(No. 1.)

TASMANIA

REPORT

OF THE

SECRETARY FOR MINES

FOR

YEAR ENDING DECEMBER 31

1925

INCLUDING REPORTS OF THE INSPECTORS OF MINES, GOVERNMENT GEOLOGISTS, GOVERNMENT CHEMIST AND ASSAYER, MOUNT CAMERON WATER-RACE BOARD, &c.

Presented to both Houses of Parliament by His Excellency's Command

Tasmania:

JOHN VAIL, GOVERNMENT PRINTER, HOBART

1926

31087

TABLE OF CONTENTS.

REPORT OF THE SECRETARY FOR MINES.

Mines Department,
Hobart, 3rd June, 1926.

SIR,

I HAVE the honour to submit my report on the Mines Department and the Mining Industry for the year ending 31st December, 1925.

GENERAL REMARKS.

The aggregate value of minerals raised during the year was £1,700,861, being an increase of £204,057 on the output for the previous year.

The principal increases were in coal, £3869; cement, £57,740; lead, £42,571; osmiridium, £92,953; silver, £7672; tin, £22,501; wolfram, £11,873; and zinc, £20,206; while decreases are shown in copper, £20,725; carbide, £5613; gold, £6522; limestone, £21,470; and shale £967.

APPENDICES.

Appended will be found:—

Annual Report of Mt. Cameron Water-race Board.
Reports of the Government Geologists.
Report of the Acting Government Chemist and Assayer.
Report of the Chief Inspector of Mines.
Reports of the Inspectors of Mines.
Report of the Chief Inspector of Explosives.

AID TO MINING.

Activities under the Aid to Mining in the Zeehan district were fairly well maintained throughout the year; a decline, however, in the number of tributors employed occurred towards the end of the period.

The high prices ruling for metals, particularly for lead, stimulated prospecting work, but it did not result in any increase to speak of in the output of ore.

It was confidently expected that, with the market provided by the Electrolytic Zinc Coy. for low grade lead and zinc-lead ores hitherto unsaleable, a marked revival in mining would ensue. This, however, did not eventuate. The reasons assigned are:—

(1) The best tariff offered is not sufficiently favourable, from the producers' point of view, for the general classes of low grade ore available in the Zeehan district.
(2) No reserves of low grade ore are available to ensure a regular output of a quality suitable for the most favourable terms the tariff provides.
(3) Freight and handling charges are too high to encourage development and equipment of properties.

Special investigations were made for the purpose of procuring, if possible, a market in Europe for medium and high grade zinc ores and mixed zinc-lead ores. Satisfactory tariffs were submitted by prospective buyers, stipulating regular shipments, but as no guarantee could be given by the various producers that a constant supply of ore could be maintained for shipment they were unable to avail themselves of the terms offered.

A number of tributors have been assisted in the development of their holdings, but the results obtained have not, on the whole, been encouraging. The developmental work undertaken by tributors has been chiefly by tunnelling.

On the Zeehan-Queen section in the hill east of the old No. 4 shaft recent developments on A. Cornish's tributing area are very encouraging. A payable shoot of galena was located in a winze below the drive from the upper tunnel, and a few feet north of the latter. A lower tunnel some distance north of, and on the line of, the lode, is being driven to intersect the shoot of ore 30 feet below the winze. The work of driving is well advanced, and the prospects are bright for a considerable yield of ore. This lode is well situated for much deeper development by means of tunnels.

In the Western mine section several parties of tributors have won small lots of galena from shallow tunnel workings. A good deal of driving and cross-cutting has been performed, but nothing of value has been located.

On the No. 2 Argent section several tributing parties have been operating in former tunnel workings, from which a small quantity of galena and low grade ore has been raised. No new developments of importance have occurred in this area.

On the Argent Flat section a few tons of low grade ore were raised from surface workings. No work to speak of has been carried out on the No. 6 Argent property.

At the Florence a few tons of low grade gossan ore were raised from old workings near the surface by tributors, but the results obtained were not sufficiently encouraging to continue.

A tributor carried out some tunnelling work on the Despatch, on the western side of the King Extended Hill. A small lode formation, carrying fair prospects of galena, was driven on for some distance, but the results obtained did not warrant further work.

On the eastern side of the King Extended Hill a tributor carried out a considerable amount of driving and cross-cutting, and some fair bunches of galena were met with, from which ½-ton of galena was bagged.

From the Austral Valley area a few small lots of fair grade ore were raised from surface workings and dump heaps.

Section 5934M, South Zeehan.—H. Perry's tribute on this section shows promise of developing into a productive area of some importance. A shaft is needed to prove the several lodes cut in the shallow tunnel workings.

On section 903M the tributor raised a limited quantity of fair grade ore.

In the Comstock area very little productive work has been carried out on the whole. On J. Dunkley's tributing area a fair development of low grade zinc-lead ore was located some 300 feet west of Tengdahls shaft. This ore is rather too low grade for export, and is not suitable for local treatment.

The old T.L.E. mine was again unwatered and worked for a short period. A few tons of ore were raised

On the old Tasmanian mine, situated between the Swansea and T.L.E. mines, a party of tributors drove a tunnel several hundred feet easterly from the old tramway, but nothing of importance was met with.

In the Aid to Mining area at Zeehan there are a number of mining operators, as distinct from Government tributors, actively engaged in productive and developmental work. Although the number of men employed in tributing has decreased, mining generally is on a firmer basis than in the previous term.

The amount received from ore sales was £2867 15s. 4d., which was distributed as follows:—

	£	s.	d.
Paid to tributers	2,582	3	11
Royalty paid to State	275	16	5
Interest paid to State	9	15	0
	£2,867	15	4

EXPENDITURE.

	£	s.	d.
Salaries and wages	534	0	0
Travelling expenses	1	14	6
Assistance to prospectors, under Part I.	291	10	0
Assistance to prospectors, under Part III.	216	0	0
Expenses advertising No. 6 Argent plant	33	10	0
Assay material	172	0	3
Office expenses	20	4	5
Miscellaneous expenses	4	4	0
Refund of royalties	39	13	3
	£1,312	16	5

RECEIPTS.

	£	s.	d.
Royalty paid by tributers	275	16	5
Assay fees	64	2	0
Sale of ore	263	4	4
Sale of material	63	4	3
Repayment of loan	2,000	0	0
Interest on loans	202	1	8
	£2,868	8	8

THE NO. 2 ARGENT PROSPECTING SYNDICATE, NO LIABILITY.

A sum of £9 6s. 9d. was received in Royalty, and was allocated as follows:—

	£	s.	d.
Tribute royalty			
Pumping account	4	13	4
Installation of plant (Loan Account)	4	13	5
	£9	6	9

The Syndicate's loan account at the 31st December, 1925, was as follows: —

	£	s.	d.
Total amount advanced	3,222	10	4
Paid by royalty on ore sold	1,079	3	6
Balance owing	£2,143	6	10

GOLD.

The following return shows the quantity and value of gold won during the year:—

	Fine Ozs.
Beaconsfield	309·04
Mt. Claude and Moina	142
Lisle-Golconda	110·90
North-Eastern Division	144
Mathinna	553·5
North-West and West Coasts	2,264·43
Total	3,523·87

Value, £15,041.

Beaconsfield.—Prospectors, including Messrs. Hammersley, Windred, Combie, and others, have given attention to the old dumps and surface trenching.

Blessington.—Messrs. Burkett and party have here done an exceptional amount of serviceable work by tunnelling in the hope of finally discovering payable stone on the property they are prospecting.

Port Cygnet.—A company was formed in May last to take over the gold leases of the Port Cygnet Gold Mining Syndicate.

Active operations, under the auspices of the company, were commenced in June last, and continued throughout the year, an average of eight men being continuously employed.

Considerable development work was carried out, principally in sinking a winze 90 feet below No. 1 level, prospecting shaft, and in surface costeening.

The result of preliminary prospecting justified the sinking of a 10 feet x 4 feet main shaft in three compartments, and this was started in September last, and sunk to a depth of 115 feet by the end of the year. It is proposed to sink to a depth of 200 feet before opening out.

The shaft was equipped with necessary head-gear, boiler, and winch, to enable the work to be carried out.

Approximately 40 tons of payable ore was raised in course of development operations.

Lisle and Golconda.—Beyond alluvial mining in a small way, there is nothing of interest to record in connection with either of those places.

Back Creek and Lefroy.—Both of those centres have again come into notice, especially the latter, where the prospects obtained from the "Golden Zone" and "Comrades" prospecting shows are considered of such importance as to warrant the sinking of more suitable shafts on each of them. The former is down 40 feet, and good progress has been reported to date.

Alberton.—At the Ringarooma United, with the assistance of a 10-head battery, prospecting has continued all over the property, and trial crushings have been made from stone broken from (1) the engine winze below the floor of the lowest adit or bottom level, (2) the "Premier," (3) "Rosiland," (4) Hannah's, and (5) Strahan Reefs, which, from time to time, have carried short, but exceptionally rich, makes a stone, upon one of which (from the lastmentioned) the manager is now operating. Close and adjoining prospecting is intermittently followed on the Forest King, Mount Victoria, Struggle, Una, and Everett's old sections.

Mathinna.—Work purely of a prospecting character has continued in this centre, in connection with which the Golden Gate Mine has again been unwatered to the 1700 feet level, and several blocks of stone that were left by the original owners have been operated on between this and the intervening levels without discovering anything of a payable character. Those now in possession, however, are giving this once noted property a thorough overhaul, and when satisfied in this direction there will be little left to dwell upon or speculate regarding its future. Next, and adjoining, the "Miner's Dream" main shaft has, under repeated difficulties, attained a depth of 220 feet, and the management is still persevering to increase this to 300 feet before opening out and cross-cutting in order to intersect a continuation of the stone followed in the 150 feet underlie shaft and workings, and from which in the mine's own battery a trial crushing is reported to have given an ounce to the ton.

"Old Boys," locally known as "Brock's Show." The mine manager (Mr. A. H. Solomon) reports:—The main shaft has been sunk to two hundred and eleven feet (211), and four hundred and fifty feet (450) of driving, and in driving north from crosscut we intersected the reef at 66 feet from crosscut, and have now driven on it one hundred and two feet (102). There is about 100 tons of stone at grass, but nothing has yet been crushed.

The number of men employed: Eleven.

SILVER-LEAD.

The quantity of silver produced was 730,193·67 oz., valued at £105,509.

The producers were:—

	Ounces.	Value. £
Zeehan Mines—		
Zeehan-Montana	615·20	89
Zeehan Queen	1,736·60	249
Swansea	4,700·75	682
Oonah	227·70	33
Nike	7,980·49	1,151
Sunshine	388	57
No. 2 Argent	2,339·79	338
No. 6 Argent	101·03	14
North Zeehan	6,235·80	898
Others	8,453·14	1,224
Dundas Mines—		
Hercules-Rosebery	165,356	23,885
North Mt. Farrell	233,390	33,713
Mt. Lyell Mine	133,181	19,226
Tasman	3,210·17	468
Magnet Mine	137,434	19,888
Mt. Jasper	717	104
Round Hill	23,980	3,468
Others	157	22
Totals	730,193·67	105,509

The quantity of lead produced was 5525·99 tons, valued at £197,452.

The producers were:—

	Tons.	Value. £
Zeehan Mines—		
Zeehan-Montana	5·46	199
Zeehan Queen	33·50	1,205
Swansea	179·92	6,460
Oonah	17·31	572
Nike	77·76	2,753
Sunshine	5·80	211
No. 2 Argent	15·55	548
No. 6 Argent	1·74	60
North Zeehan	8·4	305
Others	101·16	3,607
Dundas Mines—		
Hercules-Rosebery	1,679	59,835
North Mt. Farrell	2,117·08	75,797
Tasman	51·09	1,861
Magnet Mine	864·06	30,823
Mt. Jasper	5·35	197
Round Hill	360·4	12,939
Others	2·41	80
Totals	5,525·99	197,452

Northern and Southern Division.—The Round Hill Silver and Lead Mining Co., No Liability.—The Mine Manager (Mr. J. J. Andrew) reports:—

South-east Drive, Quartzite Lode, Shaft Level: This drive has been extended on the course of the lode 108 feet. The lode has proven payable over an average width of 4 feet. There is good seconds showing in the face of drive, which is being continued.

Quartz Lode, South-east of Shaft: Driving on this lode, which is running parallel to the quartzite lode, has been continued from the south crosscut a distance of 100 feet south-east and 89 feet north-west. The lode, although patchy, has produced very good milling ore.

Drive, North-west of Shaft: This drive has been advanced north-west 120 feet. We have cut several rich veins of ore, but have not yet cut the big lense of rich copper sulphide ore, which was highly productive in the tunnel above. This drive is being continued north-west on the course of the lode.

Crosscuts: Crosscuts have been driven on both sides of the shaft testing for parallel lenses of ore without discovering anything fresh.

Rises: Rises have been put up on the north-west side of the shaft and connected with the No. 1 tunnel above. This has kept this part of the mine well ventilated.

Concentrator Plant: During the year the mill treated 7495 tons of second-class ore, producing 628 tons of concentrates, containing 142 oz. gold, 23,980 oz. silver, and 360 tons lead. The plant is in good repair and running smoothly.

Power Plant: Power has been supplied by 120 h.p. suction gas engine at the mine and 90 h.p. gas engine at the mill, the average consumption of firewood being 80 cubic feet per 8 hours per 100 horsepower. Both plants are in good order and running smoothly.

Men Employed: During the year there has been an average of 40 men employed.

North-western Division.—Magnet Silver Mine.—The Manager (Mr. R. G. Hales) reports:—Ore treated, 9762 tons; metal obtained, 1982·8 tons; silver, 137,434·2 oz.; lead, 404 tons; gross value, £51,893·2; net value, £39,401·4; men employed, 110.

A good deal of development work has been carried out at various levels, and the chief production has been from stope over No. 14 level.

No. 15 Level: At the end of 1924 the main crosscut had been driven 218 feet. This work was continued, but owing to the dry weather of January and February, 1925, work had to be suspended until there was sufficient water to resume the use of rockdrills. After driving 460 feet the lode was met with. The crosscut passing through it proved it to be 16 feet wide, drives north 30 feet, and south for 65 feet, and the ground floor taken out south for a width of 35 feet, the width being due to the lode being very flat. So far as the lode has been opened up it has disclosed payable ore, the lead values increasing slightly and the silver values remaining the same. As the lode is still going strong underfoot the prospects of getting ore at No. 16 level are encouraging.

No. 14 Level: The bulk of the ore mined came from the north and south stopes over this level, but are now depleted.

No. 13 Level: Development work has been carried out at this level north of the dolomite. A west crosscut driven through it met with a lode (3 feet wide) of mixed ore, and has been driven on for 140 feet. As no work has been done through the dolomite at any of the other levels, it is only reasonable to expect that ore will be found at other levels.

Prospecting work has been carried out at Nos. 11, 10, and 9 levels, with fair results.

No. 8 Level, S.F.W. Drive: A rise put up from the end of this level is connected with the south adit. This has given another exit, and has improved the ventilation in the mine.

The scarcity of good miners is still retarding production.

It is our intention to open up No. 16 level as soon as the supply of water warrants continuous work.

The North Mount Farrell Company, No Liability.—The General Manager (Mr. Owen B. Williams) reports:—During the period under review a total of 20,910 tons of crude ore have been mined and treated for a return of 3429 tons of marketable ore, containing 233,390 oz. of silver and 2117 tons of lead. Work was carried on continuously throughout the year, and the development work carried on was as follows:—

Main Shaft: Sunk a total of 112 feet to a point 105 feet below No. 8 level.

No. 8 Level: A plat was cut at this level, and a crosscut to intersect the lode driven a total distance of 256 feet, cutting the lode proper at 234 feet from the plat. The lode has been driven on for a distance on its course of 175 feet, and two rises connecting with No. 7 have been put through. A strong body of ore was cut in the crosscut, and a leading stope has been started.

No. 7 Level: No development work has been started on this level.

No. 6 Level: The main north drive has been advanced a distance of 233 feet without disclosing any payable ore bodies.

General: The mine has been kept in good order. We have had two breakdowns in the power-house, one to the main engine and the other to the compressor, this latter placing the mine idle for 11 days.

The South Mount Farrell Company, No Liability.—The Field Superintendent (Mr. Owen B. Williams) reports:—Operations were commenced on the above company's option in September, and a trench was driven south on the lode for 12 feet, 10 feet deep. A total of 11½ tons of ore have been won, containing 578 oz. silver and 5·17 tons of lead.

A crosscut has been started to the east, and 50 feet south, at a point 50 feet below these workings, to intersect the lode at that depth. The crosscut is now in 66 feet.

Sterling Valley Silver-Lead Mine.—During the last quarter of the year two men were put on to clean out, and started to rise from No. 1 tunnel. It is reported they are breaking some very fine, clean ore.

A company has been formed, and the machinery bought for a concentrating mill, and the engineer of the North Mt. Farrell Co. (Mr. W. A. Aitkenhead) has been appointed manager.

Prospecting.—A little prospecting has been carried out at the Dove River, Main-road, and Dial Range (Penguin), but nothing of much value has been disclosed.

Western Division (*Zeehan*).—Nike Mining Company.—Consequent upon a depletion of the ore occurrence previously developed for 50 feet below the 160 feet level, the company ceased operations and let the mine on tribute.

Three parties of tributers operated at the 160 feet, adit, and intermediate levels, and produced several parcels of ore, but upon the economic possibilities of these makes of ore being exhausted the tributers ceased operations and the mine passed into a state of dormancy towards the close of the year.

Quantities of second-class ore, carrying low zinc values, were sold by the tributers with satisfactory results.

The gross production by the company and tributers was 7536·54 oz. silver, 76·05 tons lead, and 7·822 tons zinc valued at £4077.

North Mt. Zeehan Mine (Messrs. Clarke and Brown).—Operations were again pursued on a limited scale at these mines, attention being principally confined to the "Big Ben" lode workings, where, from the bottom of the underlie shaft, the northern drive was advanced to 66 feet on the lode channelling. The ore occurrence continued to be characteristically irregular and troubled by a faulting zone. From the bottom level, and for a length of 50 feet from the shaft, a block of ground has been stoped to the surface, and further developmental work is necessary for ore production. Eighteen feet of driving was done southerly from the shaft bottom without revealing any values.

At the southern end of the leases (Quigley's old workings) two parcels of ore, aggregating 13.43 tons, and containing 1153·98 oz. silver and 9·47 tons lead were recovered from shallow sinking and open stoping on the western ore occurrence.

The gross production of metal from these mines was 6236·2 oz. silver and 42·43 tons lead, valued at £1501.

Activities displayed in connection with the discovery of new lodes westerly from the North Mount Zeehan mines were not attended with any developments of importance during the period under review. At the southermost point of the acquired leases a tunnel was driven 50 feet into a low hill to explore a sparsely mineralised quartzose capping, but no lode channel was penetrated. At the initial discovery, appellated "A" lode, a shaft was sunk about 12 feet and passed through an irregular dissemination of galena, of small width, in a quartzose-slate formation. Northerly from this exposure a lode formation was trenched, and a small seam of galena was revealed, but the development was not regarded as being of economic importance.

Swansea Mine: Consequent upon the promising developments ensuing during the previous year, ore-producing activity was stimulated at this mine. The north drive at the 110 feet level was advanced to 85 feet on the lode channelling, and, together with the winze sunk from the 180 feet level, developed a block of stoping ground 50 feet in length, and carrying up to 3 feet in width of marketable ore. Stoping was proceeded with, and the block of developed ore was practically depleted at the close of the year. The face of the drive shows impoverished values, and for this reason driving was discontinued.

The south drive was advanced to 60 feet, and, together with a connection effected with the 80 feet level, developed a block of marketable ore over a length of 25 feet, varying up to 3 feet in width and extending to the level mentioned. Stoping was proceeded with, and this ore was practically depleted at the close of the year.

The main crosscut at the 110 feet level was advanced a further distance of 20 feet easterly, and penetrated a second ore shoot, which was then driven on for 20 feet northerly. This work revealed an enlarged occurrence of milling ore, carrying a little "firsts," but the owners regarded the further working of this ore body impracticable in the absence of a milling plant.

A small quantity of ore was mined from above the 80 feet level, but attention was principally confined to developments between this and the 110 feet level.

The gross production from this mine was 4700·29 oz. silver and 179 tons lead, valued at £7144. In addition, 80 tons of zinc ore, assaying 51 oz. silver, 18·1 per cent. lead, and 41·6 per cent. zinc; approximately 100 tons of jigg middlings, assaying 8·2 oz. silver, 15·5 per cent. lead, and 27·8 per cent. zinc; and about 130 tons of rejects from the sorting shed, assaying 5·6 oz. silver, 10·2 per cent. lead, and 11 per cent. zinc, were placed at grass for future sale.

An average number of 8 men was employed.

Horseshoe Mining Syndicate.—Operations were pursued with an average of 4 men at the old Tasman and Crown Lyell Extended mine, and resulted in a gross production of 3210·77 oz. silver, 51·18 tons lead, and 58·22 tons zinc, valued at £4532. The production was 2863·11 oz. silver and 51·2 tons lead less, and 46·53 tons zinc greater, than during the previous year, and this variation was due to the marketing of a less quantity of selected silver-lead ore and a greater quantity of zinciferous ore during the period under review.

The ore marketed was mined from the back of the main drive between the main shaft and Holehan's workings at the 68 feet level. In addition to this stoping some urgent repairs were effected to the shaft and principal drives.

COPPER.

The quantity of copper produced was 6539 tons, valued at £436,661.

The Mt. Lyell Mining and Railway Company Limited.—Ore and metal-bearing flux smelted (as reported by the general manager) were as follow:—

Ore and Metal-bearing Flux Smelted—

Source of Material.	Tons (dry).
Ore from the Company's Mount Lyell Mine ...	7,919
Ore from the Company's North Lyell Mine ...	3,549
Concentrates from the Company's North Lyell Mine ore	35,295
Purchased ore	8
Total	46,771

Blister Copper produced, 6599 tons, containing—Copper, 6540 tons; silver, 133,191 oz.; gold, 2249 oz.; approximate value, £465,392.

Average number of men employed—

Mining Department—		
At the Company's Mt. Lyell Mine	143	
At the Company's North Lyell Mine ...	388	
At the Company's Lyell Comstock Mine	1	
		532
Reduction Works Department (including Lake Margaret)		396
Railway Department—		
Mt. Lyell Railway	75	
North Lyell Railway	13	
		88
Total		1016

Dividends paid during year, £145,034 8s. 9d. = 2s. 3d. per share.
Dividends paid from the inception of the Company to the 31st December, 1925, £4,297,343.
Copper produced from the inception of the Company to the 31st December, 1925, 199,450 tons fine.
Silver produced from the inception of the Company to the 31st December, 1925, 13,487,021 oz. fine.
Gold produced from the inception of the Company to the 31st, December, 1925, 384,778 oz. fine.

Mining.—The principal mining operations were again confined to the North Mount Lyell Mine, which supplied practically the whole of the ore treated, the Mount Lyell Mine being drawn upon only for the small quantity of basic flux required in the blast furnace.

Mount Lyell Mine.—Work in this mine was confined to the extraction at No. 5 level of 7839 tons of pyrites required for blast furnace work. The underground workings were kept unwatered down to the No. 6 level to permit of this level being drawn upon for pyritic ore when required. A small quantity of copper was recovered by precipitation from the mine water during the term.

North Mount Lyell Mine.—Development work was carried out in this mine during the year as required.

The work of lifting the Mount Lyell Blocks Shaft from its present brace at the 500 feet level to the surface was commenced early in the year, and at the same time the sinking of a pilot winze was undertaken from the surface and from a plat chamber constructed at the 200 feet level.

Ore extraction was actively carried on without interruption during the year, the tonnage produced again showing an increase over that of the preceding year, being 118,103 tons.

The usual quantity of copper precipitates was recovered from the mine water during the year.

Reduction Works.—Operations in all branches of the ore treatment plant proceeded satisfactorily along usual lines. Plant additions included the installation of five extra concentrating tables, and the erection of new machine shops in place of the buildings which have rendered service since the inception of operations. The Telsmith rock breaker mentioned in the last report was put into commission early in the year.

The concentrating plant treated during the year 114,226 tons of North Mt. Lyell Mine ore, and produced 35,553 tons of concentrates. The metal-bearing material smelted totalled 46,771 tons, including 7919 tons of Mount Lyell pyrites, 3549 tons of North Lyell high-grade ore, 35,295 tons of concentrates produced from North Mt. Lyell ore, and 8 tons of purchased ore, these figures showing a decrease under those of the previous year, particularly in Mt. Lyell pyrites. The blister copper output totalled 6599 tons as compared with 6761 tons for the preceding year.

Hydro-Electric Plant.—The hydro-electric plant at Lake Margaret was in continuous operation, and supplied the whole of the power and lighting required for the company's mines and works, as well as the municipal requirements of Queenstown and Gormanston. In addition, the Hydro-Electric Department's sub-station at Lake Margaret was completed early in the year, and power was supplied by that department for use at Zeehan from March onwards.

TIN.

The quantity of metallic tin won was 1129·662 tons, valued at £297,515. The statistics for the year are:—

	Tons.	Value. £	Miners Employed.
Northern and Southern Division	8·652	2,224	30
North-Eastern Division	496·60	131,664	402
Eastern Division	240·51	63,315	259
North-Western Division	359·39	93,897	300
Western Division	24·51	6,415	59
Totals	1,129·662	297,515	1,050

Northern Division.—The output was 8·652 tons.

North-eastern Division.—The output of tin was 496·60 tons, obtained as follows:—

	Tons.	Tons.
Pioneer and Gladstone Districts—		
Pioneer Tin Mine	108·25	
Compeer	1·40	
Endurance	40·98	
Monarch	6·31	
Harmon	3·37	
Waugh	1·40	
Others	71·32	
		233·03
Derby, Ringarooma, and Branxholm Districts—		
Briseis Tin Mines	139·50	
Bell's Hill	2·10	
Arba Tin Mine	44·47	
Ruby Flat	14·50	
Ormuz	1·75	
Others	57·90	
		260·22
Moorina District—		
Weld and Echo	...	2·59
Straits Islands	...	0·76
Total	...	496·60

Eastern Division.—The output of tin was 240·51 tons, obtained as follows:—

	Tons.	Tons.
Weldborough and Lottah Districts—		
Michael Tin Mine	11·77	
Blue Tier	16·51	
Weldborough Tin Mine	4·35	
Others	29·25	
		61·88
St. Helens Mines—		
Argonaut	24·55	
Others	43·11	
		67·66
Avoca Mines—		
Storey's Creek	101	
Leona	8·98	
Others	·99	
		110·97
Total	...	240·51

North-Western Division.—The output of tin was 359·39 tons, obtained as follows:—

	Tons.
Mt. Bischoff	275
Mt. Bischoff Extended	79·85
Others	4·54
Total	359·39

Western Division.—The output of tin was 24·51 tons, made up as follows:—

	Tons.
Boulder-Dreadnought	1·92
Renison Bell	8·09
Montana	2·14
Razorback	1·36
Others	11
Total	24·51

North-Eastern Division.—Derby.—The Briseis Tin and General Mining Company Limited.—The General Manager (Mr. Lindesay C. Clark, reports.—It was decided to attack the hard overburden left on the eastern side of the lead during the construction of the river diversion. That portion of the overburden column from the cascade race, which was laid in front of the drift faces, was dismantled and relaid behind them and extended to the overburden on the eastern reef, involving the laying of 2977 feet of 20 inch and 21 inch pipes. A new tailrace, lined with steel plates, with grizzley and 24 inch belt conveyor for dumping stone into the old workings, were erected, and during the wet season 191,300 cubic yards of overburden and upper drifts were removed.

The basalt overburden fell in large lumps, which were broken by explosives to 2 cwt. or less for hydraulicking. The cost of explosives for this work at times amounted to £300 per month.

Drifts were sluiced, as usual, down to a depth of 120 feet below river level, 283,000 cubic yards being dealt with for a yield of 196 tons of black tin.

The construction of the rock-fill dam in the Cascade River was continued. It was raised to a height of 33 feet, at which level the width of rock-fill is sufficient to carry the fill another 30 feet higher. The concrete facing for 33 feet high was finished in June. The relatively small amount of storage thus provided has been of much value in regulating the supply since.

The other information desired is as follows:—

Average number of men employed	120	
Tin Ore won	196	tons
Equivalent Metallic Tin	139·75	,,
Value	£36,250	

Bradshaws Creek.—Pioneer Tin Mining Company Ltd.—The General Manager (Mr. Cecil G. Ryan) reports that 429,800 cubic yards of drift were treated at the Pioneer Mine for a yield of 203 tons 14 cwt. 3 qrs. 17 lbs. of stream tin, which returned in metal 145 tons 6 cwt. 3 qrs. 23 lbs., worth, with tin at £250 per ton, £36,337. An average of 67 men were employed.

Shortage of water during the summer months reduced the sluicing period, and, consequently, the output.

Work was carried on continuously at the company's saw-mill, where 26 men and boys were employed.

The Argonaut Tin Mine at St. Helens, employing 15 men, treated 61,300 cubic yards for a return of 33 tons 19 cwt. 2 qrs. 12 lbs. of stream tin, which yielded 24 tons 13 cwt. 2 qrs. 22 lbs. of metal, worth, with tin at £250, £6170.

Blue Tier.—A most promising show has been opened by the Messrs. Lawry Bros., of Victoria, at Mt. Michael, on the Blue Tier, and situated about half a mile north of the Old Full Moon property. The matrix consists chiefly of a soft, friable granite that for a width of 66 feet carries appreciable values for a depth of 20 feet.

The Manager (Mr. Lawry) reports.—The Michael Tin Mining Company, No Liability, was registered in Melbourne in July, 1924. The object was to open up for open face mining a large deposit of tin-bearing ore on the company's lease, which is situated on the Blue Tier Range, almost on the crest of Mt. Michael.

A plant, consisting of one 37 h.p. suction gas engine, two wilfley tables, and a ten-head battery, was at first installed Later, in August, 1925, this was added to by installing an extra five heads of stampers, a 100 h.p. wood-producer gas plant, an extra 35 h.p. gas engine, a stone crusher, wilfley table, air compressor, lighting plant, &c.

There have been two periods of actual production. The first commenced with the smaller plant in January, 1925. During operations for slightly over four months tin valued at £2029 was sold. The larger plant was brought into commission on October 22, 1925, but, owing largely to a defective stone crusher, production was very much interfered with. During the period from October 22 until December 31 the tin won was valued at £1343, making a total value of tin won as to December 31 of £3372.

A new crusher was installed early in the new year, and owing to the dry weather conditions prevalent until the middle of April very little has been done.

Speaking as to the 31st December, 1925, the average value of the ore treated was 0·3 per cent. tin value. The face stands approximately 20 feet in height and 80 to 100 feet in width. The entire output from the face has been treated.

On the old "Anchor,' now known as the "Blue Tier Tin Mining Company," Mr. William Gough, under most adverse circumstances, has made good, and for the past year found employment for 15 men, in addition to paying a recent dividend and opening a new face of payable ground equal to anything previously discovered on this once much-favoured property.

Weldborough.—On the Waverley and adjoining sections shallow ground has been worked with profitable results, while in the vicinity of "Bell's Hill," where the first profitable alluvial was discovered on this coast, Mr. Allan Hart has obtained an option from the present lessees, Messrs. O'Brien Bros., to float the property as a lode proposition upon which Mr. W. H. Cundy, M.E., of interstate repute, has given a favourable report. Other encouraging shoots of ore have been located on the Rattler and Winiford Hills.

Moorina.—Boring has been continued on the Weld-Echo property and Dorset Flats, near South Mount Cameron, by Mr. H. C. Lawry, who expresses himself satisfied with the results and ability to obtain capital to further investigate both properties.

Garabaldi.—The Waugh Tin Mining Company, on the Winiford River, has installed a large and centrifugal elevating plant commanding a static head of 400 feet, brought in by gravitation from the Southern Cross Creek by a mile of well-constructed head-race, and a similar distance of 16 gauge galvanised 10 inch diameter iron piping. The whole is a creditably finished undertaking, and is expected to put the mine on a profitable basis.

South Mt. Cameron and Gladstone.—The Endurance, Harmon's, Compeer, Groves Bros., Monarch, and minor shows round the township, have—in the latter through the presence of the Mt. Cameron Water-race—each contributed to the year's output, and may be expected to continue for the ensuing term, but beyond those mentioned no other discoveries of any importance have been made in this portion of the district.

Eastern Division.—St. Helens and Scamander.—The Argonaut and Georges Bay Tin Mines, with several small co-operative parties, have continued, and contributed their usual quotas towards the year's production. Recently the Pyramid has again had attention drawn to it, and there is a possibility of a small plant being erected in order to work the rich surface tin stone which abounds on the property.

Avoca and Ben Lomond.—At the Leona, Brookstead, Foster's Freehold, and Gipp's Creek, small quantities of ore have been received from each of these places, and the last mentioned has possibilities that may yet prove interesting.

North-Western Division.—Mt. Bischoff Tin Mine.—The Superintendent (Mr. J. H. Levings) reports:—At the Mt. Bischoff Tin Mine, Waratah, during the year 1925 the 40-stamp mill was in full commission and crushed 77,346 tons. A second roasting furnace was installed, and 6513 tons of pyrite were treated. Total output, 437 tons of tin oxide, assaying 66·1 per cent. tin. Net value, £64,372. The recovery equalled 0·36 per cent. metallic tin per ton of ore crushed.

Average number of men employed: 202.

An investigation is now proceeding of the detrital matter on the north side of the mount, and the old alluvial of the Waratah river flats extending from the power house to the Arthur River, a distance of 3½ miles. So far as the tests have gone, the indications are that a very fine sluicing or dredging proposition will be disclosed.

Mount Bischoff Extended Tin Mining Company, No Liability.—The Manager (Mr. H. B. Schell) reports:—The mine was closed down at the end of the year 1924 pending the installation of electric power in place of steam.

The work of converting to electric power was completed on March 24, 1925, when active operations were again started. The plant has run in a very satisfactory manner, and up to the end of the year 19,271 tons of ore were crushed, returning 117½ tons of tin oxide; assay value, 71.2 per cent.; value approximately £19,500.

The ore was drawn from the old stopes, with very little development being done for the period. Fair quantities of milling ore are still in sight, and development work will be put in hand as soon as the winter rains set in, when more power will be available to run the air compressor three shifts.

No. 9 level, which is practically 1000 feet below the top of Mt. Bischoff, has developed a very good formation for the full distance driven north upon it (approximately 130 feet), average assay value over the total distance being 0·8 per cent. tin. Some time ago 100 tons of the formation taken out from this drive, after treatment, returned 11 bags of tin oxide = 11/20 of a ton; assay value, 70 per cent. Sn. This point is 350 feet below our No. 6 level, our lowest working level at present from which crushing tonnages are drawn.

The change over to cheap electric power, and the satisfactory market for tin, has made it possible to carry on with a small profit. The near future should see the liabilities of the company cleared and profit accrue to the shareholders.

The Luina Tin Mining Company.—Mine: White River.—The old Cleveland Tin Mine, and a prospecting claim held by Mr. J. Quinton, was taken over by this company, and under the management of Mr. H. Dempster some prospecting and developmental work was carried out.

Renison Bell Mine.—The Manager (Mr. D. A. Wilkinson) reports:—Mining: Supplies of ore were obtained from the open face workings adjacent to the plant. There are no developments of any consequence to record.

Milling: Five heads of the stamp battery worked intermittently throughout the year, and treated 1313 tons of crude ore for a return of 12·84 tons of tin oxide, which yielded 8·03 tons of metallic tin.

On the average 4 men were employed.

North Heemskirk.—Ground sluicing was continued by an average number of 10 men on the North Heemskirk tin field, and resulted in a gross production of 9·167 tons tin, valued at £2411. Excepting that boring operations were undertaken to test the leads at depths beyond the capacity of the ground sluicers, with a view to more extensive working, there are no noteworthy developments to be recorded. Results of the boring were apparently not encouraging, as the project did not merge into importance.

Nothing of material importance ensued in connection with operations at South Heemskirk, and only ·6 ton tin, valued at £158, was produced. The owners are still hopeful of introducing the necessary capital for working the Federation Tin Mine. Necessary repairs and maintenance work have received due attention, so that everything may be in order should mining operations be resumed.

At the Razorback Tin Mine at Dundas five men were engaged until the close of the second quarter, when operations were suspended. Oxides, returning 1·368 tons tin, and valued at £341, were recovered from the treatment of produce from open-cutting in the weathered zone.

COAL.

The total quantity of coal raised amounted to 81,698 tons, valued at £70,424.

The raisings at the different colleries were:—

Colliery.	Tons raised.
York Plains	798
Illamatha	763
Catamaran	250
Mersey Valley	37
Mt. Nicholas	28,965
Cornwall	38,151
Jubilee	12,643
Fingal	47
Others	44
Total	81,698

Catamaran Colleries Limited.—The manager (Mr. D. C. Mackenzie) reports:—The present company was formed in July, 1925, the bulk of the capital being subscribed in Victoria and New South Wales. Active operations commenced in September, 1925, with a vigorous policy of development along modern lines. The layout, as designed, includes the latest development in loading ships and the storage, screening, and handling arrangements are right up to the minute. The works authorised by the board of directors include the following:—

(1) Simultaneous opening up of the field from three centres by means of tunnels, which allows of a big output in the minimum of time.
(2) Electric power station of 200 k.w. capacity.
(3) Modern handling, storage, and loading plant at our shipping point near the "Waterhole."
(4) New tramline (2 miles long) connecting the colleries with the shipping point, and so laid out as to be easily adaptable for "endless rope" haulage.

Up to 31st December, 1925, the new tunnel, which will control the shaft seam area, had been driven a distance of 198 feet and heavily timbered throughout. As a result of this driving 250 tons of coal were put to grass, which we value at £250 "in situ."

Over 3000 feet of boring has been done in further prospecting our leases, and it is part of the considered policy of my company to continue this valuable work.

An average of 35 men were employed during the period under review.

As a result of our prospecting our reserves of coal have been considerably enhanced, and the prospects of a successful industry being established are most promising.

The Mt. Nicholas Coal Company Proprietary Limited.—The Mine Manager (Mr. J. L. Pemberton) reports:—Mining operations at the above colliery have been carried on uninterruptedly during the year ended 31st December, 1925.

All of the coal is now won by the bord and pillar method. Most of the coal coming from the No. 3 tunnel. The workings in the No. 3 tunnel have not proved a success, so far, on account of numerous faults, broken and tender roof, and stony coal. The face is in 25 chains from the entrance. The winning headings to the east and west of the main heading have been stopped owing to inferior coal to the west of the old longwall workings to the east.

In the No. 1 tunnel the coal is now being worked in portion 2117 adjoining the Cornwall companys' boundarys. An engine flat has been constructed and headings are now being driven.

The average number of men and boys employed above and below ground for the year was 90.

The output was as follows:—

	Tons.
Best Coal	23,744
Slack Coal	4,506
Nut Coal	2,715
Total	30,965

The total value is £25,600.

SHALE.

The total quantity of shale won was 820 tons, valued at £559.

The producers were:—

	Tons.
Southern Cross Motor Fuels Co.	60
Tasmanian Cement Co.	674
Australian Shale Oil Pty.	86
Total	820

Australian Shale Oil Corporation Limited.—Works Secretary (Mr. W. J. Hall) reports:—During the year ending 31st December, 1925, a considerable amount of work was done on this company's property.

Boring by diamond and calyx drills has been carried out, proving the shale deposit on the company's holdings. As a result of this boring mining operations were started with the view of cutting the seam. To obtain this a main incline tunnel was driven for a distance of 180 feet, at which point the seam was pierced. A gannon bord was then sent ahead for a distance of 111 feet, and from this bord working places were started and are now in operation. The driving and opening out of places would total a distance of 520 feet. In addition to the foregoing work the tunnel has been equipped with hauling plant, air compressor, and ventilating fan, so that the production of shale could be carried on.

During the period under review experimenting as to the value of the shale has been carried on by the aid of an experimental retort. At the same time erection of the large retort and its subsidiary plant has been going on, together with stocking bin, conveyor, &c. The works have been connected with main trunk line by a siding. The number of men employed on all operations would average approximately 60 men.

Tasmanian Cement Pty.'s Shale Mine, Latrobe.—During the early part of the year active operations were carried on, and a considerable tonnage of shale was broken, some of which was crushed and sent to the cement works.

No work is being carried on at present.

The New Southern Cross Motor Fuel Co., Latrobe.—No mining work has been carried out during 1925. The manager (Mr. McPherson) and staff carried out some experimental work in retorting.

BISMUTH.

No bismuth was won during the year.

WOLFRAM.

The output of wolfram was as follows:—

	Tons.	Value. £
Storey's Creek	170·2	14,364
New S. and M. Mine	3·71	275
Others	0·26	19
	174·17	14,658

LIMESTONE.

The output was as follows:—

	Tons.
Broken Hill Pty.	120,291
Electrolytic Zinc Co.	4,379
	124,670

IRON ORE.

No iron ore has been produced during the year.

Prospecting work was continued on the sections held by Hoskins Iron and Steel Company with an average number of 5 men, and was principally confined to Nos. 3, 4, and 5 tunnels. No. 3 tunnel revealed an iron formation 100 feet wide, one section 30 feet wide being high grade magnetite. This tunnel is 100 to 150 feet below the crest of a hill, which is capped with a strong body of iron ore. No. 4 tunnel was advanced to 215 feet, but the objective had not been reached at the close of the year. The summit of the hill being driven into has an extensive capping of iron ore. No. 5 tunnel was commenced and driven 33 feet about 60 feet below the summit of a hill, which also shows an extensive cropping or iron ore. Prospecting results continue to be satisfactory, but an extensive cropping of iron ore. Prospecting results continue to be satisfactory, but an extensive exploitation of these deposits is still dependent upon the commands of the companys operations on the mainland.

OSMIRIDIUM.

The output of osmiridium for the year was 3,365·543 oz., valued at £103,570, and the average number of men engaged was 442.

The discovery of this metal at Adamsfield by the Staceys in May caused the greatest alluvial "rush" that has occurred in the annals of the Department.

Miners from all over the Commonwealth flocked to the field, and over 1000 miners' rights were issued at the head office, and it is estimated that fully that number of men were on the field within a few months after the discovery. Representations were made as to the state of the track from the railway terminus (Fitzgerald) to the field (22 miles), and the Public Works Department at once had gangs put on to make it passable.

Owing to the spongy and wet nature of the soil it was necessary to "cord" some twelve to fifteen miles, and it is now possible to get through on foot in less than seven hours.

The quantity of metal won from the field to the 31st December, was 2933 oz., valued at £90,300, being over 87 per cent. of the total output, which represents a record.

Caudry's Osmiridium Mining Company, No Liability.—The Manager (Mr. F. B. Stephens, A.O.S.M.) reports:—The five stamps mill and concentrating plant are now completed and crushing has started. Fifteen men are on our pay roll at present, and the number will be added to as soon as actual mining starts. No indication of the actual value of the stone can yet be obtained till a clean-up takes place. The method of treatment by blankets and concentration promises to be successful from a metallurgical point of view.

BARYTES.

The quantity of barytes won during 1925 was 3·5 tons, valued at £16, with an average number of two men employed.

CEMENT.

The output of cement for the year was 32,574 tons, valued at £162,870, employing 266 men.

CARBIDE.

Carbide manufactured during 1925 reached a total of 2934 tons, valued at £60,047, with an average of 81 men employed.

CADMIUM.

The output for the year was 5·2454 tons, valued at £1178.

ZINC.

The output of zinc for the year from Tasmanian ores was 3112·69 tons, of a value of £110,691.

Electrolytic Zinc Company of Australasia Limited.—The Manager reports operations at Risdon during the year 1925:—The average number of employees at Risdon during 1925 was 1029.

Slab zinc produced at Risdon amounted to 45,698 tons, valued at £1,657,486. The amount of cadium produced was 179 tons, valued at £40,071. The raw material used was obtained, in part, from the West Coast of Tasmania, but chiefly from Broken Hill, New South Wales.

Operations at Zeehan.—The average number of employees at Zeehan during the year was 178.

At the Zeehan plant both lead concentrate and zinc calcine were produced from Tasmanian ore. Lead concentrates, totalling 3042 tons, were produced, having a content of 1170 tons lead and 112,804 oz. silver.

Zinc calcines, amounting to 8024 tons, were despatched to Risdon for treatment in the zinc plant. From this calcine was obtained 2722 tons of zinc, valued at £97,206; 5 tons cadmium, valued at £1178; and also lead and silver amounting to 510 tons and 52,552 oz. respectively.

The zinc and cadmium extracted at Risdon from calcine produced at Zeehan from Tasmanian ore are included in the returns for the Risdon plant. The lead and silver output of the Tasmanian calcine form portion of a lead-silver residue, which is sold to smelters in South Australia.

The following further information has been supplied by the Inspector of Mines for the Zeehan district:—Beyond sectional alterations and machinery adjustments, no material innovations were made to the crushing, grinding, flotation, drying, and calcining units, comprising the pre-treatment plant placed in commission during the previous year.

Attention was firstly directed to a practical treatment, on a complete plant basis, of the Hercules ores, and, latterly, similar attention was directed to the Rosebery ores.

Consequent upon a completion of the projected plant a material reduction was made in the average number of persons employed.

The erection of a power line and sub-stations for the transmission of electric power from the Lake Margaret hydro-electric power station was completed, and the change-over from steam to electric power was effected early in the year.

Oceania.—One party operated, to a limited extent, on the zincy ores at the old Oceania workings, and produced 230 oz. silver, 7·917 tons lead, and 12·83 tons zinc, but there is no material development to be recorded, and, latterly, operations were suspended.

South Comet Lead-Zinc Mining Company.—Consequent upon a successful company flotation operations were resumed at this mine after a period of idleness extending over several years. During the year attention was concentrated upon the installation of a concentrating mill on the site of the old battery at the head of the Zeehan-Dundas railway, erection of an aerial ropeway between the mill and mine, and to preparatory work at the mine.

At the concentrating mill a gravity section will be first completed, and when this has been placed in commission installation of a flotation section will be proceeded with.

The main trestlings for the aerial ropeway were erected, and the construction of a ground tramway from the mine to the loading point was then proceeded with.

At the mine the bottom tunnel, which is 454 feet, was cleaned out and re-railed. Some stoping had previously been done over the back of the tunnel, but at 30 feet from the face a new lens of ore occurs, and this enlarges to 3 feet at the face. A face sample assayed 4 oz. silver, 14·2 per cent. lead, and 31·4 per cent. zinc. Operations were then confined to the upper or main tunnel, but progress has been slow owing to difficulties encountered in re-driving through a collapse section in the galena lode workings.

This tunnel had penetrated a zinc lode at 128 feet, and was driven along the footwall side of the lode for 182 feet, when it was deviated westerly from the zinc lode and then driven some considerable distance on the galena ore channel. The galena lode workings is the first objective, and a re-opening of this section of the mine is awaited with interest. A sample from the zinc lode exposed in the tunnel assayed 1 oz. silver, 4·5 per cent. lead, and 15 per cent. zinc.

An average number of 21 men was employed, and it is anticipated that productive operations will be commenced towards the middle of the current year.

RETURN showing the Quantity and Value of Minerals Produced in the State of Tasmania during the Year 1925.

Mineral.	Quantity.	Value.
		£
Bismuth ..... tons	...	...
Barite ..... „	3·5	16
Cadmium ..... „	5·2454	1178
Copper..... „	6539	436,661
Coal ..... „	81,698	70,424
Carbide ..... „	2934	60,047
Cement ..... „	32,574	162,870
Gold .....ozs. f.	3523·87	15,041
Lead..... tons	5525·99	197,452
Limestone..... ... ... „	124,670	124,670
Osmiridium ... . ozs.f.	3365·543	103,570
Silver ..... „	730,193·67	105,509
Shale..... tons	820	559
Tin ..... „	1129·662	297,515
Wolfram ..... „	174·17	14,658
Zinc ..... „	3112·69	110,691
Total.....	...	£1,700,861

The Electrolytic Zinc Co. recovered 42,976 tons of Zinc, valued at £1,560,280 and 173·6210 tons of Cadmium, valued at £38,893, from other than Tasmanian ores, and employed an average of 1029 men.

PLANS.

The number of different plans now stocked by the Department is 114. Of these 25 were revised for reproduction by the Government Printer, and two new compilations were made. Thirty-two geological sketch maps were prepared to accompany the different reports prepared by the Government Geologists. The colour work in connection with five other plans was also undertaken. The number of copies of plans reproduced by the Government Printer was 1098.

Large Scale Plans.—The preparation of these has been proceeded with as opportunity offered, and four sheets of the Moorina plan are well advanced.

Underground Survey Plans.—Seven plans of additional underground workings were received, checked, and filed in accordance with the provisions of "The Mines and Works Regulation Act, 1915."

GEOLOGICAL SURVEY BRANCH.

The Reports of the Government Geologists are appended.

INSPECTORS OF MINES.

The Reports of the Chief Inspector of Mines and the three inspectors are appended.

LABORATORY.

The Officer-in-Charge (Mr. W. D. Reid, Government Chemist and Assayer) was again appointed to represent the State at the British Empire Exhibition, Wembley, England. He left Hobart on 25th April, and is still in London.

During his absence, Mr. L. H. Bath was appointed Acting Government Chemist and Assayer, and carried on the work of the laboratory in a very satisfactory manner. His report is appended.

REVENUE.

The revenue for the year amounted to £14,229 8s. 7d.

The sum of £1848 18s. 3d., deposited as survey fees with applications for leases, is not included in the above.

MINING MANAGERS' EXAMINATION.

As there was no candidate for examination no examination was held.

DEPARTMENTAL STAFF.

The changes in the staff were as follows:—

W. R. Forward, Assistant Clerk, resigned 31/1/25.
J. C. Finlay, Assistant Clerk, appointed 16/3/25.
G. T. Gandy, Registrar of Mines, Derby, died 16/4/25.
H. E. T. Spotswood, Registrar of Mines, Derby, appointed 19/6/25.
Miss N. A. Cronley, Clerk and Typiste, resigned 30/9/25.
J. S. Leitch, Registrar of Mines, Zeehan, resigned 28/7/25.
V. L. Biccard, Clerk on loan from the Police Department, transferred to the Chief Secretary's Department, 5/12/25.
W. D. Reid, Government Chemist and Assayer, re-appointed Government Representative at British Empire Exhibition from 25/4/25.
L. H. Bath, re-appointed Acting Government Chemist and Assayer during the absence of W. D. Reid from 25/4/25.

CONCLUSION.

In conclusion I desire to again acknowledge the loyal assistance rendered by the officers of the Department, as also the officers of the Mining Branch of the Lands and Surveys Department.

I have the honour to be,
Sir,
Your obedient Servant,

WM. A. PRETYMAN,
Secretary for Mines.

The Hon. the Minister for Mines.

No. 1.

RETURN showing the Quantity and Value of Asbestos produced from 1899 *to* 1920-25 *inclusive.*

Year.	Quantity.	Value.
	Tons.	£
1899	200	363
1900	128	113
1901	46·5	45
1902-1915	—	—
1916	15	30
1917	271	271
1918	2854	5008
1919	51	1275
1920-1925	—	—
	3565·5	7105

No. 2.

RETURN showing the Quantity and Value of Barytes produced during the Years 1916 *to* 1925 *inclusive.*

Year.	Quantity.	Value.
	Tons.	£
1916	83	359
1917	52	234
1918	217	977
1919	399	1160
1920	1048	4163
1921-1924	—	—
1925	3·5	16
	1782·5	6909

No. 3.

RETURN showing the Quantity and Value of Bismuth produced from 1904 *to* 1925 *inclusive.*

Year.	Quantity.	Value.
	Tons.	£
1904	·3	15
1905	3·5	800
1906	·3	24
1907	·175	27
1908	3·75	462
1909	2·9	980
1910	10·70	4249
1911	14·395	5758
1912	7·59	2646
1913	5·08	1627
1914	5·619	1666
1915	5·5	1203
1916	3·51	1059
1917	4·212	895
1918	4·608	1038
1919	1·77	573
1920	·10	9
1921	·05	21
1922	—	—
1923	—	—
1924	—	—
1925	—	—
	74·059	23,052

No. 4.

RETURN showing the Quantity and Value of Cadmium produced during the Years 1924 *and* 1925.

Year.	Quantity.	Value.
	Tons.	£
1924	5·247	1175
1925	5·2454	1178
	10·4924	2353

No. 5.

RETURN showing the Quantity and Value of Carbide produced during the Years 1922 *to* 1925 *inclusive.*

Year.	Quantity.	Value.
	Tons.	£
1922	4512	135,509
1923	3236	64,720
1924	3305	65,660
1925	2934	60,047
	13,987	325,936

No. 6.

RETURN showing the Quantity and Value of Cement produced during the Years 1924 *and* 1925.

Year.	Quantity.	Value.
	Tons.	£
1924	21,026	105,130
1925	32,574	162,870
	53,600	268,000

No. 7.

RETURN showing the Quantity and Value of Coal raised from 1880 *to* 1925 *inclusive.*

Year.	Quantity.	Value.
	Tons.	£
1880 to 1903 inclusive	767,261·5	659,010
1904	61,109	51,942
1905	51,993	44,194
1906	52,895·75	44,962
1907	58,891	50,057
1908	61,067·75	51,907
1909	66,161·75	56,237
1910	82,445	48,609*
1911	57,067	26,214*
1912	53,560	24,568*
1913	55,043	25,367*
1914	60,794	27,853*
1915	64,536·25	30,418*
1916	55,575	27,736*
1917	63,412	38,673*
1918	60,163	37,676*
1919	66,253	47,004*
1920	75,429	64,005*
1921	66,476	63,446*
1922	69,238	61,016*
1923	80,718	70,797*
1924	75,988	66,555*
1925	81,698	70,424*
	2,187,775·5	1,688,670

* Value at pit's mouth.

No. 8.

RETURN showing the Quantity and Value of Blister Copper produced from 1896 *to* 1925 *inclusive.*

Year.	Quantity.	Value.
	Tons.	£
1896 to 1903 inclusive	52,154	4,186,805
1904	8371	*582,540
1905	8610	*704,287
1906	8708	*862,444
1907	8247	*832,691
1908	8833	*603,063
1909	8638	*586,419
1910	8193	*553,822
1911	6022	*385,797
1912	5136	*430,965
1913	4569	*364,732
1914	7509	*477,361
1915	7901	*709,167
1916	6305	*884,689
1917	5845	*841,583
1918	5559	*772,162
1919	5071	*557,710
1920	4837	*576,046
1921	6221	*493,271
1922	—	*410,046
1923	—	*452,879
1924	—	*479,825
1925	—	*455,887
	—	17,204,191

* Value of Gold contents deducted.

No. 9.

RETURN showing the Quantity and Value of Copper in Blister Copper and Copper Ore during the Years 1919 *to* 1925 *inclusive.*

Year.	In Blister Copper.		In Copper Ore.		Total.	
	Q'ty.	Value.	Q'ty.	Value.	Q'ty.	Value.
	Tons.	£	Tons.	£	Tons.	£
1919	5014	503,977	13	984	5027	504,961
1920	4791	528,177	·75	60	4791·75	528,237
1921	6171	462,876	9·843	287	6180·843	463,163
1922	5616	391,535	—	—	5616	391,535
1923	6063	435,282	1·7	131	6064·7	435,413
1924	6698	457,386	—	—	6698	457,386
1925	6539	436,661	—	—	6539	436,661

No. 10.

RETURN showing Quantity and Value of Copper Matte exported during the Years 1902, 1903, *and* 1904 *to* 1925 *inclusive.*

Year.	Quantity.	Value.
	Tons.	£
1902	2500	50,112
1903	3727	83,624
1904–1925	—	—
	6227	133,736

No. 11.

RETURN showing the Quantity and Value of Copper Ore produced from 1896 *to* 1925 *inclusive.*

Year.	Quantity.	Value.
	Tons.	£
1896 to 1903 inclusive	23,736·5	298,292
1904	104	1640
1905	1150·75	52,939
1906	2234·5	72,480
1907	788·25	36,975
1908	1185	6588
1909	1587·8	21,619
1910	671·27	13,150
1911	2286	22,852
1912	1391·6	9479
1913	1966·8	10,932
1914	3287·75	18,680
1915	66	1367
1916	96·84	3765
1917	771·40	6171
1918	444·170	3944
1919	123	984
1920	1·50	60
1921	—	287
1922	—	—
1923	1·70	131
1924	—	—
1925	—	—
	41,894·83	579,335

No. 12.

RETURN showing the Quantity and Value of Gold won from 1880 *to* 1925 *inclusive.*

Year.	Quantity.	Value.
	Ozs.	£
1880 to 1903 inclusive	1,265,836·95	4,905,706
1904	65,921	280,015
1905	73,540·5	312,380
1906	60,023·4	254,963
1907	65,354·25	277,607
1908	57,085·1	242,482
1909	44,777·366	190,201
1910	37,048·053	157,370
1911	31,100·873	132,108
1912	37,973·252	161,300
1913	33,400·457	141,876
1914	26,243·453	111,475
1915	18,547·338	78,784
1916	15,790·096	67,072
1917	14,496·464	61,577
1918	10,528·930	44,724
1919	7,686·470	32,650
1920	6,246·192	29,796
1921	5,340·094	28,395
1922	3,431·486	15,998
1923	3,684·124	16,639
1924	4,625·600	21,563
1925	3,523·870	15,041
	1,892,205·318	7,579,722

No. 13.

RETURN showing the Quantity and Value of Iron Ore produced from 1897 *to* 1925 *inclusive.*

Year.	Quantity.	Value.
	Tons.	£
1897 to 1903 inclusive	20,442	16,276
1904	6840	2975
1905	6300	2600
1906	2600	1100
1907	3000	1150
1908	3600	1600
1909–1925	—	—
	42,762	25,701

No. 14

RETURN showing the Quantity and Value of Iron Pyrites produced during the Years 1915 *to* 1925 *inclusive.*

Year.	Quantity.	Value.
	Tons.	£
1915	12,835·59	8945
1916	14,005·084	13,597
1917	7,685·549	7137
1918	5,105·600	4667
1919	3,456·95	4288
1920	4,440	7346
1921	606·5	2579
1922	8,276	18,620
1923	11,882	26,737
1924	—	—
1925	—	—
	68,293·273	93,916

No. 15.

RETURN showing the Quantity and Value of Lead included in Silver-Lead during the Years 1919 *to* 1925 *inclusive.*

Year.	Quantity.	Value.
	Tons.	£
1919	2357·142	64,403
1920	3855·639	142,268
1921	1434·794	32,241
1922	4925·880	118,257
1923	4784·057	127,542
1924	4559·110	154,881
1925	5525·99	197,452

No. 16.

RETURN showing the Quantity and Value of Limestone produced during the Years 1923, 1924, *and* 1925.

Year.	Quantity.	Value.
	Tons.	£
1923	100,113	122,428
1924	146,140	146,140
1925	124,670	124,670
	370,923	393,238

No. 17.

RETURN showing the Quantity and Value of Ochre produced during the Years 1918 *to* 1925 *inclusive.*

Year.	Quantity.	Value.
	Tons.	£
1918	100	200
1919	—	—
1920	—	—
1921	14	56
1922	—	—
1923	—	—
1924	20	50
1925	—	—
	134	306

No. 18.

RETURN showing the Quantity and Value of Osmiridium produced during the Years 1910 *to* 1925 *inclusive.*

Year.	Quantity.	Value.
	Ozs.	£
1910	120	530
1911	271·88	1888
1912	778·77	5742
1913	1261·65	12,016
1914	1018·83	10,076
1915	247·048	1581
1916	222·150	1899
1917	332·079	4898
1918	1606·743	44,833
1919	1669·715	39,614
1920	2009·196	77,114
1921	1750·655	42,935
1922	1173·924	35,512
1923	673·423	19,642
1924	364·805	10,617
1925	3365·543	103,570
	16,866·411	412,467

No. 19.

RETURN showing the Quantity and Value of Scheelite produced during the Years 1917 *to* 1925 *inclusive.*

Year.	Quantity.	Value.
	Tons.	£
1917	69	12,130
1918	216	39,252
1919	198·98	43,181
1920	105·09	17,905
1921–1925	—	—
	589·07	112,468

No. 20.

RETURN showing the Quantity and Value of Shale produced during the Years 1910 *to* 1925 *inclusive.*

Year.	Quantity.	Value.
	Tons.	£
1910	364	214
1911	500	250
1912	—	—
1913	130	130
1914	75	75
1915	—	—
1916	1286	1286
1917	—	—
1918	—	—
1919	600	900
1920	140	172
1921	868	1506
1922	40	100
1923	1101	1094
1924	1576	1526
1925	820	559
	7500	7812

No. 21.

RETURN showing the Quantity and Value of Silver-Lead Ore produced from 1888 *to* 1925 *inclusive.*

Year.	Quantity.	Value.
	Tons.	£
1888 to 1903 inclusive	300,977·5	2,571,771
1904	51,138	203,702
1905	75,270·5	246,888
1906	87,117·75	462,443
1907	89,762·5	572,560
1908	63,116·9	322,007
1909	80,378·35	298,880
1910	51,226·91	247,576
1911	61,501·195	253,361
1912	90,123·868	309,098
1913	83,289·268	319,997
1914	11,565·54	96,225
1915	10,382·95	91,689
1916	11,229·410	153,796
1917	9575·780	152,122
1918	7241·400	127,176
1919	*—	136,234
1920	—	261,166
1921	—	59,422
1922	—	223,183
1923	—	201,284
1924	—	220,279
1925	—	283,735
	—	7,824,594

* "Quantity" discontinued, as it has been found previous figures are misleading concentrates, hand-picked ore, and crude ore having all been added and included under the one head.

No. 22.

RETURN showing the Quantity and Value of Silver contained in Silver-Lead and Blister Copper during the Years 1919, 1920, 1921, 1922, 1923, 1924, *and* 1925.

Year.	In Silver Lead.		In Blister Copper.		Total.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	Ozs.	£	Ozs.	£	Ozs.	£
1919 ...	296,719·27	71,831	228,624	53,733	525,343·27	125,564
1920 ...	453,411	118,898	169,948	47,869	623,359	166,767
1921 ...	165,637	27,181	183,021	30,395	348,658	57,576
1922 ...	674,886	104,926	119,699	18,511	794,585	123,437
1923 ...	516,073·61	73,742	122,528	17,597	638,601·61	91,339
1924 ...	494,782	75,598	147,376	22,439	642,158	97,837
1925 ...	597,012·67	86,283	133,181	19,226	730,193·67	105,509

No. 23.

RETURN showing the Quantity and Value of Tin exported from Tasmania from 1880 *to* 1904 *(compiled from Customs Returns only), Tin Ore produced during the Years* 1905 *to* 1918 *inclusive, and Metallic Tin produced during the Years* 1919 *to* 1925 *inclusive.*

Year.	Quantity.	Value.
	Tons.	£
1880 to 1904 inclusive	76,708·4	7,167,564
1905	3891·5	362,670
1906	4472·75	557,266
1907	4342·75	501,681
1908	4520·8	421,580
1909	4511·2	418,165
1910	3701·01	399,393
1911	3953·05	513,500
1912	3713·825	543,103
1913	4010·41	531,983
1914	2572·713	259,300
1915	2599·234	292,306
1916	2854·636	350,852
1917	2637·337	427,917
1918	2256·203	488,798
1919	1580·22*	395,794
1920	1310·411*	369,362
1921	790·395*	130,257
1922	679·440*	112,407
1923	1160·390*	236,955
1924	1108·450*	275,014
1925	1129·662*	297,515
	134,604·786	15,053,382

*, Metallic Tin.

No. 24.

RETURN showing the Quantity and Value of Wolfram produced from 1899 *to* 1925 *inclusive.*

Year.	Quantity.	Value.
	Tons.	£
1899 to 1903 inclusive	57·25	2157
1904	15·5	1147
1905	32·25	2371
1906	19·75	1465
1907	40·75	4411
1908	4·5	338
1909	28·35	2494
1910	67·35	7280
1911	69·96	7769
1912	66·49	6601
1913	68·07	7040
1914	46·873	4327
1915	94·685	11,115
1916	106·265	16,910
1917	172·190	28,714
1918	155·362	27,239
1919	120·907	26,613
1920	70·89	13,626
1921	10·34	676
1922	19·26	1024
1923	96·86	6150
1924	54	2785
1925	174·170	14,658
	1592·022	196,910

No. 25.

RETURN showing the Quantity and Value of Zinc produced during the Years 1917 *to* 1925 *inclusive.*

Year.	Quantity.	Value.
	Tons.	£
1917	48	1968
1918	3822	152,880
1919	285	13,110
1920	9·3	334
1921–1923	—	—
1924	2748·75	90,485
1925	3112·69	110,691
	10,025·74	369,468

No. 26.

RETURN showing Value of Minerals and Metal raised in Tasmania from 1880 *to* 1925 *inclusive.*

Mineral or Metal.	Value.
	£
Asbestos	7105
Barytes	6909
Bismuth	23,052
Cadmium	2353
Carbide	325,936
Cement	268,800
Coal	1,688,670
*Copper (Blister)	17,204,191
Copper Matte	133,736
Copper Ore	579,335
Gold	7,579,722
Iron Ore	25,701
Iron Pyrites	93,916
Limestone	393,238
Ochre	306
Osmiridium	412,467
Scheelite	112,468
Shale	7812
*Silver-lead	7,824,594
Tin	15,053,382
Wolfram	196,910
Zinc	369,468
Unenumerated prior to 1894	31,988
Total	£52,341,259

* Metallic contents and values are shown in Tables Nos. 9, 15, and 22.

No. 27.

RETURN showing the Amounts paid in Dividends by Mining Companies during the Year ending 31*st December*, 1925.

Mines.	Dividends.
	£ s. d.
Copper	...
Gold	...
Tin	13,439 10 0
Silver	20,000 0 0
Coal	4648 0 0
Total	£38,087 10 0

No. 28.

RETURN showing the Average Number of Persons engaged in Mining during the Years 1880 *to* 1925 *inclusive.*

Year.	Number.	Year.	Number.
1880	1653	1903	6017
1881	3156	1904	6194
1882	4098	1905	6581
1883	3818	1906	7005
1884	2972	1907	7516
1885	2783	1908	6466
1886	2681	1909	6054
1887	3361	1910	5770
1888	2989	1911	5247
1889	3141	1912	5566
1890	2868	1913	6107
1891	3219	1914	4741
1892	3295	1915	3908
1893	3403	1916	3864
1894	3433	1917	4050
1895	4062	1918	4278
1896	4350	1919	4413
1897	4510	1920	5364
1898	6052	1921	4011
1899	6622	1922	3835
1900	7023	1923	4785
1901	6923	1924	5264
1902	5934	1925	5110

No. 29.

RETURN showing the Mining Companies registered during the Year ending 31*st December*, 1925.

Number of Companies.	Capital.
7	£26,500

In addition to the above, nine Agents for Foreign Companies and two Syndicates under Part Va. of the Act were registered.

No. 30.

RETURN showing the Average Number of Miners employed during the Year ending 31*st December*, 1925.

Division.	Number.
Northern and Southern	2137
North-Eastern	413
Eastern	542
North-Western	530
Western	1488
	5110

No. 31.

RETURN showing the Total Amount of Rents, Fees, &c., received by the Mines Department during the Year ending 31*st December*, 1925.

Head of Revenue.	Amount.
	£ s. d.
Rent of Auriferous and Mineral Land	12,415 18 6
Fees, ditto ditto	1241 5 5
Survey Fees	1848 18 3
Fees under "Explosives and Inflammable Liquid Act"	572 4 8
Total	£16,078 6 10

No. 32.

RETURN showing the Total Area of Land and Number of Sluiceheads of Water applied for during the Year ending 31*st December*, 1925.

Mineral.	Number.	Sluiceheads.	Area.
			Acres.
Barytes	1	...	80
Clay	1	...	19
Coal	13	...	3639
Copper	1	...	80
Gold	41	...	967
Gems	1	...	5
Galena	1	...	40
Iron	1	...	54
Minerals	52	...	2024
Osmiridium	5	...	45
Pyritic Ore	3	...	103
Silver	5	...	210
Stone	6	...	192
Slate	1	...	40
Tin	121	...	2914
Zinc	2	...	151
Machinery Sites	3	...	16
Mining Easements	6	...	47
Dredging Claims	15	...	273
Water Rights and Dam Sites	41	197	85
Licences to search for Coal or Oil	18	...	13,909
	338	197	24,893

No. 33.

RETURN showing Total Number and Area of Leases and Licences issued during the Year ending 31*st December*, 1925.

Mineral.	Leases.	Sluiceheads.	Area.
			Acres.
Arsenic	1	...	10
Arsenical Pyrites	4	...	164
Copper	4	...	332
Coal	6	...	1610
Dredging Claims	6	...	99
Gold	47	...	820
Gems	1	...	80
Iron	16	...	354
Limestone	3	...	533
Minerals	70	...	2983
Machinery Sites	4	...	9
Mining Easements	13	...	104
Oil	1	...	235
Pyrites	1	...	8
Silver Lead	6	...	53
Slate	3	...	151
Shale Oil	1	...	506
Tin	145	...	4007
Water Rights	51	143	289
Licences to search for Coal and Oil	16	...	12,269
	399	143	24,616

No. 34.

RETURN showing the Total Number of Leases and Licences in force on 31st December, 1925.

Mineral.	No. of Leases.	No. of Sluiceheads.	Area.
			Acres.
Asbestos	1	...	1
Coal	35	...	9922
Copper	3	...	90
Clay	3	...	13
Dredging Claims	20	...	195
Gold	70	...	1340
Gems	1	...	80
Iron	19	...	908
Kaolin	1	...	5
Limestone	9	...	1271
Mining Easements	77	...	579
Machinery Sites	27	...	112
Minerals	121	...	7845
Nickel	1	...	80
Osmiridium	4	...	83
Ochre	1	...	20
Serpentine	9	...	485
Shale	2	...	1589
Silver-lead	19	...	653
Slate	1	...	71
Tin	334	...	10,348
Water-rights and Dam Sites	371	1604	2167
Wolfram	3	...	46
Licences to search for Coal or Oil	19	...	14,130
	1151	1604	52,033

No. 35.

RETURN showing the Annual Value of Mineral Products for the State of Tasmania from 1880 to 1925 inclusive.

Year	Value.	Year.	Value.
	£		£
1880	554,031	1904	1,379,204
1881	602,723	1905	1,729,129
1882	556,306	1906	2,257,147
1883	560,873	1907	2,277,159
1884	468,302	1908	1,650,027
1885	518,885	1909	1,574,995
1886	489,966	1910	1,432,193
1887	593,256	1911	1,349,497
1888	616,733	1912	1,493,502
1889	504,718	1913	1,415,700
1890	444,210	1914	1,007,038
1891	528,388	1915	1,225,575
1892	526,909	1916	1,521,050
1893	627,909	1917	1,584,290
1894	732,764	1918	1,750,574
1895	575,692	1919	1,301,090
1896	662,058	1920	1,421,104
1897	1,006,140	1921	822,851
1898	1,071,084	1922	1,013,415
1899	1,660,622	1923	1,219,456
1900	1,888,695	1924	1,496,804
1901	1,763,896	1925	1,700,861
1902	1,378,406	Unenumerated	
1903	1,354,044	prior to 1894	31,988
			£52,341,259

No. 36.

RETURN showing the Number and Area of Leases held under "The Mining Act," in force on 31st December, 1917 to 1925 inclusive.

Nature of Lease.	In force on 31st Dec., 1917.		In force on 31st Dec., 1918.		In force on 31st Dec., 1919.		In force on 31st Dec., 1920.		In force on 31st Dec., 1921.		In force on 31st December, 1922.		In force on 31st December, 1923.		In force on 31st Dec. 1924.		In force on 31st Dec., 1925.	
	No.	Area.	No.	Area.	No.	Area.	No.	Area.	No.	Area.	No.	Area.	No.	Area.	No.	Area.	No.	Area.
		Acres.		Acres.		Acres.		Acres.		Acres.		Acres.		Acres.		Acres.		Acres.
For Minerals, Silver, Tin, &c.	876	36,203	796	32,011	823	31,006	795	30,043	901	31,719	716	26,459	614	21,880	460	23,308	532	23,588
For Coal, Slate, Shale, &c.	50	13,138	44	10,729	45	11,562	50	11,667	66	15,430	73	16,809	66	16,053	27	8901	35	9922
For Gold	91	1761	43	657	32	537	65	1403	92	1894	127	2424	108	1687	91	1829	70	1340
Dredging Claims	30	401	23	323	31	482	30	410	29	413	36	399	33	369	20	289	20	195
Mining Easements	105	628	111	594	113	608	104	616	97	621	87	607	81	606	77	592	77	579
Machinery Sites	38	175	37	165	38	180	33	147	34	152	31	123	30	124	26	115	27	112
Licences to search for Coal or Oil	—	—	—	—	—	—	—	—	51	117,031	73	137,692	36	34,761	21	38,528	19	14,130
Water-rights Mineral and Gold	557	2085 & 2035 sluice-heads	494	2121 & 1865 sluice-heads	551	2116 & 1975 sluice-heads	559	2094 & 1982 sluice-heads	543	2247 & 2060 sluice-heads	493	3002 & 1814 sluice-heads	435	2147 & 1612 sluice-heads	338	1990 & 1520 sluice-heads	371	2167 & 1604 sluice-heads

No. 37.

COMPARATIVE Statement of Revenue from Mines, being Rents, Fees, Storage of Explosives, &c. (exclusive of Survey Fees), paid to the Treasury for the Years ending 30th June, from 1882 *to* 1903, *and for Six months ending* 31*st December*, 1903, *and for the Years ending* 31*st December*, 1904 *to* 1925, *inclusive.*

Year.	Amount.			Year.	Amount.		
	£	s.	d.		£	s.	d.
1882	23,077	1	9	1903, 1 July to 31 Dec.	14,758	17	1
1883	15,439	14	5	1904, Jan. to Dec.	16,631	8	2
1884	6981	11	10	1905	20,208	17	0
1885	11,070	5	7	1906	24,136	12	5
1886	12,523	10	4	1907	24,794	7	7
1887	14,611	11	5	1908	20,311	3	0
1888	23,502	8	4	1909	22,804	1	5
1889	17,254	9	0	1910	22,221	18	0
1890	26,955	4	9	1911	20,556	15	10
1891	37,829	16	5	1912	17,639	19	11
1892	17,568	18	4	1913	19,410	17	8
1893	16,971	9	2	1914	14,087	0	6
1894	16,732	7	7	1915	17,679	3	6
1895	15,323	1	9	1916	14,678	19	10
1896	20,901	13	2	1917	14,669	7	2
1897	25,631	0	3	1918	17,833	14	9
1898	33,661	13	9	1919	15,388	7	7
1899	24,696	10	5	1920	16,767	11	6
1900	28,380	11	10	1921	11,248	14	11
1901	21,569	5	2	1922	14,184	7	3
1902	19,471	0	1	1923	13,224	11	9
1903	17,776	14	3	1924	14,678	13	11
				1925	14,229	8	7

The above Statement does not include Stamp Duties upon Transfer of Leases and Registration of Companies, nor the Tax payable upon Dividends, from which sources large sums are derived.

No. 38.

RETURN Showing the Average Annual Prices for Minerals during recent years.

	Average for **1915.**			Average for **1916.**			Average for **1917.**			Average for **1918.**			Average for **1919.**			Average for **1920.**			Average for **1921.**			Average for **1922.**			Average for **1923.**			Average for **1924.**			Average for **1925.**		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
Copper—Standard, Spot : per ton	72	12	9	116	1	3	125	2	5	115	11	6	90	19	4	97	12	5	69	8	8	62	3	6	66	7	4	63	4	3	61	9	7
Lead—Soft Foreign : per ton	22	17	8	30	19	6	30	0	0	30	2	8	28	3	11	38	4	7	22	14	6	23	14	10	25	19	4	33	13	11	35	17	3
Spelter : per ton	66	13	8	68	8	11	52	3	6	52	3	11	42	5	3	45	4	6	26	4	1	29	14	2	32	18	4	33	12	0	36	5	0
Tin—Standard, Spot : per ton	164	4	0	182	3	5	237	13	1	329	11	2	257	9	8	296	1	7	165	8	2	159	10	9	191	7	5	248	17	4	261	1	8
Silver—Standard, Spot : per oz	s.	d.		s.	d.		s.	d.		s.	d.		s.	d.		s.	d.		s.	d.		s.	d.		s.	d.		s.	d.		s.	d.	
	1	11·69		2	7·32		3	4·88		3	11·57		4	9·06		5	1·56		3	0·875		2	10·41		2	8·37		2	9·97		2	8	

REPORT OF THE MOUNT CAMERON WATER-RACE BOARD FOR THE YEAR ENDED 31ST DECEMBER, 1925.

SIR,

We have the honour to submit our report for the year ending 31st December, 1925.

Manager.—Mr. David Shields still holds this position, and has carried out his duties faithfully, and to the entire satisfaction of the Board.

Race.—The scrubbing and cleaning of the race was carried out in April, and the opportunity was taken to shoot out the number of old stumps which had for years caused leaks, and the race is now in first-class order, but as the rainfall for the year, both at main intake and Little Mussel Roe intake, was only 22 inches, as compared with 38 inches for the year 1924, there has been a slight shortage, and the demand could not be fully met. There were about 22 heads coming through toward the end of the year. The Purdue branch race was widened at a cost of £58 13s. 8d., half of which was paid by the Compeer Tin Mining Company, whose ground it serves.

Flumings and Syphons.—These are all in fair condition but will require to be coated with tar during the current year.

General.—Repairs to the Manager's cottage, the repainting thereof, was authorised at the last annual meeting, and have been attended to, as also the fence, and the Board's property in now in first-class order.

Proposed Extension of the Race.—A special meeting of the Board was held at Gladstone on the 13th August, 1925, to consider the necessity of extending the race a further 4½ miles beyond its present terminus, when the following resolution was carried—

> "That it be recommended by the Board to the Minister that the extension of the Mount Cameron Water Race for a distance of 4½ miles from the present terminus be proceeded with, at an estimated cost of Eight hundred Pounds; and that the necessary survey and levels be put in hand forthwith;"

and the Chairman was instructed to convey such resolution to the Honourable the Minister for Mines, and it is with grave concern that the Board learns that you have refused to approach Parliament for the necessary provision, and the matter will be further discussed at the annual meeting called for the 10th March instant.

Rainfall.—The registered rainfall for the year was as follows:—Main intake, 23 inches 13 points; Little Mussel Roe intake, 2⅛ inches 45 points.

Revenue.—The revenue for the year, which includes the sum of £29 6s. 10d. received towards the cost of widening the Purdue branch of the Mount Cameron Water Race, amounted to £1029 16s. 10d., being a decrease of £134 13s. 8d. on the previous year.

Expenditure,—The expenditure amounted to £1007 16s. 11d., being an increase of £171 5s. 9d. on that of the previous year.

Statistics.—The statistics for the year are as follow:—

Average number of claims supplied per week, 11.
Greatest number supplied for any one week,16.
Total number of sluice heads of water supplied—Under fixed or cash scale, 317⅓; under royalty or credit scale, 1316; total, 1633⅓.

Receipts.—Total receipts for the year—	£	s.	d.
Water sold under fixed scale	285	15	7
Water sold under royalty scale	777	14	5
Half-cost of widening Purdue branch of the Mount Cameron Water Race paid by Compeer Tin Mining Company, No Liability	29	6	10
	£1,092	16	10

Expenditure.—	£	s.	d.
Salaries and wages	722	4	8
Travelling expenses	30	16	9
Repairs to race	17	10	11
Insurances	6	12	1
Stationery, stores, freight	33	2	9
Widening Purdue branch of race	58	13	8
Cleaning and scrubbing race	78	3	4
Repairs and painting Manager's residence	60	12	9
	£1,007	16	11

Paid to the Public Debts Sinking Fund for the year ended 30th June, 1925 (including moiety of rents of mineral lands served by the race)	£2	0	7

We have the honour to be,
Sir
Your obedient servants,

W. A. PRETYMAN, Chairman.
JAS. OGILVIE,
J. O. HUDSON,
CECIL G. RYAN,
JOHN SIMPSON, } Members.

REPORTS OF THE GOVERNMENT GEOLOGISTS.

Mines Department,
Hobart, 18th May, 1926.

SIR,

I have the honour to submit my report for the year ended 31st December, 1925.

Field Investigations.

The earlier part of the year was devoted to the completion of the Geological Survey of the Lisle Goldfield, as portion of the programme for the systematic investigation of the north-eastern goldfields. The plan and report thereon have been completed and are now in the course of publication.

Numerous other special examinations were carried out, the most important being the cement materials at Paloona and Melrose, the North Zeehan mining district, the alluvial and detrital tin deposits of the Waratah River valley, and the Oonah-Henrietta shale areas.

In connection with the cement materials at Paloona and Melrose, a company is in process of formation in order to establish a cement industry. The tin deposits of the Waratah valley have been taken over by the Mount Bischoff Tin Mining Company who contemplate the working thereof.

The following list comprises all the field examinations carried out:—

(1) Geological Examination of Blyth's Freehold, Beaconsfield.
(2) Geological Examination of alleged discovery of Gold at Loira and Rookery (Winkleigh).
(3) Geological Examination of Ringarooma United Gold Mine, Alberton.
(4) Geological Examination of Mount Horror Arsenic Prospect.
(5) Geological Examination of Slide's Prospect, Warrentinna.
(6) Geological Examination of Wardlaw Prospect, Alberton.
(7) Geological Examination of the Lisle, Cradle Creek, Little Molly, and St. Patrick's River Mines, near Lisle.
(8) Geological Examination of Cement Materials at Paloona and Melrose.
(9) Geological Examination of Dennison Gold Mining Area.
(10) Geological Examination of Lisle District (completion of investigation).
(11) Geological Examination of Reservoir Site at Kelcie's Tier for Devonport Council.
(12) Geological Examination of Tin Ore Prospects at Oonah and Hampshire.
(13) Geological Examination of Galena and Blende Lode at Preston.
(14) Geological Examination of Oonah and Henrietta Shale Areas.
(15) Geological Examination of Zircon Deposits near Lister's Hill.
(16) Geological Examination of Muenna Coal and Shale Mine, Preolenna.
(17) Geological Examination of Zeehan (North) Silver-lead Area.
(18) Geological Examination of Swansea Mine, Zeehan.
(19) Geological Examination of Pine Hill and Kerslake Mine, Renison Bell.
(20) Geological Examination of Bell's Hill Tin Mine, Branxholm.
(21) Geological Examination of Mammoth Tin Mine, Weldborough.
(22) Geological Examination of Liberator and Cambria Tin Mines, Blue Tier.
(23) Examination of the Mount Cameron Water Race, Gladstone.
(24) Geological Examination of Miner's Dream Mine, Mathinna.
(25) Geological Examination of Old Boys' Mine.
(26) Geological Examination of Adams River Osmiridium Field.
(27) Geological Examination of Shaw's Prospect, Brown's River.
(28) Geological Examination of Lamph Prospect, Port Cygnet.
(29) Geological Examination of Alluvial Tin Ore Deposits, Waratah River.

In connection with the above, and other examinations, and on other subjects the following reports have been prepared:—

(1) Report on Blyth's Freehold, near Beaconsfield.
(2) Report on alleged discovery of Gold at Loira and Rookery (Winkleigh).
(3) Report on Mount Horror Arsenopyrite Prospect.
(4) Report on Wardlaw Prospect, Alberton.
(5) Preliminary Report on Bessell Reward Gold Prospect.
(6) Report on Cement Materials at Melrose and Paloona.
(7) Report on Site of proposed Reservoir, Kelcie's Tier.
(8) Report on Prospects of the Ringarooma Gold Mining Company.
(9) Preliminary Report on the Goldfields of Lisle and District.
(10) Report on the Alluvial and Detrital Tin Ore of Waratah River Valley.
(11) Report on the Adams River Osmiridium Field—Situation and Access.
(12) Adams River Osmiridium Field.
(13) Report on Cement Materials at Melrose.
(14) Report on the Operations of the Muenna Coal Mining Syndicate.
(15) Report on the Gold Prospects at Hallam's, Piper River.
(16) Report on the Mount Cameron Water Race Area at Gladstone.
(17) Report on the Miner's Dream Gold Mine, at Mathinna.
(18) Report on the Bell Hill Tin Mine, Weldborough.
(19) Report on the Mammoth Mine.
(20) Report on the Swansea Mine.

Preparation and Publication of Bulletins, &c.

During the year the following publication was printed and became available for issue:—

Geological Survey Bulletin, No. 36.—The Dundas Mineral Field.

The Report on the Lisle Gold-field has been completed and is now being printed for issue as Geological Survey Bulletin, No. 37.

Other Duties Performed.

In addition to the above field investigations and the preparation of the reports thereon, a considerable amount of attention was devoted to the following, among other matters:—

Australian Shale Oil Corporation Bill.—Evidence was given before the Select Committee appointed by the Legislative Council in connection with the above Bill. Attention was given to other matters in connection with this matter, such as selection of bore-sites, visits of inspection, technical advice, &c.

Federal Parliamentary Public Accounts Committee Enquiry on Oil Shale Industry.—Evidence was also given before the Committee when sitting at Latrobe.

Conference of State Geologists, Melbourne.—Attendance was made at this important Conference in Melbourne. One direct result was the retention by the Commonwealth of the bounty on shale oil, which was in danger of being removed.

Oil Panel, Australian Commonwealth Standards Committee.—Numerous attendances were made as Chairman at the sittings of the State Committee of this Panel. The meeting of the Australian Committee in Melbourne was also attended.

Coal Panel, Australian Commonwealth Standards Committee.—The various meetings of the State Committee of this Panel were also attended.

Routine Duties.

During the year the amount of inward and outward correspondence was very large and, in addition, an extraordinary number of visitors called for interviews. These conditions were largely brought about by the discovery of the Adams River Osmiridium Field and the large amount of information sought by intending visitors thereto. Apart from this, however, the usual number of inquires about all varieties of mineral deposits in Tasmania and the attendant problems of mining and treatment were made.

Yours faithfully,

A. McINTOSH REID, Government Geologist.

W. A. PRETYMAN, Esq., Secretary for Mines,
Hobart.

Hobart, 18th May, 1926.

SIR,

I HAVE the honour to submit my report for the year ended 31st December, 1925.

Field Investigations.

The early part of the year was devoted to the completion of the geological and topographical survey of the Campbell Town-Conara-St. Marys district for the State Development Advisory Board. The report and plans thereof have been completed, and are now being printed for issue as "Underground Water-Supply Paper No. 4."

The most important field investigation was the geological survey of the recently discovered Adams River osmiridium field, to which two months were devoted. The osmiridium is shed from serpentine derived from bronzitite rocks, as is found on all osmiridium fields in Tasmania. The serpentine occurs in the form of a large dyke-like intrusion, being one mile wide at its northern end (from which the greater part of the osmiridium has been shed) and gradually decreasing in width to the south. The claims being worked are all alluvial, and are not restricted to the serpentine area, the majority being on the sandstone area to the west of the serpentine.

In addition a number of special investigations were made, a large proportion of which were connected with supplies of underground water.

The following list contains a complete statement of the field work performed:—

(1) Geological Survey of the Campbell Town-Conara-St. Marys District.
(2) Geological Examination of "The Braes," Woodbury.
(3) Geological Survey of Upper Portion of the Arthur River Conservation Scheme.
(4) Geological Examination of Mr. G. A. Barber's Property at South Arm.
(5) Geological Examination of No. 1 Bore "The Braes," Woodbury.
(6) Geological Examination of the Tasman and Crown Lyell Extended Mine, Queenstown.

(7) Geological Examination of "Lowes Park," Woodbury.
(8) Geological Examination of Property of Mr. C. Salmon, Antill Ponds.
(9) Geological Examination of Property of Mr. C. E. Triffett, Tunbridge.
(10) Geological Examination of Property of Mr. E. E. Powell (Little Plains), Tunbridge.
(11) Geological Examination of Property of Mr. Lodge, Tunbridge.
(12) Geological Examination of Property of Mr. Rothwell, Tunbridge.
(13) Geological Examination of Property of Mr. C. E. Triffett, Tunbridge.
(14) Geological Examination of Property of Mr. E. Dowling, Ross.
(15) Geological Examination of Property of Mr. Nicholson (Trulands), Campbell Town.
(16) Geological Survey of Property of Mr. H. D. Reed, (Ivanhoe), Plenty.
(17) Geological Survey of Golden Zone Mine, Lefroy.
(18) Geological Survey of Adams River Osmiridium Field.
(19) Geological Survey of Prospects of Florentine Mining Company, Mount Mueller District.

In connection with the above and other field trips and on other subjects the following reports were published:—

(1) Report on Sulphide Deposits in Tasmania.
(2) Report on Phosphate Deposits in Tasmania.
(3) Report on Bore-sites for Underground Water at "The Braes," Woodbury.
(4) and (5) Report on No. 1 Bore, "The Braes," Woodbury.
(6) The Upper Portion of the Arthur River Hydro-Electric Water Conservation Scheme.
(7) Report on Dolomite and Megnesite Deposit, near the Victory Mine, Arthur River.
(8) Report on the Prospect of Obtaining Underground Water on the Property of Mr. C. Salmon, Antill Ponds.
(9) Report on the Possibility of Obtaining Supplies of Underground Water on the property of Mr. G. A. Barber, Opposum Bay.
(10) Report on the Possibility of Obtaining Underground Water on the property of Mr. H. Oldmeadow, "Lowes Park," Antill Ponds.
(11) Report on the Possibility of Obtaining Water on the Property of Mr. C. E. Triffett, Tunbridge.
(12) Report on the Possibility of Obtaining Supplies of Water on the Property of Mr. E. E. Powell, Little Plains, Tunbridge.
(13) Report on the Possibility of Obtaining Supplies of Underground Water on the Property of Mr. Lodge, Tunbridge.
(14) Report on the Possibility of Obtaining Supplies of Underground Water on the Property of Mr. Rothwell, Tunbridge.
(15) Report on the Prospect of Obtaining Supplies of Underground Water on the Property of Mr. Nicholson, "Trulands," Campbell Town.
(16) Report on the Prospects of Obtaining Water on the Property of Mr. H. Dowling, Ross.
(17) Report on the possibility of Obtaining Supplies of Underground Water on the Property of Mr. C. E. Triffett (Township Lagoon), Tunbridge.
(18) Report on Tasman and Crown Lyell Extended Mine.
(19) Notes on the Bell Hill Tin Mine.
(20) Report on the Golden Zone Mine, Lefroy.
(21) Preliminary Report on the Adams River Osmiridium Field.

Preparation and Publication of Bulletins, &c.

During the year the following report, *viz.*, Geological Survey Bulletin No. 35—The Sub-Basaltic Tin Deposits of the Ringarooma Valley—was printed, and became available for issue.

The report on the Campbell Town-Conara-St. Marys district was completed, and is now being printed for issue as "Underground Water Supply Paper No. 4."

Other Duties Performed.

In addition to the above, attention was given to the following, amongst other matters:—

International Geological Congress, Madrid, 1926.—Several reports were prepared for this congress in connection with sulphide and phosphate deposits in Tasmania. These had to be amended from time to time as the scope of the reports was enlarged.

British Empire Exhibition, 1925.—A pamplet on the mineral resources and the mining industry of Tasmania was prepared, in conjunction with Mr. W. D. Reid. The 1924 pamphlet was enlarged and illustrated, with the result that a much more satisfactory one was produced.

Interstate Geological Conference, Melbourne.—This meeting was attended, in company with Mr. A. McIntosh Reid.

Australian Shale Oil Corporation Bill.—Evidence was given before the Select Committee of Inquiry appointed by the Legislative Council in connection with the above Bill.

Tasmanian Museum Geological Collections.—The reorganisation of these collections was continued by devoting a few days at intervals to this purpose. The collections are now arranged in a more systematic way, further alterations and additions are necessary, and will be carried out when possible.

Routine Duties.

A considerable volume of correspondence had to be attended to, and numerous interviews given to visitors. Much information was sought in connection with the various mineral deposits of the State and their exploitation.

Yours, faithfully,

P. B. NYE, M.Sc., B.M.E., Government Geologist.

W. A. PRETYMAN, ESQ.,
Secretary for Mines, Hobart.

REPORT OF THE ACTING GOVERNMENT CHEMIST AND ASSAYER.

Mines Department Laboratory,
Launceston, 1st June, 1926.

SIR,

I beg to submit my annual report for the year ending 31st December, 1925.

During the year the work consisted largely of making metallurgical tests, and analyses of ores, rocks, coal, waters, oil, shales, osmiridium, and minerals.

The total number of assays and analytical tests made for the public and the Department amounted to 5956.

Assays have been made for gold, silver, lead, tin, zinc, copper, bismuth, tungstic acid, barium, molybdenum, iron, manganese, sulphur, nickel, cobalt, osmium, iridium, platinum, chromium, antimony, arsenic, titanium, phosphorous, magnesium, sodium, potassium, vanadium, mercury, flourine, aluminium, zirconium. Complete analyses have been made of rocks, ores, clay, shale, coals, and alloys. Distillation tests of shales, &c., have been carried out.

Personal Interviews.

In addition to the large number of inquiries by post, over 1500 personal interviews have been attended to. The large amount of technical information supplied has involved considerable work after office hours.

Correspondence.

A large amount of correspondence has been dealt with during the year, the number of letters, in and out, totalling 1540.

Conclusion.

I desire to place on record my appreciation of the services rendered by the Assistant-Chemist (Mr. W. St. C. Manson), and also the voluntary assistance rendered by Miss R. B. Reid.—I have &c.,

L. H. BATH,
Acting Government Chemist and Assayer.

W. A. PRETYMAN, ESQ.,
Secretary for Mines, Hobart.

Diagram showing the ratio of Fatal Accidents in Mines in Tasmania

Rate per 1000 men employed

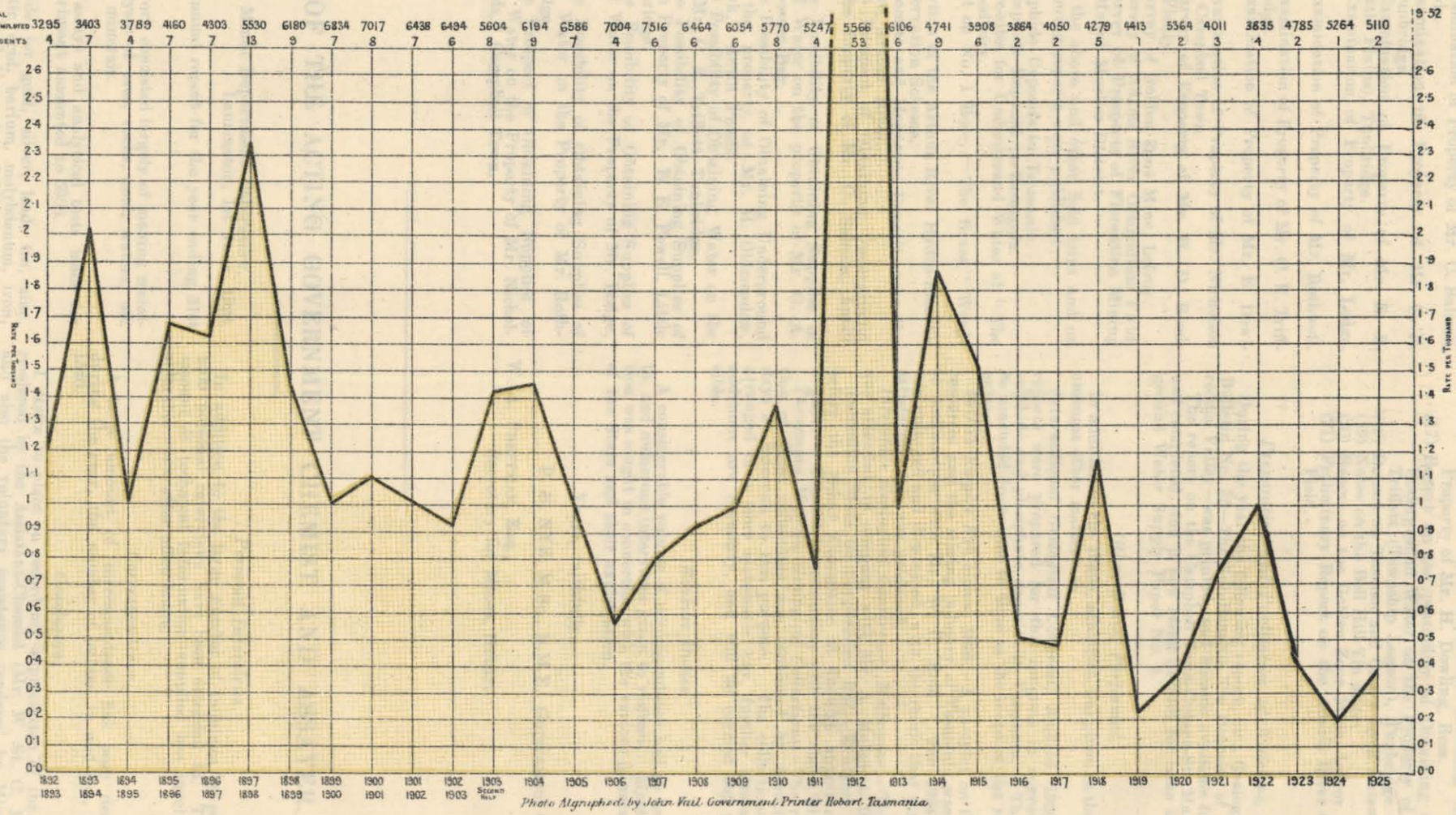

Photo Mgraphed by John Vail, Government Printer Hobart Tasmania

5 cm

REPORT OF THE CHIEF INSPECTOR OF MINES.

Hobart, 7th May, 1926.

SIR,

I HAVE the honour to submit my annual report for the year 1925 in connection with the administration of "The Mines and Works Regulation Act, 1915."

Tables showing (1) the number of persons killed and injured in and about the mines of Tasmania, (2) rate per thousand killed and injured in the different divisions, and (3) analysis of statistics of accidents for the western division for the year 1925, are attached, as well as a comparative table of statistics of accidents in and about the mines of Tasmania from 1st July, 1892, to 31st December, 1925, and a graph showing the ratio of fatal accidents in mines in Tasmania per thousand men employed.

The average number of men employed was 5110, which is a decrease of 154 compared with the previous year.

There were 62 accidents, causing two fatalities, and injury to 61 persons. It will be observed that the total number of accidents shows a decrease of ten, as compared with those of the previous year. The two fatal accidents occurred at surface, one by inhaling gas at works and one by explosion on the surface of a mine. It is pleasing to record the absence of any fatality in underground workings.

The death rate per 1000 persons employed in mines, works, and quarries, was 0·391, as against 0·189 for the previous year, and the rate per thousand persons employed who sustained serious injury was 11·937 in 1925, as compared with 13·867 in 1924. Underground workings were responsible for 27 of the accidents, and 35 occurred on surface and in the works.

Of the serious accidents, 11 caused fractures or permanent injury. The remainder were occurrences which necessitated absence from occupation for more than 14 days.

It was found necessary to take legal proceedings in five cases for breaches of the Act. In three of these convictions were obtained, one case was dismissed, and one was withdrawn.

It is pleasing to record that the number of prosecutions are considerably less than in previous years, and that there appears to be a more ready compliance with the requests of the inspectors on the part of the managements. It is also satisfactory to note the improvement which has taken place in regard to the use of dust-allaying appliances and the care taken in dealing with defective ground.

During the year one mine has adopted the system of allowing one hour to elapse after the day shift leaves the mine before the afternoon shift enters, with a view to allowing all explosive fumes to become dispersed and the dust raised by explosions to settle. This system should certainly tend to better health conditions.

With regard to prospecting, 24 parties were granted sustenance during the year. One of these discovered the osmiridium field at Adamsfield, which has since proved to be a very important discovery. Others obtained good prospects which may lead to new discoveries in the future.

In connection with drilling, two plants were engaged during portion of the year, one boring for water in the Midlands, where six bores were completed. Five of these were successful in locating permanent supplies of water. One drill operated on the shale area at Latrobe, and rendered good service in locating a large body of shale.

There has been no alteration in the personnel of the district inspectors, but the office clerk has been replaced by a male clerk.

In conclusion, I desire to express appreciation of the capable and energetic manner in which the inspectors have carried out their duties during the year.—I have, &c.,

J. O. HUDSON,
Chief Inspector of Mines.

W. A. PRETYMAN, ESQ.,
Secretary for Mines, Hobart.

TABLE showing Rate per Thousand Killed and Injured in different Divisions for the Year 1925.

Division.	Average Number of Men Employed.	Number of Accidents.	Number of Persons		Total Number Killed & Injured.	Average per 1000 Killed and Injured.	Average per 1000	
			Killed.	Injured.			Killed.	Injured.
Northern and Southern	2137	17	1	16	17	7·955	·467	7·487
North-Eastern	413	5	...	5	5	12·100	...	12·100
Eastern	542	5	...	5	5	9·225	...	9·225
North-Western	530	6	...	6	6	11·320	...	11·320
Western	1488	29	1	29	30	20·161	·672	19·489
Total	5110	62	2	61	63	12·328	·391	11·937

ANALYSIS of Statistics of Accidents for Western Division.

Division.	Number of Miners Employed.	Number of Accidents.	Number of Persons		Total Number Killed & Injured.	Average per 1000 Killed and Injured.	Average per 1000.	
			Killed.	Injured.			Killed.	Injured.
Mt. Lyell	1015	21	1	21	22	21·674	·985	20·689
Zeehan, &c.	473	8	...	8	8	16·913	...	16·913
Total	1488	29	1	29	30	20·161	·672	19·489

COMPARATIVE Table of Statistics of Accidents in and about the Mines of Tasmania from 1st July, 1892, to 31st December, 1925.

Period.	Number of Miners Employed.	Number of Accidents.	Number of Persons.		Total Killed and Injured.	Average per 1000 Killed and Injured.	Average per 1000.	
			Killed.	Injured.			Killed.	Injured.
1 July, 1892, to 30 June 1893	3295	28	4	25	29	8·8001	1·214	7·586
,, 1893 ,, 1894	3403	25	7	20	27	7·934	2·057	5·877
,, 1894 ,, 1895	3789	26	4	24	28	7·390	1·058	6·332
,, 1895 ,, 1896	4160	22	7	16	23	5·529	1·682	3·847
,, 1896 ,, 1897	4303	36	7	31	38	8·831	1·627	7·204
,, 1897 ,, 1898	5530	36	13	33	46	8·318	2·351	5·967
,, 1898 ,, 1899	6180	35	9	34	43	6·957	1·456	5·501
,, 1899 ,, 1900	6834	19	7	16	23	3·365	1·024	2·341
,, 1900 ,, 1901	7017	29	8	23	31	4·417	1·140	3·278
,, 1901 ,, 1902	6438	38	7	35	42	6·524	1·088	5·437
,, 1902 ,, 1903	6484	44	6	43	49	7·557	0·925	6·632
,, 1903, to 31 Dec., 1903	5604	27	8	20	28	4·977	1·428	3·569
1 Jan. 1904 ,, 1904	6192	73	9	65	74	11·951	1·454	10·497
,, 1905 ,, 1905	6586	34	7	30	37	5·618	1·063	4·555
,, 1906 ,, 1906	7004	65	4	61	65	9·280	0·571	8·709
,, 1907 ,, 1907	7516	68	6	64	70	9·314	0·798	8·515
,, 1908 ,, 1908	6464	60	6	58	64	9·900	0·928	8·972
,, 1909 ,, 1909	6054	54	6	49	55	9·085	0·991	8·093
,, 1910 ,, 1910	5770	63	8	57	65	11·265	1·386	9·878
,, 1911 ,, 1911	5247	80	4	77	81	15·437	0·762	14·675
,, 1912 ,, 1912	5566	60	53*	53	106	19·044	9·522	9·522
,, 1913 ,, 1913	6106	64	6	60	66	10·809	0·982	9·826
,, 1914 ,, 1914	4741	69	9	62	71	14·977	1·896	13·081
,, 1915 ,, 1915	3908	71	6	67	73	18·679	1·535	17·144
,, 1916 ,, 1916	3864	53	2	51	53	13·716	0·517	13·198
,, 1917 ,, 1917	4050	50	2	48	50	12·345	0·493	11·852
,, 1918 ,, 1918	4279	50	5	45	50	11·684	1·168	10·516
,, 1919 ,, 1919	4413	58	1	57	58	13·143	0·226	12·917
,, 1920 ,, 1920	5364	52	2	50	52	9·694	0·372	9·322
,, 1921 ,, 1921	4011	40	3	37	40	9·972	0·748	9·224
,, 1922 ,, 1922	3835	31	4	27	31	8·083	1·043	7·040
,, 1923 ,, 1923	4785	64	2	63	65	13·584	0·417	13·166
,, 1924 ,, 1924	5264	72	1	73	74	14·057	0·189	13·867
,, 1925 ,, 1925	5110	62	2	61	63	12·328	0·391	11·937

* Mt Lyell disaster.

TABLE showing the Number of Persons Killed and Injured in and about the Mines of Tasmania during the Year 1925.

Place or Cause of Accident.	Inspection Districts.													
	Northern and Southern Division.		North-Eastern Division.		Eastern Division.		North-Western Division.		Western Division.				Total.	
									Zeehan and other Districts.		Lyell District.			
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
Underground—														
Falls of ground	...	...	...	...	...	4	...	...	...	1	...	1	...	6
Shaft Accidents—														
Falling down passes and shafts	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	...	...	...	...	...	4	...	...	...	1	...	1	...	6
Miscellaneous (underground).														
Haulage	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Trams, &c.	...	...	...	...	...	...	...	2	...	...	...	5	...	7
Sundry accidents	...	2	...	...	...	1	...	1	...	3	...	7	...	14
Explosives	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	...	2	...	...	...	1	...	3	...	3	...	12	...	21
Total Underground	...	2	...	...	...	5	...	3	...	4	...	13	...	27
On Surface—														
Smelting-works	...	...	...	...	...	...	...	...	...	1	...	2	...	3
Machinery	...	...	...	...	...	...	...	1	...	...	...	1	...	2
Tramways	...	3	...	...	...	...	...	1	...	...	...	1	...	5
Falls of persons	...	6	...	...	...	...	...	...	...	2	...	...	...	8
Explosives	...	2	...	...	...	...	...	...	...	...	1	2	1	4
Miscellaneous	1	2	...	...	...	...	...	3	...	1	...	1	1	7
Sluicing	...	...	...	5	...	...	...	...	...	...	...	...	...	5
Total Surface	1	13	...	5	...	...	...	5	...	4	1	7	2	34
Gross Total, 1925	1	15	...	5	...	5	...	8	...	8	1	20	2	61

REPORTS OF THE INSPECTORS OF MINES.

Mr. Inspector Curtain (Launceston) reports:—

I have the honour to submit my annual report for the year 1925 in connection with the work of inspection and administration of the various Acts, within my Division:—

Accidents.—The list supplied contains the names of the men injured during the past year, and will compare favourably with that of its predecessors. All the injured persons recovered and with the exception of Britton, who through age relinquishes underground work, returned to their usual, or other occupations, including a case of "gassing," at the Golden Gate Mine at Mathinna, where, while cleaning out a winze, one of the men was overcome, but timely rescued, thanks to the promtitude of his mates, especially Robert Parry, who is certainly deserving of some suitable recognition for the part he played in what would otherwise have been of much more serious consequences.

Health of the Miners.—From medical reports this continues satisfactory, and will compare favourably with the health of those engaged in other callings throughout the State.

Ventilation.—With the exception of the lowest or last unwatered levels at the Golden Gate, this throughout has been reasonably satisfactory, and in reference to the instance mentioned a connection has recently been made from the 1500 feet level with the workings of the North Gate Mine shaft that has considerably improved those deeper workings.

Dust.—Where rock-drills are in use a reticulated water service follows the air-pipes, and from observation and statements received from the men the prevailing conditions have invariably been found satisfactory. Their use is principally centered in the Storey's Creek Mine where, in addition to the rock being of a moist nature, the workings are well ventilated, accompanied by a cool, in fact cold, atmosphere that constantly pervades the same.

Changing Houses.—Those in the metal mines and Mount Bischoff Smelters are reasonably equipped, and appreciated by the employees, but to date, although much-discussed with the managers, no attempt has been made to establish these most necessary adjuncts on our collieries where their services are, in fact, much greater required after each shift by black, grimy colliers than miners working in dry, clean metalliferous mines. It is contended that it is not the usual practice to have these "appendages" attached to coal mines, but this is not correct, as an excellent system is in vogue at the Victorian State Mine that could well be copied and, in a modified manner, adopted, if not with all at least in our principal coal mines.

Magazines and Explosives.—Both have been periodically examined, and in no instances has any deleterious presence or adverse report been found or received in connection with either, which also applies to fuse and detonators. An explosion took place in the blacksmith's shop of the Storey's Creek Mine while a water-drill (steel) was being heated for sharpening, through the duct being unknowingly clogged with geligните in consequence of it having been reapplied to an evidently charged hole for firing. The drill was shattered, but its missiles, fortunately, missed the smith and his attendant, who were thrown down by the concussion, otherwise the result must have been much more disastrous. An inquiry into the occurrence was instituted, but from general denials from the powder-monkeys it was impossible to locate, or more than suspect, the cause, and consequently nothing further was done in the matter.

Inflammable Liquids.—The work in connection with those commodities is now general, and principally directed to the selection of sites and plans for stores and depots, and their subsequent supervision, with correspondence, takes up a considerable amount of time, and as the consumption of petrol is steadily increasing, coupled with a desire on the part of vendors to instal bulk storage, its care and supervision must correspondingly follow, whereby the efficient standard already attained regarding its safe handling and distribution may be continued. In connection with this it is satisfactory to mention that with all the large oversea shipments received to date not one has been attended with an approach to fire or any personal injury to the attendants.

Mr. Inspector Williams (Queenstown) reports:—

I have the honour to submit the following report upon the work of inspection and administration of the provisions of "The Mines and Works Regulation Act, 1915," "The Explosives Act, 1916," and "The Inflammable Liquid Act, 1920," within the Lyell and Zeehan Inspection Division, for the year ended the 31st December, 1925.

The estimated gross production of metallics from the inspection division was 6539 tons copper, 2247 ounces gold, 168,505·79 ounces silver, 499·28 tons lead, 114·14 tons zinc, and 11·14 tons tin. The total value of the production, based on average quarterly metal prices, was £495,560.

Despite favourable market prices for metals, other than copper, there was a decline in the production of metallics, excepting gold, which showed a slight increase of 110 ounces. Depletion of developed lodes, restricted development and mining of known ore bodies, and an absence of new discoveries of economic importance, accounted for a decrease in the production of silver-lead ores. A little more activity was displayed in exploiting the possibilities of the markets offering for zinciferous ores, and although the gross production of zinc was less than during the previous year, the actual tonnage of ore mined was greater. Metal prices remaining favourable, and consequent upon an active resumption of operations at one mine, and provided advantage is taken of the possibilities for more active exploitation of known ore occurrences at other parts of the inspection division, it is anticipated that recent declines in the production of metallics will be arrested. The average number of men engaged in connection with the mining industry was 1252.

The principal mines and works again commanded the greater number of underground and surface inspections, the work of inspection being extended to those of lesser importance as occasion demanded. The production and maintenance of safe working conditions received full consideration. Records show that several instances of laxity were encountered in respect to barring down, or otherwise, attending to unsafe ground, adoption of protective measures during operations in broken ground, efficacy of timbering underground excavations, and attending to other details upon which safety depends. Differences and unpleasantries have arisen in respect to conditions obtaining and modes of working, but an application of consistent and impartial measures has been productive of good results in many cases.

There were no extensive or uncontrolled settlements of ground, and in view of the response made to the counsel extended for the modification of policies of working or adoption of other precautionary measures in the presence of lines or zones of structural weaknesses in the ore bodies, the absence of uncontrolled settlements of ground is appreciated. At an opencut workings quantities of ground have continued to fall from the affected hanging wall area, but the weakness has been known, the falls have been anticipated, and no person has been exposed to imminent danger.

Accidents.

Twenty-six accidents, entailing twenty-seven casualties, were registered under the provisions of Section 26 of "The Mines and Works Regulation Act." There was one fatality and twenty-six casualties attended with non-fatal injuries. Fourteen of the accidents occurred underground, four occurred on the surface at mines, and eight were associated with operations at metallurgical works.

The fatal accident occurred at a quarry serving a mine with material for underground filling purposes, and was due to the detonation, by manual force, of a concealed and unknown quantity of explosives. One person was killed instantly, one person sustained a fractured skull, and was incapacitated for more than 14 days, and a third person sustained injuries which incapacitated him for less than 14 days. Several persons were engaged levelling the floor of the quarry to enable a trucking road to be moved nearer the working face, when the deceased, who was picking to a depth of about four inches, struck a quantity of invisible explosives, and caused a violent explosion. At the subsequent inquest several contentions were advanced in regard to the possible theft and concealment of explosives, but no theory could be definitely affixed to this incident, and as the evidence portrayed reasonable care in respect to the handling, use, and storage of explosives, the jury found that the occurrence was accidental and not otherwise.

A second serious surface accident was associated with operations at a mine sawmill. When a log was being "snigged" into position at the timber-dressing shed, the front end struck an obstruction and, owing to the snigging chain being fixed below the centre of the log, the other end swung round, struck one of the three persons engaged, jammed his left leg against a rail of a nearby trucking road, and inflicted a fracture and dislocation of the ankle. The circumstances suggested an absence of due regard for the possible results. An error of judgment was committed when the snigging chain was placed below the centre of the log, and the injured person courted danger when he trespassed on the same side of the log as the horse.

Although in several instances the injuries received were of a painful nature, only one of the underground accidents was of serious moment. In this case two persons were engaged "strapping" a partially-reared pass in a rill stope, when a quantity of ground slipped down the footwall, struck one of the persons on the left leg, and inflicted a compound fracture and dislocation of the ankle. Callousness to a known danger was the contributory cause of this accident. Investigations disclosed that the ground was known to be bad, but was not barred down, as it was not regarded advantageous to bring the ground down until the pass had been finally reared and "strapped."

Two additional accidents were due to falling ground, but in sympathy with the circumstances, these are to be classified as "miscellaneous accidents," as it cannot be asserted that the ground fell as implied by the classification "falls of ground." In one case a miner was "barring down" subsequent to blasting operations in a stope when a small piece of ore was deflected in its fall by the cap of the covered set in which he was working, and struck him on the foot. In the second case, a miner was driving through a collapsed area with the use of false sets and driving laths for safety, when a small quantity of ground dribbled from the ends of the back laths as he was preparing to insert a main set, and a small rock struck him on the back of the righ hand.

Of the remainder of the underground accidents five were connected with trucking operations, three occurred during the handling of mining timber, and three were of a miscellaneous nature. Investigations suggested that an exercise of merited care would have averted the results recorded in at least five instances.

The eight accidents associated with operations at metallurgical works were of a miscellaneous nature. In one case a person was indiscreetly trespassing near the open end of an idle blast furnace while hood accretions were being barred down and was struck on the foot by a lump of accretion which rolled through the open furnace end. Measures were taken to avert a recurrence of this class of accident. While attending to the casting of blister copper bars one person sustained a burnt foot as a result of dampness in the mould causing a violent splash of the molten metal. While attending to the discharge chute of a Herreshoff furnace an employee sustained a burnt foot as a result of an unprecedented discharge of hot calcines. One person was "walking" a crusher jaw along a floor at a crusher station when he slipped and thereby allowed the jaw to cant and jamb his right ankle against a belt case. A labourer stood on a guard rail to replace a burnt-out electric globe when the guard rail carried away and caused him to fall a distance of sixteen feet. A carpenter's labourer incautiously allowed his right index finger to project under the bottom edge of a piece of squared timber which was being placed on the ground. In the eighth case, a person was hurrying from one floor to another at a flotation plant, when he slipped at a "step-down" and sprained his ankle.

Five accidents, involving more than 14 days' disablement, occurred at mines and works, but have been omitted from the tabulated list as these were machinery accidents and were accepted for registration by the Machinery Department. None was of serious moment.

Health and Sanitation.

Matters pertaining to health and sanitation have not been slighted, and employers have been prevailed upon to produce and maintain equitable working conditions. In many instances good results have been recorded, and have been appreciated, but, again, it cannot be chronicled that the desiderata of this office have been met with a merited response in several cases.

At a copper reduction works aggravating conditions of dust and fumes were periodically encountered, consequently the improved conditions, referred to previously, were not established as being consistent, and in other directions, encouragement for improved working conditions has not yet been responded to.

At another works technical investigations determined the causes and remedies of aggravating conditions of dust and fumes. The management responded to a request for improved conditions to an extent that the results attained at the close of the period were appreciated both by this office and employees.

Encouragement for added measures for the prevention of dust dispersion at a crusher station produced material results, but progress was slow and the work had not been completed at the close of the year.

Atmospheric dust in mines received attention, although more time could be devoted to this work than opportunity has permitted. In all cases where the degree of dust appeared to be excessive correcting measures were requested. Three instances of persons having to inhale smoke and fumes from blasting operations were encountered and dealt with as occasion demanded. The thermometrical requirements of the Act were not exceeded. Except in isolated cases, ventilating systems were not materially different from those obtaining previously. At one mine mechanically controlled ventilation was provided to counter discomfort caused by a combination of gases and vapours arising during baling operations in part of the workings. At a different part of the workings of the same mine auxiliary means were installed to prevent objectionable atmospheres from old workings circulating through the working places. At a second mine an additional opening to the surface was required and obtained, and beneficially affected the ventilating conditions when the circulation and distribution of the air currents had been controlled. At a third mine operations at one place were prohibited owing to excessive amounts of carbon dioxide until ventilating means are provided.

Due attention was given to the provision of adequate bathing and changing accommodation at the mines and works. At one mine the work of enlarging and remodelling the entire arrangements was continued, and practically completed at the close of the year. The new arrangements are a marked improvement upon those existing, and objected to, during, and prior to, 1923. A complete reorganisation of arrangements at a second change house was obtained with beneficial results. At both of these change houses the locker system, with electrical equipment for heating and drying clothes, now obtains. As experienced in the latter change house, closer attention will be necessary to cleanliness with the lockers than with the open system of change house arrangements. At a metallurgical works, requisite additions were made, and improved the internal arrangements of a change house.

Several irregularities were encountered in respect to "crib" places and latrine accommodation, but these were corrected upon request, and some commendable innovations were obtained in the arrangements at the principal mines and works. At the small mines arrangements were not different from previous years.

There were no innovations to the facilities previously provided for rendering first aid.

Prosecutions.

Legal proceedings were instituted against four persons for contraventions of the provisions of the Mines and Works Regulation Act in respect to the handling and use of explosives in mines. Penalties were inflicted in three cases, and the complaint against the fourth person was dismissed.

Machinery and General.

Due regard was directed to the efficient maintenance of ropes, cages, and attendant appliances, and, as a general rule these appliances were found to be reasonably well cared for. In one case only was it necessary to condemn and order the immediate replacement of a shaft rope.

At the commencement of the day shift at one of the principal mines a small smouldering fire was detected on one of the underground levels, and promptly extinguished before any material damage was done. The leg of a gallery set was burnt through, and the ends of a cap and two struts were charred. The cause of the fire was not determined.

Explosives.

Administration of the provisions of "The Explosives Act," and Division IV. of the Schedule to "The Mines and Works Regulation Act," relating to explosives, was not slighted.

Nitro-compounds of South African and Australian manufacture were used, and no complaints were made to this office regarding the quality thereof. During the year the former compound passed out of use, and Nobel's Ardeer compounds introduced during the previous year, were extensively used. As yet these compounds have satisfied local conditions, and inquiries have elicited nothing detrimental to their use.

Small quantities of nitro-compounds, aggregating 50 lbs., were ordered to be destroyed owing to advanced deliquescence. In each case the oxygen supplier was found to be sodium nitrate. No Ardeer compound has yet been condemned, but observations in respect to the behaviour and durability of this compound under local conditions of storage have not yet been finalised.

Several instances of improper handling and keeping of explosives were encountered. Legal proceedings were instituted in four cases, and lesser misdemeanours were countered with cautionary measures.

No difficulties were experienced in connection with the detonators used. Frequent tests and examinations were made of the safety fuse in use, and no instance of faulty fuse was encountered.

Two explosive accidents occurred during the year. One was attended with fatal injuries to one person, and non-fatal injuries to two persons, and in the other case a miner sustained injuries which incapacitated him for less than 14 days.

The fatality has been epitomised under "Accidents."

The second accident was associated with the firing of four pop-holes in the floor of a crosscut. The fuse ends were unravelled, and the miner proceeded to ignite the fuses with an acetylene light. Three fuses "spit" satisfactorily, but when the light was applied to the fourth fuse it did not "spit" within what was regarded as a reasonable time, and the miner decided to return to the place and light it after the three other charges had exploded. Three reports were recorded, and a few minutes later the miner returned to the place, in the smoke, fumes, and dust, to light the fourth fuse, as he had definitely concluded that the fuse had failed to ignite. He reached the scene of blasting, and was feeling for the fuse, when the charge exploded. He was indeed fortunate to escape with minor peppered abrasions on the arms and face. It was reasonably apparent that the fuse end was unravelled haphazardly and the powder train disturbed, and that when the light was applied the jacketing was ignited and smouldered until the powder train was ignited a few minutes later. Apart from contraventions of the provisions of "The Mines and Works Regulation Act" that were committed, the actions of the miner displayed an absence of consideration of the circumstances and possible consequences.

Landing of imported explosives at the port of Strahan was supervised as occasion demanded, and nothing untoward ensued in connection with this work.

Inflammable Liquids.

No new depots were established, and reasonable conditions of storage obtained at the premises registered under the provisions of "The Inflammable Liquid Act."

Mr. Inspector VAUDEAU (Burnie) reports:—

I have the honour to submit my annual report, for the year 1925, in connection with the work of inspection and administration of the various Acts delegated to this office,

The average number of persons engaged in my district was 1042, against 1052 in 1924. A good number left during the last six months for the Adams River Osmiridium Field, otherwise the average would have been greater, as there was, and is, room for practical miners in the Rosebery and Waratah districts.

Accidents.—A tabulated list containing an account of the various accidents requiring to be registered in compliance with Section 26 of "The Mines and Works Regulation Acts, 1915," has been furnished to the Chief Inspector.

As in previous years I have asked all the managers to let me have reports in connection with every accident that happens.

During the term under review 42 accidents have been reported to this office. Eighteen of these are recorded in the tabulated list, the sufferers having lost the time necessary to constitute a serious accident by the Act, *viz.*, 14 working days. There were no fatal accidents during the term. Ten of the recorded accidents occurred on the surface and eight underground.

Of these registered accidents one man lost 14 days; one, 15 days; four men lost 16 days; two, 17 days; three, 18 days; two, four weeks; one, five weeks; one, eight weeks; and three time unknown (two having left the district and one being still off work).

In connection with the man who lost eight weeks and the one who lost five weeks it appears, from inquiries made, that if they had carried out the mine foreman's instructions the accidents would not have happened. This, also, is true of another who left the district.

One case was rather peculiar. The man was turning a drill in a stope when a small, sharp piece of ore flew off the wall, hitting him on the finger, cutting and fracturing it. After a few days, septicæmia set in and the finger had to be amputated at the second joint. It appears that there had been some previous trouble in connection with blood-poisoning, and it was considered likely that this was accountable for the trouble. He is still off work. The accident happened on 16th October, 1925.

One man in charge of surface mining operations stated that he was inserting a piece of fuse into a detonator, pressing it home, when it exploded. He lost portion of two fingers and part of the thumb of his left hand. He accepted a position in the Straits Settlement, and went away before the wounds were quite healed

The other accidents were incidental to the mining industry, and with a little more care and thoughtfulness most of them could have been avoided.

Of the 24 accidents not registered, three men lost three days; five, four days; four, five days; one, six days; two, seven days; two, eight days; one, nine days; three, 10 days; one, 11 days; and two, 13 days. Thirteen of these accidents occurred underground and 11 on the surface.

Ventilation.—At one mine (mentioned in my last annual report) the rise was holed through and it made a decided improvement. Three levels were then connected by rising and winzing for ventilation and second exit, owing to the difficulty in keeping an opening through the old stopes, but no endeavour has been made to control the "air-currents," up to the end of the year. A rise was being put through from the lowest level to one above at the time of my last visit, and the manager considered the ventilation of the mine would then be satisfactory. On my next visit of inspection I hope to be abe to check up the various currents, and if they are found to be unsatisfactory they will need to be remedied at once. Auxiliary methods were requested and obtained, to assist the ventilation until connections were made at a few places, but taken on the whole the general conditions were better than the preceding term.

Settlements of Ground.—Nothing of a serious nature has occurred during the term, apart from one instance when the Chief Inspector and I visited a mine and found men working in unsafe conditions in a stope, and the following was recorded:—"We are of the opinion that this stope is absolutely unsafe for persons to be employed in, owing to the want of close filling, crushed timbers, and broken ground, and the work of breaking ore must be discontinued until the open area is close filled." This work of filling was put in hand, but soon after the ground above gave further signs of movement and the men were withdrawn. This branch strongly commented on the way in which it was proposed to take out the "hanging-wall portion of the ore-body," the "footwall" portion having been taken years previously. Since the withdrawal of the men this ground has not been touched. There were two other settlements noted, neither of which necessitated the withdrawal of the workmen.

Change Houses.—At two mines conditions are far from satisfactory. At one a system for drying clothes was put in. This was very severely criticised by this Department when being put in as being totally inadequate. It was soon after proved to be so. At this company's other mine, where there were no facilities for changing, a request was made for a suitable and adequate change-house. After months of waiting, and recording, and writing the Chief Inspector, and his interviewing the heads, a start was made on this, but the drying system being put in will, in my opinion, be as big a failure as the other previously mentioned. As this company is noted for its welfare schemes, &c., I cannot understand its actions in this connection. These are only "pin-pricks" to the men and, in my opinion, do not tend to good results Promises have been received that the drying-systems at both places will be made more adequate.

At another change-house the dirty condition in which it was kept had to be recorded and legal action threatened before a change was effected. Improvements have been effected at other places.

Shelter Sheds and Crib-Places.—A better response has been met in this connection, both on the surface and underground, but there is still room for many improvements, which are being asked for.

Health and Sanitation.—Considerable improvement in these matters has been effected at some mines, but there is much to be desired.

At two mines the managers state that it is almost impossible to get anyone to carry out the removal of the pans from underground. For this reason one of them expected the men to go outside to the surface, with a sad result, for he found an old, disused drive in an awful state. A temporary system has been put in, and the promise given that proper facilities will be erected to satisfy the requirements of this Department.

As far as I was able to judge there appears to be an improvement underground in connection with rock machine-drilling. No one has been found failing to use water, by me during the term under review, neither have I noticed the usual signs when dry boring is in vogue. At the big quarry mentioned in my last report water was laid on and jets provided to allay the dust, but it was found by the company that it was not posible to get beyond two to four feet by using a jet and allaying the dust on any holes from horizontal to vertical, as the dust mixing with the little water running down the steel formed "rings" round the hole, which set like cement, and made it impossible to get the bit past them. Boring with water passing through the machine and steel was tried out and it was found that it took from twice to five times as long as boring dry to get the same depth of holes as usualy bored, *viz.*, 18 to 20 feet Tests were made in my presence confirming the above. A system of boring was mutually agreed on by the Chief Inspector of Mines, the company's officer, the acting-superintendent at the quarry, and myself, whereas it was expected that a 65 to 70 per cent. efficiency would be obtained, which was considered to be all that could be reasonably insisted on by this Department. The company are complaining that the arrangements agreed on have put up their costs of boring considerably. This is to be expected in connection with boring "pops," which was agreed to be done by "wet machines." This was considered necessary by this Department as it was impossible for the men to stand in such a position as to be free of most of the dust. The men engaged boring state, which I endorse, that there is very little difference in the feetage obtained in all other classes of holes. I am positive that the tonnage broken, per foot of ground, bored with the present system, would more than compensate for the reduced feetage in drilling as previously carried out, and should ensure a safer quarry surface.

During the term a new quarry was being opened up, from and in front of the present one, and as most of this stone is partly and full of water it made boring very expensive. It is not known whether this boring was entered up, in connection with the old faces, but, if so, one can easily account for the increased costs as given to this Department.

There is an argument that the dust is not injurious, but I have yet to learn that any dust is not so if taken in in large enough quantities. It may not cause phthisis for many years but Dr. Haldane, one of the world's best authorities, and others, state "that any kind of dust particles will cause inflammatory changes in the lungs if enough of the particles are inhaled," and "that this harm, if caused immediately, seems to be much about the same with all sorts of dust." Personally I do not consider anyone should be allowed to work in clouds of dust, as I have seen men do in this quarry, and trust they will never be allowed to do so again.

At another works, that was supposed to be near completion, some of the plant was being "tried out" when an explosion of gas occurred, wrecking a concrete bin. One man was badly affected at the time by shock, otherwise he was not hurt. Some of the plant was proved to be an utter failure, and various alterations have, and are, being effected. Many improvements are also being put in to do away with a lot of unnecessary dust.

Two old West Coast hands have passed away during the last 12 months. They were suffering from phthisis but succumbed to pneumonia. One of them was unable to work before contracting pneumonia.

I regret that "The Occupational Diseases Act" has not yet come into force. I consider that something in this direction is badly needed, but, in order to make it really effective, the matter should be taken up by the Federal Government.

Explosives and Magazines.—Considerable attention has been given to the handling and storing of explosives. Only a very small quantity of sodium-nitrate gelignite needed destroying owing to excessive absorption of moisture.

Fuse and detonators gave satisfaction, as far as I know, no complaints having reached this office.

Several persons have appied for permits to sell, or convey, explosives.

Magazines generally have been kept clean and satisfactory.

Machinery, Ropes, &c.—As occasion demanded these were inspected, and in most instances a ready response was given to my requests. A new rope was put on, in place of the one commented on in my last report, on the incline haulage. One rope was condemned and the men ordered not to use the cage until a new one was put on.

On a tramline being used in connection with a mine, the fettler's trolly, on which men were proceeding to their work, was run into by the company's rail-motor. One of the men received a cut under the left eye and hurt his left wrist, but resumed work after losing six days. It was requested that some system be put into operation so that the fettlers could be notified when the motor was being run other than at its usual time.

As far as I was able to judge there appears to be an On September 29th the counter-shaft of the haulage winch at the main shaft snapped in half, just near the outer bearing. This winch had been changed over from compressed air to electricity some time previously. On examination the cause seemed to be an old flaw, the shaft having evidently been "turned-up" out of a piece of second-hand material—probably out of a piece of old battery-shank. The winch was put back on to compressed air again until another piece of shafting was secured.

On 23rd October the gas engine collapsed. The engineer considered the gudgeon-pin on the crosshead broke, thus causing the accident. When this bolt broke the "head" would drop under the gudgeon-pin brasses, and, as there was no room between the brasses and the piston, at a certain period of the stroke, a jam would occur, causing the piston-rod to bend and release itself from the piston, the brasses dropping down between the piston and the connecting rod, which, later on, on the return stroke drove the piston through the com-

bustion chamber. On examination, crystallisation was found to be present, but as far as one could judge not to a dangerous extent. All the bolts were annealed during the previous Christmas Holidays. This engine had been running during the past four years 33,860 hours out of a possible 35,800, and during the period was fully loaded for 26,000 hours, with long periods of overload. At the time of the accident it was running on a 50 per cent. load, both governors and ignition functioning properly according to the engine-driver's statement. In order to endeavour to prevent any recurrence of such a serious nature, work was put in hand to replace all vital parts likely to be fatigued, through shocks and vibration, with new parts. Again on December 10th, the crankshaft of the air compressor snapped close against the outer bearing. Apart from damaging the bearing and stopping the machine, no other damage was done, and nobody was injured. No exlanation could be given for the occurrence. As far as I could judge no one at the works could be blamed for the occurrences. The engineer has always struck me as being a thoroughly qualified man.

Permission had to be granted to run a winding engine, which is placed underground, on steam, on a few occasions owing to a shortage of water to generate electricity, and some of the coils on the driving motor being burnt out on another occasion.

The court case, as mentioned in my last report, which was set down to be heard on the 13th February last, was allowed to drop by the Crown Law Department. I am informed that the Machinery Act and Regulations are being amended.

Inflammable Liquid Storage.—A considerable amount of attention has been given to this as time permitted, but there remains much to be done. Over 60 persons applied for registration of premises during 1925.

Assistance has been asked for from the Police Department as occasion demanded, and a very ready response has been met with.

Legal proceedings were instituted against 6 persons. One was convicted, and fined £3 and 6s. 6d. costs. Two were convicted and ordered to pay £1 0s. 6d. costs. Two cases were dismissed, one owing to the word "keep" not being defined under the "Act," the other, on the person concerned stating on oath that he only had 16 gallons of motor spirit, (which is exempt under the "Act") on his own premises and 16 gallons in a persons shed adjoining, this shed being part of a property rented from him and in which he had permission to keep the two cases. When the police officer inspected the premises he did not say anything in this connection. The other case was withdrawn, owing to a satisfactory explanation being supplied to the Chief Inspector.

General.—The various mines, works, and quarries in my district which are under "The Mines and Works Regulation Act, 1915," have been inspected as the importance of the operations called for and as time permitted. I still find a considerable amount of loose and affected ground during my inspections of both quarries and underground workings, and this becomes more noticeable, if or any reason, a longer time intervenes between my visits.

The term has been a very busy one. In fact the clerical work has grown to such an extent in connection with the work of the Explosives and Inflammable Liquid Acts, that I find, to keep up with it and do my inspection work properly, I have to do a good deal of it in the evenings while away from home.

Apart from a few instances my recommendations have been heartily appreciated and acted on, regarding better working conditions and safety.

I would again like to here express my appreciation to the various managers, officers, and workmen, who have given me their co-operation in my endeavours to get a reasonable degree of safety and better working conditions.

It having been said that the inspectors should do more to help the companies engaged in mining, in an advisory way, in connection with the opening up and laying out of their works, &c., I would like to say that the Chief Inspector of Mines has always told me to do this when asked, or when I thought it advisable. However, this has only been done by word of mouth, as section 18 of "The Mines and Works Regulation Act, 1915," states very distinctly "that an inspector shall not for any purpose whatever make a report on any mine or mining property or prospect, except an official report to his superior officer or the Minister, &c." If it is desired that we should do more than we are doing in this connection, we should be given instructions in writing from the Minister to do so. Personally I am agreeable to do anything I can, while employed by the Government, to help on the industry.

From present indications it appears that a considerable amount of new work will be gone on with during the year just entered, both in connection with the zinc ore and shale industry, and other lines.

REPORT OF THE CHIEF INSPECTOR OF EXPLOSIVES

Hobart, Tasmania, 7th May, 1926.

SIR,

I HAVE the honour to submit my annual report for the year 1925, in connection with the administration of the Explosives and Inflammable Liquids Acts.

The imports of explosives for the year were:—

	lbs.
Monobel	16,250
Gelignite	280,500
Blasting Gelatine	10,750
Ligdyn	49,000
Powder	30,062
	No.
Detonators	461,100

The quality of the explosives imported was very satisfactory and only a very small quantity was destroyed owing to deterioration. Generally. greater care has been exercised with regard to storage and handling.

There were two accidents on mines, but the occurrences could in no way be attributed to the quality of the explosives. In one case, which proved fatal, a tram-line was being moved. One of the employees while using a pick in loose gravel struck explosives with the pick. In the other case a miner was inserting the fuse into a detonator when an explosion occurred, evidently due to friction of the fuse on the detonating composition. In addition to the above there were two cases of accident to children while playing with detonators.

The importation of inflammable liquid continues to increase, and it has now become a question of future storage, the present stores having reached the limit of their capacity. Steps are now being taken by the larger organisations to adopt bulk importation and bulk delivery.

There were eight prosecutions for breaches of the Act during the year. In one case the ruling was such as to necessitate an alteration in the wording of the Act.

Revenue.—

	£	s.	d.
Magazine licences, 67	67	0	0
Licences to store, 80	87	0	0
Permits to sell, 343	85	15	0
Permits to import, 9	18	0	0
Permits to convey, 49	12	5	0
Permit to sell fireworks only, 34	4	5	0
Registered premises, 418	104	10	0
	£378	15	0
Magazine rents	163	15	8½
Total revenue	£542	10	8½

I have &c.,

J. O. HUDSON,
Chief Inpectior of Explosives.

W. A. PRETYMAN, Esq.,
Secretary for Mines, Hobart.

JOHN VAIL,
GOVERNMENT PRINTER, TASMANIA.