

MININD1904-4

THE PROGRESS OF
THE MINERAL INDUSTRY
OF
TASMANIA

FOR THE QUARTER ENDING 31st DECEMBER, 1904.

COMPILED BY

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BY ORDER OF

THE HONOURABLE C. LENNOX STEWART,

MINISTER OF MINES.



Tasmania:

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FOR THE QUARTER ENDING 31ST DECEMBER, 1904.

Launceston, 28th February, 1905.

THE following table shows, as far as can be ascertained, the quantities and values of Metals and Minerals raised during the quarter ending 31st December, 1904, compared with the previous quarter ending 30th September, 1904.

	During the Quarter ending 31st December, 1904.		During the Quarter ending 30th September, 1904.	
	Quantity.	Value.	Quantity.	Value.
		£		£
* Gold won ozs.	17,803·404	75,624	16,754·844	71,170
Silver Lead Ore raised ... tons	14,851	52,265	14,237	58,991
† Blister Copper produced ..	2016	149,004	2044	138,685
Copper Ore produced ... "	64	1320	...	...
Native Copper produced ..	212	14,416	...	...
Tin Ore produced..... "	871½	70,157	868½	66,798
Iron Ore produced	1900	750	2000	800
Coal produced	12,562	10,678	20,890½	17,757
Flux Ore produced	2180	933	3133	1523
Wolfram Ore produced... "	15½	1147	...	...
Bismuth Ore produced... cwts.	6	15	...	...
	...	376,309	...	355,724

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

† Value of gold contents deducted.

GOLD.

During the past quarter 8648 ozs. of gold were obtained from quartz, 172 ozs. from alluvial, 1400 ozs. by means of the cyanide and chlorination processes, 6261 ozs. from blister copper from the Mount Lyell Mining and Railway Company, Limited, 915 ozs. from the silver-lead bullion from the Tasmanian Smelting Company's works, Zeehan, and $1300\frac{1}{2}$ ozs. from the sulphide ores from Mount Read, valued at £75,624.

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 1903, and the previous quarter ending 30th September, 1904:—

	Gold obtained during the Quarter ending 31st Dec., 1904.						Totals corresponding Quarter, 1903.	Totals Quarter ending 30th Sept. 1904.
	From Quartz.	Alluvial.	Cyanide & chlorination.	From Blister Copper.	From Silver-lead Bullion.	From Sulphide Ores.		
	ozs.	ozs.	ozs.	ozs.	ozs.	ozs.	ozs.	ozs.
Beaconsfield	4241	23 $\frac{3}{4}$	691	...	...	4955 $\frac{1}{2}$ ₃₀	4698	4550
Mathinna ...	4263	...	539	...	...	4802	4542	4948
Mt. Victoria	27 $\frac{1}{2}$	3	...	...	...	30 $\frac{19}{20}$	98	130
Warrentinna	...	...	170	...	...	170	432	164
Lefroy .....	...	47	...	...	...	47	218	147
Lisle .....	...	...	...	...	...	116 $\frac{10}{30}$	48 $\frac{16}{30}$	282
Golconda ...	116 $\frac{1}{2}$	...	...	...	...	7	8	12
Mangana ...	...	...	...	...	...	...	...	...
Bell Mount.	...	...	...	...	...	...	...	...
Middlesex...	...	...	...	...	...	...	...	...
West Coast.	...	91 $\frac{5}{20}$	...	6261	915	1300 $\frac{1}{2}$ ₃₀	8567 $\frac{19}{30}$	6934 $\frac{16}{30}$
TOTALS	8648	172	1400	6261	915	1300 $\frac{1}{2}$ ₃₀	18,696 $\frac{14}{30}$	...
Totals corresponding Quarter, 1903.....	8189 $\frac{16}{30}$	347	1623	4777	1062 $\frac{16}{30}$	980	...	16,979 $\frac{13}{30}$
Totals for Quarter ending 30th Sept., 1904.....	8427 $\frac{1}{2}$	204 $\frac{3}{20}$	1659	6000	737	627 $\frac{4}{30}$	...	17,654 $\frac{16}{30}$

Value £75,624; equal to 17,803·404 ozs. fine gold.

—BEACONSFIELD.—Seven hundred and sixty-five men were employed on the field this quarter, of whom 35 were prospectors, &c. At the Tasmania Mine 7533 tons of quartz were crushed, and 4880

ozs. gold obtained (by amalgamation and chlorination), which makes a total from the first start of the mine of 530,451 tons quartz crushed, and 598,168 ozs. gold won.

Mr. C. F. Heathcote, the general manager, reports as follows:—The old temporary pumping plant at Hart's shaft has been removed. The foundations for the new pump, which is to be placed in that shaft, have been completed, as well as those for the winding engine and the steel headgear. The foundations round collar of new shaft, to be known as "Grubb's shaft," have been placed, the depth being 40 feet. This shaft is 32 feet 1 inch by 8 feet in the clear, and will contain one ladder, two pumping and two winding compartments. The three pumping engines to be erected have cylinders 50 and 108 inches by 10 feet stroke; they are designed to work to a depth of 2000 feet, with duplex 20-inch diameter rams. The combined delivery of water will be 8,000,000 gallons per day.

The winding engine at Hart's shaft is a cross compound, with cylinders 26 and 43 inches diameter by 54 inches stroke, drums 14 feet diameter by 5 feet face, and is capable of lifting 6 tons, exclusive of rope, at 2000 feet a minute. The headgear has a span of 50 feet, and the height of pulley centres is 105 feet, the main landing stage being at 43 feet above surface level. Four Babcock and Wilcox boilers of 500 h.p. each have been installed with superheaters and economizer. The steel chimney-stack, which is now being erected, will be 180 feet high by 9 feet diameter, and will serve one-half of the new boiler-house, which is being so erected that automatic stokers can be installed at a later date.

The old main shaft has been sunk to a depth of 915 feet, and the 900-foot level has been driven east a distance of 400 feet, maintaining the average value shown in the higher levels, the average width of quartz being between 7 and 8 feet, and the average width of lode between 10 and 11 feet. Seven hundred and twenty-six men were employed.

North Tasmania Mine.—Wilson and Manion's tribute party continues work at the intermediate on a small lode, only 2 or 3 inches wide. Fifty-two ozs. of gold were obtained with four men.

Bonanza Mine.—Sinking still proceeded with; shaft down nearly 500 feet.

Tasman-Ophir Mine.—The directors' half-yearly report to the 31st December states that during the six months the drive at the 400-foot level from main shaft has been extended 61 feet, but as no gold was found, the sinking of the prospecting shaft was resumed, from which a drive was opened out at 100 feet, striking wash with prospects averaging 2 to 3 dwts. per ton. The best wash having dipped underfoot, a rise was put up from the 129-foot level to connect with the deposit. This rise is up in brown wash, prospecting about 2 dwts. per ton, and when the connection is made, it is hoped that large quantities of wash will be raised and treated profitably.

MINERAL INDUSTRY

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

	Gold produced, ozs.	Men employed.
New Pinafore	131	24
Gray and party	32	3
Prospectors and others	7	21
	<u>170</u>	<u>48</u>

The New Pinafore Company has relinquished deep mining and is prospecting several reefs at surface. Prospecting is also being carried on by the Digney Association at the Volunteer, by Weetman and Crockford at the Reward reef, and by White and Son north of Chums reef. Lanham and Sons and Ponting Bros. are working alluvial; King and Gray's parties are working the West Chum and Volunteer tailings; and the Simpson P.A. is putting up machinery.

LISLE.—The Dredging Company's output was 47 ozs. gold with 18 men.

Mt. VICTORIA.—The quarter's output was as follows:—

	Quartz crushed. tons.	Gold produced. ozs. dwts.	Men.
Long Struggle	22	27 6	4
Brown and Party .....	...	...	6
M'Caul Bros. ....	...	...	2
Krushka's Freehold ....	...	3 0	1
	<u>22</u>	<u>30 6</u>	<u>13</u>

MATHINNA.—The following are the statistics for the quarter:—

	Quartz crushed. tons.	Gold produced. ozs.	Men.
New Golden Gate	4820	3429	} 150
" " " Sand treated (5511 yds.)...	...	539	
Volunteer	960	223	54
Tasmanian Consols	700	476	36
Volunteer Consolidated...	130	100	32
Volunteer Consolidated Extended	40	25	12
King Edward	30	10	6
Miner's Dream .....	...	...	4
Other Companies, &c. ...	...	...	21
Total	<u>6680</u>	<u>4802</u>	<u>315</u>

The New Golden Gate has continued to yield stone in quantity and quality exceeding expectations; but the manager (Mr. Thos. Andrews) states that in accomplishing this the reserve of payable stone in the mine has been to some extent reduced. He hopes, however, very

shortly to discover the reef south of the No. 2 main slide, whereby the reserve of stone is expected to be greatly increased. The electrical pumping plant, which was ordered through Messrs. Siemens Bros. & Co., Limited, in December, 1903, has arrived at the mine, and is being erected. The directors state that its installation will afford additional facilities for economically working the mine.

Volunteer.—Mr. W. G. Good, manager, reports on the half-year's work, as follows:—Development work has been continued by completing the sinking of the main shaft to 418 feet from surface; a drive north, at 330 feet, on a reef averaging 3 feet, for a distance of 180 feet. The face is at present in broken country, with a few inches of stone on hanging-wall. Three rises have been put up from this level. A level has been driven 45 feet north, at 400 feet, in the reef formation, but so far solid stone has not been met with in the ore-channel in this drive, excepting a little where the crosscut passed through it.

The total quantity of quartz raised from the beginning is 7590 tons, which have yielded 2282 ozs. gold, being an average of 6 dwts. $\frac{1}{2}$ gr. per ton, and which realised £8128 8s. 7d.

Volunteer Consolidated.—The latest news from this mine is that the new battery is approaching completion. An effective water supply is stated to be assured. A lot of stone has been broken from No. 4 lode, the junction of Nos. 4 and 6, and No. 5. A block of stone has been opened up west, 125 feet long and 18 inches wide, of good quality.

Volunteer Consolidated Extended.—Driving east on No. 1 lode at the bottom level, on small but good quality stone.

Victorian Golden Gate.—This comprises two 10-acre leases, $\frac{1}{4}$ mile south-west of the New Golden Gate, and was first prospected about thirty years ago, and has been worked since at various times. At the beginning of 1904 the present company started operations, and the prospecting work done has proved to be of an encouraging nature.

MANGANA.—

	Crushed. tons.	Gold produced. ozs.	Men employed. No.
Golden Entrance	43	116 $\frac{1}{2}$	5

The lease is worked on tribute.

WEST COAST.—*Coronation Mine.*—Work has been continued in the 70-foot level, and the south drive extended 80 feet on a large make of stone, which contains small patches of exceptional richness. Men employed, 5.

May P.A., Lynchford.—This property is situate above the Princess River's Bridal Wreath Falls, and is being opened up satisfactorily. A good body of stone exists, 80 tons of which are again at grass. Any of this stone will give payable dish prospects. A 5-head battery has been secured, and would have been erected but for a claim of the site by the Queenstown Town Board as a pleasure reserve. Men employed, 4.

Woody Hill Mines.—Two men employed. W. and T. Murray anticipate successful results.

Alluvial Mining.—Parties of fossickers continue work on the mountain ranges, Mc'usack's Creek, Flannigan's Flat, and other localities. These numbered 28 altogether, and 91½ ozs. alluvial gold were purchased locally.

TIN.

The output of tin ore at and near Waratah during the quarter was as follows :—

	Tons.	Cwts.	Men employed.
Mount Bischoff	318	0	235
Waratah Alluvial.....	2	15	3
Stanhope Alluvial	2	10	3
Wombat Mine	1	15	4
Weir's Surprise	0	0	6
Total	325	0	251

Mt. Bischoff.—Mr. H. W. Ferd. Kayser's report for the six months ending 31st December, shows that 636 tons tin ore were obtained, bringing the total since the formation of the company to 63,502 tons 18 cwts. 2 qrs. 2 lbs. The quantities treated during the six months were :—

	tons.	cwts.	qrs.	
60-head battery, 42,283 tons stuff, producing...	385	19	2	dressed ore.
15 " 11,597 " " ...	154	7	3	"
Slime sheds	82	11	3	"
Ring-tail sheds.....	13	1	0	"
Total	636	0	0	"

The average percentage of ore obtained from the whole mine was 1·180. The reduction of ore by the stampers was 4·92 tons per stamp-head per 24 hours. The cost of mining, crushing, and dressing a ton of stanniferous material was as follows :—

	s.	d.
Mining, including new works and maintenance	2	9·572
Filling, hauling, and emptying trucks	0	4·642
Crushing, dressing, and maintenance of plant	0	9·386
Slime sheds.....	0	1·048
Ring-tail sheds	0	2·191
Management and supervision	0	7·222
Plant	0	1·417
Development and progressive work	0	5·940
(Of this, 0s. 3·665d. has been expended on diamond-drilling)		
Waterworks	0	0·042
Ore-bagging	0	0·424
Stores	0	5·841
Sundries	0	0·588
Total.....	6	0·813

At the beginning of the half-year, the Diamond Drilling Company had reached a depth of 503 feet in No. 3 hole. Since then 747 feet have been bored, making a total depth of 1350 feet. Numerous veins of pyrites have been passed through, but nothing of any commercial value. Boring is being continued.

Weir's Bischoff Surprise.—At Mt. Bischoff, at the foot of the northern slopes of the mount, the old Phoenix flats have been taken up for working. The reports state that the wash averages 16 feet in depth, estimated as worth from $3\frac{1}{2}$ to 5 lbs. tin oxide per cubic yard. The wash carries varying proportions of stones, boulders, and gravel wash, and can, it is believed, be easily and profitably handled.

NORTH-EASTERN DIVISION.—The output in this division has been 358 tons 7 cwt. and the number of men employed was 575.

The returns for the Ringarooma district were as follows:—

	Tin Ore obtained.		Men employed.	
	tons.	cwts.	Europeans.	Chinese.
Star of Peace Co.	0	1	1	...
Mammoth Co.	0	3	2	...
Hope Creek Claims	1	14	2	...
Dorset Claims	0	18	4	...
Cascade Claims	4	9	16	5
Maurice Claims	2	5	9	...
Black Creek	3	19	14	...
Tin Pot Creek	0	17	2	...
Total	14	6	50	5

PIONEER AND GLADSTONE DISTRICT.—The quarter's returns are as follows:—

	Tin ore obtained.		Men employed.	
	tons.	cwts.	Europeans.	Chinese.
Pioneer Mine.....	79	11	47	...
Scotia Mine	38	0	14	...
Garibaldi ..	14	8	12	7
Ruby Mine.....	4	0	5	13
Wilberforce Pump.....	4	0	4	...
South Mt. Cameron Co. ...	...	...	18	...
Mussel Roe Claims	6	10	21	...
Gladstone Claims	1	19	7	4
Pioneer Claims	5	6	2	23
Mount Horror	1	9	3	...
Boobyalla .....	...	16	3	...
Mount Cameron .....	...	8	2	...
Garibaldi.....	2	9	...	12
Ringarooma River.....	...	...	...	4
Wyniford River.....	4	9	...	22
Total	163	5	138	85

The Moorina Deep Lead Company is boring on the flats between David's Creek and the Pioneer, opposite the O.K. Creek, where an old lead is supposed to cross the line of the Ringarooma River.

There is a large basin of deep ground here, and what is required is to find in it a deep channel, where the wash will very likely be payable.

MOORINA DISTRICT.—The following is the output for the quarter:—

	Tin ore obtained.		Men employed.	
	tons.	cwts.	Europeans.	Chinese.
Native Youth Tin Mine	8	10	10	...
Moorina Tin Mine.....	7	10	7	...
Moa Tin Mine	5	8	7	...
Weld Tin Mine	4	16	7	...
Other Claims	2	8	4	1
Total	28	12	35	1

DERBY DISTRICT.—

	Tin ore obtained.		Men employed.	
	tons.	cwts.	Europeans.	Chinese.
Briseis Tin Mines	107	19	160	...
Briseis Extended .....	...	...	3	...
Main Creek and Cascade Mines	12	12	12	17
Total	120	11	175	17

BRANXHOLM DISTRICT.—

	Tin ore obtained.		Men employed.	
	tons.	cwts.	Europeans.	Chinese.
Arba Tin Mine.....	18	18	36	...
Ruby Flat.....	12	4	7	22
	31	2	43	22
Little Mount Horror	0	7	1	...
Tin Pot Creek.....	0	2	2	...
Black Creek.....	0	2	0	1
	0	11	3	1
Total North-Eastern Division	358	7	444	131

During the quarter considerable attention has been paid to the Gladstone field. Torley's claim, on the Mussel Roe fall, where the Government bores disclosed tin-bearing drift on what was assumed to be the course of the old Mussel Roe lead, is being prospected. Torley removed his workings to the proximity of the Government bore line, and, after working some time on profitable drift, disposed of his interest to a Launceston syndicate, which, under the name of the Cybele Co., is testing this and the neighbouring ground. The same syndicate is also interested in ground near the Scotia.

The Gladstone Tin Development Company has leased the flats on the Ringarooma River from Gladstone for several miles towards the mouth for dredging purposes, and is testing the ground by bores.

Briseis Tin Mines.—Mr. Lindsay Clark, general manager reports :—Overburden removed during the quarter—

From Briseis property	174,350 cubic yards.
From New Brothers' Home, No. 1....	16,845 "
Total.....	<u>191,195 "</u>

Drift removed, 55,200 yards.

Briseis Extended Tin Mines.—This property is in the Ringarooma Valley, between the Briseis and Arba Mines, and was worked twelve or thirteen years ago by the Ringarooma Valley Company, who operated in a very primitive way, and took out a good deal of ore. There is no over-burden; the deposit appears to be an embayment of the main lead, and the new company expects, with a modern dredging plant, to do profitable work.

EASTERN DIVISION.—The statistics for the quarter show 165 tons 19 cwt. tin ore raised and 380 men employed. The particulars are as follows :—

	Tin ore obtained.		Men employed.	
	tons.	cwts.	Europeans.	Chinese.
<i>Weldborough Mines.</i>				
Weldborough Tin Mine	2	15	5	...
Weldbrook Tin Mine	1	7	2	...
R. B. Inglis	2	6	—	5
Chinese leases and claims ...	8	1	...	50
Other claims.....	15	8	30	...
Total	29	17	37	55
<i>Lottah and Blue Tier Mines.</i>				
Anchor Mine	48	7	115	...
Australian Mine	1	1	4	...
Liberator and Cambria	0	17	3	...
Woolley Bros., Crystal Creek	1	10	2	...
Other Claims.....	3	10	13	7
Total	55	5	137	7
<i>St. Helens Mines.</i>				
Royal Ruby	6	17	14	...
Thureau's Deep Lead	6	13	10	...
Hunt P.A.....	0	15	4	...
Paul Beahr, Scamander .....	...	...	3	...
Other claims	6	2	38	1
Total	20	7	69	1
<i>Avoca Mines.</i>				
Mount Rex	50	15	50	...
South Esk	9	6	12	...
Dalrymple.....	Wolfram	...	12	...
Other Claims	0	9	3	...
Total	60	10	74	...
<i>Total Eastern Division.....</i>	<u>165</u>	<u>19</u>	<u>317</u>	<u>63</u>

At Weldborough, the Weldborough, or Laffa Mine, as it is locally called, has raised about £700 worth of tin to date. Considerable expenditure has been incurred in putting the mine into a position to produce. Two thousand feet of piping have been laid, and a tunnel 1000 feet long has been driven to give an outlet for the tail-race. The length of the workings is about 18 chains at the head of the Main Creek. Soft leaders, carrying tin, run through the decomposed granite, in which the workings are situate. The soft ground goes down some 30 feet below the floor of the present excavation, which is 15 or 20 feet from surface. Work at present is cramped for want of funds, but the prospect justifies more vigour being put into the enterprise.

Ancho Mine.—Mr. J. B. Lewis manager, reports:—The tin ore raised this quarter has been 48 tons 7 cwt.; 31,110 tons of stone have been quarried and treated at an average cost of under 2s. 4d. per ton, and with a saving of 80 per cent. of black tin as tested by automatic sampler. The output has been low, as arrangements are not yet completed for working recently prospected ground. New works for the quarter include the completion of regulating reservoir on the Marie Louise, and short race to bring water into it. This was constructed to regulate water supply for driving stone-crushers, and has so far answered its purpose, as without it the mine would have had to shut down at least a month. Erection of new Heclon crusher and re-arrangement of crusher plant is not yet completed. The crusher will take stones of over 2 cwt. and will break 60 tons per hour to about road metal size. From this the stuff will pass to the two existing Gates crushers, which will be arranged to reduce it further to about $\frac{3}{4}$ in. diameter, thus reducing work to be done in battery, wear on shoes and dies, &c., and increasing its capacity. A new storage bin has been constructed to hold a reserve of ore, and to permit labour in the faces to be better regulated. The dry winter, spring, and dry summer, together with continuous heavy winds, have reduced the water supply considerably, so that for some weeks the battery has seldom been able to run full power.

WEST COAST.—The quarter's output was:—

	Tons.	Cwts.	Men employed.
Mayne's Tin Mine	11	0	11
Tasman River	2	5	3
Connor's	1	0	3
Other claims	8	5	24
Total	22	10	41

Tasman River.—Capt. W. Fisher reports:—The present face, 200 feet wide by 7 feet of wash, has become poor, only averaging $\frac{1}{2}$ oz. tin per dish. It is intended to prospect further up the flat, and, if payable, open up another face.

SILVER.

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

	Ore.	Tons.	Value.	Men.
<i>Zeehan Mines:</i>			£	
Mount Zeehan, Tas.	galena	1117	9236	180
Zeehan-Montana	"	964	11,329	220
Florence	"	188	1857	50
Oonah	"	27	151	14
"	stannite	47	426	
South Comstock	galena	46		
"	zinc ore	84	740	20
Zeehan-Western	galena	43	489	
"	flux ore	113	50	37
"	gossan	114½	284	
Zeehan-Queen	galena	94	735	41
Silver Queen Extended	"	14	93	10
Nubeena	"	90	923	15
Silver King	gossan	45	156	3
Watt and M'Auliffe	"	131½	1076	6
New Mount Zeehan	galena	31	150	7
<i>Dundas Mines:</i>				
Hercules	zinc-lead	2207	2779	121
"	zinc-blende	2416	7365	
Comet	galena	255	1405	40
"	gossan	1209	674	
West Comet	flux ore	1900	800	30
Fahl Ore	fahl ore	92	1119	14
Red Lead	flux ore	167	83	5
<i>Rosebery Mines:</i>				
Primrose	galena	1505	1336	28
"	zinc ore	536	1309	
<i>Mt. Farrell Mines:</i>				
North Mt. Farrell	galena	450	4300	75
Murchison	"	109	821	14
Tasmanian Smelting Co., Zeehan	.....	...	...	185
Other mines, &c.	.....	...	...	122
Total	.....	13,995	43,686	1237

Mount Zeehan (Tasmania).—Mr. T. Vincent, manager, reports:—Spray Mine has installed additional boiler power and is putting down new pumping plant to drain No. 4 level. No. 3 level, No. 1 lode south 340 feet, payable. No. 3 lode, cut in crosscut 600 feet, drive north 130 feet, lode poor. One hundred and forty feet ahead, winze from upper level down 120 feet, payable. No. 6 shaft waiting for new boiler from Salisbury's Foundry Company.

Zeehan-Montana.—Mr. J. Craze, manager, reports:—Development sinking of No. 1 shaft has been started, which is now 52 feet below No. 6 level (600 feet). What is believed to be Clark's lode in the west crosscut has been cut, but so far the lode is very broken. A

drive is now going south from the crosscut, and the lode looks more settled and carries a little galena; this is at the 200 feet, or No. 2 level. A larger winding engine has been put into position at No. 2 shaft and a 14-inch plunger pump put in at No. 2 level, and sinking will be commenced shortly.

Zeehan-Western.—Mr. J. Craze, manager, reports:—Little or no exploratory work has been done during the past quarter. The main shaft has now reached a depth of 800 feet. It is intended to open out both east and west of the shaft. At about 18 feet the crosscut west will probably cut a branch of the main lode, which broke away at No. 8 level and has been cut at Nos. 9 and 10, showing carbonate of iron, and, at No. 10 level (700 feet), a little copper pyrites. The east crosscut will probably cut the main lode at about 70 feet from the shaft. It is intended to prospect the main lode at No. 9 level by rising through to No. 8; a little copper pyrites shows in it. This rise will be under the chute of ore recently found at No. 8, where there is a fair lode in the bottom, and it will probably open out some payable ground between the two levels.

Oonah.—Capt. W. Fisher, manager, reports:—Stannite: Work has been confined to stoping between Nos. 4 and 3 adit levels, which stopes will shortly be exhausted. The south end on main lode is being driven for another chute of metal. Gossan tunnel workings have closed for some time, but with the present prices of silver and lead will be payable, and work has been started on 50 ozs. sulphides over the level going north.

Zeehan-Queen.—Mr. T. H. Vincent, manager, reports:—West drive on Clarke's lode advanced to 900 feet from crosscut, now showing a payable lode of galena and stannite. In No. 2 level, crosscut west driven 130 feet from No. 5 lode, and will intersect No. 3 lode in February.

Silver King.—Capt. W. Fisher, manager, reports:—Work has been chiefly confined to taking out patches of gossan left over the 30-feet level of the old South King gossan workings, stuff that can only be mined while prices of silver and lead are high, as at present. The heaps of seconds at the main workings will also now be sent to market.

Florence.—Mr. F. K. Astell, manager, reports:—Main shaft: No. 1 level south advanced to 240 feet. Last 60 feet the lode averages 6 inches firsts. Stoping and sinking are going on on this lode. At No. 2 level, crosscut in 20 feet to cut south lode; when cut, rise will be put up to connect with winze being sunk from above. Stoping is going on at this level on Currie's lode: Currie's level driven north 30 feet.

South Comstock.—Mr. H. Castle, manager, reports:—The work this quarter has been done by tributors, the ore being won from the tips and shallow surface workings.

DUNDAS AND MOUNT READ.—*Fahl Ore Mine, Ring Valley.*—Mr. John Moyle, manager, reports:—A moderate amount of stoping, driving, and rising has been carried on this quarter, and with very

fair results. The lode is variable in character and value, and it is believed that it would justify more extensive operations.

Hercules Mine.—Mr. Sydney Thow, general manager, reports that owing to the largely increased output of zinc blende concentrates from Broken Hill and elsewhere anticipated for 1905, the disposal of such material in European markets can only be effected with difficulty and at much increased cost for treatment.

Tasmanian Smelting Company, Limited.—Mr. P. Kunze, manager, reports:—Ore purchased during the quarter ending 31st December, 6602 tons, containing 1898 tons lead, 243,182 ozs. silver, 844 ozs. gold. Bullion exported: 1863 tons lead, 247,437 ozs. silver, 915 ozs. gold. During the last year systematic investigations have been carried out with a view to ascertain if, through improvements in plant and cheapening of cost of treatment, larger quantities of zinc sulphides from the Mount Read and Rosebery districts could be profitably treated. The experiments have shown that this is possible, and the new plant just put into commission, which will form the first section of more extensive systems contemplated, has fully corroborated the result of the previous experiments. For the economical treatment of sulphides the supply of metal-bearing flux is of great importance, and metallurgical results are improved through blending the refractory sulphides with galena. The conditions are favourable generally, and the natural advantages of the field should outweigh the great drawback caused by the costliness of coke, which has to be procured from New South Wales. The prospects of the metallurgical industry must be considered decidedly promising.

North Farrell Mine.—The No. 4 or bottom level workings have supplied most of the last quarter's output, and the directors state that the silver contents of the ore are appreciably higher than those of the ore previously mined. The published accounts show that the total output of ore at this mine to the 31st October was 4005 tons 17 cwt. 8 lbs., averaging 64·51 ozs. silver per ton and 60·02 per cent. lead, of a net value at the mine of £31,498 2s. 2d., or £7 17s. 3d. per ton.

NORTH-WESTERN DIVISION.—The quarter's statistics are as follows:—

	Ore produced. tons.	Men employed.
Magnet Mine	2826	120
Long Tunnel.....	200	30
Washington Hay.....	5	3
Silver Cliff	5	3
Godkin .....	...	4
	<hr/> 3036 <hr/>	<hr/> 160 <hr/>

Magnet Mine.—The net value of the 2826 tons ore shipped this quarter was £8089. The shaft is to be continued down below the No. 5 level. The erection of the new concentrating mill has been proceeded with. During the quarter the company has declared a dividend of £2000.

Washington Hay.—Mr. H. P. McCreery reports :—North and south drives have been put in from the 40-foot rise from the lower level, showing a wide lode, which carries good milling ore all across, with bunches of clean galena in places, occasionally up to 8 inches in width. Eight tons of ore from this part were sent to the Zeehan smelters; the firsts realised up to £22 10s. per ton and the seconds £14 7s.; but the heavy freight charges are a serious handicap. About 100 tons of milling ore have been raised. A new level, 93 feet above the old one, has been driven 80 feet south into the hill towards the main shaft, which is about 200 feet ahead of the face. The drive has passed through nice gossan, with a little clean galena and disseminated carbonate of lead. Further capital is required to test this mine.

COPPER.

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

Ores and metal-bearing fluxes treated :—

	Tons.	cwts.	qrs.	lbs.
Mt. Lyell Mine ore	77,776	0	2	15
North Lyell Mine ore	27,103	8	3	7
Purchased ores	223	11	1	10
	105,103	0	3	4
By-products from Crotty Smelting Works	0	16	3	18
Metal-bearing fluxes from North Lyell Mine	2012	9	2	16
Cupriferous clays, North Lyell Mine	6	5	0	15
	107,122	12	1	25

Quantity and value of metal produced—

Blister copper, 2016 tons, containing—	£	s.	d.
Copper, 1991 tons, valued at	128,461	6	3
Silver, fine, 181,031 ozs., valued at	20,542	9	10
Gold, fine, 6261 ozs., valued at	26,609	5	0
Total value	£175,613	1	1

Number of men employed—

At the Company's	Mt. Lyell Mine	296
"	North Lyell Mine	470
"	Lyell Tharsis	10
"	South Lyell	4
"	Reduction Works	1002
"	Mt. Lyell Railway	137
"	North Lyell Railway	25
	Total	1944

The usual pyritic extraction at the Iron Blow continues from the open-cut faces, of upwards of 1000 tons per day; but even with this huge exploitation, accompanied by a removal of a similar quantity of overburden, only a slight diminution of the main ore-body is noticeable by a constant observer. The chief attack is directed to the north-western escarpment of the deposit.

At the North Lyell, the Lyell Tharsis property has been acquired, and in pursuance of a fixed policy the Lyell Company has started vigorous developmental work, in consequence of which a profitable return from this source is anticipated during the coming quarter. The three open-cut faces contribute their quota of fair grade ore and fluxes for the smelters, in addition to supplying filling for the main stope workings underground. The work of most moment underground has been the completion of the main shaft to the 600-foot level, where chambers on both sides are being opened out. In addition to this, prospecting in various directions has been continued with the diamond-drill. High grade ore continues to be won from each successive level to the floor of the 200 feet, above which only one stope (A) is now being worked. In the Blocks main shaft, after clearing the debris, and reaching the contact at the 450-foot level, hand labour was replaced by the diamond-drill, which continues to bore into the contact and adjoining country.

At the Reduction Works, the first extraction is confined to four furnaces, through which is passed a tonnage exceeding anything in the past.

Lyell Blocks.—Underground work has been confined to the office tunnel and No. 1 level (Balance shaft) stopes. In both places enrichments of native copper have been met with. The quantity of cupriferos clay broken was 17,154 tons, containing 212 tons of native copper, valued at £14,416. Two hundred and twelve men employed.

Crown Lyell.—From the No. 5 level, the western crosscut has been driven 150 feet. The face is showing a change of country, which is looked upon as a continuation of the mineral-bearing belt which was cut in the upper levels. Twelve men employed.

Tasman and Crown Lyell Extended.—A lengthy inclined connection (243 feet) has been completed, between Nos. 3 and 2 levels, whereby many advantages are afforded for the more economical prospecting of this property. Six men employed.

Tasman-Comstock Consolidated.—Surface prospecting continued on the western fall of Mt. Lyell. Two men employed.

Copper Mines of Mt. Lyell West.—Arrangements have been made with the Diamond Drilling Company for prospecting.

Mount Jukes.—At Lake Jukes, Mr. H. S. Muir reports:—The winze from the 200-foot level is down 37 feet, carrying quartz veins, with a little gold and copper ore. Four men employed.

Ring River.—180 tons of copper ore, containing 22 tons of copper, were raised at the Ring River Mine. Ten men employed.

NORTH-WEST COAST.—*Hardstaff's Mine.*—At Hardstaff's Mine, at Dial Range, driving has been continued into the hill past the intersection of the lode, and it has now been decided to follow this lode down from the surface by deepening the winze at the outcrop.

Dial Mine.—At the Dial Mine, driving is going on through the pyritic contact breccia towards the slate wall. Iron pyrites exists in quantity, but little or no copper ore as yet.

Copper King Mine.—The Copper King Mine (Clark's) has sent out to date 42 tons of copper ore, which has returned between 11 and 14 per cent. copper at the smelters; but at present it is idle, pending the introduction of capital. Lately some ore of a still better grade has been exposed.

Rutherford's Mine.—At Rutherford's Mine a crosscut is being driven from the bottom of the 100-foot shaft to reach the lode, from which ore averaging 7 per cent. was obtained at higher levels in the old shaft.

Several prospecting shows have been started in the Blythe and Stowport districts, among which may be mentioned the Norton-Stowport, Commonwealth, North Commonwealth, Edwards', Smith's, Syce's, McKenna's, &c. Work has disclosed a little copper on each of these, but no active exploration is being carried on at present. The field generally is waiting for developments on the Rutherford and Copper King properties.

At Rocky Cape, Mr. J. Lee-Archer has sunk two shafts in a dyke which carries a little copper pyrites, but the work done has not been sufficient to test the value of the proposition.

COAL.

The output this quarter was 12,562 tons, against 20,890 $\frac{1}{4}$ tons the previous quarter. The raisings of the several mines were as under:—

Colliery.	Tons raised.	Men employed.
Cornwall	5664	80
Mount Nicholas	5514	65
Cardiff	32	4
Dulverton	121	4
Teasdale's, Dulverton	124	2
Spreyton	145	4
Illamatha (Spreyton)	120	4
York Plains	81	4
Sandfly	200	18
Mt. Cygnet	491	5
Catamaran	70	6
Total	12,562	196

On the Sandfly property the main tunnel has been driven 400 feet upon the seam without disclosing any fault, and efforts will now be made to construct the tramway to North-West Bay. Work has also been done at the entrance to the tunnel on the important No. 10 seam, which it is intended to open up and work.

IRON.

The quarter's output of the Tasmanian Iron Company's Mine at Penguin was 1900 tons. Sixteen men were employed.

WOLFRAM.

The production of this mineral has been as follows :—

	tons	cwts.
Dalrymple Mine, Ben Lomond	1	10
Other Ben Lomond claims	12	0
Middlesex claims	2	0
Total	15	10

Market values have had a downward tendency in consequence of over production. The output in Tasmania may be expected to continue to be a moderate one, and will be regulated by the prices obtainable, which will only remain remunerative if producers elsewhere keep their output within bounds.

CONCLUSION.

The values of output for the quarter show satisfactory increases for gold, copper, tin, bismuth, and wolfram, and the healthy tone of the metal market generally gives reason for anticipating a continued increase. It is anticipated that new copper and tin propositions, which are now coming to the front, will augment the output for the new year. In addition to the Oonah Mine, another mine at Zeehan—the Zeehan-Queen—has begun to produce argentiferous stannite (containing 72·4 ozs. silver, 12·4 per cent. copper, 6 per cent. lead, and 12·5 per cent. tin), an ore which only commands in the local market less than half the gross value of the metal contents. The attention of metallurgists in Europe may be invited to these complex ores, especially now, when good market prices offer a fair margin of profit for both producers and smelters.

The following return shows the average number of men employed in or about the mines during the quarter ending the 31st December, 1904 :—

District.	European.	Chinese.	Total.
Northern and Southern	928	1	929
North-Western	411	...	411
North-Eastern	457	131	588
Eastern	786	63	849
Western	3510	...	3510
Total	6092	195	6287

Value of the mineral output per man employed, £59 17s. 1½d.

The dividends paid during the quarter were :—

	£	s.	d.	£	s.	d.
From Copper Mines—						
Mount Lyell Mining and Railway Company.....	...			75,000	0	0
From Gold Mines :—						
New Golden Gate G.M. Co., N.L. ....	...			6400	0	0
From Tin Mines :—						
Mt. Bischoff T.M. Co., Registered ...	15,000	0	0			
Pioneer T.M. Co., Ltd.	4050	0	0			
Mayne Tin Mines, N.L.	1500	0	0			
South Esk Tin Mining Co., N.L.	560	0	0			
Wilberforce Pump Co., No. 1, N.L.....	75	0	0			
				21,185	0	0
From Silver Mines :—						
Mt. Zeehan (Tasmania) Silver-lead Mines, Ltd.....	7976	14	0			
Zeehan-Montana Mine, Limited	3333	0	0			
Oonah Silver Mining Co., Limited.....	1076	5	4			
Magnet Silver Mining Co., N.L.....	2000	0	0			
West Comet Pros. Syndicate, N.L.....	144	0	0			
				14,529	19	4
Total .....	...			£117,114	19	4