

MININD1905-4

THE PROGRESS OF  
THE MINERAL INDUSTRY  
OF  
TASMANIA

FOR THE QUARTER ENDING 31st DECEMBER, 1905.

COMPILED BY

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BY ORDER OF

THE HONOURABLE ALEC. HEAN,

MINISTER OF MINES.



Tasmania

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1906.



PROGRESS OF THE

# MINERAL INDUSTRY OF TASMANIA

FOR THE QUARTER ENDING 31<sup>ST</sup> DECEMBER, 1905.

Launceston, 9th February, 1906.

The following table shows, as far as can be ascertained, the quantities and values of Metals and Minerals raised during the quarter ending 31st December, 1905, as compared with the previous quarter ending 30th September, 1905:—

	During the Quarter ending 31st Dec., 1905.		During the Quarter ending 30th Sept., 1905.	
	Quantity.	Value.	Quantity.	Value.
		£		£
* Gold won ..... ozs.	19,447·813	82,609	20,225·878	85,914
Silver Lead Ore produced tons	21,890	73,908	20,739½	65,050
† Blister Copper produced ..	2323	204,842	2339	188,935
Copper Ore and Native Copper produced..... ..	301	14,719	315	12,452
Tin Ore produced..... ..	1171½	117,624	1050¾	100,502
Iron Ore raised..... ..	1500	600	1500	600
Coal raised..... ..	11,086	9423	15,252	12,964
Wolfram Ore produced... ..	8	588	8	556
Bismuth Ore produced... ..	1¼	250	1½	350
...	...	504,563	...	467,323

\* Fine gold, including gold contained in blister copper and silver-lead bullion.

† Value of gold contents deducted.

## GOLD.

During the past quarter 10,540¾ ozs. of gold were obtained from quartz, 175½ ozs. from alluvial, 1672 ozs. by means of the cyanide

and chlorination processes, 6448 ozs. from blister copper from the Mount Lyell Mining and Railway Company, Limited, and 826 ozs. from the silver-lead bullion from the Tasmanian Smelting Company's works, Zeehan, valued at £82,609.

The following table shows the quantities obtained from the various sources on the different fields during the period under review, together with the totals for the corresponding period of 1904, and the previous quarter ending 30th September, 1905:—

	Gold obtained during the Quarter ending 31st Dec., 1905.						TOTAL.	Totals corresponding Quarter, 1904.	Totals for Quarter ending 30th Sept., 1905.
	From Quartz.	Alluvial.	Cyanide & chlorination.	From Blister Copper.	From Silver-lead Bullion.	From Sulphide Ores.			
	ozs.	ozs.	ozs.	ozs.	ozs.	ozs.	ozs.	ozs.	
Beaconsfield	8284	23	1566	...	...	...	9873	4955 $\frac{15}{10}$	10,461 $\frac{1}{2}$
Mathinna ...	1972 $\frac{1}{2}$	13	36	...	...	...	2021 $\frac{1}{2}$	4802	2379 $\frac{1}{4}$
Mt. Victoria	221 $\frac{3}{4}$	8	...	...	...	...	229 $\frac{3}{4}$	30 $\frac{1}{2}$	116
Warrentinna	...	3 $\frac{1}{4}$	70	...	...	...	73 $\frac{1}{4}$	170	132 $\frac{1}{2}$
Lefroy .....	...	75	...	...	...	...	75	47	45
Lisle .....	...	...	...	...	...	...	...	116 $\frac{1}{2}$	309
Golconda ...	...	...	...	...	...	...	...	7	20
Mangana ...	...	...	...	...	...	...	...	7	20
Bell Mount.	...	...	...	...	...	...	...	7	20
West Coast.	62 $\frac{1}{2}$	53	...	6448	826	...	7389 $\frac{1}{2}$	8567 $\frac{13}{16}$	7036
TOTALS	10,540 $\frac{1}{4}$	175 $\frac{1}{4}$	1672	6448	826	...	19,662		
Totals corresponding Quarter, 1904.....	8648	172	1400	6261	915	1300 $\frac{1}{10}$	...	18,696 $\frac{1}{10}$	
Totals for Quarter ending 30th Sept., 1905.....	11,177 $\frac{1}{4}$	164	2199 $\frac{1}{4}$	6419	540	...	...	...	20,499 $\frac{1}{4}$

Value £82,609; equal to 19,447·813 ozs. fine gold.

**BEACONSFIELD.**—The quarter's statistics for the district are as follows:—

	Gold produced, ozs.	Men employed.
Tasmania Mine.....	9805	737
North Tasmania.....	37 $\frac{1}{2}$	8
Other Companies and Prospectors .....	30 $\frac{1}{2}$	26
Total.....	<u>9873</u>	<u>771</u>

*Tasmania Mine.*—15,889 tons quartz crushed, and 9805 ozs. fine gold obtained (by amalgamation and chlorination), which makes a total of 582,549 tons quartz crushed, 634,356 ozs. gold won, since the mine was first started.

Mr. C. F. Heathcote, A.M.I.C.E., the general manager, reports:—During the past quarter Grubb's shaft has been sunk and timbered a further distance of 166 feet, making the total distance from the surface 794 feet. The valve chambers at the 500-foot level, which are 40 feet long, 14 feet wide, and 25 feet high, have been excavated and timbered. The second and third pumping engines have been erected, and are ready for connecting to the pitwork on completion of the shaft to the 1000-foot level. The tailings separating plant has been nearly completed; and the cyanide plant, for the treatment of the sands from the battery and the tailings from the chlorination works, has been completed, and is now at work.

LEFROY.—The quarter's statistics are as follows:—

	Gold produced, ozs.	Men employed.
New Pinafore G.M. Co. ....	73½	15
Others Claims and Prospectors .....	—	54
Total.....	<u>73½</u>	<u>69</u>

Mr. J. T. Stubs, manager of the New Pinafore, reports:—Operations at this mine have been confined to surface prospecting, but no new discovery has resulted.

*The M'Ivor G.M. Co.* has sunk its main shaft 100 feet, and has cut the reef at that level without finding gold. It has also driven about 120 feet on the course of the reef, and risen up to prospectors' workings without discovering anything payable.

*The Nugget* has sunk about 150 feet, and will try and strike the "Sunlight" reef at that level.

LISLE AND GOLCONDA.—75 ozs. of alluvial gold have been won from the Lisle field; 824 men have been engaged in these districts.

MOUNT VICTORIA.—Statistics for this field are as follows:—

	Gold produced, ozs.	Men employed.
Ringarooma Gold Mining Syndicate	206½	6
Long Struggle G.M. Co. ....	15	5
Krushka's Freehold .....	8	1
	<u>229½</u>	<u>12</u>

For the above yield, the Ringarooma crushed 62 tons quartz, and the Long Struggle 15 tons.

**MATHINNA.**—The quarter's statistics are as follows:—

	Quartz crushed.	Gold produced.	Men.
	tons.	ozs.	
New Golden Gate .....	1569	792	60
"    "    from sand	...	36	...
Tasmanian Consols .....	1915	1051	83
Queen of the Earth .....	193	38	12
Volunteer Consolidated.....	50	34½	10
Miners' Dream.....	10	26	3
King Edward.....	17	11	4
New Golden King.....	10	4	2
Othershowsand prospectors	...	29	42
.....	.....	2021½	216

*New Golden Gate G.M.*—A little gold has been met with in the 1600-foot level, and a drive north started on the east reef. A winze has been started in the north drive, but so far the gold in the reef has proved somewhat erratic.

*Tasmanian Consols.*—This mine is a work on stone opened up by the 1400-foot level.

**WEST COAST.**—*May Gold Mine*, Lynchford, crushed 183 tons of stone for 35 ozs. 16 dwts. of gold, and is getting out another trial crushing. Ten men were engaged.

*Woody Hills.*—Messrs. Murray Bros. report that work for the quarter has been prospecting and development. Thirty tons of stone crushed yielded 12 ozs. 12 dwts. of gold. Nine men engaged.

*Lake Jukes.*—A crushing of 134 tons yielded 14 ozs. gold. Fifteen men were employed on the mine.

*Darwin, Queen River flats and branches, and Flannigan's Flat* have yielded 53 ozs. of gold, and given employment to 27 men.

## TIN.

The statistics for this metal for the past quarter are as follows:—

	Ore won.		Men employed.
	tons.	cwts.	
Northern and Southern Division	9	12	21
North-Eastern Division.....	675	13	697
Eastern Division.....	114	9	355
Western Division.....	36	0	107
North-Western Division.....	335	16	286
Totals .....	1171	10	1466

NORTH-WESTERN DIVISION.—The output has been as under:—

	tons.	cwts.	Men employed.
Mount Bischoff .....	318	0	230
Bischoff Extended .....	10	10	24
Waratab Alluvial.....	3	12	5
Weir's Bischoff Surprise .....	3	4	7
Others .....	0	10	20
Totals.....	335	16	286

MOUNT BISCHOFF.—During the half-year the following quantities have been treated:—

	Crushed.	Produced.		
	tons.	tons.	cwts.	qrs.
60-head battery.....	40,824½	382	8	2
15-head battery .....	10,009½	148	1	2
Slime sheds.....	...	93	5	0
Ringtail sheds .....	...	12	5	0
Totals.....	50,834	636	0	0

The stamps crushed 4·24 tons per stamp-head per 24 hours. The percentage of ore was 1·384. The total output of ore since the formation of the company is 64,774 tons 18 cwts. 2 qrs. Mr. H. W. Ferd. Kayser, general manager, publishes the following analysis of the cost of mining, crushing, and dressing a ton of crude ore:—

	s.	d.
Mining, including new work, maintenance, and other expenses	3	2·908
Filling, hauling, and emptying trucks .....	0	5·071
Crushing, dressing, and maintenance of plant.....	0	11·455
Slime sheds.....	0	1·237
Ringtail sheds.....	0	2·359
Management and supervision.....	0	9·364
Plant, including all machinery.....	0	2·260
Development and progressive work (of this, 0s. 0·043d. has been expended in diamond-drilling) .....	0	2·191
Waterworks.....	0	0·185
Ore-bagging .....	0	0·498
Stores.....	0	4·301
Sundries.....	0	0·798
Electric light.....	0	0·557
Total.....	6	7·184

## NORTH-EASTERN DIVISION.—RINGAROOMA DISTRICT:—

	tons. cwts.		Men employed.	
			Europeans.	Chinese.
Cascade River Claims .....	5	5	20	7
Dutch Harry (Hope Creek)...	1	6	2	...
British Banner (Black Creek)	2	2	2	...
Other Black Creek shows.....	3	0	15	2
Dorset River shows.....	2	9	7	...
Dunn's Creek .....	0	1	1	...
Mt. Maurice .....	0	2	1	...
Maurice River .....	0	4	1	...
Ringarooma River.....	0	4	2	...
Total .....	14	13	51	9

## PIONEER AND GLADSTONE DISTRICT:—

	Tin ore won. tons. cwts.		Men employed.	
			Europeans.	Chinese.
Pioneer Tin Mine.....	109	8	100	...
Pioneer Extended .....	3	16	14	...
Chinese (Pioneer).....	1	3	...	10
Murray, A. ....	...	7	2	...
Garibaldi Tin Mine .....	10	15	8	6
Chinese (Garibaldi) .....	4	7	...	18
South Mt. Cameron Tin Mine	24	10	17	...
Others at South Mt. Cameron	2	10	2	5
Wilberforce Pump Co. (Mt. Horror) .....	3	17	4	...
Martin, N. ....	1	3	2	...
Cybele Tin Mine (Gladstone)	2	11	4	...
Scotia Tin Mine (Gladstone)	12	12	13	...
Gladstone Dredge .....	23	3	9	...
Other Claims at Gladstone....	13	1	20	15
Wyniford Tin Mine.....	2	8	14	...
Other Claims Wyniford River	3	...	...	10
Boobyalla.....	...	4	2	...
Total.....	218	15	211	64

## DERBY DISTRICT:—

	Tin ore won. tons. cwts.		Men employed.	
			Europeans.	Chinese.
Bris's & Bros. Home, No. 1....	321	10	145	...
Abbotstord Tin Mine.....	3	12	6	...
Bris's Extended .....	34	0	38	...
Mutual Hill Tin Mine.....	1	7	7	...
Cascade River Claims .....	5	12	15	18
Total.....	366	1	211	18

*Abbotsford T.M.*—A considerable amount of development work has been done, and a Pelton wheel and Wilberforce pump installed.

**BRANXHOLM DISTRICT.—**

	Tin ore won.		Men employed.	
	tons.	cwts.	Europeans.	Chinese.
Arba Tin Mine.....	29	16	35	...
Branxholm Development.....	...	5	4	...
New Ruby Flat Tin Mine.....	14	...	15	...
Contact Tin Mine.....	2	...	3	...
Hawkes, S.....	1	10	3	...
Stewart and Smith.....	1	...	3	...
Ah Moy.....	1	15	...	7
Other Shows, Ruby Flat .....	1	7	5	9
<b>Total .....</b>	<b>51</b>	<b>13</b>	<b>68</b>	<b>16</b>

**MOORINA DISTRICT.—**

	Tin ore won.		Men employed.	
	tons.	cwts.	Europeans.	Chinese.
Native Youth Tin Mine.....	6	3	10	...
Moa Tin Mine.....	3	15	7	...
Moorina Tin Mine.....	6	1	7	...
Weld Tin Mine .....	4	...	10	...
Other Claims .....	4	12	13	2
<b>Total .....</b>	<b>24</b>	<b>11</b>	<b>47</b>	<b>2</b>
<i>Total North-Eastern Division .....</i>	<i>675</i>	<i>13</i>	<i>588</i>	<i>109</i>

**NORTHERN AND SOUTHERN DIVISION.—**

	Tin ore won.		Men employed.	
	tons.	cwts.	Europeans.	Chinese.
Middlesex claims .....	6	10	13	...
Cox's Bight.....	3	2	8	...
<b>Total .....</b>	<b>9</b>	<b>12</b>	<b>21</b>	<b>..</b>

**EASTERN DIVISION.—**

	Tin ore won.		Men employed.	
	tons.	cwts.	Europeans.	Chinese.
<i>Weldborough Mines.</i>				
Weldborough Tin Mine.....	6	8	5	...
Miller, U. M. (Weldborough)	1	12	5	...
Eyers, P. (ditto).....	1	1	3	...
Dickenson, C. (ditto).....	2	3	4	...
Nicholas and party (ditto)...	1	2	3	...
Chinese, Cascades (ditto)....	...	10	...	4
Chinese (Weldborough).....	10	17	...	54
Other Claims.....	5	5	13	...
<b>Total .....</b>	<b>28</b>	<b>18</b>	<b>33</b>	<b>58</b>

*Lottah and Blue Tier Mines.*

	Tin ore won.		Men employed.	
	tons.	cwts.	Europeans.	Chinese.
Anchor Tin Mine.....	50	3	120	...
Lottah Claims.....	2	8	10	...
Direen and party, Blue Tier	3	15	6	...
Other Claims, ditto.....	3	6	9	...
Chinese, ditto.....	...	10	...	5
<b>Total .....</b>	<b>60</b>	<b>2</b>	<b>145</b>	<b>5</b>

*St. Helens.*

Macmichael, J. C.....	3	6	12	...
Williams, A.....	1	8	5	1
Miller, C.....	1	16	7	...
Thureau's Deep Lead.....	1	3	4	...
Royal Ruby.....	3	3	14	...
Other Claims.....	3	6	22	...
<b>Total .....</b>	<b>14</b>	<b>2</b>	<b>64</b>	<b>1</b>

*Avoca Mines.*

Mount Rex Tin Mine.....	2	4	7	...
Ben Lomond Tin Mine.....	...	12	2	...
St Aubyn's Tin Mine.....	2	...	5	...
Cash, J., Storey's Creek.....	2	...	3	...
Other Claims.....	4	6	28	...
Mathinna Shows.....	...	5	4	...
<b>Total .....</b>	<b>11</b>	<b>7</b>	<b>49</b>	<b>...</b>

<i>Total Eastern Division.....</i>	<b>114</b>	<b>9</b>	<b>291</b>	<b>64</b>
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## WESTERN DIVISION:—

	Tin ore won.		Men employed.	
	tons.	cwts.		
Renison Bell.....	6	15	13	
Mayne's Tin Mine.....	11	0	10	
Others.....	18	5	84	
<b>Total.....</b>	<b>36</b>	<b>0</b>	<b>107</b>	

## SILVER.

WEST COAST.—The registered output of silver ores in the Western Division for the quarter ending 31st December was as follows:—

	Ore.	Tons.	Value. £	Men.
<i>Zeehan Mines :</i>				
Mount Zeehan, Tas.	galena.....	1516	18,551	192
Zeehan-Queen	" .....	565	627	26
Zeehan-Montana	" .....	816	12,889	203
Zeehan-Western	" .....	359	6537	
"	flux ore .....	261	593	} 191
"	gossan .....	129	940	
"	copper sulphide .....	18	111	
Zeehan-South Comstock	galena.....	86	500	} 32
"	zinc blende.....	282	1355	
Silver Queen Extended	galena .....	14	75	9
Oonah	gossan .....	110	675	15
Florence	galena .....	153	1697	40
New Mount Zeehan	" .....	44	381	12
Watt and M'Auliffe	" .....	143	1109	6
Nubeena	" .....	8	84	8
<i>Dundas Mines :</i>				
Red Lead	flux ore .....	737	289	4
Comet	galena.....	365	2201	} 70
"	gossan.....	3194	1429	
West Comet	flux ore .....	4000	1800	50
Ring Valley	flux ore .....	28	273	10
Ring River	copper sulphide.....	350	450	8
<i>Mt. Farrell Mines :</i>				
North Farrell	galena.....	566	5094	95
Murchison River	" .....	25	189	21
<i>Rosebery Mines :</i>				
Primrose	" .....	1406	1588	18
Tasmanian Copper	" .....	3535	1800	35
Tasmanian Smelting Co.	.....	...	...	220
Others	.....	...	...	249
	Total .....	18,746	61,237	1514

MOUNT ZEEHAN (TASMANIA).—*Spray Mine*.—Mr. T. Vincent, manager, reports:—Opened out No. 5 level north and south; lode full size of both faces, antimonial ore, and highly payable. No. 4 level north, 354 feet, poor. Have replaced winding engines with a more powerful pair. New shaft making good progress. No. 2 shaft No. 30 lode, south 806 feet, strong payable lode, ground very hard. Mine looking well.

*Zeehan-Queen*.—Payable ground all worked out; no new developments; mine closed down.

*Zeehan-Montana*.—Mr. J. Craze, manager, reports:—Nos. 2, 3, and 8 lodes at 4, 5, and 6 levels, No. 1 shaft, still continue to show

good ore, with every appearance of continuing for some considerable distance north of present ends. Expect to commence cutting the station at No. 7 level early in February; and shall complete the sinking of No. 1 shaft to No. 8 level immediately. The No. 2 shaft has been sunk to No. 4 level (400 feet), and crosscuts are being driven at that level, and at the 300 feet, to cut No. 1 lode.

*Zeehan-Western.*—Mr. J. Craze, manager, reports:—At No. 11 level the west crosscut is being driven with rock-drills, and is now 214 feet west of the shaft. Nothing of value has been passed through. I expect to carry this crosscut 200 feet further, to cut the most westerly lode. I am also driving north and south on No. 1 lode, No. 11 level, with rock-drills. The north drive is 219 feet, and the south drive 217 feet, from the crosscut. Nothing of any value has yet been found in the lode north of the crosscut; there are, however, encouraging prospects in the south end, where the lode is composed of carbonate of iron 3 feet wide, 12 inches of which are showing galena. At No. 9 level I am driving south on No. 1 lode; and at No. 6 level I am driving north on the same lode, which so far is very poor. During the quarter the company has been pushing on with two crosscuts at No. 11 level, one drive at No. 9 level, and one drive at No. 6 level. The stopes are being worked on a system of tribute which is giving general satisfaction to both miners and company.

*Zeehan-South Comstock.*—Mr. Henry Castles, manager, reports:—At Tengdahl's tribute a considerable amount of dead work has been done. The 100-foot level, Whitelaw's shaft, extended 40 feet; rise up 17 feet in strong body of zinc ore bulking 50 per cent. zinc. Lode in face at present 3 feet 6 inches wide, carrying 10 inches of good galena. Nos. 2 and 3 tributes are also looking well.

*Silver-Queen Extended.*—Mr. Charles Stevens, manager, reports:—124 feet have been driven, 150 feet stoped, 18 feet risen, 10 feet sunk, and 60 feet trenched.

*Oonah.*—Captain W. Fisher, manager, reports:—The chief work done has been stoping on the Kaolin lode, the gossan averaging some 80 ozs. silver per ton, with very little lead (5 per cent.). The smelters have not taken low-grade sulphides from here during the quarter, but have arranged to do so after the third furnace is going. A crosscut is being driven west, from stannite No. IV. adit level, which should cut a payable lode within another 40 feet of driving; it has been driven 68 feet to date.

*Florence.*—Mr. F. H. Astell, manager, reports:—Chief work for the quarter has been as follows:—Sinking winze 40 feet on Astell's lode, No. 3 level (lode continuing good); opening out east and west at No. 2 level, crosscut west 274 feet to cut lode worked by McKay tribute. A few feet more should cut it.

DUNDAS AND MOUNT READ.—*Comet.*—Mr. Gerald Ahern, manager reports that the mine is looking fairly well. No. 3 level is being unwatered.

*Ring Valley.*—Mr. John Moyle, manager, reports that only one parcel of ore has been raised during the quarter; the old stopes are worked out, and no payable ground has been discovered by the recent extensions of the several drives. No. 1 tunnel is now in 1169 feet, and No. 2 in 640 feet. Prospects poor.

MOUNT FARRELL DISTRICT.—*Murchison River Mine.*—Mr. J. H. Astell, manager, reports:—That no ore has been broken for the past two months. The only underground work going on is the extension of No. 3 tunnel, which is now in 53 feet, and should cut the main lode in another 99 feet of driving. The mill should be completed and working by the end of January next.

*Tasmanian Smelting Company.*—Mr. Kapp, manager, reports:—Ore purchased during the quarter ending 31st December, 11,714 tons, containing 2406 tons lead, 417,188 ozs. silver, 761 ozs. gold. Bullion exported, 2691 tons, containing 2677 tons of lead, valued at £39,903, 438,737 ozs. silver, valued at £57,902, and 826 ozs. gold. During the 12 months ending 31st December, 1905, we have smelted 39,743 tons of ore, containing 9028 tons lead, 1,359,267 ozs. silver, 1867 ozs. gold; exported 9422 tons of bullion, containing 1,343,413 ozs. silver, 1922 ozs. gold—as against our operations during the previous twelve months (ending 31st December, 1904), when we smelted 26,932 tons ore, containing 7702 tons lead, 1,050,546 ozs. silver, 3434 ozs. gold; exported, 8144 tons bullion, containing 1,079,490 ozs. silver, 3417 ozs. gold. The above figures show a big increase in the tonnage of ore treated during 1905, as compared with the tonnage of ore treated during 1904. The greater proportion of the additional material consisted of very low-grade ore, and even tailings, containing only 10 ozs. silver and a few per cent. of lead, have been successfully treated. The company has been able to keep two blast furnaces in blast constantly during the second half of the year. The outlook for future ore supplies is favourable, and warrants considerable extension of the works. At the pump station an additional boiler and pump were installed during the year; an additional main boiler is just being built in; and a third blast furnace, capable of smelting 100 tons of ore per day, is in course of erection. Further, the company is building an extensive drying plant, which will be capable of drying 300 tons of ore per day. All of the new additions to the company's plant are manufactured in Australia, and most of them in Tasmania.

#### NORTH-WESTERN DIVISION.—

	Ore produced. tons.	Value. £	Men employed.
Magnet Mine.....	2904	9791	125
Long Tunnel.....	240	2880	10
Other mines.....	...	...	28
	<u>3144</u>	<u>12,671</u>	<u>163</u>

*Magnet Mine.*—The most important work has been in No. 6 level, which has been driven on 240 feet, and continues strong north and south. The south face is 30 feet in width, mostly of seconds ore. The manner of working this wide body of ore is by driving the level on the footwall and wingstopping the rest, the whole being supported by extremely strong timber. The lode continues towards the north, but not so good as formerly. Now 18 inches of firsts, with 3 feet of poor seconds on hanging-wall. In the interstices of the south face are indications of gossanous matter, showing that the gossan ore won above further south will soon be met with. The present mass of ore exposed is practically unknown in the upper levels, the main shoot being still to the south. At the extreme south end of No. 5 level a fine body of ore is being broken out 18 feet wide, consisting of a good band of firsts on footwall; the rest, fairly good seconds in a white dolomitic matrix. In No. 3 north a body of ore 9 feet wide has been exposed, consisting of 18 inches high-grade firsts, the balance very good seconds of the usual banded character. No. 2 north: good ore is still being broken out between this level and No. 1. No. 1 south, west branch: a large body of gossan is being mined of variable assay value, at present time fairly good. The usual output is being maintained. During the half-year one dividend was declared. Survey has been carried out for electric light and power. It is proposed to bring in the Arthur River with the Magnet Creek, and after use divert both streams into the Magnet bed, and then again into the Arthur River. The water available will be about 12 sluiceways, with 410 feet of head. The pipe-track, which is now cleared, will be 1200 feet in length. To prevent any shortage in dry seasons a dam is being surveyed which will hold 15,000,000 gallons.

### COPPER.

*Mount Lyell Mine.*—Mr. Robt. Sticht, general manager, reports:—The quantities of ore treated and metal produced during the quarter ending 31st December, were as follows:—

	Dry weight.			
	tons.	cwts.	qrs.	lbs.
Mt. Lyell ore .....	75,929	9	1	4
North Lyell ore .....	28,965	8	3	2
Purchased ore.....	430	0	0	24
By-products from Crotty .....	24	7	0	12
Metal-bearing fluxes :				
From North Lyell Mine .....	1100	11	0	6
,, Lyell Tharsis Mine.....	5089	6	3	19
Total . .....	111,539	3	1	11

## Quantity and value of metal produced:—

B blister Copper, 2323 tons, containing —	£	s.	d.
Copper, 2294 tons, valued at .....	182,304	3	7
Silver, fine, 183,360 ozs., valued at.....	22,538	0	0
Gold, 6448 ozs., valued at .....	27,404	0	0
	<u>£232,246</u>	<u>3</u>	<u>7</u>

## Number of men employed:—

At the Company's Mt. Lyell Mine .....	347
"    "    North Lyell Mine .....	496
"    "    Lyell Tharsis Mine.....	6
"    "    Royal Tharsis Mine .....	24
"    "    Prince Lyell Mine .....	2
"    "    North Crown Lyell .....	8
"    "    Reduction Works .....	1058
"    "    Mt. Lyell Railway.....	137
"    "    North Lyell Railway.....	16
	<u>2094</u>

Inspector Curtain reports that the usual extraction of pyritic ore continues from the open-cuts, and that to take the place of those overlapped with overburden, another (No. 4 B) or lowest bench has been started, making the second below the level, whereby the ore can be delivered by gravitation to the main storage or reserve bins. The ore from this service will be hoisted in a large tank-constructed skip, mounted on wheels, travelling on a railed incline, that will follow the footwall to the next (No. 5) adit below, from which, for drainage and other purposes, a rise is being made. Prospecting from No. 8 on the contact continues south, also at the North Crown, Prince Lyell, and Reserve sections.

At the North Lyell Mine the main shaft is down 80 feet below the 700-foot level, in extremely hard country, rendering progress slow. This also applies to the winze or auxiliary shaft, which is now completed to the 700-foot level of the main shaft, where corresponding flats are being cut out and mounted. The south drive has been extended from the 200-foot level, and to this depth drained the Lyell Tharsis workings, with improving face prospects. The main stopes above the 300-foot level are nearing exhaustion, and those from the 400-feet are also cutting out the ground floor of the former. These constitute the limit of the original North Lyell Company's operations, and their picking up has been satisfactory. Under these levels the production is chiefly derived from the sub-stopings, which in area promise to exceed those worked in the higher or old stope main workings. A branch line from that connecting the north workings with the main haulage is being constructed to the South and Royal Tharsis, auguring resumption of work on these properties.

At the Smelters a compound feeder on an adjustable blade principle is being installed. Both turbo-generators have proved satisfactory, and with the completion of another unit (600 b.h.p.) will practically centre and distribute all power in the future.

*Lyell Blocks Mine.*—Mr. Robert Ferguson, manager, reports as follows:—Driven 828 feet, risen 672 feet, sunk 74 feet. Ore broken and treated, 18,900 tons, worth 1·9 per cent. copper. Concentrates produced, 330 tons, containing 262 tons fine copper. Average number of men employed, 250. Of the above quantity 251 tons were purchased by the Hamburg Metal Company for £13,787 19s. 3d., while the balance is included in the Mount Lyell Company's returns. Extraction continues from the No. 1 surface office and eastern cross-cut levels, where stope-faces from time to time have shown prospects of increased quality. The lowest stope workings have been connected with the Consols adit, and this not only effects more ready despatch, but improves the ventilation throughout the whole workings.

The *Crown, Tasman-Crown Extended, Tasman-Comstock, and Copper Mines of Mount Lyell West* are idle, and an early resumption of work is uncertain.

NORTHERN AND SOUTHERN DIVISION.—*Copper King Mine.*—50 tons of copper ore were raised, and 10 men employed. The ore was shipped to New South Wales, and its average assay value was 24·96 per cent.

## IRON.

The *Tasmanian Iron Company*, at the Penguin, raised 1500 tons of high-grade hematite ore; employing 15 men.

## WOLFRAM.

The production has been as follows:—

	tons.	cwts.	Men employed.
All Nations Mine.....	2	5	2
Shepherd and Murphy .....	—	2	—
Ben Lomond Mines.....	5	14	6
Total .....	8	1	8

## COAL.

The output this quarter was 11,086 tons, against 15,252 tons the previous quarter. The raisings at the respective collieries were as follows:—

Colliery.	Tons raised.	Men employed.
Mount Nicholas Colliery .....	5360	66
Cornwall .....	4467	59
Dulverton .....	100	6
Spreyton .....	210	5
Teasdale's .....	25	2
Brightburn .....	40	2
York Plains .....	120	2
Sandfly .....	50	3
Mount Cygnet .....	414	4
Catamaran .....	300	5
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Total .....	11,086	154
	<hr/> <hr/>	<hr/> <hr/>

## CONCLUSION.

This quarter witnessed a further increase of values of output, the figures being £504,563 against £467,323, making the total for the year £1,729,129, an amount which has only once been exceeded in the history of the State, viz., in 1900. The values for the respective quarters in 1905 have been as follows:—

	£
Quarter ending 31st March, 1905 .....	373,379
"    30th June, 1905.....	383,864
"    30th September, 1905 .....	467,323
"    31st December, 1905 .....	504,563
	<hr/>
Total.....	1,729,129
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The value of tin ore raised during the past quarter exceeded that of the September quarter by £17,122, and the quantity by 121 tons; that of silver-lead ore by £8858, and the quantity by 1151 tons; that of copper and copper ore by £18,174, owing, practically, to the increased market price of the metal. The productions of gold fell off by 778 ozs., and coal by 4166 tons. The number of men engaged in the mining industry remained nearly the same, being 6828 against 6801 the previous quarter; and raising a value of £73 17s. 11½d. per man.

The following return shows the average number of men employed in or about the mines during the quarter ending the 31st December, 1905:—

District.	European.	Chinese.	Total.
Northern and Southern .....	940	1	941
North-Eastern .....	600	109	709
Eastern .....	638	64	702
North-Western .....	449	...	449
Western .....	4027	...	4027
Total .....	6654	174	6828

Value of mineral output per man employed:—£73 17s. 11½d.

The dividends paid during the quarter were:—

	£	s.	d.	£	s.	d.
From Copper Mines—						
Mount Lyell Mining and Railway Company, Limited .....	120,000	0	0	120,000	0	0
From Gold Mines .....			Nil			
From Tin Mines:—						
Bischoff T.M. Co., Registered .....	16,500	0	0			
Pioneer T.M. Co., Ltd. ....	3375	0	0			
Wilberforce Pump Co., No. 1, N.L.....	50	0	0			
New Ruby Flat T.M. Co., N.L.....	1050	0	0			
Mayne's Tin Mine, N.L.....	1125	0	0			
New Brothers' Home No. 1 T.M. C., N.L.....	3000	0	0			
Garibaldi T.M. Co., N.L.....	309	0	0			
				25,409	0	0
From Silver Mines:—						
Mt. Zeehan (Tasmania) Silver-lead Mines, Ltd.....	11,440	0	0			
Zeehan-Montana Mine, Ltd.....	...					
				11,440	0	0
Total .....				£156,849	0	0