

MININD1901_3

THE PROGRESS OF
THE MINERAL INDUSTRY
OF
TASMANIA,

FOR THE QUARTER ENDING 30TH SEPT., 1901.

COMPILED BY

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BY ORDER OF

THE HONOURABLE EDWARD MULCAHY,

MINISTER OF MINES.



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1901.



PROGRESS OF THE MINERAL INDUSTRY OF TASMANIA

FOR THE QUARTER ENDING 30TH SEPTEMBER, 1901.

*Launceston,
November, 1901.*

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 September, 1901, compared with the corresponding Quarter in 1900 and the previous Quarter ending 30th June, 1901:—

	During the Quarter ending 30th Sept., 1901.		During the Quarter ending 30th Sept., 1900.		During the Quarter ending 30th June, 1901.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
		£		£		£
Gold won ozs.	12,714	47,677	13,368	50,130	14,294	53,602
Auriferous Quartz and pyrites exported tons	76	1452	48½	534	33	653
Silver Ore exported..... "	5190½	62,184	2723	35,145	4290½	47,953
Blister Copper exported.... "	2416½	217,762	2463½	221,704	2402½	226,414
Copper Ore exported "	2346	33,655	145½	1369	2983	40,316
Iron Ore exported "	200	200	1910	1270	210	115
Coal raised "	16,705	14,199	14,508	12,332	12,750	10,837
Silver-lead Bullion exported	749½	26,215	949½	31,665	1069½	37,140
Tin Ore exported..... "	30	1600	...	...	5½	27
Lead exported..... "	...	...	...	...	...	...
Tin (metallic) exported "	469½	56,052	531½	74,050	386½	47,815
Wolfram Ore exported .... "	...	...	14½	532	...	...
Asbestos exported ..... "	...	...	22	22	10	8
Gold Quartz exported "	12	300	25	139	51	230
Oxide Mineral exported..... "	...	...	...	...	...	...
Gold Tailings exported .... "	...	...	...	...	...	...
Zinc-lead exported ..... "	...	...	...	...	...	...
Zinc Ore exported ..... "	...	...	...	...	...	...
Galena exported ..... "	...	...	1	6	...	...
Gold & Silver Ore exported cwts.	...	...	12	200	...	...
Copper exported tons	150	10,511	...	...	...	...
TOTAL VALUE .....	...	£ 471,807	...	£ 429,098	...	£ 465,110

GOLD.

During the past quarter 9760 ounces of gold were obtained from quartz, 129 ounces from alluvial, and 2825 ounces by means of the cyanide and chlorination processes, valued at £47,677.

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 1900:—

	Gold obtained during the Quarter ending 30th Sept., 1901.				Totals corresponding Quarter, 1900.	Totals for Quarter ending 30 June, 1901.
	Quartz.	Alluvial.	Cyanide & Chlorination.	TOTAL.		
	ozs.	ozs.	ozs.	ozs.	ozs.	ozs.
Beaconsfield	6192	78	1640	7910	7305	8719
Mathinna	2972	...	1076	4048	4013	4309
Mount Victoria, and Warrentinna	82	30	...	112	629	80
Lefroy	129	...	109	238	473	367
Lisle and Golconda .....	...	11	...	11	150	225
Mangana	385	...	...	385	753	574
West Coast, Middlesex, &c. ....	...	10	...	10	45	20
TOTALS	9760	129	2825	12,714	...	...
TOTALS for corresponding Quarter, 1900	9019	302	4047	...	13,368	...
TOTALS for Quarter ending 30th June, 1901 ...	10,403	193	3698	...	...	14,294

BEACONSFIELD.—The men engaged in gold-mining in this district numbered 658, of which 638 were hands employed by the companies, and 20 were tributors and prospectors.

In the Tasmania Mine, the water has ceased to be as troublesome as in times past. Forty head of stamps are being added to the existing battery of 65 heads, and when the plant is complete, it is expected to double the present crushing power. The greatest depth reached in this mine is 1100 feet in the new main shaft, where a crosscut level is being driven to the reef. The gold obtained from the battery and chlorination works the last three months has averaged as under:—

July, 1 oz. 10 dwts. 3½ grs. per ton.

Aug., 1 oz. 6 dwts. 16 grs. per ton.

Sept., 16 dwts. 6 grs. per ton.

The fall is attributed partly to the gradual exhaustion of the tailings stocks, which now only require two furnaces instead of four, and partly to the quartz from the neighbourhood of the crosscourse at the 718-foot level, being actually poorer, but this has since then returned

to its normal richness. When the new battery is finished, it is considered that sufficient concentrates will be produced to keep the full number of furnaces at work regularly.

The total amount of gold obtained since the formation of the company is 528,269 ozs. 3 dwts. 7 grs., from 441,215 tons quartz crushed; value, £1,935,719 7s.; paid in dividends, £754,071 15s.

The Moonlight-cum-Wonder Mine employs 24 men. The shaft is down 800 feet; a north crosscut has been driven 40 feet from the shaft at the 800-foot level, and a south crosscut 22 feet. At the 614-foot level, the south crosscut is in 355 feet, but only bunches of quartz in the country-rock have been intersected. The crosscut N. at the 800-foot has lately been passing through a wide band of mineralised country, containing 14 dwts. 6 grs. silver per ton, small percentages of copper, lead, zinc, and traces of gold and antimony. An assay of the clean pyrites left after panning returned 2 dwts. 12 grs. gold, 10 dwts. 6 grs. silver, per ton. It is intended to drive east on this formation.

The Tasmania West Extended and the Amalgamated West Tasmania Companies are considering amalgamation. The history of the former mine, briefly, is that a lode was cut in the 180-foot level, but not payable, and the shaft was carried further down to 290 feet. A crosscut level was then opened out at 280 feet, and driven 123 feet to date. The reef is expected to be cut within the next 40 feet.

The North Tasmania Mine has been worked by a party of tributors, who have raised six tons of quartz, returning 20 ozs. 5 dwts. free gold and 4 ozs. by chemical treatment.

The other tributors and prospectors on the field have won—

103 ozs. 6 dwts. free gold.

24 ozs. 14 dwts. by chemical treatment.

78 ozs. 12 dwts. alluvial gold.

The Duchess of York Prospecting Association has been formed in Launceston to prospect the old Gladstone tunnel workings at the south end of the Beaconsfield Blue Tier. The old history of the mine is repeating itself; lumpy gold has been found in soft gossan, and the discovery caused a mild sensation. With one man at work, 50 ounces of gold were brought to town. The formation itself is ill-understood.

LEFROY.—78 men were employed on this field. The New Pinafore Company crushed no stone during the quarter, but obtained 88 ounces of gold by treating their copper-plates and 63½ ounces by cyaniding. The only other produce of the district was 46 ounces of bullion won by Johns Brothers' Cyanide Syndicate.

J. Laird and Son, at the Industry, crushed 24 tons of quartz at the New Pinafore battery, but no gold return was reported before the end of the quarter; a portion of their works is now closed down.

West Laird P.A.—Prospecting has resulted in the discovery of rich stone in a shallow shaft, 12 inches to 18 inches wide, estimated at 1

ounce per ton. Of the 11 prospecting parties at work, 3 suspended operations at the end of the quarter.

The New Pinafore Company is still exploring at the 1200-foot level. Quite lately, the prospects have greatly improved, in consequence of solid stone over 4 feet in width having been cut at the bottom level. Exploration is to be continued energetically, and the intention is to get Government to continue assistance to test the deep western ground under where the good gold was found at shallower levels in times past. The future of Lefroy depends, as far as can be seen at present, upon the success of the deep work at the New Pinafore. The discovery of gold in depth will alone save the field from being abandoned to intermittent prospecting work.

LISLE.—The usual amount of alluvial digging has gone on. The Lisle dredge is at work, and, at the start, was estimated to be lifting 40 tons per hour. The first partial clean-up was in October—65 ounces.

WARRENTINNA.—On Bayley's Leases, the erection of a battery is nearly finished, and crushing will shortly commence.

MOUNT VICTORIA.—The New Mercury tributors crushed 45 tons of quartz for 82 ounces gold. Seven miners were employed here. A good body of stone, 2 feet wide, showing gold, has been met with 40 feet below previous work.

The Canton, re-christened the Long Struggle, has started a five-head battery, and is stoping and driving on good-quality stone.

MATHINNA.—At the New Golden Gate, the south end, at the 1400-foot level west, is being advanced on 6 feet of payable quartz, which, in places, has been much wider. This lode has not been cut above. The new make of stone discovered at the 1000-foot level has been followed up to the 600-feet, and is a fine, strong, high-grade reef. The stopes over the 1200-feet are in solid payable stone, over 20 feet in width. The main shaft is being sunk from 1400 feet to 1600 feet, when levels will be opened out. The Wilfley concentrating tables and the cyanide plant are working well.

At the Volunteer Mine, a good block of stone is being opened up at No. 1 level on No. 1 lode. A winze is being sunk on another lode of variable quality, which, eventually, will be cut by a crosscut from No. 2 level.

The East Volunteer is starting to drive their bottom crosscut, with a view of proving the mine. The delay in unwatering has been due to non-arrival of gear when expected.

New Golden King.—The prospecting shaft is 65 feet deep, and at the 25 feet level the reef is 2 ft. 6 ins., showing evenly-distributed gold. To the west, the main shaft is down 80 feet, and the intention is to sink to 120 or 130 feet before driving east to cut the lode in the

bottom level of the prospecting shaft. Sixteen men are employed, and the results of a 30-ton crushing will be known directly.

The Old Yellow Boy section is east of the East Volunteer, and is to be further prospected. Fair gold was formerly won from this reef. On the old Golden Stairs, the reef has been sunk on a little, and has opened out to 2 feet; the stone prospects fairly. This is a north-and-south lode, said to be on the line of the New Golden Gate lode system. On Bailey's section, 5 or 6 miles N.E. of Mathinna, small lots of stone in former times gave good results. A tunnel is now being driven on the reef, to prove its value.

Hickson's drifted during the quarter into inextricable difficulty, and the winding-plant and battery have had to be sold. The company is to be revived or incorporated with a new venture.

The revival of interest in the Mathinna field is unabated, and there is talk of foreign capital being introduced into some of the properties near the New Golden Gate. A few years ago, British money was invested in some of these, but funds were exhausted before completely carrying out all the necessary exploratory and dead work.

MANGANA.—The Golden Entrance Mine is looking well. During the past twelve months, 933 ounces of smelted gold have been obtained from 101 tons of stone treated in Victoria (value £3732). The average yield at present is somewhat over 1 ounce per ton.

FINGAL.—Four lodes have been proved to exist on the Fingal Reefs property, and two shafts have been sunk 50 feet, 10 chains apart. In the No. 1 shaft, a crosscut has been driven through the lode for 21 feet, and in No. 2 for 8 feet. Above No. 1 a large body of quartz is exposed, and a small rich cross-lode has enhanced the value of the main lode. Five tons of mineralised stone from the cross-lode have been treated at Jaques Brothers' Works, Richmond (Victoria), the result being 32 ounces smelted gold, equal to 6 ozs. 7 dwts. 21 grs. per ton.

BEN LOMOND.—The Bright Prospect has been driving north from the shaft, on good-quality stone.

NORTH-WEST COAST.—The Whyte River Company report having won 13 ounces gold to date. No value has been received for the osmiridium won with the gold; on the contrary, a charge is made for its separation. Logs and repairs have interrupted dredging work.

WEST COAST.—The King River P.A. has obtained an adjustable deflector, for increasing the effectiveness of the sluicing-nozzle. At the start, it worked successfully on the clayey face, bringing down 10 to 12 tons of dirt in half an hour. The race prospects are showing favourable examples of coarse ragged gold.

The Queen River Dredging Company has had to cease operations recently, but no report of the results of work has been received.

TIN.

The production of tin-ore at Waratah during the quarter has been 344 tons 1 cwt., from the following mines:—

	Tons.	cwts.
Mount Bischoff.....	336	14
West Bischoff.....	2	0
Stanhope Alluvial.....	2	7
Waratah Alluvial.....	3	0
Total	344	1

This output has provided employment for 248 men, all Europeans.

At the Mount Bischoff Mine, work was started the last week in the quarter on the alluvial on the north side of the hill. In the Brown Face most of the best dirt has been removed from the present working level; the stuff taken out lately has, owing to this exhaustion, been poorer. The other faces are as usual.

At Mount Rex Mine, the 20-head battery has been running on average stone. The first consignment of 25 tons ore was sent away in September, and has realised £1050 net. The underground faces are showing improvement, and some phenomenal lumps of tin-ore have been broken from No. 2 level, north end. Now that a profitable market is assured for the somewhat complex dressed ore (containing small percentages of lead and copper), a prosperous career is anticipated for this mine.

At the Briseis Mine, great activity prevails. The Briseis and Ringarooma faces are being opened up, and are exposing rich seams of tin. All preparatory work is being pushed forward, and it is anticipated that, early in the coming year, everything will be ready for raising full quantities of ore. In August and September, the rainfall was abundant, and contributed to the scouring out of the river near Derby.

Brothers' Home No. 1 is at full work removing the stripping. The mine is looked upon as one which will prove remunerative in the future, when the underlying stanniferous wash is treated.

At the Ringarooma Tin Mines, the pumps have been working satisfactorily since the beginning of July. The pumping-plant is a very fine one, with four Babcock and Wilcox boilers, and four horizontal duplex condensing-engines by Carruthers and Co., Glasgow. It is claimed that the pumps can force 30 heads of water to 150 feet in height.

At Ruby Flat, a Chinese syndicate is working a large area of alluvial, and is doing well. The Arba Mine is now raising some tin-ore. A few small mines in the vicinity of Moorina have been very successful.

The Pioneer will become one of the important mines of the Coast. The machinery is now nearly finished mounting, when the output will

be largely increased. The monthly raisings are expected to amount to 30 tons of black tin. During the last half-year, 65,200 cubic yards of wash were treated, the average mine working cost being sixpence per cubic yard. While waiting for the erection of the new centrifugal pump, the old one has been used, winning 66 tons of tin, of which 46 tons have been sold at a high profit.

The Weld output continues good, and the outlook is promising. Not much prospecting has been done during the wet weather, miners being busy winning tin while the water supply keeps good.

Races are being constructed in the Boobyalla district, to deliver water to mines which are about to be opened out there.

At the Star of Peace, near Weldborough, stripping has proceeded vigorously, and the outlook is promising. The Government has granted £150 towards making a good road from the Tin Pot Road to the mine.

The mines on the Blue Tier, near Lottah, have returned 67 tons of tin-ore during the quarter, and have employed 282 men, of whom 100 were engaged cutting the large race for the Anchor Company. At the Crystal Hill Mine, the new battery has been fixed, and preparatory work going on. At the Australian, work has been interrupted by overhauling and readjusting the plant. The Anchor battery has run full time whenever the quantity of water admitted of it. These mines on the Tier have at their command an unlimited quantity of low-grade tinstone, but, so far, have been dependent upon seasonal water supply, which has proved inadequate.

The St. Helens district has raised 12 tons 8 cwts. tin-ore, and employed 82 men. Two Melbourne companies have started recently—the Royal Ruby and the Ruby King. The former is working ground on the Golden Fleece Rivulet. The Ruby King is preparing for hydraulic sluicing, and making a large reservoir on Fern Tree Creek, high enough to provide the necessary pressure. They expect to have two or three faces going almost directly.

The Avoca district has raised 10 tons 15 cwts. tin-ore with 13 miners. The tin won on the South Esk claim is said to about pay expenses. About 17 tons have been raised in the half-year, but better returns are expected the next six months. The ground averages about 18 feet in depth, and has been worked two or three chains wide; it varies in quality a good deal, some being rich, other parts poor.

The Government borings along the valley of the Mussel Roe have been proceeding continuously, but, so far, they have not disclosed any run of stanniferous ground.

NORTH-WEST COAST.—At the Shepherd and Murphy Mine, Bell Mount, 427 tons of tin-ore stuff were raised, and 10 tons 11 cwts. mixed ore returned, consisting of tin, wolfram, and bismuth, the relative proportions of which are not attainable before treatment outside the State. The estimated value of the 10 tons is £420. Twelve miners have been employed on an average. The mine has now been let on

tribute, pending an attempt to get English capital into it, for which purpose two well-known metallurgical experts have recently examined it.

WEST COAST.—Tin-ore continues to be won from the creeks at North-East Dundas. The Commonwealth Tin Mine has 6 men employed, and has raised $2\frac{1}{4}$ tons of tin from alluvial workings.

SILVER.

WEST COAST.—The output of ore from the principal mines in the Zeehan division during the past quarter was:—

		Tons.	Value. £
Zeehan-Montana	galena.....	1003	17,654
British Zeehan	"	828	11,719
South King	"	610	3555
Silver King	"	606	3493
Western	"	559	5816
South Comstock	galena and zinc	300	450
Colonel, North	galena.....	90	970
Silver Bell	"	73	358
Silver Queen	"	70	400
Watt & M'Auliff	"	50	300
Oonah	"	38	250
Susannite	"	30	120
Smith's section	"	10	111
Sunrise	"	11	100
Western Consolidated	"	7	70
Union	"	5	60
Comstock	"	2	10
Hercules gossan and sulphide	.....	1910	7869
Curtin and Davis.	galena	18	150
Comet	"	380	3943
Perseverance	"	12	200
Kosminsky's	"	10	120
Great South Comet	"	2	24

The above mines employed 1026 hands. The principal mines have maintained their usual output, but, unfortunately, the low prices ruling for silver and lead have made it difficult for the Western Silver Mine to pay its way, and it has been recently shut down for a time, the intention being to re-float with fresh capital as soon as possible. The mine itself is reported as looking well, but, under present conditions, the ore cannot be worked profitably. The Minister of Mines, feeling the discharge of so many men to be a calamity, authorised the continuance of pumping operations for a short time, pending negotiations with the company, with a view of giving pecuniary assistance, and preventing suspension. These negotiations, however, fell through.

Sixty-eight tributors worked on the Silver Queen property the past half-year, obtaining $480\frac{1}{2}$ tons ore, which realised £2998 10s. 1d. It

is intended, during the coming year, to try and dispose of the mine satisfactorily. As the tribute parties have been very successful lately, there is some hope that this may be done.

Watt and McAuliffe have a good block of ground ready for stoping above the 80-foot level. It is intended shortly to resume sinking the main shaft, and to instal steam-winding and pumping plant. Work on a small scale has been going on here for the last three years, during which time over £5000 worth of ore has been sold. The results justify the additional outlay now contemplated.

The Oonah Mine is still being worked on tribute. The sales of ore for the last six months have been—galena and gossan, 112 $\frac{3}{4}$ tons, £783; stannite, 122 $\frac{1}{2}$ tons, £1181.

At the South King, eight stopes are in operation, and the dressing-plant is running full time.

COMSTOCK DISTRICT.—Prospecting and preliminary work are going on in this field, in view of the early completion of the tram-line from Zeehan. The Tasmania and South Tasmania sections are to be worked by the United Grand Syndicate. Good gossan and galena have been obtained from these sections.

DUNDAS.—The Comet Mine employs 64 men, and the work during the quarter comprised—shaft sinking, 30 feet; rising, 30 feet; driving, 40 feet; and stoping, 1381 feet. At Kozminsky's and the Great South Comet, work has been confined to picking over the old tip-heads. The Curtin-Davis Mine is being worked on tribute, with fair results; but more capital is needed.

The Ring Valley Mine has erected a new engine. The shaft has been sunk 100 feet, and 120 feet have been driven to cut the lode.

MOUNT REID.—The British Mount Reid Mine has closed down temporarily, it is understood, pending introduction of fresh capital.

At the Hercules Mine, stoping of gossan and sulphide ores has proceeded. During the half-year ending 31st July, the sulphide ore in sight in No. 3 lode is stated as having been increased by at least 2000 tons. The South lode intermediate has been worked, with satisfactory results. No difficulty is anticipated in completing the contract for delivery of the 10,000 tons gossan ore to the Dapto Works, for the deposit has proved wider than was calculated, and additional quantities of sulphide-ore have also been found to exist. During the half-year, 46,661 cubic feet of productive ground have been worked, and 2265 tons gossan and zinc-lead sulphide broken and sold, realising net £3 16s. 7d. per ton.

No bagging will be necessary in the consignments of ore to the Tasmanian Smelting Company, as delivery of the loose ore is taken at the foot of the mine tramway.

The workings below the No. 4 tunnel are estimated to have proved the existence of 20,000 tons 3 per cent. copper-ore, which will be doubled if the deposit extends downwards to a depth of 50 feet below the level of No. 5.

Tasmanian Smelting Company.—During the past quarter, the purchases have been 1888·111 tons of ore, containing 1004·352 tons lead and 73,642·85 ozs. silver. The bullion produced in the same period was 1070·780 tons, containing 1043·813 tons lead, 92,234·95 ozs. silver, and 213·137 ozs. gold.

NORTH-WESTERN DISTRICT.—At the Magnet, the construction of the tram-line has been pushed forward, 150 men being employed on this work, and it is expected that the plate-laying will reach the mine early in December, and the whole work finished for starting to ship ore in the beginning of next year. The total length of the tram is 10 miles, with a maximum grade of 1 in 25 on the straight. Two double bogie trucks of 16 tons capacity have been purchased from the Tasmanian Government. A station-yard has been built at the junction of the line with the Emu Bay Railway, 1½ miles from Waratah, with engine and goods-sheds, platforms, dwellings, tanks, &c.

The dumps of second-class ore have been systematically sampled and assayed, with the following results:—

	Silver per ton. ozs.	Lead. per cent.	Tons.
No. 1 dump.....	21½	8·4	1000
No. 2 N. dump	15½	5·8	1500
No. 3 S. dump	31	7·5	2500
No. 4 dump.....	21	6·3	6000
Average	<u>22½</u>	<u>6·7</u>	<u>11,000</u>

At the surface various work of a preliminary nature has been carried out. The water-race from the Magnet Falls has been cut for 16½ chains, and the fluming, 7 chains, is being prepared.

At Mount Farrell, considerable activity prevails in anticipation of a beginning being made by the Government with the laying of the tramway which is to connect the district with the Emu Bay Railway at the 21-mile peg. Substantial buildings are being put up at the township at the Mount, and some of the mining companies are preparing to work on a serious scale. Among these are the North Farrell, Mackintosh, and Murchison.

The Devon Mine has continued work on a limited scale. Its produce has been 18 tons silver-lead ore, declared as containing 15 dwts. gold, 221 ozs. silver, 10·2 tons lead, and worth £177.

COPPER.

Mount Lyell Mine.—The return of ore treated at the reduction-works during the quarter ending 30th September is:—

	Tons.	cwts.	qrs.	lbs.
Company's ore.....	79,287	19	3	12
Purchased ores	21,257	11	2	6
Metal-bearing flux from South Tharsis Mine	5726	5	1	10
TOTAL	106,271	16	3	0

and the quantity of metal produced was 2661 tons blister copper, containing—

	£	s.	d.
Copper, 2630 tons, valued at	176,210	0	0
Silver, 164,932 ozs.	20,616	10	0
Gold, 5244 ozs.	22,287	0	0
Total.....	£219,113	10	0

The number of men employed was:—

At the Company's Mount Lyell Mine	419
At the Company's South Tharsis Mine	38
At the Company's Royal Tharsis Mine	8
At the Company's Reduction Works	1221
At the Company's Railway	235
	1921

The main shaft was sunk to the end of the quarter to nearly 100 feet below No. 7 level, where another level will be opened out, and the good-grade ore of the south end of the deposit will be proved.

North Mount Lyell.—This mine has shipped from Pillinger during the quarter 1795 tons ore, valued at £21,540, and has sold to the Mount Lyell Company 21,540 tons, value £70,104. The number of men employed was:—

At the Mine	300
At the Smelters	330
On the Railway	130
	760

Two of the furnaces at Crotty were completed by the end of the quarter, and recently both have been started, producing matte of average value, stated at 55 per cent. copper, 32 ozs. silver, and 4 ozs.

gold. Large quantities of ore are being broken from the benches, and good stuff is coming from the stopes.

Mount Lyell Blocks.—The main shaft has been sunk a further 45 feet, and is down 475 feet. At 450 feet, prospecting continues on both sides of the shaft, in addition to which 2571 tons of 8 per cent. ore have been won from the stopes. The mine employs 107 workmen.

Lyell Tharsis Mine.—Seventy-six men are engaged. Stopping from the 50-foot and 100-foot levels, with the open cut workings, produced 6634 tons of ore, containing 4.87 per cent. copper. Work continues here with regularity, 90 to 100 tons of good-grade ore being sent daily to the Lyell Smelters.

Lyell Comstock Mine.—Twenty-six men are employed. The total measurements of driving, crosscutting, connections, and winzes have been 2850 feet. Three bodies of medium-grade ore have been opened, but little more can be done until better means of communication are available. The question of connection with the North Lyell Railway is believed to be under consideration.

Tasman and Crown Lyell Extended.—Seven men employed. The lowest adit is now in 520 feet.

Tasman Lyell Copper Mines.—Ten men employed. Two shallow adits have been driven, and the main crosscut from the North Mount Lyell's No. 1 adit has been extended 208 feet.

North Crown Lyell Extended.—Two crosscuts, totalling 1219 feet, have been driven. In the lowest one a small quantity of high-grade ore has been met with recently.

Great Lyell South Mine.—Twenty-three men employed. On section 793 the shaft is down 172 feet. At 168 feet another level has been opened out, and on other portions of the property trenching and driving has been going on.

Darwin and Jukes Field.—At the Mount Jukes Proprietary Mine, the ore-body in the No. 2 tunnel has been driven into 14 feet. It consists of copper pyrites associated with hematite. In the south drive the seam opens out in parts to 4 feet wide.

At the Jukes Consols and Darwin Proprietary, prospecting work continues.

Exploration work on this field is generally expensive, and is being carried on upon a very moderate scale. The North Lyell Railway and Smelters will, in the future, afford valuable facilities for the exploitation of this mineral belt, which, when better understood than at present, is likely to be an important copper-producing district.

Tasmanian Copper Company, at Rosebery.—Work on this property is still suspended, awaiting the final decision in London as to the process to be adopted for treating the complex sulphides. Some of the ore is awaiting trial by the Phoenix process, and lately the Butterfield process has been mentioned.

Mount Farrell.—The Kittson Blocks, south and adjoining the Osborne Copper Blocks, are being prospected, and some good specimens of copper ore are coming to hand. This, too, is a part of the country which deserves more attention than it has received hitherto, and it

may be expected to come to the front when tramway connection is effected.

COAL.

INGLIS RIVER.—The coal discovered is in the Parish of Preolenna, and was found in cutting a Government track from the Calder Road to the Arthur River. The seams have been visited by the Assistant Government Geologist, who reports them as three in number, the upper one being the only important seam. It is 20 inches to 22 inches thick, and some of it resembles the Barn Bluff Cannel coal. The Government Analyst's assays of samples, taken by the Assistant Geologist, are as follows:—

	Moisture. per cent.	Ash.	Gases.	Fixed Carbon.	Coke.
No. 1	1.2	5.8	42.0	51.0	firm
No. 2	2.2	3.5	65.8	28.5	rather tender
No. 3	1.1	8.8	47.9	42.5	tender

LATROBE.—Tests made of the dysodile, or Tasmanite shale, show that lubricating and other mineral oils can be extracted, and it is hoped that a profitable business will result. The deposit is a sandy shale, impregnated with vegetable spore cases, called *Tasmanites punctatus* (Newton), highly charged with oily matter. It belongs to our lower coal measures (Permo-carboniferous). An Adelaide syndicate is taking the deposit in hand.

RECHERCHE BAY.—At the Ramsgate Coal Mine, three seams of coal have been lately reported upon, and the Government Analyst's assay published as—

Fixed Carbon.	Ash.	Gases.	Moisture.
52.6	15.4	26.0	6.0

ST. MARY'S.—Another strike occurred for a week at these mines. Work has been resumed at the Jubilee Mine, north of St. Marys, where there is a solid seam of 6 feet good coal, divided by a 17-inch band. A tramway 3 miles is required to connect with the railway station, and, until the necessary capital is found for this, much cannot be done at the mine. At present cart-transport is used.

At Thorndale, near Thompson's Marshes, S. of St. Mary's, some coal seams are being taken up for further work. One of these is a 10-foot seam, divided into two by a 4-ft. 5-in. band.

LLANDAFF.—The Government bores are proceeding here. No. 1 bore has been completed. At 465 feet it entered solid granite. The coal intersected by the bore was—

ft.	in.	ft.	in.	
At 236	8	0	9	Coal
251	2	3	10	"
318	6	0	6	"
335	0	1	0	"
366	10	0	5	"
372	6	0	9	"

The 3-ft. 10-in. seam consisted of friable coal, of poor quality. The analyses made by the Government Analyst are as follow:—

Feet.	Fixed Carbon. per cent.	Gases. per cent.	Ash. per cent.	Water. per cent.	Coke.
236	35·2	20·1	43·0	1·7	rather powdery.
251	43·7	24·6	29·3	2·4	powdery
318	...	...	35·4	...	...
335	...	...	79·3	...	...
366	...	...	41·4	...	...
372	...	...	34·3	...	...

A second bore is being started at the foot of the Llandaff Range in coal-measure sandstone.

FARM COVE.—The company has suspended boring operations, but an attempt is being made to reconstruct the undertaking.

There is a feeling of uneasiness in the coal industry lest the entry of New South Wales coal into the State, duty free, under the Federal Tariff, should injuriously affect the output here.

The output of coal for the last quarter has been 16,705 tons, against 12,750 tons the preceding quarter, and 14,508 tons the corresponding quarter of last year. The following statistics give the quantities raised at the different collieries, and the number of men employed:—

Colliery.	Tons raised.	Men employed.
Mount Nicholas	8530	60
Cornwall	6207	65
Mount Cygnet	1260	12
Dulverton	333	11
Glen Leith	150	3
York Plains	140	2
ubilee.....	85	3
Total.....	16,705	156

Return showing the average number of men employed in or about the mines during the Quarter ending 30th September, 1901:—

District.	European.	Chinese.	Total.
North and South	835	...	835
North-East	553	168	721
East	889	82	971
North-West	398	...	398
West	3981	...	3981
	6656	250	6906

Value of the mineral output per man employed, £68 6s. 5½d.

The dividends paid during the Quarter were:—

	£	s.	d.
From Copper Mines	34,375	0	0
„ Gold „	15,400	0	0
„ Tin „	18,000	0	0
„ Silver „	2099	0	0
„ Coal „	1359	9	9
Total	<u>£71,233</u>	<u>9</u>	<u>9</u>