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THE PROGRESS OF  
THE MINERAL INDUSTRY  
OF  
TASMANIA,

FOR THE QUARTER ENDING 30TH JUNE, 1899.

COMPILED BY

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BY ORDER OF

THE HONOURABLE EDWARD THOMAS MILES,  
MINISTER OF MINES.



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1899



## PROGRESS OF THE MINERAL INDUSTRY OF TASMANIA

FOR THE QUARTER ENDING 30TH JUNE, 1899.

Hobart, 24th July, 1899.

The following Table shows, as far as can be ascertained, the quantities and values of Metals and Minerals raised and exported during the Quarter ending 30th June, 1899, compared with those for the corresponding Quarter of 1898 :—

	DURING THE QUARTER ENDING JUNE 30, 1899.		DURING THE QUARTER ENDING JUNE 30, 1898.	
	Quantity.	Value.	Quantity.	Value.
Gold won .....	15,569	£ 58,384	13,466	£ 50,590
Auriferous Quartz and Pyrites exported .....	92½	852	134	602
Silver Ore exported.....	3131	38,378	3671	44,040
Blister Copper exported.....	1562½	137,885	1109½	88,760
Copper Ore exported .....	889½	12,837	71	1440
Tin (metallic) exported .....	474	55,134	383½	25,594
Iron Ore exported ....	460	415	404	404
Coal raised .....	11,834	9462	13,755	11,004
<b>TOTAL VALUE .....</b>	... £	313,347	... £	222,434

There is an increase of £24,162 in the total value for the previous quarter, and an increase of £90,913 in the total value as compared with the corresponding quarter in 1898.

### GOLD.

During the past quarter 10,668 ounces of gold were obtained from quartz, 344 ounces from alluvial, and 4557 ounces by means of cyanide and chlorination processes. Total, 15,569 ounces, valued at £58,384.

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 1898 :—

	GOLD OBTAINED DURING THE QUARTER ENDING JUNE 30, 1899.				TOTALS FOR CORRESPOND- ING QUARTER IN 1898.
	Quartz.	Alluvial.	Cyanide and Chlorination.	TOTAL.	
	ozs.	ozs.	ozs.	ozs.	ozs.
Beaconsfield .....	5177	9	3010	8196	7265
Mathinna .....	4438	...	1139	5577	4661
Mount Victoria & Warrentinna .....	790	40	...	830	693
Lefroy .....	191	...	408	599	157
Lisle & Golconda..	...	175	...	175	200
Mangana .....	32	10	...	42	389
West Coast, Mid- dlesex, &c. ....	40	110	...	150	81
TOTALS.....	10,668	344	4557	15,569	...
TOTALS for corre- sponding Quarter, 1898.....	11,901	379	1166	...	13,446

BEACONSFIELD.—At the Tasmania Mine the 65-head battery was running continuously. During the past quarter 6525 tons of quartz were crushed, yielding 5100 ounces retorted gold, as against 5405 tons crushed, yielding 4215 ounces for the previous quarter. In addition to this, 3010 ounces of smelted gold, worth £4 1s. per ounce, were obtained from the chlorination; total for the quarter, 8110 ounces. The total output from the mine up to the 30th June was 457,475 ounces from 388,925 tons crushed, value, £1,664,534, and the amount paid in dividends, £994,071 15s., including £9000 paid during the last quarter.

At the chlorination works two additional roasting-furnaces have been erected, and the capacity of the plant is now about 180 tons per week, the cost of treatment being reduced to about 12s. 6d. per ton. The tailings from the leaching-vats contain from 1 to 5 dwts. of gold per ton, and will be eventually treated by cyanide. At the end of June, 1899, there were 8050 tons of pyrites concentrates on hand at the Florence Battery, and 5600 tons at the Tasmania Battery; total, 13,650 tons, estimated to yield a profit of £67,500. The weekly production at the Tasmania Battery is about 100 tons, assaying approximately 1½ ozs. of gold per ton. The hydraulic pumping-plant at the main shaft is practically completed, and preparations are now being made

to open out at 818 feet. At the new main shaft a depth of 711 feet was reached, but it was found impossible to sink deeper with the present 14-inch pump, and it has now been decided to fix a powerful Riedler steam-pump at 700 feet. Below this the shaft will be enlarged so as to admit of an 18-inch lift, if necessary.

**LEFROY.**—The two deep-sinking undertakings on this field on the New Pinafore and Volunteer reefs have not yet been able to solve the question whether gold exists on this field, as expected by analogy with the proved results on similar Australian fields, at greater depths than those which were productive at Lefroy in the past; but the operations of the two mines mentioned have still only attained the depths of 1250 and 1300 feet respectively, at which levels they are now prospecting by drives, &c. Some 25 prospectors are exploring the country around Lefroy. The gold obtained during the quarter shown in the Return consists in the yield of the cyanide works from the accumulated tailings by the New Pinafore Company and those of the Queensland men operating in Sludge Creek, with the exception of 191 ounces yielded by trial crushings by other undertakings.

**MATHINNA.**—At the New Golden Gate mine 5440 tons of quartz were crushed during the quarter, yielding 4438 ounces of retorted gold, and 983 ounces were obtained by the cyanide process. This mine is the only really dividend-paying mine on this field. Large sums of money have been expended in sinking for gold in the vicinity of the New Golden Gate mine, but up to the present, without success. The great mistake appears to have been in undertaking "deep sinking" with insufficient capital.

If the syndicate who have made an offer for the New Golden Gate mine succeed in getting the offer accepted, both the North and South Gate sections will receive further attention. The Salmon & Company, whose sections are situated about seven miles from Fingal on the road to Mathinna, are making good progress in their prospecting operations, and their stone has greatly improved lately. Several sections adjoining the Salmon & Company's ground are being actively prospected. A small quantity of alluvial gold has been obtained in and about Mathinna.

**MANGANA.**—Several parties are still prospecting, and some are very hopeful of success. A small quantity of alluvial gold has been obtained during the quarter.

**MOUNT VICTORIA.**—Satisfactory progress has been made during the past quarter. The Mount Victoria Gold Mining Company crushed 483 tons of quartz, yielding 605 ozs. 15 dwts. of gold.

At the Ringarooma Gold Mine extensive and costly works are now in progress with the view of thoroughly opening out the mine, so that it can be worked economically and successfully. Electrical pumping and winding plant are being erected for this purpose. A fifteen-head battery (water-power) on this claim will be completed in a short time. This Company holds 300 acres of freehold land at New River, a few miles distant from the above claim, upon which gold reefs have been found, and, so far as tested, have proved payable. A ten-head battery is now being erected on this claim, and the prospects of this mine are considered very favourable. Forty ounces of alluvial gold were obtained by four men during the quarter.

WARRENTINNA.—Very little work is being done on this field. During the quarter 274 tons of quartz were crushed on Bailey's sections, yielding 33 ozs. 10 dwts. of gold.

OTHER LOCALITIES.—At Lisle and Golconda 175 ounces of gold have been obtained from alluvial. The worked-out surface alluvial goldfield of Lisle still holds out sufficient inducement to some 40 or 50 men, being principally persons who have settled on small agricultural holdings in the vicinity, and who supplement their means by gold-digging on spots formerly imperfectly worked and abandoned. But the new departure in mining operations recently introduced from New Zealand by dredging not only rivers but suitably humid localities on land, is engaging the attention of several persons, and at present applications have been made for over 100 acres for that purpose.

WEST COAST.—At Woody Hill the Messrs. Murray Bros. are still working on tribute, and have crushed 175 tons of quartz, which has yielded 11 dwts. to the ton. The amount of alluvial gold won during the quarter has been about 40 ozs., and this has been obtained principally at Flannigan's Flat, near Mount Sorell.

The gold sections in the vicinity of Lynchford are still unworked, which is to be regretted. The present holders have not sufficient capital to develop them; it requires a company with a good working capital to do so.

## TIN.

The total recorded quantity of tin ore produced during the quarter was 1033 tons, and the quantity of metal shipped 474 tons. These figures show an increase of 393 tons of tin ore, as compared with the same period of 1898, and an increase of 90½ tons of metal shipped.

WARATAH.—The output from the Mount Bischoff Mine was 480 tons of tin ore, as compared with 470 tons during the previous quarter.

Two dividends of 10s. per share and one of 12s. 6d. were paid, amounting to £19,500, the total amount paid in dividends being £1,570,000.

The following particulars, taken from the half-yearly report, show the cost of treating a ton of stanniferous material during the six months ending 30th June, 1899:—

	<i>s.</i>	<i>d.</i>
Mining, including new works, maintenance, and other expenses .....	2	4½
Hauling, filling, and emptying trucks .....	0	6
Crushing, dressing, and maintenance of plant .....	0	11¼
Slime sheds.....	0	1½
Ring tail-sheds .....	0	2
Management and supervision .....	0	5½
Plant, including machinery.....	0	1½
Development and progressive work .....	0	2¼
Waterworks .....	0	0
Ore bagging .....	0	0½
Contracts and sundries.....	0	1
Stores .....	0	4½
	<hr/>	
	5	4½

Four tons 11 cwt. were obtained from the Waratah Alluvial Mine, and 2 tons 5 cwt. from the Phoenix Mine.

NORTH-EASTERN DISTRICT.—The total quantity of tin ore sent away from Scottsdale and Boobyalla was 144 tons 8 cwt. At Derby and Brothers' Home the principal claims have been continuously worked, and the prospects are considered to indicate increased outputs during the coming quarter. The carrying out of large and costly waterworks from the Upper Ringarooma River is under consideration by the Briseis and the Brothers' Home Companies to provide an adequate supply of water for working their claims on much more extensive scales than heretofore. The latter company is now engaged in removing the heavy overlay of basalt from over the rich tin deposit, and, consequently, do not raise much tin.

The Briseis Company's claim looks exceedingly well, and is under careful and able management. Last month's yield of tin ore amounted to 30 tons, and present prospects indicate a continuance. The face, where now mined, appears very rich in tin ore, and the deposit or wash has not yet been reached there.

The yield from the Krushka Brothers' Mine continues satisfactory, as also from the Brothers' Home Extended Mine.

The Tasmanian Tin Dredging Company have completed their dredging plant, and commenced operations upon the Ringarooma River last Monday. It is expected that this company will add very largely to the output of tin from the district.

**MOORINA.**—The prospects in this locality have very materially improved of late. The local claims are in full work, and yielding fair returns. New claims are being taken up, and capital proposed to be invested, which will tend to remove the depression experienced in this place during late years.

**EASTERN DISTRICT.**—There is a substantial increase in the output of tin ore from this district, the total quantity raised being 100 tons 15 cwt. Of this quantity, 55 tons (more than one half) has been raised by the Anchor Tin Mine.

At Weldborough 38 Europeans and 46 Chinese have been engaged, and have raised 16 tons of tin ore.

At St. Helen's and Scamander 12 tons 18 cwt. of ore has been won by 38 Europeans and 9 Chinese.

The tin industry in the vicinity of Ben Lomond is looking up, and a new discovery of tin has been made near Avoca, and reward claims have been applied for.

**WEST COAST.**—There is a little tin mining going on in the vicinity of Mount Heemskirk. About half a dozen miners are working the alluvial there.

## SILVER.

**WEST COAST.**—The total output of silver-lead ore for the quarter was 9871 tons, valued approximately at £60,666, as against 5516 tons, valued approximately at £45,384 for the previous quarter. Of the first-mentioned quantity, 3424 tons, value £46,429, was sent to Strahan for export to foreign smelting works, and the remainder, 6357 tons, value £14,237, went to the Tasmanian Smelting Company for treatment. The increase of the quantity of ore obtained over the previous quarter is due to the beginning of smelting operations by the Tasmanian Smelting Company. Their first blast-furnace was blown in in June, and, with the exception of one slight stoppage for a few days, has been working satisfactorily ever since. A second blast-furnace will shortly be completed.

The mines contributing the principal part of the output are as follows :—

	Tons.	£
Western .....	1219	17,269
Montana .....	847	12,308
Oonah .....	442	5697
Smith's Section .....	2114	4532
British Zeehan.....	236	3387
Silver Queen .....	374	2977

At the Western Mine the spur-wheel of the pumping plant broke in May last, causing a stoppage of pumping, and the mine was flooded nearly up to the No. 3 level (170 feet). A new wheel was fixed on 26th June, and pumping started again, but it will be another three or four weeks before the water is out.

The Montana Company have put in 33 chains of tramway to connect their main workings with the Despatch Mine, where work will shortly be commenced. The same company is carrying on work in the Tasmanian Crown Mine, lately acquired by them.

At the Oonah Mine sinking operations in the main shaft will be resumed, the company having let a contract to take it down another 100 feet, which will give a total depth of 425 feet.

The British Zeehan Mine has raised for the quarter 65 tons of firsts and 460 tons of seconds ; the two together producing 135 tons of marketable ore ; about 100 tons were raised by tributors. The company also disposed of £800 worth of middlings, which were lying stacked on the mine, to the Tasmanian Smelting Company. The Company paid its first dividend in December last, being 1s. per share on all preferential shares, amounting to £2150.

The Comstock Mine has a large ore formation, some 26 feet wide, carrying bands of zinc blende, assaying 46 per cent. zinc. A market for this has been found with the Tasmanian Smelting Company who purchase it for export.

The Colonel North Company are taking up the rails on the Grubb's tramline and relaying them to a gauge of two feet.

Work was stopped last quarter at the Oceana Mine owing to the sinking of the ground round the main shaft, and has not yet been resumed. It is doubtful if operations will be started again for some considerable time.

The Comet Mine maintains an average output to the Tasmanian Smelting Company of about 60 tons per week.

Bins, capable of holding 250 to 300 tons of ore, are being erected to receive ore from the Hercules Tramway and deliver it to the North-East Tramway. As soon as these are completed the Mount Reid Mine will begin delivering ore to the Tasmanian Smelting Company. Five thousand tons are to be delivered before the end of the present year. A large amount of surface

work has been done on the mine, and a main tunnel driven on the course of the lode. At 476 feet from the mouth a crosscut was put in, which shows the lode to be 74 feet wide.

At the Hercules Mine developmental and prospecting work is proceeding energetically. From the appearance of the ore bodies in the lower levels it would seem that the deeper down they are followed the freer they are from zinc.

**NORTH-WESTERN DISTRICT.**—The Magnet Company has shipped 179 tons 16 cwt. 2 qrs. of silver ore during the quarter. The number of men employed on this mine is 32.

**MIDDLESEX, BELL MOUNT, &c.**—The only operations, except those of a mere prospecting or tentative character, are those known as "Shepherd and Murphy's claim" and the "Devon Galena mine," the former of which has excavated some 600 tons of ore of associated bismuth and tin. It is estimated that about 5000 tons of ore are in sight, and 300 tons have been sent away by pack-horses, and also 30 tons of concentrates containing (by assay) 16 per cent. of bismuth and 14 per cent. of tin. At present 14 men are employed in this mine. The product of the latter-named mine was 100 tons of galena, obtained during the quarter, and this output is expected to continue.

### COPPER.

**Mount Lyell Company's Reduction Works.**—The output of blister copper was 1943 tons, containing 1918 tons of copper, 173,820 oz. of silver, and 5916 oz. of gold, valued at £188,614. The aerial ropeway is completed and is working satisfactorily. The company employ at the reduction works, in all branches, 1400 men, and at the mine 422 men; total 1822 men. On the 30th June nine furnaces were working at the reduction works.

The extension of the railway from Teepookana to Strahan is proceeding steadily, and by the end of the present year it is expected that communication will be established between Strahan and Queenstown.

The South Tharsis Company are erecting a concentrating plant to treat their ore, which is of low grade. This work is watched with interest by the neighbouring mines who have ore of a similar character.

The Lyell Tharsis Company are sending daily to the Mount Lyell Reduction Works 100 tons of ore for treatment along their aerial ropeway. Preparations are also being made to mine on the open cut system.

The North Lyell Company have continued steadily working, and their railway from Kelly's Basin is proceeding, and will,

when completed, be a great advantage to the mines in the neighbourhood of Mounts Jukes and Darwin.

Prospecting, both on the surface and underground, is being carried out on the surrounding sections generally, and although there are still sections which should be at work, there is more activity shown, and evident desire on the part of leaseholders to prove their properties.

At Mount Jukes, on property held by Messrs. Bean and Allen (Sections 3564-93M and 3755-93M), rich ore has been found, assaying as high as 60 per cent. copper.

The country generally about Jukes and Darwin is metaliferous, but beyond prospecting much work cannot be done until machinery can be brought by rail.

**RED HILLS.**—The Red Hills Mine still continues to open up well. The forming of a track from the Henty Huts to Red Hills is completed for a distance of about  $2\frac{1}{4}$  miles. About another mile will carry it to the mine, and it will serve the North, South, and Red Hills mines. It is expected that the district will become a very busy one in the near future.

**ROSEBERY.**—The Mount Black Company are getting out excavations for concentrators, which are shortly to be erected. They are to be driven by compressed air obtained by water-power. Ample water may be obtained from the Stitt River. The cost of concentration therefore should be low.

The lode on the Mount Black Extended mine has been proved to be 10 feet wide of solid ore. Assays taken from the first 5 feet gave an average of 6 per cent. copper, 3 dwts. gold, and 14 oz. silver per ton. The shaft is only 60 feet deep, but the company, having proof of the value of the ore body, intend sinking a main shaft.

**EASTERN DISTRICT.**—Attention is again being paid to the sections on the Scamander River, consequent upon the great rise in copper. A company with sufficient capital has been formed to further prospect these sections. The present holders of the ground have expended a large amount of capital in prospecting, and fully deserve success.

## COAL.

There is an increase in the output of coal for the past quarter of 3827 tons, as compared with the output of the previous quarter.

A seam of bituminous coal has been recently found near Eden, West Coast, and is said to be a foot in thickness on the surface.

There has not yet been time to test its value or quality at a depth. Trials of small quantities from the surface show it to be a quick-burning coal, throwing out a good heat.

The following is the result of analysis of a sample forwarded to the Government Analyst to be tested :—

Fixed Carbon .....	61·6
Ash .....	10·5
Gas, &c., lost at red heat .....	26·5
Moisture .....	1·4
	100·0
	100·0

This coal forms a fine coke. Sulphur was not determined, as the sample appeared to be too much weathered to give a reliable result.

The following list shows the quantity raised from the different collieries, and the number of men employed at each :—

	Quantity raised. Tons.	No. of men employed.
Mount Nicholas .....	6118	63
Cornwall .....	4349	51
Russell .....	560	13
Mount Cygnet .....	480	10
Dulverton .....	89	14
Ivanhoe .....	238	4
York Plains.....	No return.	—
TOTAL .....	11,834	155

### IRON ORE.

During the past quarter 460 tons of ore were exported, as compared with 572 tons during the previous quarter.

The average number of men employed in or about the mines during the past quarter was as follows:—

District.	Europeans.	Chinese.	Total.
Northern and Southern.....	877	—	877
North-Western .....	290	—	290
North-Eastern .....	340	182	522
Eastern .....	736	51	787
Western .....	4100	—	4100
Total.....	6343	233	6576

Value of the mineral output for the quarter per man employed, £47 13s.

The dividends paid during the quarter were as follows:—

	£	s.	d.
From Copper Mines.....	34,375	0	0
Gold .....	17,800	0	0
Tin .....	19,500	0	0
Silver.....	4500	0	0
Total.....	<u>£76,175</u>	<u>0</u>	<u>0</u>