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THE PROGRESS OF  
THE MINERAL INDUSTRY  
OF  
TASMANIA,

FOR THE QUARTER ENDING 30TH SEPTEMBER, 1898.

COMPILED BY

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BY ORDER OF

THE HONOURABLE ALFRED T. PILLINGER,  
MINISTER OF MINES.

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1898.

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## PROGRESS OF THE MINERAL INDUSTRY OF TASMANIA

FOR THE QUARTER ENDING SEPTEMBER 30, 1898.

Launceston, 10th November, 1898.

THE Mineral Returns for the Quarter ending 30th September, 1898, show a decrease on the previous quarter's output of Gold, Iron Ore, and Coal, but an increase in Silver Ore, Blister Copper, and Tin, the total increase in value being £37,498.

The following Table shows, as far as can be ascertained, the quantities and values of the Metals and Minerals raised or exported during the period under review, compared with those for the previous Quarter :—

	DURING THE QUARTER ENDING SEPT. 30, 1898.		DURING THE QUARTER ENDING JUNE 30, 1898.	
	Quantity.	Value.	Quantity.	Value.
		£		£
Gold won .....	11,673 $\frac{3}{4}$	43,773	13,446	50,590
Gold Quartz and Pyrites exported tons	61	607	134	602
Silver Ore exported.....	4084	52,406	3671	44,040
Blister Copper exported.....	1317	116,679	1109 $\frac{1}{2}$	88,760
Copper Ore exported .....	36 $\frac{1}{2}$	912	71	1440
Tin (metallic) exported .....	478 $\frac{1}{2}$	34,948	383 $\frac{1}{2}$	25,594
Iron Ore exported .....	60	60	404	404
Coal raised .....	13,184	10,547	13,755	11,004
TOTAL VALUE .....	... £	259,932	... £	222,434

## GOLD.

The quantity of Gold contributed by the different fields is shown in the following Table :—

	GOLD OBTAINED DURING THE QUARTER ENDING SEPTEMBER 30, 1898.				TOTALS FOR PREVIOUS QUARTER.
	From Quartz.	Alluvial.	Cyanide and Chlorination.	TOTAL.	
	ozs.	ozs.	ozs.	ozs.	ozs.
Beaconsfield .....	4847½	56	675½	5579	7265
Mathinna .....	4326	...	336	4662	4661
Mount Victoria ...	618½	10	...	628½	693
Mangana .....	70	...	...	70	389
Lefroy .....	77	16	273	366	157
Lisle & Golconda..	...	180	...	180	200
West Coast, Middlesex, &c. ....	76½	112	...	188½	81
TOTAL .....	10,015½	374	1284½	11,673¾	...
TOTALS for previous Quarter ...	11,901	379	1166	...	13,446

BEACONSFIELD.—The whole of the yield from this field has come from the Tasmania Mine. Between 3rd July and 23rd September, 6180 tons of quartz were crushed, which yielded 4847½ ozs. retorted gold, worth £3 15s. per oz. : 675½ ozs. were obtained from the chlorination works and 56 ozs. from alluvial ; total, 5579 ozs., as against 7182 ozs. for the previous quarter. The falling off in the output is more apparent than real, as last quarter's returns included the results of three crushings, whilst this quarter there were only two cleanings-up, the usual battery run being from five to six weeks.

During the quarter the water has been finally overcome, and stoping recommenced at the 718-ft. level. Both batteries, comprising 105 heads, are now running full time on average stone. Since the mine started, 368,575 tons of quartz have been crushed, the total yield of gold, including that from alluvial and chlorine, being 434,917 ozs., valued at £1,578,300. On 22nd August the 160th dividend of one shilling per share, amounting to £2910 15s., was paid, bringing up the total amount of dividends paid to £670,071 15s. During the half year ending 30th June, 1898, 11,770 tons of quartz were crushed at the Tasmania battery, from which 9558 ozs. of gold were obtained, and 2015 tons of pyrites, with an average assay value of 1 oz. 14 dwts. 6 grs. per

ton. Total quantity of concentrates on hand, 7280 tons. During the same period the chlorination plant treated 668 tons of pyrites concentrates, yielding 884 ozs. smelted gold, the cost of treatment being £1 Os. 4*d.* per ton. Two additional roasting furnaces have just been started, and the yield from this source should be considerably increased during the current quarter.

Everything is in readiness for the reception of the additional pumping machinery for the present main shaft, which is expected to arrive shortly. Owing to the increase of water at the new main shaft it has been found necessary to increase the capacity of the pumping plant, and very little sinking has been done during the quarter.

Five (5) other companies are engaged on this field, principally in prospecting, and one of these, the North Tasmania Company, has sent away 19 tons of auriferous copper ore, valued at £187. The ground held for some years by the Ballarat Deep Lead Company, who, after spending between £8000 and £10,000, were obliged to cease work, owing to financial difficulties, has lately, through litigation, been acquired by other holders, and it is probable that a further effort will be made to prove the "Deep Lead," running below the town.

LEFROY.—The operations at the New Pinafore and Volunteer Mines are being watched with much interest. At the former mine driving has been continued along the reef channel at the 1150 ft. level, (1086 ft. vertical), and the prospects have lately considerably improved, though the stone is not yet payable. The Central Shaft has reached a depth of 1147 ft., and sinking is still proceeding. During the past quarter 20 tons of quartz were crushed for 6 ozs. of gold, and 273 ozs. were obtained from chlorine and cyanide.

There is nothing fresh to report from the Volunteer Mine, where the drive along the reef at the 1300 ft. level has been continued without meeting payable stone. A good deal of work is going on in other parts of the field. 34 tons of quartz from the Comrades Mine yielded 42 ozs. gold, and 47 tons from the Industry Mine yielded 30 ozs.

MATHINNA.—At the Golden Spur Mine the shaft has been sunk to a depth of 990 feet, and preparations are being made to open out at 1000 feet. A winze is also being sunk from the north drive at the 900 feet level, from which a little quartz is being raised, and it is anticipated that crushing will be started before the end of the current quarter.

The New Golden Gate Mine is looking well throughout, and the last crushing of 1550 tons yielded 1718 ozs. gold, which is considerably above the average. During the quarter 4615 tons of quartz were crushed, which yielded 4159 ozs. gold, and 336 ozs. were obtained from the cyanide plant, which is now being enlarged. The sum of £9600 was paid in dividends.

North of Mathinna the Mabel Mine is being actively developed, and some good stone is being obtained. In the same neighbourhood are the October, Hickson's Record, and Federal Mines, on which a little work is being done, and small crushings have been made from the two last-named.

Active prospecting and development work is going on in several places between Mathinna and Fingal, with encouraging results. At the Miami Mine (Salmon Gold Syndicate) there are about 300 tons of stone at grass, estimated to yield 1 oz. per ton, but it has been decided to defer the erection of a battery until the mine is more fully developed. The reef has been cut at a depth of nearly 200 feet from the surface, and a chamber is being cut in which it is intended to erect a steam winch and sink a vertical shaft, 12 feet by 4 feet, to a depth of 200 feet.

**MANGANA.**—Several trial crushings have been made from different parts of the New Sovereign Mine (Mangana Gold Reefs), but the stone is very poor, the last 820 tons crushed yielding only 102 ozs. of gold, worth £3 10s. per oz.

**MOUNT VICTORIA.**—At the Ringarooma Mine preparations are being made to instal an electric pumping and winding plant in the main adit, about 1100 feet from the entrance, and sink on the reef. A 40 horse-power engine will be erected to generate the electricity, and it will also act as an auxiliary to the battery water-wheel in dry weather. This will be the first electrical winding-plant erected in Tasmania. During the quarter 520 tons of quartz were crushed, which yielded 612 ozs. gold, worth £3 19s. per oz.

The trial crushing from the Bright Star Mine did not prove satisfactory, and the mine has been closed down. No stone has been crushed from any of the other mines in the district.

**WARRENTINNA.**—At the East Volunteer Mine the reef has been cut about 1100 feet from the entrance of the adit, and some very rich quartz has been obtained, but its extent is not yet known, and no stone has been crushed. Very little work has been done in the district outside this mine, but the Golden King P.A. have crushed 4 tons of quartz for  $6\frac{1}{4}$  ozs. gold.

MIDDLESEX.—The Glynn and Golden Hill Mines are both provided with batteries, and several small trial crushings have been made. At the Glynn, up to September 30th, 117 tons of mixed firsts and seconds had been crushed for  $36\frac{1}{2}$  ozs. of gold, worth £3 2s. per oz. 50 tons from the Golden Hill Mine yielded  $11\frac{1}{2}$  ozs. of free gold, but the stone carries a large proportion of auriferous pyrites, which is being saved for further treatment. A trial crushing of 3 tons from the Golden Cliff Mine yielded 10 ozs. of gold, but the reef is very small.

### TIN.

WARATAH.—There has been a slight falling off in the output from the Mt. Bischoff Mine, some of the best crush dirt at the Brown Face being still inaccessible. During the quarter ending 30th September, 439 tons of black tin were obtained, as compared with 444 tons for the previous quarter. Three dividends of 5s. per share, amounting to £9000, have been paid, bringing the total amount paid in dividends up to £1,518,000.

NORTH-EASTERN DISTRICT.—Owing to the plentiful supply of water, and the increase in the price of tin, there has been renewed activity in this district, and the quantity of tin ore sent away during the past quarter amounted to 281 tons 9 cwts., as against 136 tons 7 cwts. for the previous quarter. Of this nearly all has come from alluvial workings, the only lode tin mine being the Appalachian Mine, near Ringarooma. 150 tons of stone were crushed for a yield of  $1\frac{1}{2}$  tons of black tin, but work has been suspended for the present.

Early in August very heavy slips of the basaltic capping took place at the Brothers' Home Mine, Derby, and it will be some time before the work of tin-getting is again proceeded with. The yield of tin ore for the quarter was 19 tons. From the adjoining Brothers' Home No. 1 Mine 40 tons 15 cwt. have been obtained. Much of the best ground from this claim was "blocked out" some years ago, before the basaltic overburden was removed. A good deal more of the top stuff will have to be removed before the real gutter-wash is reached and stripping has again been started.

At the Briseis Mine the stripping is well in advance of the sluicing, and some fairly rich drift is being worked. The output for the quarter was 40 tons. From the Brothers' Home Extended Mine 8 tons were obtained: better results are expected when the new water-race is completed.

It is probable that work will shortly be resumed at the Arba and Ormuz Mines, on the old Branhholm Deep-Lead, from which large quantities of tin were obtained some years ago.

At Bradshaw's Creek the Pioneer Company have obtained 10 tons of tin ore. Messrs. Simpson and Ogilvie's claims at South Mount Cameron and Gladstone have produced  $11\frac{1}{2}$  tons and  $13\frac{1}{2}$  tons respectively. The remainder of the output has come from small private claims worked chiefly by Chinese.

**EASTERN DISTRICT.**—The result of the trial crushings from the Anchor Mine not proving satisfactory, the mine was closed down for the greater part of the quarter. Work has now been resumed, and it is intended to obtain the use of the Government diamond drill to prove the ground ahead of the working faces. 9 tons 9 cwt. of tin ore, valued at £400, were obtained from the Liberator Mine. Figures are not available as to the quantity of stone crushed, but the yield was not considered satisfactory, and work has been suspended for the present.

At the Australian Mine 1224 tons of stone were crushed, for a yield of  $6\frac{1}{2}$  tons of ore. Crushing is still proceeding, with improved prospects.

At Weldborough and St. Helen's 36 Europeans and 64 Chinese have been employed, the yield of tin ore being 27 tons 19 cwt.

In the Ben Lomond and St. Paul's Districts 21 men are employed, chiefly in development work. The yield of tin ore from these districts was 1 ton 7 cwt.

During the quarter there have been considerable fluctuations in the tin market. The price rose from £70 per ton on June 30th to £75 10s. per ton on August 17th, receding to £74 10s. on September 30th, but since then there has been a considerable rise. This has led to further attention being paid to the Heemskirk field on the West Coast, which had been abandoned for some time. The New West Cumberland Mine has been taken on tribute, and a company called the Heemskirk Prospecting Association has been formed to send out prospectors.

## SILVER.

**WEST COAST.**—There has been an increased output of silver-lead ore from the Zeehan and Dundas fields during the past quarter, the quantity sent away from the Zeehan Railway Station being 4016 tons, of an approximate value of £51,640, as against 3670 tons, valued at £44,040, for the previous quarter. These values are net, after deducting all charges for smelting, freight, &c.; the gross value would be about £5 per ton more.

The following list shows the quantity and approximate value of the ore sent away from the principal mines :—

	Quantity. Tons.	Value. £
Western.....	1145	16,030
Montana .....	905	12,462
Oonah .....	559	6326
Silver Queen.....	370	3116
Smith's Section.....	430	6021
West Comet .....	91	686

Small parcels have also been sent away from the following mines :—Tasmanian Crown, S. W. Curtin-Davis, No. 1 Curtin-Davis, Curtin-Davis Proprietary, Block 291, Rich P.A., Bonnie Dundee, Kosminsky, &c.

The output from the Western Mine has increased, and the average assay value for the half-year ending September 30th was 9 ozs. silver per ton and 6 per cent. lead higher than for the previous half-year. During the past quarter 511 tons of firsts and 6735 tons seconds were mined. The concentrating mill treated 6624 tons, which yielded 546 tons concentrates; total output of marketable ore for the quarter, 1057 tons, of an average assay value of 105 ozs. silver per ton and 59 per cent. lead. The total quantity of marketable ore produced up to September 30th was 28,422 tons, containing 2,852,235 ozs. silver and 15,425 tons lead, the net value of the same at the mine being approximately £344,171. Sinking has again been resumed at the main shaft, which has reached a depth of about 560 feet.

The Montana shaft is down to 335 feet, sinking still proceeding. This mine is still looking well, and during the past quarter produced 905 tons of ore, containing 84,700 ozs. silver and 577 tons lead.

At the Oonah 3348 tons of seconds have been concentrated, producing, with hand-picked ore, 558 tons, containing 46,393 ozs. silver and 335 tons lead: net value, £6314. One ton of argentiferous stannite, containing 161 ozs. silver, 14 per cent. copper, and 13.5 per cent. tin, has also been sent away for trial, the price realised being £12 per ton. At the Silver Queen, 1690 tons were mined, which produced 370 tons marketable ore, containing 24,736 ozs. silver and 204 tons of lead. The output from the British-Zeehan Mine was 289 tons, including 69 tons concentrates from 373 tons crushed. Total contents, 24,910 ozs. silver and 199 tons lead. Detailed figures are not to hand of the contents of the ore raised from Smith's Section, but the average price received was about £14 per ton.

At the Oceana Mine there are several hundred tons of ore at grass, estimated to contain 20 ozs. silver per ton and 50 per cent.

lead. There are also large reserves of similiar ore in sight in the mine, and arrangements have been made for disposing of it to the Tasmanian Smelting Company, which, it is anticipated, will be in a position to treat ore by the end of the year. Commodious storage bins have been erected, and already several small parcels of ore have been received. The erection of these works has given a great impetus to mining throughout the field, and attention is again being directed to the Comstock District, in which large bodies of ore are known to exist, but the difficulty of access has hitherto hindered progress. The pumping-plant at the Comet Mine has been renewed, and the work of unwatering the mine started. Pumping has also been started at the Colonel North Mine with a view to resuming operations underground; and it is probable that work will be shortly resumed at the New Mount Zeehan Mine.

**WARATAH DISTRICT.**—During the quarter, 116 tons of firsts have been obtained from the Magnet Mine, containing 13,558 ozs. silver and  $34\frac{1}{2}$  tons lead. The track from the mine to the Waratah Road has been completed, and 68 tons of ore have been packed out and sent to Dapto, New South Wales, the net price received being between £11 and £12 per ton. It is probable that the track will shortly be converted into a horse-tram, when the cost of getting the ore to Waratah, which is now £1 10s. per ton, will be considerably reduced. A little work is still going on at the New Silver Cliff Mine, near Waratah, but no ore has been sent away during the past quarter. A few tons of high-grade ore have been obtained from the Mount Stewart Mine in the Heazlewood District.

### COPPER.

At the Mount Lyell Company's Reduction Works six furnaces have been continually in blast, save for necessary stoppages for repairs and renewals. The 7th and 8th furnaces were nearly completed at the end of the quarter, and the other three furnaces of the second nest are well under way. During the quarter ending September 30, approximately 47,750 tons of ore were smelted, and the blister copper produced during the same period was 1317 tons, containing 1300 tons copper, 203,908 ozs. silver, and 6938 ozs. gold, the gross value of the same being £116,679. As the haulage line is not able to carry sufficient ore for the additional furnaces, it has been decided to construct an aerial ropeway from the mine, and good progress has been made with the necessary excavations and foundations for the standards, bins, &c.

On July 1st the fifth dividend of 4s. per share—amounting to £50,000—was paid, bringing up the total to £244,200.

At the North Mount Lyell Mine the rich ore-body found on the surface has been cut at the 206 feet level. The bottom tunnel (320 feet level) has been driven 650 feet. The country is now much more favourable, and it is expected to cut the ore-body within 50 feet. It is intended to work the upper part of the deposit by open cuts, and preparations are being made for removing the overburden. A powerful air-compressing plant for driving rock-drills will be erected, and part of the machinery has been delivered.

Good progress is being made with the preliminary work in connection with the aerial ropeway from the Lyell Tharsis Mine. This will be a little over a mile in length, and will be worked by gravity only. The plant is expected to arrive in November. In the meantime the mine is being opened up, and by the end of the year should be sending ore to the Mount Lyell Smelters.

Steady prospecting and development work is going on at the other mines in the neighbourhood, and a separate township is springing up at North Mount Lyell.

In the Lake Dora District the results have, so far, not been very encouraging. Several companies have now amalgamated for the purpose of testing the ground more economically, while others have suspended operations, and purchased properties in different parts of the Colony. A good deal of work has been done at the Red Hills Mine, which is being energetically developed by open cuts and tunnels. The Hercules and Mount Reid Mines have large quantities of ore at grass and in sight, but no ore has been sent away.

At Rosebery the Mount Black shaft has been sunk to a depth of 100 feet, and a crosscut started for the lode. Steady work is going on at the North Tasmania Copper and Berry Consols Mines, but underground work has been temporarily suspended at the Tasmanian Copper and Primrose Mines, pending the completion of the railway and the erection of smelters.

There is nothing fresh to report from the mines in the Colebrook District. The Colebrook Company have purchased a diamond drill, which will soon be ready to work.

**RINGVILLE DISTRICT.**—The Curtin-Davis Proprietary Mine has been let on tribute, and several small parcels, aggregating 28 tons 16 cwts., containing 2203 ozs. silver and 1 ton 16 cwts. copper, have been raised. This ore was sold to the Tasmanian Smelting Company, Zeehan, the price realised being £148 10s.

at Montezuma Railway Station. 27 tons of Fahl ore, valued at £370, were sent away from the No. 1 Curtin and Davis Mine; and small lots, details of which have not been received, were sent away from the S. W. Curtin-Davis, Rich P.A., and Bonnie Dundee Mines. These ores all contain a little copper, but the silver contents are the most valuable, and, as they are sent through Zeehan, they are included in the export of silver-lead ore from that field.

At the Rocky River Mine some rich auriferous nickel ore has been discovered, and prospects have considerably improved. The road from Corinna to the mine has been improved, and arrangements are being made to send away a trial parcel of ore.

On the North-West Coast several companies are prospecting in the neighbourhood of Penguin, Dial Range, and Wynyard.

### COAL.

The output of Coal for the quarter was 13,185 tons, as against 13,755 tons for the previous quarter.

At the Mount Nicholas Mine a good deal of trouble has been caused by the disturbed nature of the ground, several faults having been met with. The output for the quarter was 5620 tons. A splendid seam of 6 feet of clean coal has been discovered at the Cornwall Mine, and is now being opened up. The output for the quarter was 6459 tons. The other collieries contributing were as follows:—

	Tons.
Russell.....	671
Dulverton.....	231
York Plains.....	104
Jerusalem.....	100

### IRON ORE.

Only 60 tons of Iron Ore have been exported during the quarter. The Tasmanian Iron Company, Penguin, has been engaged in extending the tramway, and should soon be in a position to send out large quantities of ore. A survey has been started for a railway from the coast to the immense deposit of red hematite on the Blyth River. This will be about eight miles long, and will junction with the projected line from Ulverstone to Burnie, about five miles from the latter port.

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

Europeans .....	5672
Chinese .....	238
Total .....	<u>5910</u>

Value of the mineral output per man employed, £43 19s. 7*d.*

The dividends paid during the quarter were as follows:—

	£	s.	d.
From Copper Mines .....	50,000	0	0
Gold Mines .....	12,510	15	0
Tin Mines .....	9000	0	0
Total.....	<u>£71,510</u>	<u>15</u>	<u>0</u>