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THE PROGRESS OF  
THE MINERAL INDUSTRY

OF

TASMANIA,

FOR THE QUARTER ENDING 31ST DECEMBER, 1898.

COMPILED BY

J. HARCOURT-SMITH, ESQ., B.A.,

GOVERNMENT GEOLOGIST FOR TASMANIA,

BY ORDER OF

THE HONOURABLE ALFRED T. PILLINGER,

MINISTER OF MINES.



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## PROGRESS OF THE MINERAL INDUSTRY OF TASMANIA

FOR THE QUARTER ENDING 31ST DECEMBER, 1898.

Launceston, 6th February, 1899.

DURING the Quarter ending 31st December, 1898, there has been an all-round increase in the Mineral Returns, as compared with the previous Quarter's figures, with the exception of those of Coal, the output of which has decreased by 2077 tons, owing to the smaller demand during the summer months.

The following Table shows, as far as can be ascertained, the quantities and values of the Metals and Minerals raised and exported during the past Quarter, and for the whole year :—

	DURING THE QUARTER ENDING DEC. 31, 1898.		DURING THE YEAR 1898.	
	Quantity.	Value.	Quantity.	Value.
		£		£
Gold won .....	15,329	59,000	49,816	188,941
Auriferous Quartz and Pyrites exported .....	139	1255	403	3105
Silver Ore exported.....	4238	53,651	15,320	188,892
Bliſter Copper exported.....	1404	116,479	4955½	400,668
Copper Ore exported .....	270½	5400	394	8128
Tin (metallic) exported .....	567	46,752	1972	142,046
Iron Ore exported ....	586	586	1598	1598
Coal raised .....	11,107	9000	47,678	38,256
<b>TOTAL VALUE .....</b>	... £	292,123	... £	971,634

Comparing the figures for the whole year with those for 1897, it will be seen that there has been a decrease in the output of Gold, Silver Ore, and Tin, but an increase in that of Blister Copper, and Copper Ore, Iron Ore, and Coal, the net result being an increase in value of £24,316.

## GOLD.

The yield of Gold for the past quarter was 15,329 ozs., valued at £59,000, the total recorded yield up to 31st December, 1898, being 996,788 ozs., valued at £3,800,297. This is exclusive of the Gold contained in the Blister Copper produced by the Mount Lyell Company, and in the auriferous pyrites, &c. exported for treatment, the returns of which are not available.

The following Table shows the quantities of gold obtained from various sources on the different fields, with the totals for the corresponding quarter of 1897 :—

	GOLD OBTAINED DURING THE QUARTER ENDING DECEMBER 31, 1898, FROM				TOTALS FOR CORRESPOND- ING QUARTER 1897.
	Quartz.	Alluvial.	Cyanide and Chlorination.	TOTAL.	
	ozs.	ozs.	ozs.	ozs.	ozs.
Beaconsfield .....	6252	11	1757	8020	7488
Mathinna .....	4922	...	726	5648	6642
Mount Victoria & Warrentinna .....	478	11	...	489	616
Lefroy .....	89	206	285	580	967
Mangana .....	71	...	...	71	...
Lisle & Golconda..	...	160	...	160	200
West Coast, Mid- dlesex, &c. ....	105	256	...	361	177
TOTALS.....	11,917	644	2768	15,329	...
TOTALS for corre- sponding Quarter, 1897.....	14,213	399	1478	...	16,090

BEACONSFIELD.—With the exception of a few ounces won from alluvial, the Tasmania mine was again the sole producer on this field. During the past quarter 8420 tons of quartz were crushed, and yielded 6252 ozs. retorted gold, and 1757 ozs. were obtained from the chlorination works; total 8009 ozs., valued at £31,753 11s. 1d., out of which £9000 has been paid in dividends.

Since the mine started 376,995 tons of quartz have been crushed, the total yield of gold, including that from alluvial and chlorination, being 442,926 ozs., worth £1,610,054, and the sum of £679,071 15s. has been paid in dividends. Good progress is being made with the erection of the engines for the new pumping plant at the main shaft; in the meantime it is considered inadvisable to advance any of the deeper levels for fear of cutting more water, but a good body of stone has been opened up at the 500-ft. level, and sufficient quartz is being raised to keep the 65-head battery crushing full time. At the new main shaft the pumping plant has been unable to cope with the water, which is much heavier than expected, and sinking has been temporarily suspended.

The North Tasmania Mine is being opened up ready for stoping, and the reef at the bottom level, 326 ft. from the surface, shows gold freely in places, and carries less copper pyrites than in the upper levels. The shaft is being sunk deeper, and it is probable that a winding engine will be shortly erected instead of the whim used hitherto. The Little Wonder and Moonlight Companies are still working, and several new companies have started prospecting, but nothing further has been done towards proving the Deep Lead.

LEFROY.—During the quarter payable stone was reported from the bottom level at the New Pinafore Mine, and some rich specimens were obtained, but unfortunately the good stone was of small extent. The central shaft has been sunk to a depth of 1200 ft. vertical, and a cross-cut has been started for the Chums reef. 45 tons of stone were crushed for 14 ozs. retorted gold, and 274 ozs. were obtained from the Cyanide Plant re-treating old tailings. A trial parcel of 57 tons from the New Monarch mine yielded 32 ozs. of gold, and 15 tons from the Industry were crushed for a return of 4 ozs. Active prospecting is still going on at the Volunteer Mine, but so far without success; the cost of this is entirely defrayed by calls from shareholders. Several other mines are working in a small way, but more capital is required to properly develop this field.

MATHINNA.—At the New Golden Gate Mine 5415 tons of quartz were crushed during the quarter for 4808 ozs. of gold, and 726 ozs. of bullion, worth about £2 14s. per oz., were obtained from the Cyanide Works. During the year 1898, 19,860 tons of quartz were crushed, which yielded 17,720 ozs. of retorted gold, worth £66,980. The pyrites saved contained 1400 ozs., valued at £5020, and 2310 ozs. of cyanide bullion were obtained, worth

£6200. Total value for the year £78,200, out of which £42,400, equal to £1 6s. 6d. per share, was paid in dividends, bringing the total amount paid to shareholders up to £214,400. The development work is kept well ahead of the stoping, and there are large reserves of stone opened up.

At the Golden Spur Mine work has been started at the 1000 feet level, the reef being strong and reported to be payable, but no stone has yet been crushed.

The trial crushing of stone from the Mabel Mine proved very disappointing, 96 tons of quartz yielding only 38 ozs. of gold, and work has been suspended. At the Hickson's Mine the water has proved too strong for sinking the shaft without machinery. 13 tons of quartz from the Record Mine yielded 9 oz. of gold, and 52 tons from the Hatherton yielded 52 ozs.

At the Miami Mine (Salmon Gold Syndicate) the main shaft has been sunk 120 feet below the adit level, a total of 320 feet from the surface. At the 200 feet level a distance of 200 feet has been driven along the reef, which is strong, but of rather poor quality. Prospecting is also going on at the West Miami and other mines in the neighbourhood with encouraging results.

MANGANA.—Prospecting is going on in several places on this field. The New Sovereign Mine has been temporarily shut down, but it is proposed to erect machinery at the old main shaft, which has been full of water for some years. The recorded yield of gold for the quarter was 71 ozs. from 566 tons of quartz.

MOUNT VICTORIA.—The prospects of this field continue very favourable, and a good deal of work is being done. The Ringarooma Company crushed 327 tons for 340 ozs. of gold. A first crushing of 180 tons of mixed stone from the New Mercury Mine yielded only  $13\frac{1}{2}$  ozs. of gold, but 32 tons from shallow workings on the Old Ragged Youth Section, which is now held by the New Mercury Company, yielded 54 ozs., and a shaft is now being sunk on the reef.

WARRENTINNA.—A trial crushing of 60 tons from the East Volunteer Mine yielded 68 ozs. of gold, but the quantity of stone available above the adit level is small, and the mine is to be let on tribute. The Derby Company crushed 15 tons for a return of 8 ozs. of gold.

MIDDLESEX, WEST COAST, &c.—Several small crushings have been made at the Glynn Mine, and 61 ozs. of gold obtained

from 150 tons of stone. From the same neighbourhood 50 ozs. of alluvial gold were also won during the quarter. A little work is going on on the Queen River and other localities on the West Coast, and at the Woody Hill Mine tributors have crushed 34 tons for 28 ozs. of gold. A small reef carrying rich stone has been discovered near Golconda, and a prospecting shaft is being sunk on it.

## TIN.

WARATAH.—The output from the Mt. Bischoff Mine during the past quarter was 450 tons of black tin, as compared with 439 tons for the previous quarter. The prospects at the Brown Face have improved, but there still remain between 2000 and 3000 tons of mixed dirt from the slips to remove. Connection has been made with the main tunnel for drainage purposes, and a bench is being taken out 12 ft. deep; eventually this will be extended 12 ft. deeper, and the ore will be hauled up an incline by a stationary engine at the top. The other faces remain about the same. A good deal of prospecting and development work has been done underground, and stoping on the Queen Lode has been carried on with satisfactory results. The great rise in the price of tin will now permit of the poorer ore being worked, which could not before be treated at a profit.

During the half-year ending 31st December, 1898, 46,515 tons were treated, producing 889 tons of dressed tin ore; the total quantity obtained since the formation of the company being 54,462 tons 2 cwts. 2 qrs. 26 lbs.

The following particulars taken from the last Half-yearly Report show the cost of treating a ton of stanniferous material during the six months ending 31st December, 1898:—

	s.	d.
Mining, including new works, maintenance, and other expenses .....	2	5 $\frac{7}{8}$
Hauling, filling, and emptying trucks.....	0	5 $\frac{1}{2}$
Crushing, dressing, and maintenance of plant	0	8 $\frac{5}{8}$
Slime Sheds .....	0	1 $\frac{1}{2}$
Ringtail Sheds .....	0	2 $\frac{1}{6}$
Management and supervision.....	0	6 $\frac{5}{8}$
Plant, including all machinery.....	0	1 $\frac{1}{2}$
Development and progressive work.....	0	2 $\frac{1}{4}$
Ore-bagging .....	0	0 $\frac{5}{8}$
Contracts and sundries.....	0	3 $\frac{1}{2}$
Stores .....	0	4 $\frac{3}{4}$
TOTAL.....	5	6 $\frac{1}{2}$ $\frac{3}{4}$

The water supply has been abundant for all purposes, the rainfall for the six months being 62·22 inches. At the Smelting Works in Launceston, during the half-year, 837 tons 6 cwt. 3 qrs. 14 lbs. of ore were smelted on behalf the Company, yielding 582 tons 12 cwt. 1 qr. 21 lbs. refined tin; and 665 tons 6 cwt. 3 qrs. 26 lbs., yielding 470 tons 1 cwt. 3 qrs. 10 lbs. of refined tin, were smelted on public account. The average assay of the refined tin was 99·84 per cent., and of the slag, 5·5 per cent. During the past quarter three dividends have been paid, amounting to £10,500.

**NORTH-EASTERN DISTRICT.**—There was a good supply of water during most of the past quarter, and the yields were fairly good. The quantity of tin ore sent away by rail from Scottsdale, and by boat from Boobyalla, was 279 tons 8 cwt., as against 281 tons 9 cwt. for the previous quarter, and the average number of men employed was 153 Europeans and 192 Chinamen.

At Derby operations have been considerably hampered by the Ringarooma River being blocked by accumulated tailings; the river has been thrown out of its original course and dammed back for a considerable distance, and a channel is now being cut to try and remedy this.

The Briseis Company sent away 35 tons, the total yield for the quarter, being 50 tons obtained by 22 men. The New Brothers Home No. 1 Co., obtained 19 tons, employing 10 men. The Brothers' Home (private mine) produced 19 tons 6 cwt. with 14 men, and the Brothers' Home Extended, 11 tons 14 cwt., with 8 men. The tin ore from these mines is of very high grade, often assaying over 75 per cent. of metallic tin. At South Mount Cameron 16 tons 10 cwt. were obtained from Mr. J. Simpson's private claims, employing 31 Chinese on tribute; and 12 tons came from Mr. Ogilvie's claims near Gladstone, employing 28 Chinese on tribute. Several sections have been taken up on what is known as the Mussel Roe Deep Lead, and a good deal of preparatory work in the way of cutting tail-races, &c. has been done.

**EASTERN DISTRICT.**—At the Anchor Mine crushing has been going on steadily with satisfactory results, but the water supply was only sufficient to drive 50 out of the 100 head of stamps for part of the quarter. Surveys are being made with a view of ascertaining the best available source of a supply to keep the 100 head continuously at work, and a dam site has been

applied for on the opposite of the Blue Tier, in which a very large quantity of water could be conserved. Exact figures are not available of the quantity of rock crushed and tin ore obtained during the quarter, but it is stated that a good profit is being made, although the yield is less than one-half per cent. black tin; the costs of mining, crushing, dressing, &c., have been reduced to less than 2s. 6d. per ton of rock crushed, and it is anticipated that with a plentiful supply of water sufficient to work 100 heads, the costs will be under 2s. per ton. The Government No. 1 diamond-drill was erected during the quarter, and boring was commenced early in the new year with a four-inch bit.

At the Australian Mine 1207 tons were crushed for a yield of 8 tons 5 cwt. of black tin. Crushing has been temporarily suspended, but the company has purchased a section on Crystal Creek, formerly known as the Dawn. Some rich tin-bearing rock is showing on the surface, and a tramway is being constructed to take the stone to the battery, about half a mile distant.

At Weldborough and St. Helen's 66 Europeans and 42 Chinese have been engaged, the yield of tin ore being 33 tons 3 cwt.

In the Ben Lomond and St. Paul's Districts 1 ton 17 cwt. of tin ore and 2 tons 10 cwt. of wolfram have been obtained. It is probable that capital will be shortly introduced for the purpose of working several promising shows in these districts.

The price of tin has shown a continuous upward tendency, having risen from £74 10s. per ton on September 30th to £84 10s. on December 30th. Since the close of the year it has risen very rapidly, and should the price be maintained at anything over £100 per ton, doubtless many abandoned mines will be reopened, but it is not likely that there will be any great increase in the output during the current quarter.

## SILVER.

WEST COAST.—During the past quarter steady work has been going on throughout the Zeehan and Dundas Fields, and the output from the principal mines has been well maintained. The Tasmanian Smelting Company are pushing on with the erection of their works, but progress has been considerably hampered by the continued wet weather. About 2555 tons of

ore, of an approximate value of £7824, have been delivered at the works, and it is anticipated that smelting will be started in two or three months.

The quantity of ore exported from Zeehan during the quarter was 4074 tons, of an approximate value of £52,199, as against 4016 tons, valued at £51,640, for the previous quarter, and 3425 tons, valued at £40,948, for the corresponding quarter of 1897. This quantity does not include 2350 tons delivered to the Tasmanian Smelting Company, and stacked by them, awaiting the completion of the smelters.

The following list shows the quantity and approximate net value of the ore sent away for export from the principal mines. The quantity sent away does not always correspond exactly with the quarter's output :—

	Quantity. Tons.	Value. £
Western.....	1220	18,824
Montana .....	872	12,240
Oonah .....	488	5245
Silver Queen.....	537	5005
British Zeehan .....	333	4830
Smith's Section.....	163	2182

Smaller lots have been sent away from the Tasmanian Crown, Silver Queen Extended, S.W. Curtin Davis, No. 1 Curtin Davis, Rich P.A., and other mines; and the following have sent ore (chiefly of low grade) to the Tasmanian Smelting Company :—Comet, Oceana, Smith's Section, Sylvester, Block 291, Curtin Davis Proprietary, &c.

At the Western Mine the main shaft has been sunk to 600 feet from the surface, and will be continued to 700 feet before cross-cutting for the lodes. A new pumping plant, that will enable the shaft to be continued to over 1000 feet, will shortly be put in.

During the past quarter 624 tons of firsts (handpicked galena), 9 tons of rich oxidised ore, and 5695 tons of seconds, which yielded 506 tons of concentrates, were obtained: total output of marketable ore for the quarter, 1139 tons, containing approximately 123,353 ozs. of silver and 657 tons of lead. The 47th dividend of 1s. per share, amounting to £3000, was paid in December.

At the Montana the shaft is down 360 feet, and a cross-cut is being driven for No. 1 lode. During the quarter 443 tons of

firsts were obtained and 4200 tons of seconds, which yielded 429 tons of concentrates. Total output of marketable ore, 872 tons, containing 79,886 ozs. of silver and 558 tons of lead, the net value of the same at the mine being £12,240.

At the Oonah 2126 tons of seconds were concentrated, and the total output of marketable ore was 488 tons, containing 40,016 ozs. of silver and 332 tons of lead : net value, £5245.

The output from the Silver Queen Mine was  $175\frac{1}{2}$  tons firsts, and  $364\frac{1}{2}$  tons concentrates: total 540 tons, containing 33,377 ozs. of silver and 332 tons of lead. There are now nine tribute parties working on the company's leases, but in most cases they have not made current wages. During the half-year ending 31st December, 1898, the company raised 194 tons 19 cwts. 2 qrs. 2 lbs. firsts, valued at £2457 9s. 7d., equal to about £12 12s. per ton, and 5868 tons 8 cwts. seconds, which produced 589 tons 6 cwts. 1 qr. 1 lb. concentrates, valued at £4554 19s. 3d., equal to £7 14s. 7d. per ton. Total output, 6063 tons 7 cwts. 2 qrs. 22 lbs., of an average value of £1 3s. 3d. per ton. During the same period tributors obtained 107 tons 12 cwts. 2 qrs. 16 lbs. firsts (galena and gossan), worth £879 19s. 10d., and 17 tons 5 cwts. 2 qrs. 27 lbs. concentrates, worth £990 6s. 3d., from which the company received £196 2s. 7d. in royalties. The British-Zeehan Mine produced 227 tons firsts, and 93 tons concentrates from 535 tons crushed. Total, 320 tons, containing 30,426 ozs. of silver and 221 tons of lead, valued at £4775. On Smith's Section seven sub-tribute parties are at work. At the principal one, the Currie and Everest Tribute Association have sunk their shaft to 160 feet, and cut the lode, still carrying high-grade galena. The Silver Queen Extended Mine is worked entirely on tribute, the average number of men employed being 15. The output for the past quarter was 33 tons 10 cwts., containing 2211 ozs. of silver and 20 tons of lead, valued at £449. 100 tons of seconds from the Sylvester Mine were crushed at the Silver Queen Mill, and yielded 20 tons of concentrates, assaying 29 ozs. silver per ton, and 49 per cent. lead; 82 tons of oxidised ore, assaying 15 ozs. silver per ton, and 13·8 per cent. lead were sold to the Tasmanian Smelting Company for £25 13s., and 25 tons of sulphide ore, assaying 20 ozs. silver per ton, and 24 per cent. lead realised £1 1s. 6d. per ton on the mine.

Work has been resumed on the old Silver King Extended Mine, and ore is being taken from the cutting on the west side of Main-street and sent to the smelters. At the New Mount

Zeehan Mine the shaft has been unwatered, and work started in the several drives.

The Comet Company has sent 800 tons of gossan to the smelting works. 500 tons assayed 4 ozs. silver per ton and 15 per cent. lead, and 300 tons assayed 6 ozs. silver per ton and 21 per cent. lead. Most of the mines in the Curtin-Davis group, near Ringville, are being worked on tribute, and several of them have sent out small parcels, chiefly to the Tasmanian Smelting Company's works, but details of contents and value are not available. No ore has been raised from the Oceana Mine during the quarter, but 517 tons from the heap at grass have been delivered to the smelters.

### COPPER.

At the Mt. Lyell Company's reduction works the 7th and 8th furnaces were blown in in October, and for part of the quarter eight furnaces were in blast, but during the Christmas holidays the No. 1 plant was closed down for a thorough overhaul. The remaining three furnaces of the 2nd nest were practically completed at the end of the year, and will probably be blown in during the current quarter, as soon as the aerial ropeway from the mine to the No. 1 plant is completed. The following particulars of the No. 2 plant are taken from the Report of the General Manager for the half year ending September 30, 1898:—  
“The size of the furnaces is 210 inches by 42 inches in the clear at the hearth; height from tapping floor to charging floor, 20 feet, and each furnace has 40 tuyeres. The blast for the furnaces is heated by four hot blast stoves in two sets. The power plant consists of 6 boilers of 125 horse power each, and five high-class vertical compound condensing engines, each coupled direct by means of a flexible coupling to a No. 8 Root's Blower. The mouth of the main chimney stack is 287 feet above the tapping-floor level. During the past quarter 54,880 tons of ore were treated, and 1404 tons of blister copper produced, containing approximately, 6009 ozs. of gold, 166,388 ozs. of silver, and 1388 tons of copper, the gross value being £116,479. During the half year ending September 30th, 1898, 75,865 tons from the open cuts and 7349 tons from underground were treated; total, 83,214 tons net dry weight, of an average assay of 0.158 ozs. gold, 3.46 ozs. silver, and 3.07 per cent. copper. During the same period the Converter plant treated 4728 tons of converter matte, assaying 2.91 ozs. gold, 75.28 ozs. silver per ton, and 55.28 per cent. copper, and produced 2481 tons of blister copper,

containing 13,206 ozs. gold, 338,507 ozs. silver, and 2449 tons of copper.

The costs per ton of ore treated were as follows :—

	£	s.	d.
Mining operations .....	0	2	5·83
Removal of overburden.....	0	2	0
Smelting operations .....	0	16	5·31
Converter operations.....	0	2	5·33
<b>TOTAL .....</b>	<b>£1</b>	<b>3</b>	<b>4·47</b>

as compared with £1 4s. 11·64*d.* for the previous half-year.

The total quantity of blister copper produced up to September 30th, 1898, was 8352 tons, of an average assay value of 4·756 ozs. gold, 102·61 ozs. silver per ton, and 98·81 per cent. copper.

The Company has decided to extend the railway from its present terminus at Teepookana, on the King River, to Regatta Point, Strahan, and the work of clearing, &c. has already commenced. On October 1st the sixth dividend of 2s. per share on 275,000 shares was paid, bringing up the total to £271,700. The average number of men employed by the Company in all departments during the past quarter was 2125. At the North Mount Lyell Mine, near the end of the quarter, the ore-body was struck in the bottom adit, over 300 feet below the crown of the hill, but it will take some time to determine its true value. Good progress has been made with the removal of the overburden, and during the past quarter 512 tons of copper ore were sent away, containing approximately 152 tons of copper, 5800 ozs. of silver, and 9 ozs of gold, valued at £10,568. A contract has been let for the construction of the railway from Kelly's Basin to the mine, and it is expected to be completed in twelve months. The aerial ropeway from the Tharsis Mine to the Mt. Lyell Company's Smelters was not completed by the end of the year as anticipated, but it is well in hand, and is being pushed on as fast as possible. Until this is completed very little further work will be done underground, as large quantities of ore are opened up ready for stoping.

A small winding engine has been erected at the Crown Lyell Mine. The shaft has been sunk to a depth of 80 feet, and driving is going on to cut the ore body seen on the surface and

to pick up the continuation of the belt of siliceous ore-bearing schist passing through the Tharsis and North Lyell properties.

At the South Tharsis Mine there is a large body of low-grade ore, and it is probable that a concentrating plant will shortly be erected to treat this on an extensive scale.

Several other mines in the neighbourhood are pushing on with adits, and are hopeful of success.

At the South Lyell Mine the shaft has been sunk to a depth of nearly 400 feet, and will be continued to 450 feet before opening out.

Very good reports are coming in of the pyritic ore bodies which are being prospected at Mount Jukes and Mount Darwin, and the construction of the North Mount Lyell Company's railway will greatly facilitate operations in these districts.

In the Red Hills district the prospects still continue favourable, but there is nothing special to report.

The Mount Reid Mine has been connected with the Hercules tramway, and the main adit is now being widened to admit of a horse being employed. There has been considerable delay in the completion of the self-acting tramway from the Hercules Mine to Deep Lead, but it is now nearly ready, and as soon as this is completed a trial parcel of 100 tons from the Mount Reid Mine will be sent to England to ascertain the best method of treatment. It is stated that similar ores can be successfully treated by the Ellershausen process, and the zinc, as well as the other metallic contents, recovered at a small cost. Should this be borne out by further trial, it will be of immense advantage to the Mount Reid and Rosebery districts.

Very little work is going on at the Tasmanian Copper Mine, Rosebery, and it has been decided to defer the erection of smelters pending the investigation of certain new processes for treating zinciferous ores. Steady work is going on at the North Tasmanian Copper and Berry Consols Mines, but the principal item of the quarter's progress in this district is the striking of the lode in the 100-ft. level at the Mount Black Proprietary Mine. At this depth the lode is wider than on the surface, and the ore is of about the same assay value. Several smaller veins have been cut between the shaft and the main lode but have not

been driven on. The rails of the Burnie-Zeehan Railway are laid within a mile of where the line crosses the Pieman River, about four miles from Rosebery, and this district will soon be more easily accessible when better progress may be expected.

At the Colebrook Mine a small diamond drill has been erected, and during the quarter a distance of 178 feet 6 inches was bored from the end of the 150 ft. tunnel on the eastern slope of the hill. The bore is said to have passed through some good ore, but no assays of the core have been made.

There is nothing fresh to report from the North-West Coast, where steady prospecting work is going on in several localities.

### COAL.

The output of Coal for the quarter was 11,107 tons, as against 13,185 tons for the previous quarter, and 8767 tons for the corresponding quarter of 1897. The following list shows the quantity raised from the different collieries :—

	Tons.
Mt. Nicholas .....	5251
Cornwall.....	4124
Russell.....	480
Mt. Cygnet.....	985*
Dulverton.....	196
York Plains.....	71
Total.....	<u>11,107</u>

\* This includes 585 tons raised during the quarter ending September 30th, the returns having been received too late to include in that quarter's report.

### IRON ORE.

During the quarter 586 tons of Iron Ore were sent away from the Penguin. At present this is used only as flux in lead smelting-works, but the ore, both at the Penguin and the Blyth River, is of excellent quality, admirably suited for the manufacture of Bessemer Iron and Steel, and in the event of iron smelting-works being established in Australia these deposits would be of great value.

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

Europeans .....	5590
Chinese .....	263
	<hr/>
Total .....	5853
	<hr/> <hr/>

of whom 3600 were employed on the West Coast.

Value of the mineral output for the quarter per man employed, £49 18s. 2·39d.

The dividends paid during the quarter were as follows:—

	£	s.	d.
From Copper Mines .....	27,500	0	0
Gold Mines .....	21,000	0	0
Tin Mines .....	10,500	0	0
Silver Mines .....	3000	0	0
	<hr/>		
Total.....	£62,000	0	0
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