	£ s. d.
Blackwater Mines	144	37,939 0 0	16,224 3 0	2,379 13 0	*74,915 7 9
Globe Hill—					
Progress Mines	3	..	..	..	†950 19 4
Reefton—					
Murray Creek	4	124 0 0	101 17 0	..	372 8 9
Wealth of Nations	38	6,790 0 0	2,004 18 0	884 8 0	11,550 13 5
Crushington—					
New Keep-it-dark	5	165 0 0	54 1 0	12 3 18	204 18 6
Alexander River—					
Alexander River	12	645 0 0	1,646 19 0	..	6,636 8 1
Big River—					
New Big River	42	3,976 0 0	2,775 15 0	656 0 0	13,497 5 7
Alfred River—					
Taylor and Williams	2	..	59 3 0	..	224 15 6
MARLBOROUGH.					
Wakamarina—					
Dominion Consolidated ..	20	3,615 0 0	787 10 17	..	2,857 3 10
Totals, 1925 ..	270	53,254 0 0	23,654 6 17	3,932 4 18	111,210 0 9
Totals, 1924 ..	248	51,467 0 0	22,034 1 0	5,540 13 12	115,651 18 4

* Includes £492 2s. premium on concentrates treated previous year. † Includes £519 8s. 8d. premium on concentrates treated previous year.

STATEMENT SHOWING THE QUANTITY OF QUARTZ CRUSHED AND GOLD OBTAINED IN THE SOUTHERN MINING DISTRICT FOR THE YEAR ENDED 31ST DECEMBER, 1925.

Locality and Name of Mine.	Average Number of Men employed.	Quartz crushed.	Gold obtained by		Value.
			Amalgamation.	Cyanide.	
VINCENT COUNTY.					
Old Man Range—		Tons cwt. qr.	Oz. dwt. gr.	Oz. dwt. gr.	£ s. d.
Advance	3	40 0 0	31 0 0	..	129 0 0
Totals, 1925 ..	3	40 0 0	31 0 0	..	129 0 0
Totals, 1924 ..	6	97 0 0	63 2 22	217 13 0	1,113 4 9

SUMMARY OF INSPECTION DISTRICTS.

Inspection District.	Average Number of Persons employed.	Quartz crushed.	Bullion obtained.	Value.
		Statute Tons.	Oz. dwt. gr.	£ s. d.
Northern (North Island)	677	193,907	576,426 17 0	348,703 15 4
West Coast (South Island)	270	53,254	27,586 11 11	111,210 0 9
Southern (Otago and Southland) ..	3	40	31 0 0	129 0 0
Totals, 1925	950	247,201	604,044 8 11	460,042 16 1
Totals, 1924	1,129	261,045	625,161 18 10	490,850 1 3

In addition, 139 persons were employed at unproductive quartz-mining.

Table 2.

STATEMENTS OF AFFAIRS OF MINING COMPANIES, AS PUBLISHED IN ACCORDANCE WITH THE COMPANIES ACT, 1908.

Name of Company.	Date of Registration.	Subscribed Capital.	Amount of Capital actually paid up.	Value of Scrip given to Shareholders on which no Cash paid.	Number of Shares allotted.	Amount paid per Share.	Arrears of Calls.	Number of Shareholders at present.	Number of Men employed.	Quantity and Value of Gold and Silver produced since Registration.		Total Expenditure since Registration.	Total Amount of Dividends paid.	Amount of Debts owing by Company
										Quantity.	Value.			
AUCKLAND DISTRICT.														
		£	£	£			£			Oz.	£	£	£	£
Hauraki Mines Consolidated (Limited)	28/11/25	7,647	1,980	Nil	30,591	1/- and 2/-	..	110	Nil	Nil	Nil	Nil	Nil	Nil
Hauraki Reefs (Limited), (in liquidation)	28/4/10	12,416	11,681	5,083	175,000	1/8 and 2/-	Nil	414	Nil	..	9,175	21,766	Nil	381
Horseshoe Mines (Limited)	20/8/20	1,612	1,656	7,500	80,450	0/6, 0/9, 1/-, and 1/3	181	31	Nil	Nil	Nil	1,644	Nil	109
Mount Welcome Gold-mining Company (Limited) ..	21/10/20	3,600	1,528	2,500	24,400	2/2 and 5/-	3	53	Nil	Nil	Nil	1,625	Nil	38
Muir's Gold-reefs (Limited)	16/8/17	81,692	81,692	Nil	81,754	Various	61	206	29	..	164,776	324,939	Nil	58,500
Ohinemuri Gold and Silver Mines (Limited) ..	1/6/14	101,417	36,463	55,175	202,834	10/-	Nil	185	12	7,282	1,354	39,956	Nil	2,433
Nonpareil Gold-mining Company (No Liability) ..	14/9/20	19,225	3,053	2,625	87,400	1/2 and 1/6	Nil	54	3	Nil	Nil	3,048	Nil	38
New Waiotahi Gold-mining Company (No Liability)	31/8/22	31,272	6,044	3,950	125,090	1/1 and 1/2	16	135	5	211	567	5,909	Nil	137
Caledonia-Kuranui-Moanataiari Consolidated Gold-mining Company (Limited)	16/3/20	22,500	17,625	2,500	100,000	3/11 and 5/-	Nil	201	8	Nil	Nil	19,847	Nil	414
Four-in-hand (Limited)	31/7/23	20,000	8,372	2,500	80,000	2/7, 2/7½, and 5/-	122	61	Nil	285	789	9,436	Nil	85
Majestic Gold-mining Company (Limited)	14/12/22	41,506	27,608	8,301	166,025	2/3, 4/-, and 4/3	585	229	18	Nil	Nil	29,737	Nil	..
Argo Concentrates (Limited)	2/8/24	12,000	4,661	5,000	12,000	12/6, 13/6, and £1	63	236	1	Nil	Nil	4,128	Nil	Nil
Kuranui Gold-mining Company (Limited)	5/6/25	8,026	811	210	82,364	0/2 and 0/3	Nil	26	5	10	25	730	Nil	191
Owera Gold-mining Company (Limited)	7/6/23	5,102	3,065	10,000	60,410	3/- and 5/-	69	79	Nil	Nil	Nil	2,826	Nil	26
Maori Consolidated (Limited)	24/3/25	500	335	5,000	2,000	3/6	30	12	Nil	Nil	Nil	394	Nil	69
Renown Gold-mining Company (Limited)	27/2/25	10,000	8,457	7,000	2,000	£2/10/- £2/15/- and £5	49	73	Nil	Nil	Nil	788	Nil	335
Lucky Shot Gold-mines (Limited)	9/4/25	10,000	2,000	2,000	100,000	0/6	Nil	198	5	Nil	Nil	1,700	Nil	342
Alburnia Gold-mining Company (Limited).. ..	20/12/24	5,286	2,776	153	52,866	2/-	10	208	6	Nil	Nil	1,540	Nil	120
Iris Gold-mining Company (Limited)	17/4/24	2,500	2,500	Nil	100	£25	Nil	40	Nil	Nil	Nil	300	Nil	32
Rising Sun Gold-mining Company (Limited) ..	6/4/25	10,000	3,684	Nil	40,000	2/3	815	71	22	2,395	5,068	8,763	Nil	4,647
NELSON DISTRICT (INCLUDING WEST COAST).														
New Big River Gold-mining Company (Limited) ..	19/8/07	6,000	600	Nil	24,000	0/6	Nil	61	39	91,516	385,929	278,608	112,800	836
New Discovery Mines (Limited)	1/3/20	50,000	9,600	26,000	50,000	8/- and £1	Nil	22	Nil	Nil	Nil	7,757	Nil	5,515
North Big River Gold-mines (Limited)	29/10/19	49,086	11,851	34,000	49,086	12/3, 12/9, and 13/3	41	79	2	Nil	Nil	8,272	Nil	21
New Millerton Mines (Limited)	1/3/20	50,000	15,375	29,500	50,000	15/- and £1	Nil	124	7	872	3,626	24,830	Nil	8,637
Reefton Gold-mines (Limited)	20/10/19	107,935	61,457	20,000	107,935	Various	7,754	582	..	..	..	..	Nil	177
Rimu Gold-dredging Company (Limited)	20/7/20	213,572	142,863	70,709	213,572	£1	Nil	35	48	19,320	190,061	137,793	13,098	1,448
South Blackwater Mines (Limited)	1/3/20	75,000	6,400	43,000	75,000	4/- and £1	Nil	164	22	Nil	Nil	10,447	Nil	7,053
Taylor's Creek Gold Sluicing Company (Limited) ..	26/8/14	2,500	2,500	6,250	35	£250	Nil	10	Nil	..	168	2,500	Nil	27
Wealth of Nations Mine (Limited)	15/7/22	20,000	14,979	5,000	20,000	13/-, 15/-, and 20/-	1	105	22	5,584	23,698	43,455	Nil	8,831
New Murray Creek Gold-mines (Limited)	25/7/23	15,000	4,821	10,000	15,000	10/- and £1	75	64	Nil	208	744	2,920	Nil	499
Buller Gold-mining Company (Limited)	30/5/23	10,000	3,609	2,001	10,000	9/6 and £1	Nil	28	4	109	443	13,534	Nil	7,808
South Big River Mines (Limited)	15/12/23	25,000	500	20,000	25,000	5/- and £1	Ni	39	6	Nil	Nil	2,861	Nil	2,421
Mahakipawa Goldfields (Limited)	12/10/23	8,515	8,515	15,025	384,563	1/-, 3/4, and 5/-	Nil	203	9	Nil	Nil	6,007	Nil	126
Victory Mines Syndicate (Limited)	20/2/18	15,000	8,597	3,750	15,000	8/-, 14/-, 14/6, and £1	77	154	2	12	49	8,631	Nil	Nil
Howard Sluicing Company (Limited)	12/3/25	1,728	914	600	6,914	4/- and 5/-	Nil	40	Nil	50	209	739	Nil	8
New River Gold Dredging Company (Limited) ..	8/5/25	40,000	15,061	25,000	40,000	17/6, 20/-, 25/, and 27/6	696	44	31	Nil	Nil	13,814	Nil	..
Ngahere Gold Prospecting Company (Limited) ..	22/12/25	4,000	400	Nil	8,000	1/-	Nil	20	4	Nil	Nil	127	Nil	..
Colossus Gold-mining Development Company (Limited)	28/8/14	30,473	12,473	18,000	30,473	£1	Nil	65	1	Nil	Nil	33,623	Nil	3,959

Table 2—*continued.*

STATEMENTS OF AFFAIRS OF MINING COMPANIES, AS PUBLISHED IN ACCORDANCE WITH THE COMPANIES ACT, 1908—*continued.*

Name of Company.	Date of Registration.	Subscribed Capital.	Amount of Capital actually paid up.	Value of Scrip given to Share-holders on which no Cash paid.	Number of Shares allotted.	Amount paid per Share.	Arrears of Calls.	Number of Share-holders at present.	Number of Men em-ployed.	Quantity and Value of Gold and Silver produced since Registration.		Total Expenditure since Registration.	Total Amount of Dividends paid.	Amount of Debts owing by Company.
										Quantity.	Value.			
OTAGO DISTRICT.														
		£	£	£			£			Oz.	£	£	£	£
Gabriel's Gully Sluicing Company (Limited) ..	2/5/07	600	600	Nil	600	£1	Nil	9	14	17,529	69,143	61,324	17,615	196
Golden Crescent Sluicing Company (Limited) ..	26/11/98	3,500	3,500	Nil	3,500	£1	Nil	20	6	12,639	50,597	42,065	13,650	197
Havelock Sluicing Company (Limited)	3/3/08	4,000	3,400	600	4,000	£1	Nil	13	Nil	9,877	38,838	32,686	11,400	200
Lawrence Sluicing Company (Limited)	18/3/16	5,000	5,000	Nil	5,000	£1	Nil	24	6	4,422	18,782	18,669	2,000	67
Round Hill Mining Company (Limited)	30/7/02	28,245	6,753	21,491	5,649	£5	Nil	180	15	51,847	210,266	205,909	12,286	920
Sailor's Gully (Waitahuna) Gold-mining Company (Limited)	3/6/96	8,400	200	8,200	8,400	£1	Nil	26	6	10,220	40,609	33,892	7,520	176
Scandinavian Water-race Company (Limited) ..	10/12/07	7	7	9,750	9,757	Nil	Nil	20	6	10,640	42,013	44,923	Nil	4,156
Skippers Sluicing Company (Limited)	20/11/11	3,450	345	3,105	3,450	£1	Nil	30	2	1,989	8,387	9,580	Nil	1,509
Tallaburn Hydraulic Company (Limited)	3/12/04	1,200	1,200	Nil	12	£100	Nil	9	2	2,143	8,344	10,743	1,380	337
United M.E. Water-race Company (Registered) ..	23/4/72	7,600	7,600	Nil	152	£50	Nil	9	..	16,909	69,138	74,623	3,534	Nil
Vinegar Hill Hydraulic Sluicing Company (Limited)	23/9/00	6,000	6,000	Nil	6,000	£1	Nil	15	4	5,312	20,434	19,343	1,050	1,263
St. Bathan's Gold-mining Company (Limited) ..	6/6/25	45,000	10,148	22,000	45,000	4/-, 11/-, and 20/-	Nil	143	13	Nil	Nil	11,664	Nil	5,346
Kawarau Gold-mining Company (Limited) ..	8/4/24	10,000	½	9,999½	200,000	1/-	Nil	585	43	Nil	Nil	71,694	Nil	8,277
Lucky Chance Kawarau Claims (Limited)	15/12/24	8,000	4,966	Nil	32,000	5/-	1,034	320	Nil	Nil	Nil	4,786	Nil	Nil
McGeorge Bros. (Limited)	29/3/12	11,400	11,400	Nil	11,400	£1	Nil	6	9	29,759	126,878	77,336	46,200	Nil
Vogel's Vision Gold Company (Limited)	19/11/24	16,020	9,652	Nil	100,000	3/- and 5/-	Nil	199	1	Nil	Nil	8,436	Nil	179
Another Chance Kawarau Gold (Limited)	15/12/24	8,000	4,907	Nil	32,000	5/-	1,092	375	Nil	Nil	Nil	4,779	Nil	Nil
Wairarapa Gold Claims (Limited)	18/11/24	10,200	4,070	500	10,200	9/-	295	139	1	Nil	Nil	4,160	Nil	111
Natural Bridge Gold-mining Company (Limited) ..	8/4/25	2,600	1,564	1,400	16,000	2/6 and 3/9	136	30	Nil	Nil	Nil	1,309	Nil	Nil
Cromwell Gold-mining Company (Limited) ..	6/2/25	1,300	678	600	1,900	10/- and 11/-	32	33	Nil	Nil	Nil	678	Nil	6
Golden Chance Mining Company (Limited) ..	10/7/25	1,400	825	600	8,000	3/-	15	28	Nil	Nil	Nil	661	Nil	Nil
Good Fortune Gold-mining Company (Limited) ..	13/5/25	1,800	500	600	1,800	£1	..	9	Nil	Nil	Nil	211	Nil	19
Nokomai Hydraulic Sluicing Company (Limited) ..	26/3/98	24,000	7,000	17,000	24,000	£1	Nil	69	25	55,991	213,050	170,723	54,683	4,363
Golden Bed Mining Company (Limited)	12/3/25	5,500	1,666	1,925	11,000	2/-, 4/-, 4/6, and 10/-	86	147	Nil	Nil	Nil	1,607	Nil	Nil
Black's Gold-mining Company (Limited)	2/10/25	34,000	3,000	14,000	34,000	3/- and 20/-	Nil	104	6	Nil	Nil	826	Nil	232
Golden Gorge Mining Company (Limited)	..	3,438	1,732	Nil	17,355	1/-, 2/-, 3/-, and 5/-	219	254	Nil	Nil	Nil	1,714	Nil	Nil
Golden River Mining Company (Limited)	21/1/25	5,000	1,725	1,613	5,000	10/- and 20/-	25	95	Nil	Nil	Nil	1,617	Nil	Nil
Akarana Claims (Limited)	25/10/24	3,500	1,316	1,500	3,500	13/- and 13/6	2	11	Nil	Nil	Nil	1,306	Nil	16
Birthday Claims (Limited)	8/12/24	4,500	1,562	2,000	4,500	12/6	Nil	22	Nil	Nil	Nil	1,477	Nil	27
Riverton Quartz Mining Company (Limited) ..	15/5/23	2,809	577	2,500	3,099	Various	13	35	Nil	..	14	791	Nil	443
Kawarau High Level Mining Company (Limited) ..	17/8/25	6,000	778	1,000	6,000	3/-	Nil	35	3	Nil	Nil	760	Nil	14
Golden Kawarau Claim (Limited)	27/5/25	3,257	2,957	Nil	32,570	1/-	230	291	Nil	Nil	Nil	2,645	Nil	Nil
Hidden Treasure Gold-mining Company (Limited) ..	16/6/25	2,400	1,940	Nil	2,400	£1 and 8/6	Nil	13	Nil	Nil	Nil	1,882	Nil	Nil
Temuka Gold-mining Company (Limited)	11/12/24	2,000	685	Nil	2,000	8/-	Nil	10	Nil	Nil	Nil	717	Nil	Nil
New Era Gold-mining Company (Limited)	4/3/25	6,980	3,802	1,500	6,980	Various	53	191	Nil	Nil	Nil	191	Nil	146
Central Treasure Gold-mining Company (Limited) ..	15/7/25	6,492	2,980	1,500	12,984	Various	46	185	Nil	Nil	Nil	97	Nil	74
Sandhills Gold-mining Company (Limited) ..	19/12/13	7,000	2,000	5,000	7,000	£1	Nil	20	4	1,192	4,562	15,884	Nil	4,321
Glenorchy Scheelite Mining Company (Limited) ..	6/12/11	3,000	Nil	3,000	3,000	£1	Nil	11	2	..	313*	84,587	7,125	1,310
Henley Mining Company (Limited)	22/7/24	4,000	2,025	Nil	4,000	10/1½	800	6	Nil	Nil	Nil	2,009	Nil	800

*In addition, scheelite valued at £87,853.

Table 2—*continued.*

STATEMENT OF AFFAIRS OF MINING COMPANIES, AS PUBLISHED IN ACCORDANCE WITH THE COMPANIES ACT, 1908—*continued.*

FOREIGN COMPANIES.

Name of Company.	Date of Registration of Office in Dominion.	Subscribed Capital.	Amount of Capital actually paid up in Dominion.	Value of Scrip given to Shareholders on which no Cash paid.	Number of Shares on Dominion Register.	Amount paid up per Share, Dominion Register.	Arrears of Calls, Dominion Register.	Number of Shareholders on Dominion Register.	Number of Men employed in Dominion.	Quantity and Value of Gold and Silver produced since Registration.		Total Expenditure since Registration.	Total Amount of Dividends paid in Dominion.	Amount of Liabilities of Company in New Zealand.
										Quantity.	Value.			
		£	£	£			£			Oz.	£	£	£	£
Blackwater Mines (Limited)	25/3/07	250,000	Nil	200,000	54,561	£1	Nil	158	138	291,086	1,237,572	980,897	12,398	1,872
Progress Mines of New Zealand (Limited)	8/12/96	275,000	Nil	200,000	31,629	£1	Nil	71	2	347,877	1,471,542	1,236,843	5,385	35
Consolidated Goldfields of New Zealand (Limited)	22/1/96	250,000	Nil	17,378	..	£1	Nil	..	3	173,798	719,732	947,769	12,398	7,251
Waihi Gold-mining Company (Limited)	7/12/87	247,953	9,606	53,333	234,504	10s.	Nil	1,935	628	21,385,165	14,759,631	8,564,526	1,071,222	25,872

APPENDIX B.

REPORTS RELATING TO THE INSPECTION OF COAL-MINES.

THE INSPECTING ENGINEER AND CHIEF INSPECTOR OF COAL-MINES to the UNDER-SECRETARY OF MINES.

SIR,— Wellington, 26th May, 1926.

I have the honour to present my annual report, together with statistical information, in regard to coal-mines of the Dominion for the year ended 31st December, 1925, in accordance with section 78 of the Coal-mines Act, 1908. The report is divided into the following sections :—

I. Output.
II. Persons employed.
III. Accidents.
IV. Working of the Coal-mines Act—
  (*a.*) Permitted Explosives.
  (*b.*) List of Mines required by Law to use Permitted Explosives.
  (*c.*) List of Mines required by Law to use Safety-lamps.
  (*d.*) Dangerous Occurrences.
  (*e.*) Electricity at Collieries.
  (*f.*) Prosecutions.
V. Legislation affecting Coal-mining.
Annexures—
  A. Summary of Annual Reports by Inspectors of Mines.
  B. Colliery Statistics.

SECTION I.—OUTPUT.

The output of the several classes of coal mined in each inspection district is summarized as follows :—

Class of Coal.	Output of Coal during 1925.				Total Output to the End of 1925.
	Northern District (North Island).	West Coast District (South Island).	Southern District (South Island).	Totals.	
	Tons.	Tons.	Tons.	Tons.	Tons.
Bituminous and sub-bituminous	131,540	913,186	..	1,044,726	37,983,397
Brown	540,863	37,771	332,791	911,425	19,901,452
Lignite	..	439	158,405	158,844	3,834,494
Totals for 1925 ..	672,403	951,396	491,196	2,114,995	61,719,343
Totals for 1924 ..	637,525	990,612	455,070	2,083,207	59,604,348

The following is a table showing the annual production of coal and the quantity of coal imported since 1911 :—

Year.	Coal produced.	Coal imported.	Total Quantity of Coal produced and imported.	Year.	Coal produced.	Coal imported.	Total Quantity of Coal produced and imported.
	Tons.	Tons.	Tons.		Tons.	Tons.	Tons.
1911 ..	2,066,073	188,068	2,254,141	1919 ..	1,847,848	391,434	2,239,282
1912 ..	2,177,615	364,359	2,541,974	1920 ..	1,843,705	476,343	2,320,048
1913 ..	1,888,005	468,940	2,356,945	1921 ..	1,809,095	822,459	2,631,554
1914 ..	2,275,614*	518,070	2,793,684*	1922 ..	1,857,819	501,478	2,359,297
1915 ..	2,208,624	353,471	2,562,095	1923 ..	1,969,834	445,792	2,415,626
1916 ..	2,257,135	293,956	2,551,091	1924 ..	2,083,207	674,483	2,757,690
1917 ..	2,068,419	291,597	2,360,016	1925 ..	2,114,995	572,573	2,687,568
1918 ..	2,034,250	255,332	2,289,582				

* Includes 21 tons of shale.

The gross output of coal for 1925 showed an increase of 31,788 tons over the output of the previous year. The increase was wholly due to the increased production of brown coal, which was 72,408 tons in excess of the output of brown coal for the preceding year, the bituminous coal produced being 40,278 tons less than for 1924.

The coal-market was dull during most of the year, and short time was worked in almost all mines. For all classes of coal the combined capacity of the mines is well ahead of the demand, and particularly so in the case of brown coal. There was comparative freedom from stoppages due to industrial trouble during the year. Mining by co-operative parties continues to be carried on to a considerable extent in the Greymouth, Westport, and Huntly districts, and in some cases continues to be very profitable to the parties.

The production from and the number of persons employed at the collieries of the Dominion are shown in the following table:—

Name of Colliery.	Locality.	Class of Coal.	Output for 1925.	Total Output to 31st December, 1925.	Total Number of Persons ordinarily employed.
Northern District.			Tons.	Tons.	
Hikurangi (2 collieries)	Hikurangi ..	Sub-bituminous	65,781	1,562,775	162
Wilson's Colliery	,, ..	,,	53,115	232,104	149
Rotowaro	Huntly ..	Brown ..	150,637	753,476	279
Pukemiro	,, ..	,, ..	133,291	1,151,585	235
Waipa	,, ..	,, ..	56,790	793,401	116
Glen Afton	Glen Afton ..	,, ..	166,950	346,582	287
West Coast District.					
Westport-Stockton	Ngakawau ..	Bituminous ..	89,601	2,088,023	235
Millerton	Millerton ..	,, ..	224,883	7,107,541	430
Denniston	Denniston ..	,, ..	204,014	8,894,600	481
Cardiff Bridge	Seddonville ..	,, ..	21,855	56,711	27
Paparoa	Roa ..	,, ..	39,301	508,614	90
Blackball	Blackball ..	,, ..	95,343	3,365,597	296
Liverpool (State)	Rewanui ..	,, ..	106,784	1,469,779	305
James (State)	Rapahoe ..	,, ..	24,381	72,651	76
Reefton	Reefton ..	Brown ..	23,467	133,196	59
Southern District.					
Jubilee	Saddle Hill ..	Lignite ..	23,576	480,114	31
Kaitangata and Castlehill (3 collieries)	Kaitangata ..	Brown ..	104,788	4,359,306	292
Taratu	,, ..	Lignite ..	34,462	605,969	58
Linton (2 collieries)	Nightcaps ..	Brown ..	67,436	228,857	101
Wairaki ,, ...	,, ..	,, ..	37,103	166,547	83
Black Diamond	,, ..	,, ..	29,868	141,442	52
Birchwood	Ohai ..	,, ..	27,327	87,812	63
131 other collieries	All coalfields ..	Various ..	334,242	6,172,397	870
Collieries abandoned or suspended, &c.	Various ..	,, ..	..	20,940,264	..
Totals	..	..	2,114,995	61,719,343	4,777

SECTION II.—PERSONS EMPLOYED.

Inspection District.	Average Number of Persons employed during 1925.		
	Above Ground.	Below Ground.	Total.
Southern	283	774	1,057
West Coast	672	1,722	2,394
Northern	333	993	1,326
Totals, 1925	1,288	3,489	4,777
Totals, 1924	1,364	3,505	4,869

The following statement shows the tons of coal raised, persons employed, lives lost by accidents in or about collieries, &c., to 1925.

Year.	Output, in Statute Tons.	Persons ordinarily employed.			Tons raised per each Person employed below Ground.	Lives lost by Accidents in or about Collieries.		
		Above Ground.	Below Ground.	Total.		Per Million Tons produced.	Per Thousand Persons employed.	Number of Lives lost.
Prior to 1900	13,444,437	*	*	*	*	*	*	165
1900 ..	1,093,990	617	1,843	2,460	593	3·65	1·62	4
1901 ..	1,239,686	688	2,066	2,754	600	2·42	1·09	3
1902 ..	1,365,040	803	2,082	2,885	655	1·46	0·69	2
1903 ..	1,420,229	717	2,135	2,852	665	2·81	1·40	4
1904 ..	1,537,838	763	2,525	3,288	609	2·60	1·21	4
1905 ..	1,585,756	833	2,436	3,269	651	3·78	1·83	6
1906 ..	1,729,536	1,174	2,518	3,692	687	3·46	1·62	6
1907 ..	1,831,009	1,143	2,767	3,910	662	6·55	3·07	12
1908 ..	1,860,975	992	2,902	3,894	641	2·68	1·28	5
1909 ..	1,911,247	1,159	3,032	4,191	630	3·66	1·67	7
1910 ..	2,197,362	1,136	3,463	4,599	634	7·28	3·48	16
1911 ..	2,066,073	1,365	2,925	4,290	706	6·77	3·26	14
1912 ..	2,177,615	1,130	3,198	4,328	681	4·13	2·08	9
1913 ..	1,888,005	1,053	3,197	4,250	590	3·18	1·41	6
1914 ..	2,275,614	1,176	3,558	4,734	639	21·53	10·35	49†
1915 ..	2,208,624	1,050	3,106	4,156	711	4·07	2·16	9
1916 ..	2,257,135	988	3,000	3,988	752	2·65	1·50	6
1917 ..	2,068,419	1,090	2,893	3,983	715	1·93	1·00	4
1918 ..	2,034,250	1,102	2,892	3,994	703	2·95	1·50	6
1919 ..	1,847,848	1,095	2,849	3,944	648	5·41	2·53	10
1920 ..	1,843,705	1,152	2,926	4,078	630	0·54	0·24	1
1921 ..	1,809,095	1,218	3,149	4,367	574	5·52	2·28	10
1922 ..	1,857,819	1,191	3,365	4,556	552	3·23	1·31	6
1923 ..	1,969,834	1,353	3,647	5,000	540	2·53	1·00	5
1924 ..	2,083,207	1,364	3,505	4,869	594	4·80	2·05	10
1925 ..	2,114,995	1,288	3,489	4,777	606	3·78	1·67	8
Totals ..	61,719,343	..	..	..	..	..	..	387

* For returns for previous years see page 32, Mines Statement, 1921. † Year of Ralph's (Huntly) explosion.

SECTION III.—ACCIDENTS.

The following is a summary of accidents in and about coal-mines during 1925, with their causes :—

—	Fatal Accidents.		Serious Non-fatal Accidents.	
	Number of Separate Fatal Accidents.	Number of Deaths.	Number of Separate Non-fatal Accidents.	Number of Persons injured, including those injured by Accidents which proved Fatal to their Companions.
Explosions of fire-damp or coal-dust ..	..	..	..	..
Falls of ground	5	5	16	16
Explosives	..	..	2	2
Haulage	3	3	1	1
Miscellaneous—Underground	..	..	4	4
On surface	..	..	2	2
Totals	8	8	25	25

The fatalities being in the proportion of 1·67 per thousand persons employed, and 3·78 per million tons produced.

The following is an account of the fatal accidents.

At Shag Point Mine, on the 13th January, James Clever, 23 years of age, employed as a trucker, received a compound fracture of the left femur, as a result of which he died in Dunedin Hospital two days later. Deceased had worked only a week in the mine, and at the time of the accident was "hanging-on" at the foot of a short steep jig. He was awaiting the landing of the full race, but had not taken the precaution to stand clear. The jig-rope was held to the coupling by means of three clamps. Apparently, as a result of the sudden application of the brake the rope-clamps failed and deceased was struck by the runaway trucks. The Coroner's finding was to the effect that the death was accidental, and that there did not seem to be any negligence on the part of any one.

At Taratu Mine, on the 22nd January, James McGowan, aged 53 years, was buried by a fall of gravel in the winding-shaft, and his body was not recovered till the 24th. As a result of an uncontrollable fire in the shaft section it was decided to abandon the section and fill the shaft with gravel, tipped into the shaft at the surface. The east winding-compartment was filled to a level of about 50 ft. above the gravel in the west compartment, and at the time of the accident deceased and a miner named D. A. Jordan were engaged in removing part of the midwall in order to allow gravel to run from the east to the west winding-compartment. Three boards were removed and some of the gravel shovelled out when the gravel fell with a rush, broke the midwall above, and buried both men beneath about 12 ft. of gravel. Jordan at the time of the fall had been standing in the pumping-compartment, and the pipes and timber saved him; he was released early the following morning.

At the Liverpool State Mine, on the 28th February, John Edward Knox, a miner, was killed by a fall of roof in his working-place. Deceased and his mate had been taking a lift of a pillar, and the lift had just been holed through into the goaf above. The lift was timbered with sets over the trucking-road and a double row of props and one chock on the right-hand side next the goaf. The place was about 10 ft. high, and the roof was a fairly strong sandstone. Shortly before the accident a fall had occurred in the goaf. This had evidently weakened the roof in the lift, for it fell to a parting 7 ft. up, without any warning being given. The timber sets were all swung out rather than broken. Knox was caught by the fall and instantly killed. The Coroner in his verdict stated that all precautions had been taken to make the place safe, and that no blame was attachable to any one.

At Paparoa Mine, on the 1st August, a miner named George Robert Smith, aged 44 years, was killed by a fall in his working-place. Deceased and his mate had been engaged in breaking off a new lift in a pillar. They had retimbered the level, using a carrying-set which supported the ends of four bars. Weight coming suddenly on the timber swung one end of the carrying-set and the soft-coal roof came down and buried deceased. The inquest was held by a Coroner and jury, and a rider was added to the verdict of accidental death stating that electric safety-lamps would have given greater safety than oil safety-lamps.

At the Liverpool State Mine, on the 19th August, James Whelan, aged 60 to 65 years, was severely injured by a race of runaway trucks, and died the same day. Deceased was employed "hanging-on" at the bottom of a bank. The bank is worked by two jigs, one above the other. The empty race on the top jig became detached from the rope, and the full race broke the stop-block at the head of the bottom jig and continued on down the bottom jig, left the rails at the curve at the bottom of the bank, and knocked out the timber. Deceased was struck either by the runaway trucks or by the timber.

At the Clydevale Mine, on the 7th September, Thomas Ronayne, aged 76 years, a director of the company, was killed by falling out of a bucket on the aerial tramway. Deceased was on a visit to the mine, and, against the advice of the manager, decided to travel up to the mine on the aerial which conveys the output from the mine-mouth to the railway-siding. When half-way across deceased must accidentally have undone the clip which kept the bucket upright, with the result that he was thrown out and fell from a height of 25 ft., fracturing his skull.

At Dobson Mine, on the 12th October, James Ford, aged 67 years, was injured by a fall of roof, and died from shock on the same day. Deceased was engaged taking out a lift of a pillar in the Mount Buckley section of the mine. The lift had been holed through to the level above and was in faulted ground. When stripping back the coal, deceased uncovered a greasy back. A fall took place, which swung the timber and struck deceased.

At Millerton Mine, on the 23rd October, a miner named James White was killed by a fall of top coal. A narrow road had been driven through the corner of a pillar to get at the top coal inside, a triangular stump being left on the right-hand side for protection. The seam had a thickness of over 30 ft. Tops had been dropped ahead of the narrow place, and as the stump had crushed it was taken out. The rails were then lifted and laid along the continuation of the board, and top coal was being filled from the left-hand side. To the left of the road the roof was too high for timber, and the trucking-road was protected by one row of props on the low side. The place was very wide, the width being necessary to get the tops to fall. Just prior to the accident a shot had been fired, and deceased had thereafter returned to his place, and was engaged in filling a truck when a piece of top coal fell from overhead and injured him so seriously that he died almost immediately.

SECTION IV.—WORKING OF THE COAL-MINES ACT.

(*a.*) Permitted Explosives.

(Regulations 241 to 245 inclusive.)

The following is a table showing the quantity of permitted explosives used and the number of shots fired at New Zealand coal-mines during 1925:—

Inspection District.	Quantity of Permitted Explosives used (lb.).			Number of Shots fired.	Number of Misfired Shots.				Approximate Quantity of Coal produced.
	A2 Monobel.	Ligdynite.	Samsonite.		By Defective Explosive.	By Defective Detonators.	By Defective Leads.	Total.	
									Tons.
Northern (*i.e.*, North Island) ..	79,103	..	..	94,639	..	184	32	216	217,389
West Coast (of South Island) ..	159,209	..	68,155	255,045	43	352	145	540	949,957
Southern (*i.e.*, Canterbury, Otago, and Southland)	26,745	..	25,096	78,159	..	48	15	63	225,076
Totals	265,057	..	93,251	427,843	43	584	192	819	1,392,422

Sixty-six per cent. of the coal produced in the Dominion during 1925 was broken down by permitted explosive, and the average production of coal per pound of explosive used was 3·8 tons, and per shot fired 3·2 tons.

(*b.*) List of Mines required by Law to use Permitted Explosives.

The following is a list of mines as at the 1st December, 1925, required by law to use permitted explosives:—

Northern Inspection District.

Pukemiro Collieries, Pukemiro—throughout South Mine.
Rotowaro Colliery, Rotowaro—throughout Nos. 1 and 3 Mines.
Glen Afton Colliery, Glen Afton—All sections of the mine with the exception of A section.

West Coast Inspection District.

North Cape Mine.
Puponga Mine.
Westport-Stockton Mine.
Westport Coal Company's Mines.
J. T. Dove's Mine.
Coal Creek Mine (McGuire and party).
Cardiff Bridge Mine.
Old Cardiff (Clay Pit).
St. Helens Mine (McAllister and party).
Westport-Mokihinui Mine.
Chester and party's Mine.
Marris and Murray's Mine.
Ngakawau Mining Syndicate's Mine.
Whitecliffs Mine.
Reefton Coal Company's Mine.
Phœnix and Venus Mine.
Victory Mine (now Caliope).
Woodlands Mine.
Empire Mine.
Lankey's Creek Mine (Bolitho Bros.).
Ferndale-Timaru Coal Company's Mine.
Sherwood (now Morrisvale) Mine (Morris and Learmont).
Paparoa Mine.
Blackball Mine.
Armstrong and party's Mine.
Baddeley and party's Mine.
Boote and party's Mine.
Dixon and party's Mine.
Clark and party's Mine (Hillside).
Duggan and party's Mine.
Hunter and party's Mine.
Manderson and party's Mine.
McIvor and party's Mine.
Moody Creek Mine (Simpson and party).
Smith and party's Mine.
Spark and party's Mine.
James Mine.
Liverpool Collieries.

Southern Inspection District.

Castle Hill Mine, Kaitangata—throughout the mine.
Kaitangata No. 1 Mine, Kaitangata—throughout the mine.
Kaitangata No. 2 Mine, Kaitangata—throughout the mine.
Wairaki No. 1 Mine, Ohai—throughout the mine.
Birchwood Mine, Ohai—throughout the mine.
New Brighton No. 1. Mine, Ohai—throughout the mine.
Linton No. 2 Mine, Ohai.
Ohai Coal Company's Mine, Ohai.

(*c.*) List of Mines required by Law to use Safety Lamps.

The following is a list of the mines as at the 1st December, 1925, required by law to use safety lamps :—

Northern Inspection District.

Pukemiro Collieries, Pukemiro—Main North Heading Section (now abandoned).
Rotowaro Colliery, Rotowaro—throughout No. 1 Mine.
Glen Afton Colliery, Glen Afton—No. 1 Heading Section.

West Coast Inspection District.

State Collieries—Morgan Seam.
State Collieries—Morgan Low-level Adit.
State Collieries—No. 4A Mine.
Hilton and Party's Mine.
Hunter and Party's Mine.
Manderson's and Party's Mine.
Paparoa Coal Company's Mine.
Millerton Mine (Westport Coal Company's).
Dobson Mine (Grey Valley Collieries).

Southern Inspection District.

Castle Hill Mine, Kaitangata—throughout each shift.
Kaitangata No. 1 Mine, Kaitangata—throughout each shift.
Kaitangata No. 2 Mine, Kaitangata—throughout each shift.
Wairaki No. 1 Mine, Ohai.—throughout each shift.
Birchwood Mine, Ohai—throughout each shift.
New Brighton No. 1 Mine, Ohai—throughout each shift.
Linton No. 2 Mine, Ohai.
Ohai Coal Company's Mine, Ohai.

(*d.*) Dangerous Occurrences reported.

(Regulation 94.)

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

Taratu Mine.—The shaft section of the Taratu Mine had been much troubled with fires for some years back. During the Christmas and New Year holidays a large fall occurred which allowed an old fire area in the seam above to become connected with the recent workings. Fire broke through on the 2nd January, 1925, and all efforts to check it failed, with the result that the shaft workings had to be abandoned.

New Brighton Mine.—On the 10th March a heating occurred near the bottom of No. 2 dip in the New Brighton Mine. No attempt was made to seal it off at the time. On the following day and on the 13th March small explosions took place, and the mine had to be shut down to allow the water in the mine to rise above the level of the fire area. The mine was reopened on the 21st April, but on the 1st May fire again broke out in the same or an adjoining area, and on the 2nd May two explosions of gas occurred. The mine was again shut down with stoppings in the intake and return and not reopened till 1st June. On the 12th September heating was again discovered, and the mine was shut down. It was reopened again on the 15th October and worked only till the 8th November, when a further heating occurred. Stoppings were again erected, sealing off the mine. An explosion occurred behind the stoppings shortly after they were completed. On this occasion the owner was notified that no more work would be allowed in the lower levels. Without any doubt the cause of the fires in this mine was the bad method of working which was practised, and particularly the smallness of the pillars left in the first working.

Linton Mine.—On the 14th July a heating was discovered in the pillar workings in the main seam. This increased, and the area had to be sealed off. The seam is very thick, and in the pillared ground the roof has broken to the surface. This prevented the fire being completely sealed off, and the black-damp continued to enter the mine from the goaf. To overcome this the ventilating-fan was changed so as to act as a blower. On the 25th November in another pillar section heating was discovered, and the section had to be sealed off.

Phœnix and Venus Mine.—On the 21st August a serious fire broke out in the upper workings of this small mine. The stoppings erected to seal it off were inefficient, and the fire broke through and spread throughout the whole of the workings, with the result that the mine was lost.

Millerton Mine.—During October a fire was discovered in the pillar workings in the Third West dip section. Strenuous efforts were made for some weeks to locate the seat of the fire, in order to either fill out the heated material or to drown the fire with water, but without success. Eventually it was found necessary to build nine large concrete dams and to flood the area.

Hikurangi Shafts Colliery.—In the East section pillar workings the weight was excessive for the size of pillars and crushing of the pillars occurred. On the 14th December a fire broke out, and effective measures were not immediately taken to check it, with the result that the fire soon attained serious dimensions. Eventually the fire was sealed off by the erection of fourteen stoppings. A considerable quantity of coal has been irretrievably lost as a result of this fire.

(*e.*) Electricity at Collieries.

(Regulation 253.)

The following is a summary of the annual returns, in accordance with Regulation 253 (*c*), regarding electrical apparatus at collieries :—

Number of collieries at which electrical apparatus is installed	20
Number of continuous-current installations	12
Number of alternating-current installations	8
Number of collieries electrically lighted	18
Number of collieries using electrical ventilating-machines	13
Number of collieries using electrical pumping plants	13
Number of collieries using electrical haulage plants	11
Number of collieries using electrical screening plants	5
Number of collieries using electrical miscellaneous plants	9
Number of collieries using electrical locomotives	1
Total horse-power employed from motors on surface	2,735
Total horse-power employed from motors below ground	1,745

(*f.*) Prosecutions.

There were thirteen prosecutions during the year.

1. A mine-manager was prosecuted for a breach of Regulation 246. The mine was a safety-lamp mine, and he failed to withdraw the men on the occasion of an underground fire. He was fined £5 and costs.

2. Two miners were prosecuted for taking into the mine explosives which were not in a securely covered case or canister. They were each fined £1 and costs.

3. A mine-manager was prosecuted on two charges, the first for failing to provide in the bath-house efficient means for drying clothes, and, the second, for failing to provide the necessary warm water to showers and hand-basins. On the first charge he was fined £1 and costs, and on the second charge £5 and costs.

4. A manager was prosecuted on three charges for failing to comply with the requirements of the Act as regards ventilation. On the first charge he was fined £5 and costs, and was convicted and ordered to pay costs on the other charges.

5. A miner was prosecuted for failing to set sprags in his working-place prior to commencing holing. He was fined 5s. and costs.

6. A deputy was prosecuted for failing to see that a working-place was properly timbered. This prosecution did not succeed.

7. A mine-manager was prosecuted for permitting a place, where a serious accident had occurred, to be interfered with before it had been examined by the Inspector. He was convicted and ordered to pay costs.

8. A miner was prosecuted for taking into the mine explosives which were not in a securely covered case or canister. He was fined £2 and costs.

9. A mine-manager was prosecuted for failing to provide in the working-places the minimum amount of ventilation required by the Act. He was fined £5 and costs.

10. A mine-manager was prosecuted for permitting a place, where a serious accident had occurred, to be interfered with before it had been examined by the Inspector. He was fined £5 and costs.

11. The owner of a mine was prosecuted for not having a mine-manager as required by law. He was fined 5s. and costs.

12. A deputy was prosecuted for firing a shot in a place which contained inflammable gas. He was fined £1 and costs.

13. A manager was prosecuted for failing to provide an amount of ventilation sufficient to keep the working-places free from inflammable gas. He was fined £5 and costs.

SECTION V.—LEGISLATION AFFECTING COAL-MINES.

The Coal-mines Act, 1925, consolidated and amended the Coal-mines Act, 1908, and the Coal-mines Amendment Acts of 1908, 1909, 1910, 1914, 1915, 1919, 1920, 1922, and 1924, and also certain sections of the Finance Acts of 1916 and 1921–22. The new Act is divided into four parts : Part I deals with the granting of coal-mining rights ; Part II deals with the regulation of coal-mines, administration, management, provisions as to safety, accidents, and health and welfare ; Part III provides for the operations of State coal-mines ; Part IV contains general provisions.

Part I contains only small changes and additions to the old provisions.

Part II contains the most important alterations. The provisions of the Act of 1908 were suited to the requirements of the industry in its early stages, but the growth of the industry and experience here and in other countries rendered necessary the numerous amending Acts of 1908 to 1924. The new Act incorporates these amendments, and also embodies many provisions which were previously dealt with in the Special Rules in the Second Schedule to the 1908 Act and in regulations. New amendments are in the direction of making the safety provisions more stringent, and relate to winding appliances for raising and lowering men, manholes on travelling-roads, travelling on haulage-roads, height of travelling-roads and horse-roads, signalling appliances, &c. Under the 1908 Act provision was made for the payment of accident relief to miners from either of two funds known as the Sick and Accident Fund and the Coal-miners' Relief Fund; under the new Act the Sick and Accident Funds have been abolished, and accident relief will in future be paid from the Coal-miners Relief Fund, which is administered by the Public Trustee with the assistance of local committees.

Only minor alterations are contained in Parts III and IV.

The Special Rules in the Second Schedule to the 1908 Act had to be provided for in the regulations if not provided for in the new Act. This necessitated a revision of the previous regulations, and amending regulations were gazetted on the 21st May, 1925, in which, at the same time, the provisions were grouped under appropriate headings, and new provisions regarding stoppings and air-crossings, railway-sidings, signalling, appointment of shot-firers, &c., were added.

I desire to acknowledge the efficient help and co-operation which I have received from the Inspectors during the past year. During the previous year tentative steps were taken to get better mining methods adopted at several of the collieries with the object of thereby attaining greater safety and at the same time reducing the excessive loss of coal. This important phase of our work has received increased attention during the past year and has met with a considerable measure of success. In some cases new methods have been adopted and are being tried out in practice, and in others the proposals are under consideration. The past year has been marked by the increasing readiness on the part of the various coal companies to favourably consider any scheme for better methods of working put forward by the Inspectors and a desire to co-operate with the Inspectors in devising and carrying out such a scheme.

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

ANNEXURE A.

SUMMARY OF REPORTS BY INSPECTORS OF MINES.

Northern Inspection District (Mr. William Barclay, Inspector).

During the year 1925 the total output produced by the coal-mines in the North Island was 672,403 tons. These figures show an increase of output of 34,878 tons when compared with those of the previous year. No new collieries produced coal during the year. A considerable area of brown coal has been proved by outcrops and prospecting in the Waitewhena Valley district, Ohura, Taranaki. A branch railway-line of ten miles will be required to connect these coal deposits with the Government railway, which is now almost completed to Ohura. In the Waikato district an extensive field of brown coal has been discovered by boring at Waikokowai. The coal-seam varies in thickness from 10 ft. to 15 ft., and a company has been formed with a capital of £130,000 to develop this proved coal area. Preliminary works are proceeding in connection with the building of the mine officials' houses and engineering surveys of tramway to give access to the mine. There were nine serious accidents, resulting in fractured limbs to four persons, and loss of vision in one eye to three other affected persons. None of the accidents had a fatal result, and the injured men were not permanently incapacitated from following light work. Hydrated cement, applied by a cement-gun, is being used for plastering the sides of the main roadways in the Pukemiro Colliery Company's south colliery. The results are extremely beneficial, as the finished cemented surfaces tend to prevent fretting of coal from the pillar-sides, falls of ground, and decreases to a great extent the risk of roof accidents. The cement is forced into the crevices and cracks in the coal-seams, and it seals up the small cavities which collect and hold fine coal-dust. It is also applied to the standing timber in the roadways, and the cement-plaster should arrest decay by preventing the moisture from penetrating the bark of the props, particularly in the return airways. The requirements in connection with the Stone-dusting Regulations are generally well observed in the principal collieries, and special attention is being paid by the management to the treatment of the roads. Finely pulverized limestone-dust is obtained from the nearest lime-works and applied to the main roads; pumice sand is also applied in some mines. At a few mines the roof, sides, and floor in the vicinity of shot-holes are being sprayed daily with water before the shots are fired. Some improvements in connection with the incidence of coal-dust accumulations on roads has been obtained by the exclusive use of steel dust-proof mine-trucks. There is still room for improvement in regard to the testing of the dust-mixtures on roads, and the instructions recently issued by the Chief Inspector of Mines should assist the mine-managers to conform to the requirements of the regulations. They provide for systematic sampling, weighing, and testing of the dust, and the result of the analysis should show the portion of any particular road requiring more frequent applications of incombustible dust.

Kawakawa Colliery.—The working-seam is thin, with occurring bands of shaly inferior coal, and much stone-work is necessary in order the make the drives of sufficient height for the passage of skips. Operations during the year were confined to the removal of outcrop pillars abandoned by the Bay of Islands Coal Company. Boreholes put down on an adjoining prospecting lease proved the continuity of the seam to the north of the present workings. There is a good demand for coal in this district.

Hikurangi Coal Company (Limited).—Hikurangi (P.W.) Mine: A party of miners working on co-operative principles continue to extract the available coal pillars in the company's old mine. Several short dips have been driven in order to win out blocks of coal lying against the fault. Operations were proceeding in the direction of an area worked about thirty years ago, and as there were no plans or records kept to show the extent and position of the old workings I had to ask the management, in view of the likelihood of these abandoned workings containing a dangerous accumulation of water, to discontinue driving development headings and to confine operations to the extraction of the remaining pillars. The mine-workings and plant have been maintained in good repair, and a high extraction of pillar coal has been obtained by the party.

Hikurangi Coal Company (Limited).—No. 2 Mine (Shafts): During the year two separate sections, known as the East and West sections respectively, have been developed to the full rise of the coal-seam. The seam is moderately inclined, having a gradient of one in six. The bords of the East section reached the 60 ft. downthrow fault, and the standing pillars of the first workings were extracted from the fault outwards to the shaft. The coal-seam being one subject to spontaneous combustion, a fire commenced in the goaf in November, and stoppings were erected in order to suppress the outbreak. Owing to inadequate pillars being left in the first workings, a crushing movement extended over the whole section, with the result that the 30 ft. pillars between the respective bords were crushed to such an extent that stoppings could not be maintained in close proximity to the fire area. In order to effectively seal off the fire-disturbed section the safety stoppings had to be erected on a position-line which included a considerable area of coal pillars, and that coal is now irretrievably lost. The headings in the West section have also reached the proved 60 ft. downthrow fault, and preparations are being made in this section to pierce the displacement. The pillars in this section are also of small dimensions, and considerable trouble will be encountered (due to crushing and creeping) when the pillars are being extracted. Owing to the broken character of the roof, due to an intervening band of 2 ft. of jointed fireclay between the limestone roof and the coal-seam, the bords in the mine do not exceed 9 ft. in width by 7 ft. in height, and sets of timber are systematically erected to support the roof in all places. Prospecting to the south-west is being continued, but the seam is very undulating, necessitating much grading of the roadway. Brick stoppings are being erected in the disused cut-throughs between the intake and return airways. This work should assist in directing the available air-currents to the working-faces, but in order to secure full compliance with the statutory provisions of the Act a modern fan capable of producing 50,000 cubic feet of air per minute at a 2 in. W.G. is urgently required at this colliery. Endless-rope haulage on the surface has been installed in order to move the output from the shaft to the railway-sidings, a distance of 75 chains. The dust on the roadways in the mine was collected and analysed during the year.

Wilson's Colliery.—The stone drive dip section of the mine has been advanced 14 chains in the coal-seam, and the bords to the north have not as yet encountered any faults or displacements of the seam. 50 ft. pillars were formed in this section in the first workings, but a number of the bords have since been widened out from 9 ft. to 20 ft., so that the pillars are not now more than 40 ft. in width. Preparations are being made to install endless-rope haulage in the stone drive section connecting with the direct haulage in the main dip. In No. 7 pillar section the coal is being rapidly removed by the extraction of the pillars. A crushing movement "weighted" over this section; in consequence the working-places were temporarily abandoned, and new roads had to be driven through the pillars and bords in order to restore roadways into the section.

Following the cessation of pillar-extraction, while the roads were being repaired, a marked increase in the temperature of the atmosphere was experienced, due possibly to oxidation and heating of the coal in the crushed pillars. The heat produced could not be dissipated by the air-currents, owing to the lack of proper airways around the working-faces. With the view of ascertaining the existing health conditions consequent to the abnormal temperatures, numerous tests were made with the kata thermometer in order to determine the existing cooling-power of the available air-currents at the affected faces. The observations with the wet "Kata" were useful in showing that a high rate of cooling-power (as indicated by the "Kata") could be maintained in warm places by moderate air-currents conducted to within short distances of the working-faces. Work is proceeding in connection with the erection of brick separation stoppings between the intake and return airways and the enlargement of the main return airway to the shaft. An ambulance-room, to be used exclusively for first-aid treatment, has been provided during this year. Fixed electric lights have been installed along the railway-sidings, rendering better facilities for shunting railway-wagons at night. During the year samples of mine-dust were collected and analysed, and the results showed a small percentage of dust passing the 30-mesh sieve, and none, owing to dampness, passing through the 200-mesh sieve.

Kerr and Co. (The Rocks Mine).—The Rocks section of the mine has been closed, and operations are confined to the West Byron section of the property. Six chains of a stone dip have been driven to reach the coal-seam, which is lying very steep, and troubled with faults. Several crosscuts were set out to work the seam and connect with the stone dip. The inclination of the seam does not permit of satisfactory haulage, and the coal has to be shovelled long distances to the crosscuts. The main road has been maintained in good order, and the ventilation is ample for the number employed.

Silverdale Colliery (Foot and Doel's).—During the latter portion of the year mining was resumed on this Crown lease. A new drive was commenced from the outcrop following the coal-seam to the road boundary, and bords are now being set away from the main heading. An intervening bord of fireclay is mined with the coal, and the clay finds a ready market in Auckland. The output is conveyed by motor-lorries to Hikurangi, a road distance of three miles.

Northern Co-operative Mine (Cunningham Crown Lease).—Operations were confined to the extraction of a few outcrop pillars. The coal-seam was thin, and the mine closed down early in the year owing to unfavourable mining-conditions. A license to prospect for coal was granted to Mr. Cunningham over an adjoining area formerly worked by Kerr and party, and the mining plant was removed to the prospecting-area.

Christie's Colliery (Freehold).—The dip pillars are almost worked out, and a level drive from the surface has been driven for the purpose of winning the pillar coal in the rise section. A dip drive is in course of being driven to connect with an area of coal proved by boring to exist in a direction south of the present workings. The mine is operated by a party of miners working on co-operative principles, and the Act and regulations are generally well observed by the workmen. The output of 20 tons per day is carted to Hikurangi Railway-station.

Ruatangata Colliery (Freehold).—The mine has been maintained in good order. The output is used for brick-burning, and only a limited quantity is required. A level drive at a lower level is being driven in order to tap standing pillars left by a former working. The drive is strongly supported with timber, and great care is taken in driving towards the old workings.

Waro Colliery, Whangarei (Freehold).—The main dip has been extended 2 chains, and the coal has improved in quality at the lower level. Pillars are being extracted from the north section. The electrical machinery underground is under the supervision of a competent engineer connected with the Whangarei Power Board. The shaft poppet-legs carrying the winding-pulleys showed indications of decay, and repairs were effected by the erection of two additional timber standards.

Waikato (including Mokau).

Rotowaro Colliery.—The output is derived from three mines—namely, No. 1 Mine, No. 2 Mine, and Taupiri Mine section (bottom seam). In No. 1 Mine the pillars are being removed in the top seam. Emergency stoppings are erected ahead of actual requirements, and the finished districts are sealed off quickly at the few openings to the sections immediately after the presence of fire-stink is detected. Development in the West section is proceeding to connect with the proved seam beyond the fault. The seam at the face of the headings in the Main Jig section has attained a thickness of 25 ft. of clean, hard coal.

In No. 2 Mine the pillars have been extracted from the top seam, and a few bords have been worked in an upper top seam. During the year a stone drive was driven into the proved bottom seam, 14 ft. in thickness, and the drive is conveniently placed to connect the bottom seam with the existing haulage-roads.

Operations in the Taupiri section were confined to driving out main headings and dips for the purpose of providing working sections. The width of the pillars between the headings has been increased to 18 yards.

A 94 in. Sirocco fan capable of inducing 100,000 cubic feet of air per minute has been installed to ventilate the Taupiri new mine section. A "Sullivan" coal-cutting machine has been in operation in the new mine for a period of six months. An additional electric generator and a new switchboard were installed in the power-house, and preparations are being made to erect new screens at the colliery. Considerable quantities of incombustible dust were applied in treatment of the coal-dust on the main roads. Several reports of inflammable gas were recorded during the year. The coal-slack from three mines is dumped at a central point at Rotowaro Mine, and is uplifted and sold on occasions when the trade warrants a demand for increased quantities.

Pukemiro Collieries.—This well-established colliery continues to produce a large output. The headings are carried forward in advance of the bord sections. This method of working provides extensive coal reserves. In the North Mine section the first workings have reached the outcrop boundary, and the pillars in the east district are being extracted towards the main roads. The roof is composed of jointed fireclay, and it breaks within the limits of the excavated places. No great roof-pressure has "weighted" over the standing pillars, and no difficulties have yet been encountered in maintaining safe roadways. A north-west heading has been driven in faulted ground. In the South Mine the west headings are proceeding in a direction parallel to the main north fault, and several sections have been opened out by right-angle headings driven from the west heading. The workings in this mine section are becoming more extended, and a subsidiary haulage plant is being installed to operate in the north district. An air crossing is in course of construction for the purpose of connecting the East Mine section with the South Mine ventilating-system. "Cushioned" blasting is being practised by the shot-firers in the Pukemiro Collieries. The cushioning effect of the exploded shot is obtained by leaving an air-space of 2 in. to 3 in. between the explosive charge and the stemming-cartridges, which are composed of finely ground limestone, with the exception that the collar of the shot-hole is tamped firmly with clay. The management contends, since this method of stemming shots has been in vogue, that the coal is brought down with two-thirds of the usual charge, and a higher percentage of lump coal is obtained. The travelling-roads in the mines have been swept clean of coal-dust, and they were subsequently treated with incombustible dust—chiefly pulverized limestone.

The air-currents are well conducted to the working-faces throughout the mine. The equipment and mining methods adopted are maintained up to date, both in regards to safety and desirable mining-conditions.

Glen Afton Collieries.—There are six separate producing sections in the mine, locally designated A, B, C, D, E, and F sections. The main haulage-road has been driven (11 ft. wide by 7 ft. high) a distance of 72 chains, and has reached a proved 70 ft. upthrow fault. Boring is in progress in order to determine the thickness of the seam beyond the fault. The headings in E section have been advanced 40 chains westward from the main haulage-road, and a subsidiary endless-rope-haulage plant (electrically driven) has been installed to deal with the outcrop from this section. The coal-seam varies in thickness from 10 ft. to 15 ft. in the various sections.

The Sirocco fan is capable of inducing 80,000 cubic feet of air per minute, and that quantity is recorded in the return airway. Additional air-crossings, constructed in brick, are being erected for the purpose of directing a sufficiency of air into the secondary airways. Tests with the hygrometer revealed air-saturations of 60 and 84 per cent. in the intake and return airways respectively. The excess of moisture in the return shows, when calculated in grains of moisture per cubic foot, that many tons of water are being removed daily from the mine by the action of the fan.

The travelling-road, to afford a separate road for workmen passing to and from the faces, has not yet been completed. Additional accommodation has been provided in the bathhouse. The floors of the main roads have been systematically cleared of fine dust, and incombustible dust has been applied to the sides and floors of the main roads.

Samples of mine-dust have been collected and analysed, and the following results are recorded of analyses of dust collected before and after treatment of the roads: 30th March, 1925—Percentage of combustible matter contained in four samples (before treatment) = 78·08, 74·45, 70·20, 65·68. 7th December, 1925—Percentage of combustible matter contained in twelve samples (after treatment) = 40·60, 39·10, 44·20, 30·00, 40·20, 44·90, 59·50, 50·30, 47·80, 47·20, 40·44, 10·80. Practically the whole of the roadways have been sampled and tested.

Graham's Colliery (Co-operative Party).—A small ventilating-fan was installed during the year. The seam maintains a thickness of 7 ft., and owing to a heavy roof the working-places do not exceed 8 ft. in width. A few pillars are being extracted near an outcrop of the seam. Railway connection has been effected to the mine, and the output should in consequence be greatly increased. The jig to the railway-siding is properly equipped and maintained in good order. Nineteen men are employed in and about the mine.

Pukemiro Junction (Crown Lease; Co-operative Party).—A portion of the low coal area is being worked, and sets are being substituted for props. The pillars in the East section are nearing exhaustion, and preparations are being made to develop a mine section on the western boundary of the lease. Fixed screens for the separation of nuts from the coal have been erected. The mine is in good order, and the regulations have been properly observed by the party.

Waipa Colliery.—The main haulage endless rope has been extended 20 chains to a point connecting with all the branch section roads. The main dip headings have been advanced 10 chains from the upthrow fault, and two additional sections are made available for the production of coal. A cross-drift, rising one in two, through stone, has been driven from the advanced workings to a selected position on the surface, and the management contemplates removing the ventilating-fan to the new air-drift for the better ventilation of the future workings. The bords in the East section reached a thinning of the coal-seam, and the pillars are being worked back, while the timber supports and roof are in a good condition. The inclination of the seam allows for satisfactory horse haulage. A new stable, for the accommodation of the horses, has been constructed underground, conveniently situated to the return airway and to the surface. The requirements in respect to the construction of brick stoppings between the intake and return have been complied with, and the ventilation at the faces has been good during the year.

Waikato Extended Colliery.—There are approximately 10 acres of standing pillars in this mine, and as the boundary of the seam had been reached the pillars were attacked to maintain the output. The coal-seam varies in thickness from 15 ft. to 20 ft., and bords at a width of 14 ft. by 14 ft. in height have been driven promiscuously throughout the mine. No panels or barriers of solid coal have been provided, and considerable trouble in connection with the stopping of fires may ultimately result. The output of 40 tons per day is supplied to river-steamers for distribution along the banks of the Waikato River.

Huntly Brickworks.—A superior quality of fireclay is opencast-mined and manufactured into tiles, building-bricks, and firebricks. The quarry is properly worked, with due regard to the safety of the workers.

Kimihia Colliery (Auckland University College Endowment Lease).—The mine has been operated by Johnson and party. The dip has been extended towards the Kimihia Lake, and at the face there is evidence of better-quality coal and little water to contend with. The output is conveyed by motor-lorry to Huntly, a distance of three miles.

Taupiri East Colliery (Auckland University College Endowment Lease).—Coal-mining was confined to driving a heading in the coal-seam. The mine is situated about four miles from the railway, and the coal is carted over the county road. Owing to the unmetalled road affording a poor surface for the wagons, coal-carting was suspended during the winter months. A connecting tramway with the Government railway at Kimihia is required to make the mine profitable for those concerned.

Campbell Colliery, Whatawhata (Crown Lease).—Mining operations were resumed by a party of miners. A heading on a free drainage level has been advanced about 6 chains in the coal-seam, and the bords turned off the heading provide an output of 15 tons per day. Railway communication is ten miles distant from the mine, and the small output supplies the needs of the people in this sparsely populated district.

Old Stockman Mine, Mokau.—Local requirements were supplied during the year from a seam of coal 4 ft. in thickness. The seam occurs on an elevated position, and the coal is jigged down an incline to river-boats.

Greencastle Colliery, Mokau.—The seam has petered out in all directions, and the pillar coal is almost exhausted. The output from this small mine was absorbed in supplying local demands.

Welfare.

In the Waikato district the principal coal companies and local bodies subscribed liberally to the Huntly School of Mines. The amounts donated, together with the Department's subsidy, enabled the Managers of the school to maintain a teacher for the promotion of mining education to eighty students. Other welfare work, in connection with providing recreation-grounds, has progressed during the year. The Taupiri Mines Company (Limited) has completed a concrete tennis court at Rotowaro, and another is in course of construction. The Glen Afton Collieries Company (Limited) has provided two asphalt tennis-courts. At Glen Massey two courts were laid down by the Waipa Collieries Co. (Limited), and a bowling-green is also projected for the ensuing year. The tennis-courts and football-ground provided by the Pukemiro Collieries Company (Limited), and managed by a local committee, have been well maintained and patronized during the year.

In the Northern District at Waro (Hikurangi) the work in connection with the conversion of twelve two-roomed huts to four-roomed houses, finished with fencing, drainage, and water laid on from the town supply, is almost completed, due principally to the interest that the Hon. Minister of Mines had taken in the matter. A recreation-ground conveniently placed to the new township and working-mines would be a great boon to the people, as a large proportion of the mine-workers live close to the mines, where there are no public grounds for recreation purposes.

Prosecution.

On the 16th July, 1925, a mine-manager was convicted and fined £5 and costs for failing to provide the minimum allowance of air in the working-places, as required by the regulations.

Dangerous Occurrences (Regulation 94).

On the 6th March, 1925, Manager A. Penman reported a fire in the return airway No. 3 section, Rotowaro Mine. The heated coal was subsequently filled out.

On the 1st August, 1925, a fire was reported in the goaf in No. 3 pillar section, Rotowaro Mine. The fire area was isolated by means of brick stoppings.

On the 14th December, 1925, the manager of the Hikurangi Coal Company's (Shafts) Colliery reported a serious fire in the East section pillar workings. The management was successful in controlling the fire by the erection of fourteen stoppings.

Serious Non-fatal Accidents.

On the 20th January, 1925, George McLay, a miner working at Waipa Colliery, sustained a fractured leg due to a fall of roof stone at the face—liberated by insufficient roof-supports.

On the 22nd January, 1925, Joseph Norman, a miner working at Wilson's Colliery, received injuries which caused a fracture to his left leg. He was engaged in holing a rib of pillar coal in a place where the timber supports were spaced 3 ft. apart. The holing released the face before he had time to step back to safety.

On the 7th February, 1925, L. Mandeno, working at Glen Afton Colliery, met with an accident to his right hand. He was engaged in connecting skips to the rope when his right hand got caught between the clip and the rope. He was disabled for eighty-one days.

On the 8th April, 1925, Robert Dawson, a miner working at Wilson's Colliery, received a compound fracture of his right leg, due to a fall of roof-stone from a face 5 ft. in height. A few minutes before the accident he tried to take down, with a pick, a piece of overhanging suspected stone, but failed to do so; it was left unsupported and subsequently fell upon this man whilst he was engaged in filling a skip.

On the 17th April, 1925, David Porteous, a miner working at Hikurangi Colliery, sustained a fracture of his left leg, due to a lump of coal (50 lb. in weight) becoming dislodged from a sooty back at the commencement of the under-holing and falling on him. The accident could hardly have been anticipated, as the face appeared to be safe.

On the 23rd April, 1925, Albert Carlyon, a miner working at Waikato Extended Colliery, received an injury to his right eye which subsequently became septic and impaired the vision. Carlyon was off work 112 days.

On the 23rd May, 1925, Thomas Grimshaw, a miner working at Pukemiro Colliery, sustained an accident to his left foot, due to a rail falling thereon. Grimshaw was off work 216 days.

On the 4th July, 1925, Thomas Hall, a miner working at Pukemiro Colliery, sustained the loss of half vision of his left eye, due to a septic wound on the pupil caused by flying coal. Duration of disablement, seventy-three days.

On the 3rd July, 1925, Thomas Webb, a miner working at Glen Afton Colliery, sustained the loss of his left eye, due to being injured by a piece of coal from the pick-point. Webb was incapacitated fifty-seven days.

WEST COAST INSPECTION DISTRICT (Mr. C. J. STRONGMAN, Inspector).

Coal-output.

During 1925 the coal output for the combined Grey, Reefton, Buller, and Nelson districts was 950,845 tons, being a decrease of 39,767 tons, made up as follows: Buller district (decrease), 21,497 tons; Nelson district (decrease), 1,125 tons; Reefton district (increase), 2,617 tons; Grey district (decrease), 19,762 tons.

The alteration in the output from the various districts is accounted for as follows:—

Buller District: At the Millerton Mine a considerable number of working-days was lost owing to slackness of the steam-coal trade, and the output from this mine fell from 257,121 tons in 1924 to 224,883 in 1925, a reduction of 32,238 tons.

Nelson District: The output from the Puponga Mine shows a decrease of 1,015 tons when compared with that of the preceding year.

Reefton District: The output from the Reefton Coal Company's mine shows an increase of 4,621 tons for the year as compared with 1924.

Grey District: In the Grey district the State Mines show a reduction, caused by a strike, of 18,119 tons as compared with 1924.

Number of Men employed.

The total number of men employed during the year was 2,392, being a decrease of 88.

Buller District.

DENNISTON COLLIERIES.

Coalbrookdale Mine.—Birchall's Section: The main headings have reached the outcrop at Sullivan's Creek, the total distance driven being 34 chains, and a valuable area of coal has been opened up. Before the rope-road can be extended a considerable amount of grading remains to be done. All recent development in this mine has been on the panel system. In furtherance of this system two headings have been driven in a south-westerly direction for a distance of 12 chains. The coal in this direction is rapidly thinning, and several bands of stone are showing in the face.

McIllwain's Section: Two main headings are being driven with a slight dip gradient in a south-westerly direction. These show coal of good quality, 10 ft. of which is being worked. A third drive located in the bottom seam is being driven to drain the upper seam.

Waterloo: Development in this section is proceeding in a north-westerly direction. The coal is of good quality, 16 ft. in thickness, but stone intrusions cause some difficulty in working. Going north-east the coal shows signs of thinning, but there is an entire absence of stone bands.

Extended Dip Section: All solid workings having been exhausted the output from this section is being won entirely from pillars.

Callaghan's and No. 8 Cascade: The coal from this section is confined to pillar-extraction. The coal is of good quality with a maximum height of 38 ft. Only four pairs of miners employed in this section.

Haulage: During the year an endless rope, 2 in. in circumference and 23 chains in length, was installed in Birchall's section. It is driven by a friction-clutch attached to the main haulage-system. A start has also been made to extend the rope-road in the Waterloo and Extended sections, and a stone drive has been started to tap the field lying to the south-west of the Extended heading.

Prospecting: To prove what is known as the barren area in front of the main heading Extended section five boreholes varying from 77 ft. to 130 ft. in depth have been put down. In the first three coal 16 ft. in thickness was struck; a stone drive 5½ chains will be required to connect the seam with the present workings.

Developments contemplated: The driving of a stone heading to tap the coal south-west of the present workings; water-drive from Hawkin's drive to drain Waterloo dip; alteration and extension of haulage; installation of haulage-system in Waterloo dip; extension of the present haulage in McIllwain's section.

Fires: During the early part of the year the fire area in No. 8 section caused considerable trouble. During November it burned through a stopping near Boles Jig. A new line of stoppings, 20 in number, was built. Up to date these stoppings have successfully held the fire in check.

Ironbridge Mine.—This mine includes the Deep Creek Mine. The bulk of the output has been produced from pillars in the old mine comprising Kruger's section, No. 1 pillar section, and Kiwi section.

In Kruger's section signs of heating were noticed on a fault-line. The coal was much crushed and 30 ft. in thickness. Two drives, one above the other, were driven through the heated coal and the heating dissipated. It is imperative that these drives be maintained.

Deep Creek Section: The coal in this section is of indifferent quality, and a considerable quantity has been left behind as having no commercial value.

Prospecting: During the year three boreholes were put down in the Deep Creek area. At depths varying from 60 ft. to 70 ft. coal and clay were struck. The coal was not of sufficient thickness to permit of profitable working.

Millerton Mine.—No extensive development has been carried out at this mine during the year.

In the North-east section pillar-extraction has commenced near the Stockton boundary, eleven pairs of colliers being employed. The average height of coal varies from 6 ft. to 9 ft., and the roof conditions are good. Thus the conditions for a complete extraction of the pillars are extremely favourable, and a large percentage of coal is being won.

The output from the Old Dip pillar section is derived wholly from pillar-extraction. During the year heating occurred in this section. Steps were immediately taken to ventilate the area affected by splitting a pillar and directing a current of air on to the place. The temperature was considerably reduced by this means.

In the Settlement Extended section the main heading is proceeding in a westerly direction, and the outcrop has been reached by drives north and south. The roof conditions have changed during the year and are now much more favourable from a mining point of view. Eight pairs of colliers are employed in this section. The existence of a top seam having been proved, steps are being taken to open it out, and the entrance is now being prepared.

A fire broke out in the Third West (Settlement) section during October. Dams were erected in an attempt to flood the area.

Seven pairs of colliers are employed in the Fourth West Solid section. In the workings proceeding west the coal has thinned and split. Two bands of stone 10 in. and 5 in. respectively are showing in the face, and several places have been stopped. The workings are now being extended south-west.

Ten pairs of colliers are engaged in the North-east section. All solid workings in this section having been finished, the output is now derived solely from pillar-extraction.

Ten pairs of colliers are employed in the Sixth West Solid section on solid workings. The places are being driven from 7 ft. to 12 ft. in height, and from 12 ft. to 18 ft. in width, with pillars 18 yards square. The overburden is shallow, and pillar-extraction will shortly commence.

The old workings on the Millerton side of the Mangatina section have been reopened, and five pairs of colliers are employed, partly on solid and partly in bottom coal.

Pillar-extraction continues in Evan's Daylight section. The coal in this section is approximately 60 ft. in thickness, with an overburden of 90 ft. During the year a fan has been installed, and an extension of the rope-road, 96 chains, to Settlement Extended is contemplated.

Stockton Mine.—In the Fly Creek area the main headings have been stopped. It is the intention of the manager to commence developing this area on the panel system, and, with this end in view headings are to be started from the outcrop in Fly Creek. Pillar-extraction in the J Dip section continues. The coal is 20 ft. in height and of good quality, but only a limited number of pillars remain to be extracted. Pillar-extraction in the old mine along the boundary of the Westport Coal Company's Millerton lease, adjacent to the water-drive, continues. During the year the output from this section was considerably increased. The whole of the output in C section is won from pillars.

The carriage of coal by flume from the top bin to Ngakawau, a distance of 5 miles 60 chains, was commenced in September. The box of the flume is built of heart of red-pine, having sides 12 in. and bottom 17 in. The flume is lined throughout with galvanized iron $\frac{1}{16}$ in. in thickness. Some difficulty was experienced in seperating the water from the coal, and a considerable quantity of fine coal was lost. However, it is intended to construct settling-tanks to save the small coal. No figures are yet available to prove the success or otherwise of the scheme.

An electric motor for actuating an endless-rope system has been installed at Fly Creek. A Waddle fan driven by a Boving water-wheel was put into operation during the year in the Fly Creek section, and is giving every satisfaction.

Westport Main Coal Company's Mine, Granity.—This small mine adjoins that of the Westport Coal Company's Millerton Mine. To the rise development is proceeding in a north-easterly direction towards the Westport Coal Company's boundary. The main level proceeding east is in good-quality coal, similar to that produced from the Millerton Mine, and varying from 40 ft. to 60 ft. in thickness.

Clydevale Colliery.—The aerial tramway, mono-cable system, driven by a 5 horse-power steam-engine, with haulage-rope 3½ in. in circumference, and a capacity of 40 tons per hour, was completed, and has proved entirely satisfactory for the work for which it was designed. The coal-production from this mine commenced early in June, but almost immediately faulting of the seam caused the cessation of coal-winning. At the end of August, after 3,000 tons of coal had been won, it was decided to extend the aerial tramway to another outcrop further up the hill, a distance of 12 chains south-west of the old bin-site. It is expected to complete this extension during March.

Cardiff Bridge Mine.—The workings of this mine are being extended in a north-westerly direction. The height of coal at the working-faces varies from 8 ft. to 12 ft. During the year a flume, one mile in length, was completed, and this flume has done away with the necessity of several horse-jigs and an aerial tramway; in consequence the output from this mine has been considerably increased, and the cost of transport greatly reduced. The only drawback to the fluming-system of transport is the loss of fine coal, estimated, in this case, to be 15 per cent. of the total output. However, it is to be hoped that the installation of suitable appliances will enable the greater part of this fine coal to be recovered.

Old Cardiff Mine (Dove's).—During the year coal-winnning operations have been extended westerly into Lease No. 5939, and pillar-extraction has commenced. The fire in an adjoining mine, Regan and O'Brien's, is causing the management considerable trouble.

Old Cardiff No. 4 Mine and *Bell's Creek Mine.*—These mines were opened during the year, but only a few tons of coal were won when operations were again suspended.

Regan and O'Brien's Mine. — The old mine having been abandoned, prospecting operations disclosed an area of 1¼ acres, west of the old mine, which has been opened out. Only three men are employed.

Chester and Party's Mine.—Work at this mine has continued steadily throughout the year. Only two men are employed.

Coal Creek Mine, Upper Mokihinui.—On the 13th April a serious fire broke out in this mine. All efforts to extinguish the fire proving fruitless the mine was abandoned.

Celtic Mine.—This mine commenced operations during the year, the coal being won from Lease No. 6357, adjoining the old Seddonville State Mine. The coal is soft and friable and varies from 5 ft. to 12 ft. in height. The output is conveyed from the mine to the Upper Mokihinui Railway station by flume. Five men are employed.

Glasgow Co-operative Party's Mine.—This mine, which is situated near the Cardiff Bridge Mine, commenced to produce coal during the year.

Quin and Party's Mine, Mokihinui.—A small party of three co-operative miners have successfully reopened some old workings near the Mokihinui bins. A drive running in a south-westerly direction is showing 4 ft. 6 in. of hard coal.

Black and Party's Mine, Seddonville.—This party has commenced operations on the State Coal Reserve, Seddonville. Only a few tons of coal produced.

St. Helens Mine, Seddonville.—Work has proceeded steadily at this mine during the year. Only two men are employed.

Grey District.

Liverpool State Mine.—No. 1 Mine (Top Seam): During the year the whole of the output from this section was won from pillars. The pillars now being worked are 30 ft. in height. The false roof is tender, and the gradient heavy, thus rendering the extraction of pillars difficult.

Crosscut Section: Pillar-extraction in this section is not so difficult, the coal being only 8 ft. in height, and the roof hard and strong.

Morgan Seam: In this seam pillar-extraction continues under favourable conditions. On the east level coal-winning operations have ceased, all the available coal having been extracted.

West Level: All work in this level is confined to pillar-extraction.

No. 2 Mine.—Three seams cut by the stone headings are now being worked. In the first (Anderson's seam) the driving to the dip was continued for 3½ chains, when the measures showed a tendency to rise, driving was then stopped.

Kimbell Seam: Two levels going east and west have been started on this seam. The east level is now in a distance of 9 chains in good coal, 20 ft. in height. Two inclines have been driven for a distance of 2½ chains in a northerly direction at a grade of 1 in 3. A change in the strike of the seam was then met, and the directions of the inclines were altered to meet the changed conditions. The West level has been extended some 6½ chains from the stone drive. The coal is of good quality, and mining-conditions generally are favourable.

Morgan Seam, No. 2: During the year the stone headings reached this seam. The coal is of good quality, 30 ft. in thickness. Levels are being driven east and west, and inclines will shortly be set away to reach the Morgan No. 1 level, 24 chains distant.

Ferguson's Dip: Work in this section ceased early in January, 1925.

No. 3 Mine.—During the year the bulk of the output from this mine was won from pillar-extraction. A small section of solid coal, 3 ft. to 4 ft. in height, east of the main haulage-road and left behind in the first working, has been opened, thus prolonging the life of this mine.

No. 3 Extended Mine.—Pillar-extraction in this section continues. Only a small area of coal of approximately 5 acres in extent remains to be won.

The new bridge over the Seven-mile Creek leading to the No. 2 Mine has been completed, and a haulage-engine installed near the power-house. A new bathhouse, built of concrete, has been completed at the Middle Break, and is extensively used.

James State Mine.—The main heading is now in a distance of 63 chains, and is within 24 chains of Kendrick Creek. After passing through a roll, 6½ chains in length, that pinched the seam, the heading-face now shows 5 ft. 6 in. to 6 ft. of clean hard coal. To the west work has been confined to winning coal between the main heading and the outcrop. Six places are at present being worked. To the west of the main heading the inbye workings have been extended some 4 chains. The coal in this direction averages 5 ft. 6 in. in height. Operations outbye have been confined to winning coal already proved, further development having been suspended by faulting of the seam.

Blackball Mine.—During the year work commenced in No. 3 level off No. 9 dip, which is now producing the bulk of the output. The coal is of good quality. During July work in No. 1 level, No. 9 dip, ceased, all coal that could be safely won therefrom having been extracted; these workings are now sealed off. Recently a start was made to open up No. 2 dip, which has been full of water for the last nine years, and it is hoped shortly to have the water pumped out. The total output for the year was derived from the workings in No. 9 dip section; an average of forty-five pairs of colliers being employed.

With the satisfactory development of No. 3 level the main haulage-rope from the surface was extended to a point in the main dip immediately opposite the No. 3 level. During February a start was made to construct an additional outlet from No. 9 dip workings to the surface. This additional outlet takes the form of a rise at a gradient of 1 in 1. At the end of the year it was driven approximately 476 ft., leaving 50 ft. to be completed. When finished it will serve as an additional outlet, intake airway, cable-way (in lieu of present level), and will also be used for pumping purposes.

On 21st December there were indications of heating in the No. 2 heading off No. 2 level No. 9 dip, and although circumstances indicated that fire would not break out for some time the area was sealed off. The amount of coal abandoned was not considerable; it is expected that this coal will be won at a later date.

Paparoa Mine.—During the first portion of the year the output from this mine was derived from pillar-extraction, and during the latter portion from solid workings. An average of fourteen pairs of miners were engaged.

At the beginning of the year a start was made to reopen the main West level. The repair work finished, a pair of headings was set out in coal to open a new area recently prospected. The back heading on the east side of the main jig has been driven to meet the East level; this will open up a fairly large area of solid coal.

Dobson Mine (Grey Valley Collieries, Limited).—The coal, 15 ft. in thickness, was reached early in the year, and a return airway, to connect with a stone dip driven from the surface at a grade of 1 in 1 for a distance of 472 ft., has been completed. A Keith fan erected adjacent to the Greymouth–Reefton Road will shortly be in operation. It is proposed to develop the field on the panel system; each panel to be from 3½ to 5 acres in extent, with barrier pillars, 2½ chains wide. Four main drives, 100 ft. centres, are to be driven to the dip at a grade of 1 in 3. This system, coupled with the extre-large-size pillars, should give excellent results, both as regards safety from fires and accidents, and should ensure the extraction of a larger percentage of coal than is customary under the ordinary system of bord-and-pillar work.

The erection of a bin for the storage of coal, a concrete bathhouse, and a number of cottages for the housing of the workmen is being proceeded with.

Wallsend Mine (Brunner Collieries, Limited).—During the year baling operations were commenced by the above company at the old Wallsend Mine, at Wallsend (Brunnerton). Operations were commenced by erecting a temporary wooden headgear over the main hoisting-shaft. A winding-engine and a Babcock and Wilcox water-tube boiler was also placed in position. Baling operations commenced with two 400-gallon tanks. It was discovered later that the influx of water was greater than was anticipated. To cope with the influx, the size of the tanks was increased to 600 gallons, and later to 800 gallons. On the completion of baling it is proposed to install, near the bottom of the shaft, an eight-stage Rees Roturbo pump direct-coupled to a British Thomson-Houston Company's motor of the slip-ring type, flameproof, protected, enclosed, and ventilated. The power will be supplied from the Grey Power Board's plant at 11,000 volts, and transformed at the works to 400 volts.

Co-operative Parties:—

Scott and Party's Mine, Blackball.—Work has continued steadily at this mine throughout the year.

Boustridge and Party's Mine, Brunnerton.—During the year the slipped country adjacent to the mine commenced to move, so it was considered advisable to abandon the mine.

Allen and Party's Mine, Brunnerton.—This party, consisting of seven men, has successfully worked a part of the old Brunner lease. The seam is 11 ft. in height, and is of good quality. During the year the party obtained the lease of three coke-ovens belonging to the Tyneside Proprietary (Limited), and are at present turning out 2 tons of coke per day.

Armstrong and Party.—Development in this mine has been in an easterly direction. Pillar-extraction to the rise in the north-western portion of the lease has been commenced. Nine men were employed continuously throughout the year.

Moody Creek Mine (Simpson and Party).—Prospecting operations having disclosed an outcrop of coal 9 ft. in thickness further up the Seven-mile Creek, the tram-line was extended 6 chains in this direction. The coal is of good quality. The seam rises steeply and bears evidence of being disturbed by faulting. Nine men are employed.

Hunter and Party's Mine.—The main incline is being extended in a northerly direction. The coal has thinned to 2 ft. 10 in. at the face. To the east of the main incline an upthrow has been struck, and coal-winning operations in this direction have been suspended. Ten men are employed.

Brae Head Mine (Boote and Party).—Development in this mine is proceeding north-easterly. Going east the seam has thinned to 6 ft. Ten men are employed.

Hillside Mine (Clarke and Party).—The output from this mine has been won from pillars. Nine men are employed.

McIvor and Party's Mine.—Trouble caused by water and faulting compelled the party to abandon the old dip workings, and a new dip was started in a south-westerly direction. A main level broken off this dip is showing 9 ft. 6 in. of clean, hard coal. Four men are employed.

Baddeley and Party's Mine.—Development still continues to the rise. Eight men were employed continuously throughout the year.

Manderson and Party's Mine.—The major portion of the coal produced during the year has been from pillar-extraction. A borehole put down near Coal Creek has assisted in lowering the water in the bottom seam, and a start has been made to extend the workings to the dip. Ten men are employed.

Smith and Party's Mine.—All the available coal to the rise having been extracted, a stone drive was put in 6 chains south-west of the old mine to strike the old No. 1 State mine-workings. The seam is split by a stone band 2 ft. to 3 ft. in thickness. Two places are working, and eight men are employed.

Duggan and Party's Mine, Rewanui.—During the year the bulk of the coal was won from the Compressor seam. A new jig-road was surveyed and constructed from the top seam to the new bin. During the early part of the year slackness in the coal trade severely handicapped this party. Seven men are employed.

Spark and Party's Mine.—Development during the year has been confined to the rise workings of No. 1 level. The party having engaged the services of a certificated mine-manager, the number of workmen has been increased to twelve.

McNeil's Mine, Rapahoe (Twelve-mile Bluff, Greymouth–Barrytown Road).—This small mine commenced operations during the year. The seam varies from 4 ft. to 5 ft. in thickness, and is split by a stone band varying from 1 in. to 4 in. in thickness. The coal is conveyed by motor-lorry to the railway-station at Rapahoe. Four men are employed.

Inangahua District.

Reefton Coal Company's Mine, Burke's Creek.—A drive 9 chains to the dip has proved the existence of a 20 ft. seam of good-quality coal. On the western side, however, the coal has pinched, and will require further prospecting. In the old dip section a considerable amount of coal was won from pillars. Heating in this section was noticed early in the year, but after the removal of some pillars the heating gradually disappeared. During the Christmas holidays a fire broke out in a totally different portion of the section, but was effectively sealed off, all the pillars having been extracted. Preen's jig section is now closed.

Two pairs of colliers are engaged on pillar-extraction in the Anzac section. During the summer months a bush-fire that had been lit to clear land near Capleston spread over what is known as the "Short Track," some three miles to the south-western boundary of the Reefton Coal Company's lease, where it came in contact and set fire to some old workings.

Calliope Mine.—All mining operations have been suspended pending the erection of an aerial tramway.

Phœnix and Venus Mine.—Four men have been constantly engaged during the year. A 2-ton lorry has replaced the horse teams used to convey the coal to the Reefton Railway-station. On Monday, the 21st August, a fire broke out in the upper portion of the mine. All attempts to seal off the workings failed, and the mine was abandoned. It is the intention of the owners to open out on another portion of the lease.

Golden Point Mine, Reefton.—All coal-winning operations have been suspended during the year.

New Big River Mine, Big River.—All main levels have been stopped in faulted country, and the coal is being stoped on the retreating system. All coal won has been supplied to the New Big River Gold-mining Company (Limited) for power purposes.

Morrisvale Coal-mine (late Morris and Learmont's).—Practically no development-work has been done at this mine during the year, work having been confined to the splitting of pillars. To the west of the present workings the coal is on fire. The main level driven in a south-easterly direction has reached a fault. A short flume has been constructed to the No. 3 seam, and one or two working-faces opened out. All the work at this mine is being carried out on the co-operative contract system.

Empire Mine.—No coal has been won from this mine during the year.

Clele Mine, Merrijigs.—The tramway from the end of the flume has been completed, and the coal is now being conveyed by a specially constructed motor-truck to the Taipoiti Railway-station. Development proving the coal to be faulted and stony, pillar-extraction has been started.

Ferndale-Timaru Coal Company's Mine, Burke's Creek.—Owing to slackness of trade the production of coal from this mine has fallen off considerably. All development-work to the dip has been suspended. All pillars having been extracted from No. 4 seam in Lockington's area, the mine has been closed down. Pillar-extraction is being carried out in the rise workings in Lishman's area by a small party of co-operative miners.

Woodlands Mine, Burke's Creek.—This mine has remained closed during the year.

Lankey's Creek Mine, Crushington.—The coal to the rise is splitting, and stone intrusions are frequently met with. To the north of the main incline the outcrop has been met. The amount of coal remaining to be won is small. Three men have been constantly engaged during the year.

Nelson District.

M.G.O. Proprietary's Mine, Pakawau.—This mine has been abandoned, as the coal in the main headings thinned. The clay bands increased in thickness to such an extent that the venture became unprofitable.

Puponga Mine, Puponga.—All the pillars have now been extracted in the B Mine, and the section abandoned. Adjoining B Mine a new section has been developed, but the seam is split and dirty. A section taken at the working-face was as follows: Coal, 18 in.; clay, 3 ft. 6 in.; coal, 14 in.; clay, 6 in.; coal, 12 in. The workings to the rise

were slightly better, the following being the vertical section: Coal, 2 ft. 4 in.; clay, 12 in.; coal, 12 in. In the C Mine pillaring to the rise has commenced. The goaf is being packed with clay as the coal is removed. Prospecting operations due west of the present workings have disclosed a seam of clean coal 4 ft. 4 in. in height. Going east this seam splits and becomes dirty.

North Cape Mine, Puponga.—During the year a new seam approximately one mile south from the old mine was opened out by means of a dip drive, gradient 1 in 3. The seam dipped from 70 degrees to 80 degrees north-east. The stoping method was used until August, when the ground adjacent to the haulage-road collapsed, and the mine was abandoned, and a shaft 220 ft. in depth was sunk to the west of the workings. It is proposed to crosscut and work the coal on the shrinkage system. Coal will probably be produced on the co-operative system during March.

Golden Bay Mine, Motupipi.—Only two men employed during part of the year.

Waikohatu Mine, Takaka.—This mine has been closed during the whole of the year.

Clifton Mine, Rocklands, Takaka. — Prospecting operations on Hater's Estate, Takaka, have so far proved fruitless, but evidence of coal is to be seen in the adjoining hill. Operations have been suspended since October last.

O'Rourke's Mine, Murchison.—The main level has been extended a short distance. The seam is steeply inclined, and 2 ft. of coal is showing at the working-face.

Fatal Accidents.

Five fatalities occurred to workmen employed in the coal-mines of the West Coast Inspection District during the year, four being caused by falls in pillar workings, and one by a runaway truck. In addition, one of the directors of the Clydevale Mine lost his life on the aerial tramway at that mine. The following is a short account of the occurrences:—

On the 28th February John Knox was killed in the No. 1 Mine, Liverpool Colliery. Deceased was engaged extracting a pillar when a fall of roof occurred, killing him instantly.

On the 1st August a collier named George Robert Smith lost his life on the Roa Mine. Deceased was engaged splitting a pillar when the carrying-set swung. Apparently deceased was stunned by the timber and asphyxiated by the small coal.

On the 19th August an elderly man named James Whelan was killed in the Morgan seam, Liverpool Collieries. Deceased was engaged as hanger-on at the foot of an incline when a rake of three trucks, getting beyond control, ran down the incline and struck Whelan, inflicting injuries from which he died the same evening.

On the 12th October an elderly man named James Ford was killed by a fall of stone in the Mount Buckley section of the Dobson Mine. Deceased was engaged extracting a pillar when a large stone came away from a greasy head. The stone, striking deceased, inflicted injuries from which he died shortly afterwards.

On the 23rd October a miner named James White lost his life in Evan's section of the Millerton Mine. White was engaged dropping tops when a fall of coal occurred, striking deceased and killing him instantly.

On the 7th September one of the directors (Thomas Ronayne) of the Clydevale Mine lost his life. Mr. Ronayne was riding in a truck on the aerial tramway when the clip became detached, and he was thrown out on to a stump below, fracturing his skull.

Serious Non-Fatal Accidents.

On the 17th January as a labourer named A. Bradley, employed at the Liverpool Colliery, was lowering bags of cement down an incline his foot got caught in a loop of the rope, and the jerk fractured the bone near the ankle.

On the 2nd June W. H. Smith, a miner employed in a cutting at the Clydevale Mine, received a blow from a falling piece of coal that resulted in a broken leg.

On the 20th July a miner named Andrew Wilson, employed in the Millerton Mine, received injuries to his eyes from a blown-out shot.

On the 30th July a miner named Harry Driver, employed at the Reefton Coal Company's Mine, received a simple fracture of the left thigh. Driver was working in a narrow place when a piece of coal fell from the roof, striking and fracturing his thigh.

On the 14th September a miner named Stuart Symers was employed dropping tops in the Morgan seam when a piece of coal fell from the lip, fracturing his pelvis and left leg.

Dangerous Occurrences notified under Regulation 94 (1).

Millerton Mine.—On the 4th January a fire broke through No. 14 stopping 6th West fire area. The stopping was repaired and the fire again sealed off.

Coal Creek Mine, Seddonville.—During April a serious fire broke out in the top section of the Coal Creek Mine; stoppings were erected, but the fire broke through some old workings and reached the outcrop, and the mine was abandoned.

Millerton Mine.—On the 1st June the fire in the 6th West section broke over the top of No. 15 stopping, but was checked, and the stopping repaired.

Reefton Coal Company's Mine.—During the summer months a bush-fire spread to some old workings, which were ignited. Prompt steps were taken to seal off the workings.

Phœnix and Venus Mine, Murray Creek.—On the 21st August a fire was discovered in the upper workings of the Phœnix and Venus Mine. The stoppings when erected leaked badly, allowing the fire to spread through the workings. Finally the mine had to be abandoned.

Millerton Mine.—During October a fire was discovered in the 3rd West dip section. Failing to smother the fire in the ordinary manner by the use of stoppings, nine concrete dams were erected and the area flooded.

On the 31st December a fire was discovered in the Old Dip section of the Reefton Coal Company's mine. Stoppings were erected, and the fire sealed off.

Prosecutions.

On the 23rd March two colliers were each convicted and fined £1 and costs for taking into the mine explosives not in a securely covered case or canister, contrary to section 40, sub-section (2) (*d*) of the Coal-mines Act, 1908.

On the 9th May a mine-manager was convicted and fined £1 and costs for failing to provide efficient means in the bathhouse to dry the clothes of the workmen, as provided by Regulation 146. On a second charge of failing to supply water at a temperature of 100 degrees F. to the hand-basins and showers, as provided by Regulation 142, he was convicted and fined £5 and costs.

On the 25th May a manager was charged with a breach of section 40 of the Coal-mines Act, 1908, as amended by sections 8 (1) (*a*), (1) (*c*), Coal-mines Amendment Act, 1914, with a breach of section 40 of the Coal-mines Act, 1908, as amended by sections 8 (1) (*a*), (1) (*b*), Coal-mines Amendment Act, 1914, and with failing to provide a water-gauge as required by Regulation 100. In the first case a fine of £5 and costs was inflicted. In the second and third cases convictions with costs were recorded.

On the 30th July the owner of a mine was convicted and fined 5s. with costs for failing to engage a fully qualified mine-manager, as provided by section 24 (2) of the Coal-mines Act, 1908.

On the 5th August a deputy was fined £1 and costs for firing a shot in the presence of gas contrary to Regulation 242 (*a*) (1), (ii).

On the 5th August the following prosecutions were heard against a manager: That on the 18th and 19th June he did fail to produce in the mine, at such a time when there were persons therein, an adequate amount of ventilation to dilute and render harmless inflammable and noxious gases. In all, four informations were laid—two under section 8 (1) (*a*) (i) of the Coal-mines Amendment Act, 1914; two under Special Rule 3, Coal-mines Act, 1908. On the charge in respect of the 18th June defendant was convicted and fined £5 and costs. On the charge in respect of the 19th June a conviction with costs was recorded. The remaining cases were then withdrawn.

Southern Inspection District (Mr. George Duggan, Inspector).

Coal-output.

The output of coal for the year—491,196 tons—is an increase of 36,126 tons over that of 1924.

The Canterbury output again decreased by 2,999 tons, and that of Central Otago by 857 tons. The output from the Southland mines shows the substantial increase of 38,637 tons, chiefly from the Ohai field. South Otago returns show the small increase of 462 tons, and those of North Otago of 883 tons.

Owing to a strike the Ohai Coal Company's mine was idle from the 2nd April to the 14th May. Apart from this strike the year was marked by the comparative freedom from labour troubles.

A considerable proportion of the output from the Ohai field consists of slack coal, for which there is only a very small and gradually diminishing market; consequently most of the slack has to be thrown away as waste. The efforts of all concerned must be directed to reduce the proportion of slack made, and also to find some practicable way of utilizing the remainder of the small coal.

Mount Torlesse Mine.—The safety-lamp section was exhausted in June. A new dip drive was commenced from an outcrop about 5 chains to the westward. At the outcrop two seams were showing, the upper being 3 ft. and the lower 2½ ft. thick, with about 10 ft. of shale and sandstone between. The dip was stopped when 55 yards down, as the coal, which was always steeply inclined, became vertical and thinned down to 12 in. A crosscut was driven south-west off the dip at a grade of 1 in 3, and proved coal 3½ ft. thick, but soft and friable. On the east side a place was driven in stone and at about 50 yards intersected a seam which outcrops in Woods Creek. The main dip will shortly be extended to cut this seam.

Homebush Mine.—This mine is now under the charge of a certificated deputy. The low-seam workings were exhausted early in the year. A dip was recently put down in the "engine" seam in an unworked area of approximately 5 acres, and six miners are now employed there. This area is beyond the large fault met in 1906 when the mine was previously worked. The coal is 7 ft. in thickness, and dips at a grade of 1 in 3. The dip is down over 3 chains, and three levels are being driven on the north side. One level was also started on the south side, but was stopped when it was only a few yards in, as faulted coal was met.

Bush Gully Mine.—A 3 ft. seam is now being worked considerably below the 5 ft. one formerly worked by McQueen and party. The 3 ft. seam was at first divided by a band of stone 8 in. to 12 in. thick. This band has now disappeared, and the coal is fairly clean. A return airway was driven to an outcrop at a higher altitude. The party anticipates working an area 15 chains long and about 2 chains wide.

St. Helens Mine.—A short steep dip was driven early in the year. Two seams were worked from it, the upper being 5 ft. thick and the lower 3 ft., with 7 ft. of stone between. A fire broke out during December, and the dip had to be sealed. Another dip was commenced shortly before the holiday season.

Steventon Mine.—Early in October work ceased, as the pillar-work was completed. A "creep" developed near the bottom of the crosscut, and the pillars immediately to the rise of the bottom level were crushed and lost. No attempt was made to prove the extent of the fault which had been met in the main dip. About 10 chains north of the mine-mouth a prospect drive was put down at a grade of about 1 in 3 for 56 yards. After driving through shingle for 30 yards the coal, which was split up by a stone band 18 in. thick, was met. The top and bottom coals were 18 in. thick, and being unsaleable the drive was stopped. Two men are now working on an area recently applied for under a coal-prospecting license and which adjoins the Whitecliffs Mine.

Clearview Mine.—A large fault has been met at the face of the main level, which is now in 68 chains. An incline 3 chains outbye has also met this fault, which is running due north and south. The throw of the fault has not yet been proven. Eight chains beyond this fault is a large break in the hill, so the outlook is not very promising.

Tripp's Mine.—Floods in June carried away most of the surface jig, and much additional filling had to be done to repair it. The pillar-work in the old mine will soon be completed. A new drive has been commenced south of the old mine and further down the hill. This is virgin ground, and they expect to meet coal within a few yards.

Burnwell Mine.—Very little work was done at this mine during the year. The coal, being soft, is almost unsaleable.

Albury Mine.—The new owner has worked strenuously in an endeavour to prevent the mine-fire from endangering the McKenzie traffic-road. A wide trench was cut to the floor of the seam 44 yards long and running east and west. From the eastern end the trench was continued south for over a chain. A cross-trench, a chain long, had to be cut to enable work to be continued at the present face, where the coal is dipping to the south at a grade of 1 in 5. The progress of the fire has been checked to the north, and the south trench is checking it there also. The coal at the east end is 25 ft. thick, with only two stone bands, the upper 15 in. thick and the lower from 6 in. to 9 in. The former workings were above the lower stone band, so about 7 ft. of bottom coal was left unworked.

Woodbank Mine.—A short drive was put in early in the year for about 10 ft. The coal is there about 7 ft. in thickness, but of poor quality. No further work has since been done.

Allanholme Mine.—On the east side a small fault was met a few years ago. This fault has now been crossed and good coal met beyond it. If this continues the management intends to put down a new dip incline from the surface and, by leaving a barrier pillar, to cut off all the old work. No work is being done on the west side. Pumping is done by a petrol-engine on the surface.

Wharekuri Mine.—The low-level drive was continued, and when 9 chains had been driven workable coal was struck. There was a distance of about 25 ft. between this level and the old workings above. The party anticipated working about 12 chains of coal, but during July a fire broke through from the old workings, and the mine had to be sealed and abandoned.

Bellemore Mine.—A level was driven about 15 ft. above the creek. When about 2 chains in they found they were immediately over old workings driven many years ago, and of which no record is known. There was about 3 ft. of water in these old workings, and the entrance was covered by slips from the hillside. At the face of the recent workings the coal, which at the entrance was 20 ft. thick, had pinched down to a few inches, and work in consequence was stopped. Prospecting has since been commenced further down the creek.

Prince Alfred Mine.—No attempt was made to again work the dip pillars. Pillaring is proceeding above the area affected by the "creep," and the waste is closing well behind them, thus checking the heating down the dip.

St. Andrew's Mine.—This mine has recently been reopened by a party of miners from Bush Gully. They drove a level to the west to work a small area on the rise side of old workings. The level is in about 3 chains, as is also a place going north. The latter met dirty coal. The places going south are in fair coal, but there is a 12 in. band of stone about 4 ft. from the roof. A short bore was put down into the floor in the west level, and, after drilling through 6 in. of stone, went into coal at least 4 ft. thick. The places are being driven about 6 ft. wide.

Ngapara Mine.—Development still continues to the north. The coal is regularly holed by hand, and one of the ribs sheared, and, the seam being thick and fairly level, machine cutting and holing should be advantageous. As electricity for power will be available there within a year the owner may install electric coal-cutters.

Shag Point Mine.—Owing to the heavy rains during July and August the main levels and the lower workings were flooded for some time. Later, development was resumed in the main south level, which when about 4 chains in met with a large fault running almost due east and west. The throw of this fault has not yet been proven.

Shag Point Coal-mining Company's Mine.—Early in the year most of the working-places were in low coal (3 ft. to 4 ft. thick), and only a couple of places—those nearest the upper level—were over 5 ft. in height. A new haulage-road, 500 ft. in length and dipping at a grade of 1 in 4, was driven from Hailstone Gully to connect with the most advanced workings. This drive is 6 ft. high and 7 ft. wide. Owing to mining having become unprofitable, chiefly due to abnormal haulage and hewing costs, operations ceased on the 9th October, and were not recommenced until the 21st December. During this period a reconstruction of the surface works and railway-siding was made, and the screening plant re-erected on a more convenient site half a mile closer to the Shag Point Railway-station. The new haulage-road has also made possible considerable improvement in the ventilation system of the mine.

Gimmerburn Pit.—An opencast pit for local supplies.

Rough Ridge Pit.—There was no output during the year from this pit.

Idaburn Pit.—There was considerable decrease in the output from this pit compared with the previous year.

Oturehua Pit.—Another opencast pit for local supplies.

St. Bathan's Pit.—This pit, near the main traffic road between Oturehua and St. Bathan's, continues to be worked for local purposes and the overburden of gravel used for remetalling the road.

Cambrian Pit.—A small output was produced and used at St. Bathan's during the year.

Alexandra Mine.—Pillars are still being extracted on the east side of the dip. Slight signs of heating were showing in the goaf early in the year, but subsided later. The heaving floor near the fault caused much repair work to be done. It is the intention of the new manager to drive a crosscut from the main dip, above the fault, towards the return airway, thus avoiding the locality where the heaving floor occurs.

McPherson's Pit.—The stripping is still being done by an hydraulic jet, and it is kept fairly well ahead. The coal is now being won from nearer the traffic-road than formerly.

Shepherd's Creek Mine.—Pillar-extraction proceeding satisfactorily. Three miners are still employed there.

Cardrona Pit.—The large slip which occurred during 1924 was not cleared away, so no coal was produced during the year.

Nevis Crossing Pit.—Another opencast pit for local requirements, from which the customary output was maintained.

Doolan's Creek Mine (near Gibbston).—The main level going south-east has been driven 38 yards, and several places broken off east and west. The second place on the west side was stopped at 16 yards, as it was in very troubled ground. Indications of this fault are also showing at the face of the main level. Dirty coal was met on the east side when only 11 yards in, so these places were also stopped. A new drive will shortly be commenced about 3 chains west of the present main level, and will therefore be on the other side of the fault recently met. The output is still being conveyed by drays to the top of the Gibbston Saddle.

Anderson's Mine, Gibbston.—This party has abandoned the prospecting-drive put in on the east side of Deep Creek. They have driven 3 chains into the hill on the west side of the creek. After driving about 2 chains in soft country the coal was struck, which at first was fairly hard, but the lower part of the seam proved soft and friable. At the face there is about a foot of hard coal near the roof, but the remainder of the seam is still soft. The party now intend to sink a few feet, and if unsuccessful they will surrender the coal lease.

Fernhill Mine.—A few of the remaining pillars were extracted early in the year; but, the mine becoming unprofitable, it was closed down in May last.

Freeman's Mine.—The life of this long-established mine is quickly coming to a close. The heated area is now giving no trouble, as it is well in the goaf.

Jubilee Mine.—The pillars in the old mine are almost exhausted. In the new mine the main dip heading met dirty coal with a soft roof and floor. Eighteen inches from the floor there is an 18 in. band of stone with about 4 ft. of coal above. Much water was met, and later 6½ chains down from the surface the drive closed. A crosscut, going about due east, is now being driven at an angle of 40 degrees from the main heading. This crosscut has not yet reached the soft country, which it may be unable to cross. Another level drive has been commenced further west and is in 40 yards, but no coal has yet been struck there. The drive is now being deflected to the east to more quickly cross the measures.

Burnwell Mine.—The pillars were exhausted, and the mine closed down during October.

Willowbank Mine.—The working of the upper seam, which continued soft, was stopped and a new dip driven in the lower seam going to the south-east. This seam is 9 ft. in thickness, and 2 ft. of top coal is left on for a roof. The grade gradually lessened, and the drive was level for a couple of chains, but the coal is now dipping at a grade of 1 in 7. The places are all driven narrow, and timbered where required. Only a narrow area of coal can be worked from this dip, as on the left is a large downthrow fault running almost parallel to and about a chain from the dip. On the right side the coal is clean, and the area is gradually widening from the old workings.

Mosgiel Mine.—The main heading was driven about 4 chains in coal containing many clay backs. A good deal of water came through from Sneddon's old mine, and, the coal continuing thin and of poor quality, it was decided to remove the plant and abandon the mine on the 8th August.

Brighton Mine.—A "creep" developed in the higher workings, so the pillars are now being worked back. The mine-water which formerly drained away through the old workings now lodges at the bottom of the dip.

Waronui Mine.—The coal in the north-east level in the old mine gradually thinned and became more stony, so work ceased in that section. In the west section the coal became cleaner and better. Owing to the very treacherous roof all the places are driven not more than 7 ft. in width, and sets are being used in most of them. A new level has been driven in stone into the old upper-seam workings. This level, 850 ft. in length, has passed through a lot of very heavy ground, necessitating close timbering. From this drive it is intended to work many pillars left in the former workings.

Crichton Mine.—The owner of this small mine has driven a pair of levels to the rise and north-west of the old Crichton workings. The main level is in about 3 chains, and a connection has been made to the old workings. The places are about 6 ft. wide and 7 ft. high. The coal is finding a ready sale locally.

Taratu Mine.—Shaft Section: As reported elsewhere, the underground fire again broke out on the 2nd January. It was later decided to permit the water to rise in the workings and then seal the outlets.

Barclay's section: On the west side the places were stopped early in the year owing to the inferior coal met in the vicinity of a 30 ft. upthrow fault. Work was resumed there later, but the coal continued soft, and the places were again stopped. Owing to a fire from Barclay's old mine (sealed off four years ago) breaking through much work had to be done. As much of the coal as possible was taken out adjacent to the basalt dyke near the mine-entrance. The coal was replaced by fine gravel and sand to form an incombustible barrier. The dip to the east is approaching a gully, and it is anticipated that the coal will be faulted and of inferior quality there. Six places are now being worked in that section. Pillaring in the central area was completed, and that section has been effectively sealed off. Near the mine-entrance and north of the dyke a hand bore was put down towards the end of the year. Two of the "shaft" seams were pierced—the upper one 13 ft. thick at a depth of 130 ft., and the middle seam 17 ft. thick at 145 ft. Another short bore was also put down 14 chains to the north-east of the other one and to the dip thereof. At a depth of 24 ft. a 22 ft. seam of coal was pierced. The bore was then stopped. To further prospect this area a shaft will shortly be sunk about 5 chains to the north-east of the deeper hole. This shaft can later be used for a return airway. From the foot of the surface jig to the screening plant an endless-rope haulage has been installed which displaces two horses. Reversal of the air-current has been arranged by means of doors near the fan.

Tuakitoto Mine.—A considerable amount of development-work was done during the year, and there is now a fair area of clean workable coal on the east side of the dip. A shaft 40 ft. in depth has been sunk for a return airway, and the natural ventilation is now good.

Kaituna Mine.—The small output for the year was obtained chiefly from pillar-extraction. On the east side a level was driven below the pillared ground. The mine changed ownership twice during the year, being sold by the liquidator of the Kaituna Coal Company to Messrs. Smaill and Kelly during May. They sold it to Mr. T. Gage, on the 1st December.

Kaidale Mine.—Some pillar coal was won early in the year, but since April no work has been done.

Kaibrook Mine.—Pillar-extraction was continued during the year. At the mine-entrance the timbers had to be renewed owing to a large slip which was caused by the heavy rains in July.

Kaitangata No. 1 Mine.—During the year the output was obtained from pillar-extraction in No. 1 seam section and in Stanniford's dip section, and from solid work in the No. 3 seam section. A good area of coal having been proven in No. 3 seam section, which is now almost in line directly ahead of the main haulage-road but at a lower level, a stone tunnel was driven from the face of the main haulage-road for a distance of 300 ft. and at a grade of 1 in 4. This has considerably shortened the haulage from the section. The main level going north, which is in over 26 chains from the stone drive, has been stopped. There were pronounced signs of heating during October at the bottom of Stanniford's dip, and stoppings were put in to seal off this area of pillared ground. Stone tunnels to connect the Nos. 1 and 2 Mines are being driven in both mines. That in the No. 1 Mine goes to the south from the main haulage-road at a spot 37 chains from the mine-entrance. When connected they will considerably assist the ventilation of the north side of the No. 2 Mine, and also permit of the output from the north side of the No. 4A seam of the No. 2 Mine being conveyed to the surface by the shorter route through the No. 1 Mine.

Kaitangata No. 2 Mine.—In the No. 1 dip section the pillars near the bottom are being extracted, and levels are proceeding to the north from higher up the dip. Pillaring is also being done in the 6 ft. seam area in No. 1 dip. In No. 5 (McMillan's dip) section the bottom level, going south, entered soft and faulted coal when about 10 chains in, so pillar-extraction has been commenced there. To permit of the upper pillars being worked a crosscut was driven, commencing from the main stone drive and connecting with McMillan's dip at the bottom near the fault. Pillars are also being extracted to the rise off the main south level. In the No. 4A seam workings the coal thinned in the drive which will connect with the No. 1 Mine. Three lower places are in better coal; the bottom one shows 7 ft., and the others 5 ft. It is anticipated that the connecting-drive will have workable coal to the dip, which will be tested when the connection has been made.

Castle Hill Mine.—No coal, except a few tons for boiler purposes, was produced from this mine during the year.

Benhar Mine.—The main dip went through a 3 ft. downthrow fault, then an upthrow of 7 ft. The coal was full of clay backs. Another large downthrow fault was met, and the dip was then stopped. As reported elsewhere, a fire occurred in a section on the south side of the dip. Good substantial brick stoppings with buttresses were built around this extensive heated area. In the bottom north level a band of conglomerate is showing 3 ft. from the floor. In the upper places the conglomerate is not found, but many clay backs are met. Should it be decided to again extend the dip a more powerful haulage-engine would be required.

Whiterig Mine.—The places were being driven too wide, so the manager was instructed that they were not in future to exceed 18 ft. in width. A later inspection showed that the instruction was being complied with and the mine in better working-order.

Green's Mine.—The levels to the south have been continued, but no work was done in the main dip. Another boiler was recently purchased and installed in a concrete seating near the mine-entrance. A concrete tank of 2,000 gallons capacity has also been made nearby.

Springfield Pit.—A small opencast pit worked for local requirements.

Glenlee Mine.—The top level was stopped and fenced off. The two other levels were continued, and the upper one driven into broken ground of old workings. No further work has been done in the dip.

Ramsay's Pit.—Stripping has been continued, and the customary output maintained.

Landslip Pit.—Very little work was done at this opencast-pit during the year.

Argyle Pit.—The output has lately been obtained from the south-east side of the pit. Above the lignite is a seam of hard clay 18 in. to 24 in. thick. This cannot be removed by the hydraulic nozzle, so it has to be carted from the pit. The lignite is dipping to the south-east, and there is only 5 ft. now showing at the face.

McIver's Pit.—Only a few tons worked for own use.

Terrace Mine, Kingston Crossing.—The level on the west side has been driven past the old fallen ground, and places off this level have connected with the old workings on the east side.

Princhester Creek Pit.—The overburden is from 15 ft. to 20 ft. in thickness. Two seams are being worked; the lower, from 4 ft. to 5 ft. in thickness, appears to be identical with the middle seam of the Ohai Coalfield. It is here overlain by the "Rosin seam" of from 5 ft. to 6 ft. in thickness. The seams dip steeply to the north-east, but this appears to be due to a fault, as the general dip is to the south.

Boghead Mine.—Formerly an opencast pit, but, as the overburden became too thick for stripping, a couple of short dips have been driven to the north and level places broken away from them. Owing to the large quantity of water made the No. 1 dip is now stopped. The No. 2 dip is down about 200 ft., and two levels have been broken away both on the west and east sides.

Mataura Lignite Mine.—The dip has been driven a few yards lately, but development has principally been to the east and west. As the western boundary is now only 5 chains from the dip and the eastern boundary 6 chains, to keep up the output the dip must be extended without further delay.

Ota Creek Pit.—The small output from this opencast pit has again fallen, being 45 tons less than that of 1924.

Clarke's (Wyndham) Pit.—The stripping is well ahead of the face of lignite. The output from this pit also shows a small decrease.

Diamond Lignite Pit.—An opencast pit, seventeen miles from Invercargill, from which 1,386 tons were produced during the year.

Broomhill Mine (late Wattle).—This mine, now owned by two miners, is rapidly approaching exhaustion. They are now working the pillars alongside the dip and have already retreated 3 chains. They expect the remaining pillars to provide another year's output.

Black Diamond Mine.—The dip is now down 20 chains. At the bottom of the dip a large fault, apparently a downthrow, was met. As the greywacke country is known to be not far ahead no attempt will be made to extend the dip any further. Several of the levels on the south side of the dip have since reached this fault. The places going north-east and north-west are rising rapidly. The pillars now being formed are much larger than the former ones, in compliance with a requisition from the Mines Department. A 49 in. double-inlet Keith-Blackman ventilating-fan, 35 in. wide, capable of passing 50,000 cubic feet per minute, with a 1 in. W.G., has been installed in a concrete casing. The fan is properly equipped with means for air-reversal. An Ingersoll-Rand two-stage air-compressor is now running in the power-house, and is giving every satisfaction. It is capable of compressing 940 cubic feet of free air per minute to a pressure of 110 lb. per square inch. A substantial bathhouse, chiefly of concrete, is being erected. Three walls and the cubicles are of concrete to a height of 7 ft. The fourth wall will be of C.G. iron, so as to be easily removed should the building later on need enlarging.

New Brighton Mine.—After several underground fires, sometimes accompanied by explosion, had occurred it was finally decided in December to fill the mine with water, and the management was instructed not to pump it out for at least three months. They have since sold most of the colliery plant, and have given up the lease of the Wairio–Moretown Railway, which they acquired from the Ohai Railway Board early in the year. A small section at a higher altitude and south of the main mine was worked during the year. The coal was from 3 ft. to 4 ft. thick, and for a while was of good quality, but later it became soft and stony, so work was abandoned.

Wairio Mine.—The section opened during 1924 proved very disappointing, as the coal became too thin for profitable working. The few pillars were extracted, and the mine ceased production in July. Near the end of the year another section of workings was commenced further to the north-west and approaching the Mossbank No. 2 mine-workings. Two low narrow drives have been put into the hillside about 10 chains south of the Ohai traffic-road. The west one met a large upthrow fault when only 40 ft. in. The east drive is in 90 ft. The coal is only about 3 ft. thick, and is now dipping. The outlook for the mine does not appear very promising.

Mossbank No. 2 Mine.—The fire in the old heated area eventually reached the fan-house on the 7th June and destroyed it. The available pillars were exhausted, and work ceased in December.

Mossbank No. 1 Mine (New).—The upper-seam workings entered very dirty coal, and were stopped in August. The level going east in the lower seam is a continuation of the main dip. It is now in over 10 chains in coal containing many clay backs. The remainder of the present working-places are all north of this level. Many of them are in good coal, but its value is lowered through the clay from the "backs" falling amongst the coal. Most of the workings are damp.

Wairaki No. 1 Mine.—During the year the main dip going south-west has been extended over 6 chains, and is now 28 chains in length. The face of the dip is now only 4 chains from the most northerly street in Ohai Township. This company's southern boundary is only 2½ chains beyond this street. The places on the east side in No. 2 section are very stony, but those in No. 4 section are fairly clean. An upthrow fault of about 3 ft. displacement was crossed in the bottom level of No. 4 section about 4 chains from the main dip. Development is also proceeding on the west side in fairly clean coal. This company recently purchased a 49 in. double-inlet Sirocco ventilating-fan from the New Brighton Coal Company, and an excavation is being made for the masonry casing in which means will be provided for reversal of the air-current. Another multitubular boiler has also been purchased, and is being placed in position near the mine-mouth. An excavation for a bathhouse has been made nearby.

Wairaki No. 2 Mine.—The coal at the face of the level going north became very stony, so it was decided to split the pillars under the swamp, as it would be unsafe to attempt their complete extraction. This work has proceeded apace since May. The pillars in the higher levels will later on be extracted in lifts.

Linton Mine.—No. 4 dip section: Early in the year a large downthrow fault, running north-east and south-west, was struck, first in the lowest north level and then in the main dip about 16 chains from the surface. This fault has since cut off many of the northern places, in which the coal was inclined to be soft and friable. The mine is laid out on the "panel" system, and there are now three sections being worked on the south side and two sections on the north side. The No. 1 south lower workings are near the boundary of the lease. A commencement has been made to work the thick top coal in this section by another set of workings which will be kept immediately over the lower ones. The seam is 40 ft. thick there. It is inclined to be stony in the No 2 south section. A crosscut has been driven to the south-west from off the bottom of the main dip, and it is now in 5 chains. This is the No. 3 south section, and for a while a few places were being "holed" there by a compressed-air percussive coal-cutting machine. This cutter reduced the percentage of slack made from thirty to about seventeen. Owing to lack of power this machine is idle temporarily. Two "Little Tugger" hoists are used underground. Inflammable gas having been reported in this mine, the use of safety-lamps was ordered by the Mines Department, and they were installed in April. In July "Oldham" hand and cap electric safety-lamps were introduced, and have given every satisfaction since. The miners, as well as the truckers, prefer the cap-lamp to the hand one. This mine is now ventilated by a "Robinson" disk ventilating-fan. It is of the axial type, and the air-current can be reversed merely by crossing the driving-belt. It is 7 ft. in diameter, and running at about half-speed is producing 20,000 cubic feet per minute. To prove the throw of the fault, and whether profitable working coal existed north of it, a percussive boring plant is in use on the surface. The first borehole proved coal over 30 ft. in thickness at 350 ft. from the surface, and from the data thus obtained the fault has been proved to be a downthrow to the north of 160 ft. displacement. The second bore, about 10 chains west of No. 1 hole and also on the north side of the fault, is now being bored. Loads of dry clay are being spread along the trucking-roads to reduce the inflammability of the mine-dust.

Main Seam Workings.—Pillaring was continued during the year. The underground fire which had to be sealed off during 1924 has not given any further trouble, being held in check by the substantial brick stoppings, but other sections of pillars further north became heated during July and November and had to be sealed off also. The output from the Linton Mine, formerly drawn along the valley in the mine-tubs by horses, is now hauled over the narrow-gauge railway (2 ft.) by a light locomotive.

Birchwood Mine.—Early in the year a fault, apparently an upthrow, was met in the main dip 13 chains down from the surface. No attempt has been made to drive through this fault, nor to prove, by boring ahead, the amount of the displacement of the fault. Many desultory attempts were made to prove if the main seam was overlying the one now being worked, but without satisfactory results. In the No. 1 west level, about 6 chains down the dip, a reversed fault was met when it was in about 5 chains. After driving through this fault 6 ft. of clean coal was proven, but the coal continued only a few yards before further faulting was met. The level is now standing at what appears to be a large "want." On the east side all the levels above No 7 have reached the boundary of the lease, where the coal became soft and dirty. The lower east levels are still in good coal.

When the Linton Coal Company have done with the percussive drill, which it is now using, the drill will be transferred to Birchwood to prove the area west of the present workings.

Ohai Coal Company's Mine.—The present outlook for this mine is not very bright. The main dip struck a large downthrow fault 14 chains from the surface. This fault, running almost due east and west, cut off practically all the places on the north side of the dip when only a short distance in. In the bottom places on the south side stony coal has come in, and there only remains a very small area of unworked ground near the Morley Stream. An endeavour should be made to prove the land north of the downthrow fault, which may be the one which also cut off the Linton workings, and where 30 ft. of coal was proved on the north side of it. Owing to an ignition of inflammable gas which occurred during September safety-lamps are now used at this mine.

Black Lion Mine (formerly Ohai Mine).—This area was prospected a few years ago by boring by the Nightcaps Coal Company, and 457 tons were taken out by them. During the past year drives have been put into the hill, and six miners are now employed there. A substantial bridge across the Morley Stream and a surface tramway 600 ft. in length have been constructed, and a light locomotive hauls the output to the foot of the Mossburn Coal Company's direct haulage-system. From there it is hauled up to the railway by the Mossburn Coal Company. The main level was driven almost due north 200 ft., then the coal rose, and 130 ft. north from the end of the level a large fault was met. The east level is in about 2 chains in fairly clean coal. On the west side one place has been driven to the outcrop. This was in coal 7 ft. thick with a band of stone running irregularly across the place. Other west side places are in coal which varies considerably in quality, being sometimes clean and sometimes split up by many stone bands. About 10 chains north-west of the mine-mouth a small shaft was sunk 25 ft. down, and 9 ft. of clean coal proven. Another prospecting-shaft is being sunk to the south-west. Coal was met 16 ft. from the surface, but the thickness of the seam has not yet been ascertained.

Bridgehead Mine.—Owing to the accident which happened late in 1924 to one of the mine-owners no work was done in this area during the year.

Morley Collieries (Limited).—The last borehole put down by this company proved two seams of coal. The upper one is 40 ft. thick, and was struck at 597 ft. The lower seam, which is 14 ft. thick, was pierced at 949 ft. A pair of drives were laid out about due north of and 50 chains from the No. 1 borehole. These drives will dip about 1 in 4, and will be about 1,600 ft. long when they meet the upper seam. The formation has been made for a surface haulage to connect with the Ohai Railway. An office, storage-shed, and six huts have been built.

During April an area south of the Wairio–Nightcaps Railway was bored with hand boring-rods. One hole went down 50 ft., and was lost owing to the hole becoming silted up during the Easter holidays. The second one went down over 60 ft. in papa, and, the results being disappointing, it was stopped.

Linwood Mine.—This is an opencast pit near the north bank of the Upokororo Creek and about nine miles from the Te Anau Hotel. The overburden consists of from 10 ft. to 12 ft. of gravel with from 3 ft. to 4 ft. of clay and soft sandstone over the seam, which is from 8 ft. to 9 ft. in thickness The output is conveyed along a rather rough road by a seven-horse team hauling 3 tons. Water is used for stripping, and is obtained from a race about a mile in length.

Fatal Accidents.

Shag Point Coal-mining Company's Mine.—On the 13th January a trucker named James Cleaver, aged 23 years, was fatally injured by runaway trucks on a short steep jig. He had hung the empty trucks on to the jig-rope and was awaiting the full ones being jigged. A miner who was jigging pushed the full trucks over the brow. The rope immediately pulled through the three clamps which formed the rope "capping," thus allowing the full trucks to run away. Cleaver sustained a fracture of the left femur, and was conveyed to the Dunedin Hospital, where he succumbed to his injuries two days later.

Taratu Mine.—On the 22nd January two miners were working in the winding-shaft at the Taratu Mine. In consequence of a mine-fire it had been decided to fill up this shaft. Gravel had been tipped from the surface, but more had been tipped into the eastern side than into the western. Jordan and McGowan were taking out pieces of the midwall from the western side, and near the bottom of the shaft, to level the gravel across the shaft. After excavating a while a fall occurred in the gravel on the eastern side, and it pushed through the opening they had made in the midwall. They proceeded to make a further excavation when a second fall took place at about 3·40 p.m., this time breaking some of the cage-guides and the traingular "racking," thus releasing some of the higher midwall planks, which fell with the gravel. Jordan and McGowan were buried to a depth of at least 12 ft. Jordan was rescued next morning at 4.20 a.m., practically unhurt, but McGowan was instantly killed by the fall, and his body was not recovered until 3.55 p.m. on the 24th January.

Serious Non-fatal Accidents.

Kaitangata No. 2 Mine.—7th March: H. Colvin, a shiftman, was struck by a piece of coal which fell from the side of the pillar; he was knocked down and received a fractured jaw.

Kaitangata No. 2 Mine.—On the 6th April, James Hancock, a trucker, sustained a fracture of the left leg and three broken ribs through being struck by a fall of coal from the roof.

Boghead Mine, Mataura.—24th April: Chas. Richmond, 40, miner—fracture of the left tibia, caused by being struck by coal from a shot, the fuse of which he had previously lit. He had four shots altogether, and was lighting the fourth when the first one exploded.

Kaitangata No. 2 Mine.—23rd May: John Borick, miner—fracture of the right fibula. A "polar" over a set swung and struck him on the leg. He walked home after working until crib-time, and did not know the bone was broken until examined by the doctor the next day.

Kaitangata No. 2 Mine.—25th May: William Park, miner—fracture of the left tibia, caused through being struck by a piece of falling coal. He and his mate (N. Mackie) were "breasting" back a pillar and failed to put up sprags.

Alexandra Mine.—15th June: D. Mathias, 58, miner, was struck by a piece of coal which fell from the rib and dislocated his hip-joint. He was incapacitated for five months.

Burnwell (Mount Somers) Mine.—16th June: Frank Smith, trucker, sustained a fracture of the left leg by a large piece of stone falling from the roof of the place where he was turning a truck on the flat sheet.

Albury Pit.—21st August: Rex D. Brydon, miner, sustained fractures of both bones of the left leg by a fall of clay from the side of a wide trench in which he was working.

Mount Torlesse Mine.—25th August: George Baxendale, 35, miner, sustained a comminuted fracture of the right fibula through a fall of stone from the roof of his working-place.

Mossbank Mine.—10th September: George Clarke, miner, received a fractured right rib and abrasions to the right side of his face, chest, and foot by a fall of roof-coal.

Shag Point Mine.—17th September: William Upston, 16, haulage-rope attendant, received a fracture of the base of the skull by a fall of stone, which had been supported by a set and partially by a pack wall, falling on to his shoulders and pushing him head foremost into the coal-rib.

Dangerous Occurrences notified under Regulation 94 (1).

Taratu Mine.—2nd January: The underground fire in the shaft section again broke out. Efforts to check it failed, so it was decided on the 8th January to permit the water to rise in the workings and seal the two shaft-outlets. A large fall had occurred during the holiday season. This had connected the recent workings with those in the seam above, which were first stopped off owing to heating during 1916. A concrete stopping had been built on the south side about four years ago, and this had greatly assisted in preventing the fire from spreading.

New Brighton Mine.—10th March: Smoke was reported by William Dixon, mine-manager, coming from the goaf on the west side and near the bottom of No. 2 dip—*i.e.*, a few chains from the lowest part of the mine. They continued working, and at 4 p.m. when work ceased the ventilating-fan was stopped. The next day was an idle one, and the manager had arranged for some men to put up stoppings to isolate the fire area. An engine-driver, living near the mine, heard a loud report at 4 a.m. on the 11th, and the manager, on going down the mine later, found evidence that an explosion had occurred. Another explosion took place at 6.30 a.m. on the 13th March. The mine was closed and the water allowed to rise above the seat of the fire. Work was resumed on the 21st April.

On the 1st May another ignition of gas occurred at the top of No. 2 dip. The men were immediately withdrawn and water again turned into the mine from the surface. Stoppings were put in the mine-mouth and near the ventilating-fan. On the 2nd May an explosion occurred at 11.30 a.m., and another at 1.50 p.m. On the 14th May the stoppings were broken, but finding the fire was still active the mine was again sealed and not reopened until the 1st June.

Black Diamond Mine.—1st July: David Lee, a miner, was slightly burned on the back of the hand by the ignition of half a plug of compressed blasting-powder. He claims that his carbide head-lamp was at least 4 ft. away from the shot-hole being charged. After putting in the charge Lee estimated that it was undercharged, so he went back to his powder-can for another half-plug and leaving his lamp at the face. While climbing up on the loose coal to the shot-ole he fell and the half-plug of powder came in contact with the carbide-lamp.

Linton Mine.—14th July: Firestink was reported coming from the goaf at the extreme end of the pillar workings in the main seam. On the 20th July the Underviewer reported a substantial increase in temperature, and on the 24th the heating had increased so much that the area was then sealed off. On the 29th July a small quantity of black-damp was detected coming from the goaf, and on the 28th the air-current was reversed, the ventilating-fan acting as a blower instead of exhausting. Owing to the quantity of black-damp given off the men were withdrawn on the 22nd and 24th.

Wharekuri Mine.—22nd July: The underground fire in the old workings broke through into the recent ones, and, finding it impossible to combat it, the mine was sealed and then abandoned.

Benhar Mine.—25th July: The mine-manager discovered on entering the mine that the intake airway was full of smoke, which was coming from a ten-year-old fire in the old workings and which had broken through. Temporary stoppings were built of ashes and other material, and later these were backed up by substantial brick stoppings built around the whole of the upper workings on the south side of the main dip haulage-road.

Ohai Coal Company's Mine.—1st September: William Page, a miner, ignited a small quantity of firedamp with his naked carbide-lamp in his working-place. He was slightly singed on the back of the neck.

Mossbank No. 2 Mine.—2nd September: The No. 2 stopping showed signs of becoming defective, and later fire made its appearance from old workings through the coal underneath the floor of the drive. A line of stoppings was put in, cutting off the fire.

New Brighton Mine.—12th September: Deputy Archibald Dixon noticed firestink during his morning inspection, Later he and the manager endeavoured to locate the fire, but, owing to the numerous falls in the old workings. they could not do so. The two outlets to the mine were then sealed. The manager was instructed not to reopen the mine for four weeks. When reopened on the 15th October no evidence of fire was found, and work was resumed.

On Sunday, the 8th November, the engine-driver living near the mine noticed a haze around the mine-mouth. It increasing, he decided to report it. The ventilating-fan had not been running since 4 p.m. on the 6th November. The mine was sealed off by Monday morning, but at 6 p.m. that evening an explosion occurred of the pent up gases, blowing out the top portion of the stopping in the intake airway. This was again blocked up. The manager has been notified that no further work shall be done in the lower levels, and that the mine must be completely filled with water and pumping not commenced until the 1st March next.

Linton Mine.—25th November: Another section of the pillars in the main-seam section became heated, and eventually had to be sealed off.

St. Helen's Mine.—8th December: The manager reported that the fire in the old workings had worked into his recent ones, and he has sealed off the section. Work was resumed in a new drive on the 23rd December.

Prosecutions.

A mine-manager was convicted and fined £5 and costs for failing to withdraw the men on the 10th March, except those necessarily engaged in combating an underground fire from a mine in which safety-lamps were in use.

A miner was convicted and fined 5s. and costs for failing—on the 25th June—to set sprags in his working-place before commencing holing.

The deputy in charge of the section was also charged that he failed to see that the side of the working-place was properly secured by the persons working in it. This information was dismissed.

The mine-manager of a small mine was convicted and ordered to pay Court costs for permitting the part of the mine where a serious accident had occurred on the 7th July to be interfered with before it was examined by the Inspector.

A miner was convicted and fined £2 and costs for taking into the mine on the 13th July explosives which were not in a securely covered case or canister.

Another mine-manager was convicted and fined £5 and costs for permitting the part of the mine where a serious accident had occurred on the 23rd July to be interfered with before it was examined by the Inspector.

ANNEXURE B.

COLLIERY STATISTICS, 1925.

Name of Mine and Locality.	Titles held (Crown Lease or otherwise).	Name of Mine Manager.	Name and Address of Owner.	Number of Years worked.	Classification of Coal.	Number of Seams worked.	Thickness of Coal-seams.	Thickness worked.	System of Underground working.	Number of winding shafts.	Total Output for 1925.	Total Output to 31st December, 1924.	Total Output to 31st December, 1925.	Number of Persons ordinarily employed.			Means of Ventilation.	Depth of Shaft or Length of Tunnel.
														Above.	Below.	Total.		
NORTHERN INSPECTION DISTRICT.											Tons.	Tons.	Tons.					
Hikurangi P.W. Mine, Hikurangi	Freehold ..	A. Ball	Hikurangi Coal Co., Ltd., Auckland	33	Sub-bituminous	1	6½′	6½′	Bord and pillar	..	8,940	1,426,540	1,435,480	..	10	10	Natural ..	T. 396.′
Hikurangi New Shafts, Hikurangi	,, ..	E. Nelson ..	Hikurangi Coal Co., Ltd., Auckland	3	Ditto ..	1	10′	8′	Ditto ..	2	56,841	70,454	127,295	42	110	152	Waddle fans	S. 350′, S. 340′.
Kerr & Co. (McLeod's), Hikurangi	,, ..	A. H. Taylor ..	Kerr & Wyatt, Hikurangi ..	5½	,, ..	1	5′	5′	,, ..	..	2,316	22,445	24,761	3	7	10	Natural ..	T. 528′.
Silverdale Colliery, Hikurangi ..	Crown lease ..	S. Foot	Foot & Doel, Hikurangi ..	7½	,, ..	1	3′ to 5′	3′ to 5′	,, ..	..	419	21,505	21,924	1	4	5	,, ..	T. 120′.
Northern Co-operative, Hikurangi	,, ..	E. A. Cunningham (P.)	E. A. Cunningham & Co., Hikurangi	7	,, ..	1	4′	4′	,, ..	..	474	28,212	28,686	1	1	2	,, ..	T. 40′.
Christie's Co-operative, Hikurangi	Freehold ..	H. Tipton ..	Reyburn Lime Co., Whangarei ..	5½	,, ..	1	5′	5′	,, ..	..	4,228	21,457	25,685	1	4	5	,, ..	T. 206′.
Wilson's Colliery, Hikurangi ..	,, ..	G. Davidson ..	Wilson's Collieries, Ltd., Auckland	8	,, ..	1	8′	8′	,, ..	..	53,115	178,989	232,104	35	114	149	Sirocco fans	T. 1,320′.
Waro Colliery, Whangarei ..	,, ..	J. Cadman ..	N.Z. Coal & Cement Co., Whangarei	15	,, ..	1	5′ to 9′	5′ to 9′	,, ..	1	1,923	41,839	43,762	2	6	8	Fan ..	S. 120′.
Ruatangata Colliery, Kamo ..	,, ..	R. Dickson (P.) ..	Kamo Potteries, Ltd., Whangarei	5¼	,, ..	1	8′	7′	,, ..	..	911	2,274	3,185	..	1	1	Natural ..	T. 94′.
Kawakawa Colliery, Kawakawa ..	Crown lease ..	Wm. Tunstall (P.) ..	Wm. Tunstall & others, Kawakawa	2	,, ..	1	4′	4′	,, ..	..	2,373	924	3,297	1	4	5	,, ..	T. 130′.
Rotowaro Colliery, Rotowaro ..	Freehold ..	A. Penman ..	Taupiri Coal-mines, Ltd., Auckland	8	Brown ..	3	7′ to 27′	7′ to 13′	Bord and pillar	..	150,637	602,839	753,476	67	212	279	Waddle and sirocco fan	T. 1,200′, T. 1,300′.
Pukemiro Colliery, Pukemiro ..	,, ..	A. Burt	Pukemiro Collieries, Ltd., Auckland	10	,, ..	1	5′ to 18′	5′ to 14′	Ditto ..	..	133,291	1,018,294	1,151,585	58	177	235	Fans (2) ..	T. 4,000′, T. 3,200′.
Waipa Colliery, Glen Massey ..	,, ..	T. Thomson ..	Waipa Collieries & Railway, Ltd., Wellington	12	,, ..	1	8′ to 10′	6′ to 8′	,, ..	..	56,790	736,611	793,401	28	88	116	Sirocco fan	T. 6,000′.
Waikato Extended, Huntly ..	,, ..	D. Nicholson ..	Roose Shipping Co., Ltd., Mercer	9	,, ..	1	16½′	15′	,, ..	..	7,150	44,411	51,561	3	11	14	Natural ..	T. 490′.
Glen Afton Colliery, Glen Afton ..	,, ..	P. Hunter ..	N.Z. Co-op. Dairy Co., Ltd., Auckland	5	,, ..	1	8′ to 17′	8′ to 9′	,, ..	..	166,950	179,632	346,582	75	212	287	Sirocco fan	T. 4,200′.
Pukemiro Junction Mine, Pukemiro	Crown lease ..	C. V. Maloney ..	Clare & partners, Pukemiro Junct.	5	,, ..	1	2′ to 25′	2′ to 18′	,, ..	..	9,842	33,760	43,602	6	9	15	Natural ..	T. 350′.
Taupiri East, Kimihia ..	Auckland University lease	J. Thomson (P.) ..	Holland & party, Huntly ..	4	,, ..	1	17′	10′	,, ..	..	793	3,698	4,491	1	2	3	,, ..	T. 320′.
Campbell Mine, Whatawhata ..	Crown lease ..	R. Fox	Campbell Coal Co., Hamilton ..	4	,, ..	1	12′	8′	,, ..	..	2,055	4,287	6,342	1	4	5	,, ..	T. 90′.
Old Stockman Mine, Mokau ..	Freehold ..	C. Wright (P.) ..	Chambers Bros., Awakino ..	5	,, ..	1	4′ 6″	4′ 6″	,, ..	..	187	1,196	1,383	..	2	2	,, ..	T. 130′.
Graham Colliery, Glen Afton ..	,, ..	W. Mills	Graham Coal Co., Pukemiro ..	2	,, ..	1	6′	5′ 6″	,, ..	..	12,169	5,982	18,151	7	11	18	Fan ..	T. 240′.
Kimihia Colliery, Kimihia ..	Auckland University lease	T. Holt (P.) ..	R. Johnson, Huntly	2	,, ..	1	12′	7′	,, ..	..	960	441	1,401	..	3	3	Natural ..	T. 224′.
Green Castle Colliery, Aria ..	Crown lease ..	A. Morgan (P.) ..	A. Morgan, Aria	9	,, ..	1	11′	7′	,, ..	..	39	2,150	2,189	1	1	2	,, ..	T. 120′.
Output of collieries included in previous statements at which operations are abandoned or suspended	..	..	..	..	..	..	..	..	..	..	..	7,946,888	7,946,888	..	..	..	..	..
WEST COAST INSPECTION DISTRICT.																		
Nelson District.																		
Puponga	Crown lease ..	A. J. McHardy ..	Puponga Syndicate, Puponga ..	22	Bituminous	1	3′ 6″	Full height	P. & S.	..	6,064	243,332	249,396	5	15	20	Natural ..	T. 17 ch.
North Cape	Freehold ..	R. Alison ..	North Cape Coal Co., Nelson ..	15	,,	1	3′ to 8′	,,	..	..	3,143	102,786	105,929	20	10	30	,, ..	S. 220′.
Golden Bay	,, ..	J. McDougall (P.) ..	J. McDougall, Takaka	6	Lignite ..	1	5′	4′ 6″	Bord and pillar	..	411	2,038	2,449	..	1	1	,, ..	T. 10 ch.
O'Rourke's	,, ..	A. O'Rourke (P.) ..	A. O'Rourke, Murchison ..	6	Brown ..	1	2′	Full height	Ditto ..	..	100	402	502	..	1	1	,, ..	T. 8 ch.
Buller District.																		
Westport-Stockton	Crown lease ..	J. E. Armstrong ..	Westport-Stockton Coal Co., Christchurch	17	Bituminous	2	4′ to 20′	Full height	Bord and pillar	1	89,601	1,998,422	2,088,023	75	160	235	Fan ..	T. 90′.
Millerton	,, ..	Pearson & King ..	Westport Coal Co., Dunedin ..	34	,,	1	4′ to 20′	12′	Ditto ..	..	224,883	6,882,658	7,107,541	106	324	430	,, ..	T. 298 ch.
Denniston	,, ..	Hewitson & Smith ..	Westport Coal Co., Dunedin ..	45	,,	5	4′ to 20′	Full height	,, ..	..	204,014	8,690,586	8,894,600	139	342	481	,, ..	T. 345 ch.
Dove's	,, ..	Gilbert & Murray ..	J. T. Dove, Seddonville ..	5	,,	3	7′ to 20′	,,	,, ..	..	13,409	80,987	94,396	6	15	21	Fan. & nat.	..
Coal Creek	,, ..	William Smith ..	McGuire & party, Seddonville ..	10	,,	1	5′ to 20′	8′	,, ..	..	893	68,754	69,647	..	3	3	Natural ..	..
Cardiff Bridge	,, ..	M. Forsyth ..	Mulholland & party, Seddonville	5	,,	1	5′ to 20′	5′ to 12′	,, ..	..	21,855	34,856	56,711	4	23	27	,, ..	..
St. Helens	,, ..	C. R. Martin ..	Martin Bros., Seddonville ..	7	,,	2	6′	Full height	,, ..	1	323	19,929	20,252	..	2	2	,, ..	T. 3 ch.
Westport-Mokihinui	,, ..	W. O'Rourke ..	Westport-Mokihinui Coal-mines, Ltd., Seddonville	5	,,	1	6′ to 15′	6′ to 12′	,, ..	..	3,287	11,268	14,555	1	9	10	,, ..	T. 6 ch.

COLLIERY STATISTICS, 1925—*continued.*

Name of Mine and Locality.	Titles held (Crown Lease or otherwise).	Name of Mine Manager.	Name and Address of Owner.	Number of Years worked.	Classification of Coal.	Number of Seams worked.	Thickness of Coal-seams.	Thickness worked.	System of Underground working.	Number of Winding Shafts.	Total Output for 1925.	Total Output to 31st December, 1924.	Total Output to 31st December, 1925.	Number of Persons ordinarily employed. Above.	Below.	Total.	Means of Ventilation.	Depth of Shaft or Length of Tunnel.
WEST COAST INSPECTION DISTRICT—*continued.*											Tons.	Tons.	Tons.					
Buller District—continued.																		
Chester's	Crown lease	J. Penberth	Chester & Chester, Seddonville	6	Bituminous	1	2′ 9″	Full height	Bord and pillar	..	1,264	8,227	9,491	..	2	2	Natural	T. 16 ch.
Quinn's	,,	T. Quinn	Quinn & party, Seddonville	2	,,	1	5′	,,	,,	..	761	898	1,659	1	2	3	,,	..
Wynn's	,,	G. Wynn	G. Wynn, Seddonville	2	,,	1	2′ 10″	,,	,,	..	1,251	375	1,626	..	2	2	,,	T. 2¼ ch.
Glenlea	State reserve	James Black	Black and party, Seddonville	1	,,	1	4′ to 6′	,,	,,	..	78	..	78	..	2	2	,,	T. 50 yd.
Clydevale	Crown lease	John G. Quinn	The Clydevale Coal-mines, Ltd., Wellington	1	,,	1	20′	8′	,,	..	2,868	..	2,868	3	18	21	,,	T. 150′.
Glasgow	,,	S. McGuinness	McAllister & party, Seddonville	1	,,	1	6′	Full height	,,	..	2,652	..	2,652	2	3	5	,,	T. 4 ch.
Mitchell's	,,	F. T. Mitchell (P.)	F. T. Mitchell, Charleston	3	Lignite	1	3′	,,	Opencast	..	28	36	64	1	..	1	..	..
Celtic	,,	W. Jenkins	McGrane & Burchfield, Seddonville	1	Bituminous	1	Unknown	8′	Bord and pillar	..	2,431	..	2,431	..	5	5	Natural	T. 7 ch.
Westportmain	,,	George Smith	Roskvist & Rowley, Granity	1	,,	1	40′	9′ to 10′	Ditto	..	5,798	..	5,798	10	10	20	,,	..
Whitecliffs	,,	J. H. Burley	J. H. Burley, Berlin's	3	Brown	1	18′	12′	,,	..	72	202	274	..	2	2	,,	T. 4 ch.
Rocklands	,,	J. P. Burley	J. P. Burley, Berlin's	23	,,	1	27′	8′	,,	..	323	8,430	8,753	..	2	2	,,	..
Bell Creek	,,	M. Forsyth	Smith & Bennett, Seddonville	1	Bituminous	1	11′	Full height	,,	..	63	..	63	3	2	5	,,	..
Cardiff No. 4	State reserve	W. H. Smith	Smith & Stuart, Seddonville	1	,,	..	12′	8′	,,	..	398	..	398	1	2	3	,,	..
Reefton District.																		
Reefton Coal Co.	Crown lease	E. W. Tattley	Reefton Coal Co., Reefton	24	Brown	1	7 to 12′	6′ to 12′	Bord and pillar	..	23,467	109,729	133,196	14	45	59	Fan	T. One 9 ch., one 5 ch. one 8½ ch.
Phœnix & Venus	,,	L. W. Kearns	Collins & Kearns, Reefton	34	,,	1	30′	11′	Ditto	..	1,522	53,530	55,052	1	2	3	Natural	T. 100′.
Clele	,,	A. J. Grigg	Pascoe & Alborn, Reefton	39	,,	2	7′ & 9′	Full height	,,	..	1,758	22,237	23,995	1	4	5	,,	..
Big River	,,	W. E. Fattorini (P.)	Big River Gold-mine Co., Reefton	13	,,	1	8′	,,	,,	..	1,048	10,289	11,337	..	2	2	,,	T. 7¾ ch.
Morrisvale	,,	A. Thompson	Morris & Learmont, Reefton	13	,,	2	20′ & 30′	8′	,,	..	3,693	30,019	33,712	3	9	12	,,	T. 54 ch.
Lankey's Creek	,,	T. Nicholls (P.)	Politho & Nicholls, Reefton	4	,,	1	1′ to 10′	1′ to 8′	,,	..	1,166	2,903	4,069	..	3	3	,,	T. 6 ch.
Ferndale-Timaru	,,	W. Lowden	Ferndale-Timaru Coal Co., Timaru	23	,,	2	8′ to 16′	10′	,,	..	4,554	33,770	38,324	3	11	14	,,	T. 10 ch.
White Rose	,,	W. Osborn (P.)	W. Osborn, Merrijigs	2	,,	1	4′	Full height	,,	..	7	20	27	..	1	1	,,	T. 2½ ch.
Archer's	Freehold	J. J. Doran	F. W. Archer, Westport	27	,,	1	18′	7′	,,	..	51	30,069	30,120	} 2	3	5	,,	{ T. 260′.
Doran's	Crown lease	J. J. Doran	J. J. Doran, Capleston	5	,,	1	..	..	,,	..	10	1,668	1,678					..
Greymouth District.																		
McNeil's	Crown lease	J. McNeil	J. McNeil, Rapahoe	1	Bituminous	1	4′	,,	Bord and pillar	..	119	..	119	1	3	4	Natural	..
Allan & party	,,	J. Hallinan (P.)	Allan & party, Brunnerton	2	,,	1	8′ to 9′	7 to 8′	Ditto	..	1,800	600	2,400	2	5	7	,,	T. 3 ch.
Armstrong party's	State reserve	..	Armstrong & party, Runanga	4	,,	1	10′ 6″	5′	,,	..	4,745	13,827	18,572	2	7	9	,,	..
Baddeley & party's	,,	J. Rowse	Baddeley & party, Dunollie	5	,,	1	5′	Full height	,,	..	3,602	12,842	16,444	2	6	8	Fan	..
Blackball	Freehold and Crown lease	J. Neilson	Blackball Coal-mines Proprietary, Christchurch	34	,,	2	17′	15′	,,	..	95,343	3,270,254	3,365,597	56	240	296	,,	T. 1,232 ch, 650 ch.
Brae Head	State reserve	I. Powell	Boote & party, Dunollie	4	,,	1	10′	9′	,,	..	6,583	7,362	13,945	4	7	11	,,	T. 5¾ ch.
Boustridge's	Crown lease	H. Boustridge	Boustridge & party, Brunnerton	2	,,	1	9′	Full height	,,	..	551	716	1,267	..	2	2	Natural	..
Duggan's	State reserve	W. Richmond	Duggan & party, Runanga	4	,,	1	4′ 6″	,,	,,	..	3,013	10,102	13,115	1	6	7	,,	T. 4 ch.
Dobson	Crown lease	C. Hunter	Grey Valley Collieries, Ltd., Christchurch	3	,,	2	9′ to 14′	9′	,,	..	12,268	4,287	16,555	32	43	75	Fan & nat.	T. 1,200′.
Hillside	State reserve	W. S. Clarke	Clarke & party, Runanga	5	,,	1	5′	Full height	,,	..	5,770	18,329	24,099	3	6	9	Fan	T. 15′.
Hunter's	,,	R. Middleton	Hunter & party, Dunollie	5	,,	1	3′	,,	,,	..	4,622	10,359	14,981	1	9	10	,,	T. 12 ch.
Manderson's	,,	P. Manderson	Manderson & party, Dunollie	4	,,	2	5′ & 10′	,,	,,	..	5,376	10,275	15,651	2	8	10	Natural	..
McIvor's	,,	J. Duggan	McIvor & party, Dunollie	5	,,	1	6′	,,	,,	..	1,374	3,313	4,687	1	4	5	,,	T. 5 ch.
Moody Creek	,,	W. Robertson	Simpson & party, Dunollie	3	,,	1	7′	,,	,,	..	4,101	8,274	12,375	4	5	9	,,	T. 4 ch.
Smith's	,,	T. Halliday	Smith & party, Point Elizabeth	5	,,	1	6′	,,	,,	..	4,796	18,642	23,438	3	5	8	,,	T. 6 ch.
Spark's	,,	J. Watson	Spark & party, Rewanui	3	,,	1	9′	,,	,,	..	3,312	6,050	9,362	2	10	12	Fan	T. 1 ch.
Paparoa	Crown lease	A. F. O'Donnell	Paparoa Coal Co., Ltd., Blackball	17	,,	1	5′ to 25′	8′ to 25′	,,	..	39,301	469,313	508,614	27	63	90	,,	T. 48½ ch.
Cain's	State reserve	E. Cain	J. Cain, Rapahoe	1	,,	1	4′ to 6′	Full height	,,	..	309	..	309	1	2	3	Natural	T. 4 ch.
James	,,	J. Armstrong	N.Z. Government, Wellington	4	,,	1	4′ to 8′	,,	,,	..	24,381	48,270	72,651	28	48	76	Fan	T. 15 ch.
Liverpool No. 1	,,	O. J. Davis	N.Z. Government, Wellington	13	,,	2	6′ & 30′	,,	,,	..	59,193	} 1,362,995	1,469,779	{ 61	95	156	,,	T. 38 ch.
Liverpool No. 2	,,	O. J. Davis	N.Z. Government, Wellington	12	,,	3	8′ to 34	8′	,,	..	20,273			{ 20	68	88	,,	T. 56 ch.
Liverpool No. 3	,,	O. J. Davis	N.Z. Government, Wellington	14	,,	1	4′ to 16′	Full height	,,	..	14,796			{ 12	23	35	,,	T. 5 ch.
Liverpool Extended	,,	O. J. Davis	N.Z. Government, Wellington	4	,,	1	4′ 7″	,,	,,	..	12,522			{ 6	20	26	,,	..
Output of collieries included in previous statements at which operations are abandoned or suspended				..	..	..	..	..	..	..	..	7,193,127	7,193,127	..	..	..	..	..

SOUTHERN INSPECTION DISTRICT.

Canterbury District.												Tons.	Tons.	Tons.					
Mount Torlesse, Avoca	Crown lease	H. Talbot	Mount Torlesse Coll., Christchurch	8	Brown	3	8′	8′	Bord and pillar			2,684	66,171	68,855	7	16	23	Fan	T. 198.′
Homebush, Glentunnel	Freehold	J. C. Campbell (D.)	Homebush Brick & Coal Co., Glentunnel	52	,,	1	6′	6′	Ditto			1,356	342,907	344,263	2	4	6	Natural	S. 14′ T. 121.′
Bush Gully, Coalgate	,,	Jas. Charles	Homebush Brick & Coal Co., Glentunnel	8	,,	1	3′	6′	,,			462	38,659	39,121		2	2	,,	T. 264′.
St. Helens, Whitecliffs	Crown lease	J. Campbell, (D.)	G. McClatchie & Co., Christchurch	44	,,	3	3½′ to 6′	6′	,,			468	32,585	33,053	1	3	4	,,	
Steventon, Whitecliffs	Freehold	J. T. Leeming (D.)	Campbell & Leeming, Glentunnel	6	,,	1	6	6′	,,			1,281	12,288	13,569	2	4	6	,,	T. 135′.
Clearview, Glenroy	,,	Geo. Aitken (D.)	Smith & Marsh, Glentunnel	6	,,	1	9′	7′	,,			2,685	5,414	8,099	3	4	7	,,	S. 30′.
Tripps, Mount Somers	,,	J. McChuont	Burnwell Coal Co., Christchurch	59	,,	1	20′	8′	,,			1,710	81,312	83,022	1	3	4	,,	T. 400′.
Burnwell, Mount Somers	Crown lease	T. Harris (D.)	Burnwell Coal Co., Christchurch	3	,,	1	6′	All	,,			150	1,630	1,780	..	..	..	,,	T. 600′.
Albury, Albury	Lease under Land Act	J. H. Smillie (D.)	J. H. Smillie, Albury	34	Lignite	1	8′ to 20′	,,	Open			824	24,617	25,441	3	..	3	Open	
Woodbank, Albury	Ditto	J. H. Smillie (D.)	Duncan Ross, Albury	2	,,	1	7′	,,	,,			40	229	269	..	..	..	,,	
Allanholm, Waihao Forks	Crown lease	Jas. Craig (D.)	Allanholm Coal Co., Waimate	10	,,	1	15′	9′	Bord and pillar			505	10,304	10,809	..	2	2	Natural	T. 45′.
North Otago District.																			
Wharekuri, Wharekuri	Lignite license	Peter Campbell	Mary Shanks, Wharekuri	6	Lignite	1	30′	6′	Bord and pillar			385	3,987	4,372	..	3	3	Natural	T. 900′.
Bellemere, Kurow	Crown lease	Peter Campbell	Messrs. Malmanche, Watson, & Matheson, Kurow	1	,,	1	20′	6′	Ditto			40	..	40	..	2	2	,,	T. 120′.
Prince Alfred, Papakaio	,,	A. Beardsmore	Mrs. J. E. Willetts, Papakaio	56	,,	1	7′ to 12′	6′	,,			506	70,359	70,865	..	2	2	,,	
St. Andrew's, Papakaio (resumed)	Freehold	J. McQueen (R.)	James McQueen, Peebles	46	,,	1	7′	7′	,,			203	61,310	61,513	..	3	3	,,	T. 40′.
Ngapara, Ngapara	,,	W. Nimmo (P.)	W. Nimmo, Ngapara	47	,,	1	25′	8′ to 10′	,,			1,070	39,046	40,116	1	2	3	,,	T. 50′.
Shag Point (old mine), Shag Point	Crown lease	W. McLaren (P.)	Waronui Coal Co., Dunedin	11	Brown	1	5′	All	,,			969	413,913	414,882	..	2	2	,,	T. 396′.
Shag Point C.M. Co., Ltd., Shag Pt.	Freehold	J. Hughes	Shag Point C.M. Co., Ltd., Dunedin	17	,,	1	4′	,,	,,			16,867	158,712	175,579	13	50	63	Fan	T. 500′.
Central Otago District.																			
Gimmerburn, Gimmerburn	Crown lease	C. Dougherty	C. Dougherty, Gimmerburn	69	Lignite	1	12′	All	Open			..	3,433	3,433	..	..	..	Open	
Rough Ridge, Oturehua	,,	E. Beck (P.)	Margaret Beck, Oturehua	39	,,	1	20′	,,	,,			..	35,529	35,529	..	..	..	,,	
Idaburn, Oturehua	,,	R. K. Deaker (P.)	R. K. Deaker, Oturehua	55	,,	1	20′	,,	,,			636	51,997	52,633	2	..	2	,,	
Oturehua, Oturehua	,,	J. R. Becker (P.)	Becker Bros., Oturehua	31	,,	1	17′	7′	,,			142	4,955	5,097	1	..	1	,,	
St. Bathan's, Blackstone Hill	,,	J. Enwright (P.)	J. Enwright, St. Bathan's	28	,,	1	30′	All	,,			71	7,035	7,106	1	..	1	,,	
Cambrian, Cambrian	,,	M. J. Millar (P.)	Vinegar Hill Hydraulic S. Co., Ltd. St. Bathan's	64	,,	1	18′	,,	,,			195	51,050	51,245	1	..	1	,,	
Alexandra, Alexandra	,,	J. Robertson	Alexandra C.M. Co., Alexandra	44	,,	1	9′	6′	Bord and pillar			783	108,380	109,163	1	2	3	Natural	T. 1,000′.
McPherson's Coal Creek Flat	,,	N. Harlewich (P.)	N. Harlewich, Roxburgh	55	,,	1	45′	All	Open			1,795	85,775	87,570	2	..	2	Open	
Shepherd's Creek, Bannockburn	,,	J. Hodson, jun.	Bannockburn C.M. Co., Bannockburn	48	,,	1	6′ to 13′	9′	Bord and pillar			2,063	113,128	115,191	1	3	4	Natural	
Cardrona, Cardrona	,,	R. McDougall (P.)	R. McDougall, Cardrona	41	Brown	2	20′ to 30′	All	Open			..	26,742	26,742	..	..	..	Open	
Nevis Crossing, Nevis	,,	R. Ritchie (P.)	R. Ritchie, Nevis	22	,,	1	16′	6′	,,			426	16,386	16,812	2	..	2	,,	
George's, Naseby	,,	P. George	P. George, Naseby	2	Lignite	1	6′	All	,,			30	90	120	..	..	..	,,	
Henderson's (Doolan's Creek), Gibbston	,,	Wm. Hannah (P.)	D. Henderson, Arrowtown	2	Brown	1	15′	6′	Bord and pillar			95	21	116	..	2	2	Natural	
Blackman's Creek, Alexandra	Crown perpetual lease (applied for)	I. Anderson	D. Carruthers & I. Anderson, Alexandra	1	Lignite	1	20′	7′	Ditto			63	..	63	1	2	3	,,	T. 80′.
South Otago District.																			
Fernhill, Abbotsford	Freehold	W. Robertson (U.)	Fernhill Coal and Sand Co., Dunedin	48	Lignite	1	8′	6′	Bord and pillar			1,053	179,937	180,990	1	2	3	Natural	T. 330′.
Freeman's, Abbotsford	,,	W. Evans (U.)	Freeman's Coal Co., Abbotsford	45	,,	1	12′ to 15′	All	Ditto			3,280	594,200	597,480	1	5	6	,,	
Jubilee, Saddle Hill	,,	T. Barclay	Jubilee Coal Co., Dunedin	28	,,	2	5′ to 8′	,,	,,			23,576	456,538	480,114	10	21	31	Fan	T. 660′.
Harris', Burnwell, Saddle Hill	,,	Adam Harris	A. Harris, Saddle Hill	36	,,	1	6′ to 20′	6′	,,			1,049	80,817	81,866	1	2	3	Natural	T. 198′.
Willowbank, Riccarton	,,	D. McNeill	G. Scurr, Riccarton, Mosgiel	5	,,	1	14′	7′	,,			4,879	2,383	7,262	1	7	8	,,	T. 70′.
Brighton, Brighton	,,	R. C. Wright (P.)	Smith & Wright, Brighton	10	,,	1	7′	6′	,,			399	8,540	8,939	..	2	2	,,	T. 60′.
Waronui, Milton	,,	J. Carruthers, jun.	Bruce Rly. and Coal Co., Dunedin	21	,,	2	6½′ & 11′	6′ & 7′	,,			16,774	300,229	317,003	7	28	35	Fan	S. 30′, T. 1,000′.
Viewbank, Crichton	,,	N. Greaves (P.)	N. Greaves, Crichton, S.O.	6	,,	1	12′	7′	,,			746	2,995	3,741	1	2	3	Natural	S. 20′, T. 132′.
"Tres Bon," Milton	Crown lease	A. Woodhouse	Woodhouse & Mulrine, Milton	9	,,	1	10′	7′	,,			208	32,192	32,400	..	1	1	,,	
Taratu, Lovell's Flat	Freehold	J. Hadcroft	Sargood & Cheeseman, Dunedin	24	,,	1	25′	7′	..			34,462	571,507	605,969	18	40	58	Fan	S. 205′, S. 180′, T. 924′.
Tuakitoto, Tuakitoto	,,	J. Throp (P.)	J. Throp, Kaitangata	15	,,	2	18′	7′	Bord and pillar			645	4,052	4,697	1	1	2	Natural	T. 250′.
Kaituna, Kaitangata	Crown lease	R. McMillan (F. & D.)	T. Gage, Kaitangata	17	,,	1	15′	6′	Ditto			543	25,108	25,651	1	2	3	Fan	T. 350′.
Kaidale, Wangaloa	,,	E. Richardson (U.)	Morrison Bros., Kaitangata	7	,,	1	10′ to 14′	6½′	,,			180	8,227	8,407	..	1	1	Natural	
Kaibrook, Wangaloa	,,	T. Gage (P. & D.)	T. Gage, Kaitangata	6	,,	1	11′	6½′	,,			160	2,398	2,558	1	1	2	,,	T. 272′.
Kaitangata No. 1, Kaitangata	Freehold	F. Carson	N.Z. Coal & Oil Co., Ltd., Dunedin	49	Brown	2	6′ to 12′′	All	,,									Fan	S. 730′, T. 3,960′
Kaitangata No. 2, Kaitangata	,,	F. Carson	N.Z. Coal & Oil Co., Ltd., Dunedin	13	,,	4	6′ to 25	,,	,,			104,788	4,254,518	4,359,306	61	231	292	,,	T. 3,135′, T. 957, T. 462′.
Castle Hill, Kaitangata	,,	J. McLelland	N.Z. Coal & Oil Co., Ltd., Dunedin	32	,,	3	12′ to 20′	,,	,,									,,	T.3,300′,T.1,320′.
Benhar, Benhar	,,	J. Walls	P. McSkimming & Son, Benhar	62	Lignite	3	14′	10′	,,			10,021	238,130	248,151	1	7	8	..	T. 1,200′.
Mosgiel Collieries, Mosgiel	,,	R. Hill	Christie Bros., Mosgiel	1	,,	1	8′	6′	,,			531	..	531	2	5	7	Natural	T. 32′.

COLLIERY STATISTICS, 1925—*continued.*

Name of Mine and Locality.	Titles held (Crown Lease or otherwise).	Name of Mine Manager.	Name and Address of Owner.	Number of Years worked.	Classification of Coal.	Number of Seams worked.	Thickness of Coal-seams.	Thickness worked.	System of Underground working.	Number of Winding shafts.	Total Output for 1925.	Total Output to 31st December, 1924.	Total Output to 31st December, 1925.	Number of Persons ordinarily employed.			Means of Ventilation.	Depth of Shaft or Length of Tunnel.
														Above.	Below.	Total.		
			SOUTHERN INSPECTION DISTRICT—*continued.*															
Southland District.											Tons.	Tons.	Tons.					
Whiterig, East Gore	Freehold	R. Craig (P.)	Robert Craig, East Gore	47	Lignite	1	24′	14,	Bord and pillar		3,204	92,721	95,925	1	2	3	Natural	T. 792′.
Green's, Gore	,,	James Mason	T. Green & Co., Ltd., Gore	37	,,	1	19′	12′	Ditto		12,868	293,056	305,924	3	7	10	,,	T. 380′.
Riverview, Gore	,,	J. J. Nichol (P.)	J. J. Nichol, Gore	38	,,	1	10′	All	Open		..	2,104	2,104	..	..	..	Open	..
Springfield, Waikaka Valley	,,	R. L. Reid (P.)	R. L. Reid, Waikaka Valley	29	,,	1	9′	9′	,,		232	59,901	60,133	2	..	2	,,	..
Glenlee, Waikaka	..	F. W. Edge (P.)	A. A. Edge, Waikaka	32	,,	1	14′	9′	Bord and pillar		1,259	26,226	27,485	2	2	4	Natural	..
Ramsay's, North Chatton	Freehold	P. Ramsay (P.)	Peter Ramsay, North Chatton	22	,,	1	8′ to 25′	All	Open		2,176	104,347	106,523	1	..	1	Open	..
Landslip, Waikaia	Lig. lease	T. Northcoat (P.)	T. Northcoat, Waikaia	26	,,	1	5′	,,	Bord and pillar		6	36,936	36,942	..	..	..	,,	..
Argyle, Waikaia	Crown lease	J. Hutton (P.)	J. Hutton, Waikaia	34	,,	1	7′	7′	Open		342	8,902	9,244	1	..	1	,,	..
McIvers, Waikaia	Lig. lease	R. McIver (P.)	R. McIver, Waikaia	2	,,	1	10′	6′	,,		200	99	299	1	..	1	,,	..
Wendon, Waikaia (resumed)	,,	E. Radford (P.)	P. & E. Radford, Waikaia	3	,,	1	16′	10′	Bord and pillar		150	306	456	..	..	..	Natural	..
Terrace, Longridge	Crown lease	G. Daley (P.)	G. Daley, Kingston Crossing	7	,,	1	24′	11′	Ditto		1,003	8,270	9,273	..	2	2	,,	T. 66′.
Princhester Creek, The Key	Lig. lease	J. A. Denton (P.)	J. A. Denton, The Key	23	Brown	1	5′	All	Open		159	2,405	2,564	1	..	1	Open	..
Boghead, Mataura	Freehold	Jos. Buchols (D.)	C. E. Rowe, Mataura	20	Lignite	1	18′	11′	Bord and pillar		7,782	35,021	42,803	2	5	7	Natural	..
Mataura Lignite, Mataura	,,	T. Barclay	Beattie Coster, and Co., Ltd., Mataura	49	,,	1	18′	12′	Ditto		18,744	276,403	295,147	4	7	11	Fan	T. 1,320′.
Ota Creek, Wyndham	Lig. lease	E. Genge (P.)	E. Genge, Wyndham	45	,,	1	5′	All	Open		378	28,641	29,019	1	..	1	Open	..
Clarke's, Wyndham	Freehold	Wm. Thompson	Hunter Bros. & Rice, Wyndham	18	,,	1	10′	,,	,,		708	21,157	21,865	1	..	1	,,	..
Diamond Lignite, Ashers	Crown lease	A. McMillan (P.)	S. McMillan, Invercargill	23	,,	1	32′	18′	,,		1,386	29,900	31,286	2	..	2	,,	..
Broomhill (late Wattle), Nightcaps	,,	S. Reid (D.)	Broomhill Coal Co., Nightcaps	44	Brown	1	8′	8′	Bord and pillar		950	1,561	2,511	1	2	3	Steam	T. 858′.
Black Diamond, Nightcaps	,,	R. W. Duncan	Black Diamond Coal Co., Invercargill	10	,,	1	25′	8′	Ditto		29,868	111,574	141,442	18	34	52	Fan	T. 1,320′.
New Brighton, Nightcaps	,,	W. Dixon	Southland Coal Co., Invercargill	19	,,	1	9′	7′	,,		7,240	116,394	123,634	8	11	19	,,	T. 924′.
Wairio, Nightcaps	,,	P. Niven (D.)	J. H. Smith, Otautau	20	,,	1	4′	All	,,		1,167	143,969	145,136	1	1	2	Natural	T. 264′.
Mossbank, Ohai	,,	T. McMillan	Mossbank Coal Co., Ltd., Invercargill	11	,,	1	21′	8′	,,		14,722	96,292	111,014	11	15	26	Fan	T. 429′.
Wairaki No. 1, Ohai	,,	J. T. Mosley	Wairaki Coal Co., Gore	12	,,	1	10′	7′	,,		37,103	129,444	166,547	21	62	83	,,	T. 1,815′.
Wairaki No. 2, Ohai	Freehold	J. T. Mosley	Wairaki Coal Co., Gore	7	,,	1	16′	8	,,									T. 924′.
Linton No. 1, Ohai	Crown lease	G. S. Langford	Linton Coal Co, Invercargill	10	,,	2	40′	All	,,		67,436	161,421	228,857	18	83	101	,,	T. 1,100′.
Linton No. 2, Ohai	Freehold	G. S. Langford	Linton Coal Co., Invercargill	10	,,	..	8′	,,	,,									..
Birchwood, Ohai	,,	A. Morris	Birchwood Coal Co., Ohai, Nightcaps	5	,,	1	7′ to 8′	,,	,,		27,327	60,485	87,812	17	46	63	,,	T. 924′.
Ohai Coal Co., Ohai	Crown lease	J. B. Ross	Ohai Coal Co., Invercargill	3	,,	1	7′	7′	,,		12,367	7,190	19,557	13	24	37	,,	T. 858′.
Black Lion (Stevenson's), (resumed), Ohai	,,	James Mason	Wm. Stevenson, Invercargill	4	,,	1	7′	All	,,		457	4,124	4,581	..	..	..	Natural	T. 264′.
Bridgehead, Ohai	,,	A. Hunter	McKenzie & Hunter, Nightcaps	2	,,	1	5½′	,,	,,		54	20	74	..	2	2	,,	T. 100′.
Lynwood, Te Anau	,,	J. Jamieson (P.)	E. C. Govan, Te Anau	15	Lignite	1	6′ to 8′	,,	Open		110	3,310	3,420	1	..	1	Open	..
Outputs of mines included in previous statements at which operations have been abandoned or suspended				..	..	..	..	..	..		..	5,503,575	5,503,575	..	..	..	..	..
Totals, Southern Districts, South Island											491,196	15,995,489	16,486,685	283	774	1,057		
Totals, West Coast District, South Island											951,396	30,917,357	31,868,753	672	1,722	2,394		
Totals, Northern District, North Island											672,403	12,394,828	13,067,231	333	993	1,326		
Grand totals											2,114,995	59,307,674	61,422,669	1,288	3,489	4,777		
Output of collieries prior to 1890 not included in the above statement											..	..	296,653					
Shale exported, 1914											..	..	21					
													61,719,343					

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