

MININD1906-2

THE PROGRESS OF
THE MINERAL INDUSTRY
OF
TASMANIA

FOR THE QUARTER ENDING 30TH JUNE, 1906.

COMPILED BY

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BY ORDER OF

THE HONOURABLE ALEC. HEAN,

MINISTER FOR MINES.



Tasmania:

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1906.



PROGRESS OF THE
MINERAL INDUSTRY OF TASMANIA
 FOR THE QUARTER ENDING 30 JUNE, 1906.

Launceston, 1st August, 1906.

The following table shows, as far as can be ascertained, the quantities and values of Metals and Minerals raised during the quarter ending 30th June, 1906, as compared with the previous quarter ending 31st March, 1906:—

| | During the Quarter ending 30th June, 1906. | | During the Quarter ending 31st Mar., 1906. | | |
|--|--|-----------------|--|-------------------|---------|
| | Quantity. | Value. | Quantity. | Value. | |
| * Gold won | ozs. | 17,385·886 | 73,842 | 19,718·78 | 83,760 |
| Silver-lead Ore produced | tons | 23,115 | 118,547 | 22,831 | 114,738 |
| † Blister Copper produced | „ | 2116 | 199,255 | 2298 | 217,342 |
| Copper Ore and Native Copper produced..... | „ | 463 | 16,072 | ‡ 710 | 12,405 |
| Tin Ore produced..... | „ | 1096 | 135,470 | 972 $\frac{3}{4}$ | 108,727 |
| Iron Ore raised..... | „ | 1200 | 500 | 1400 | 600 |
| Coal raised..... | „ | 13,091 | 11,127 | 10,719 | 9111 |
| Wolfram Ore produced... | „ | 5 $\frac{1}{2}$ | 375 | 2 | 140 |
| Bismuth Ore produced.. | „ | .. | .. | $\frac{6}{20}$ | 24 |
| ... | | 555,188 | ... | 546,847 | |

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

† Value of gold contents deducted.

‡ This was erroneously shown in the Report for the quarter ending 31st March, 1906, as 697 tons.

GOLD.

During the past quarter 8464 $\frac{1}{2}$ ozs. of gold were obtained from quartz, 358 ozs. from alluvial, 2591 ozs. by means of the cyanide

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and chlorination processes, 5297 ozs. from blister copper from the Mount Lyell Mining and Railway Company, Limited, and 841 ozs. from the silver-lead bullion from the Tasmanian Smelting Company's works, Zeehan, valued at £73,842.

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 1905, and the previous quarter ending 31st March, 1906:—

| | Gold obtained during the Quarter ending 30th June, 1906. | | | | | | Totals corresponding Quarter, 1905. | Totals for Quarter ending 31st Mar., 1906. |
|--|--|-----------|-------------------------|----------------------|---------------------------|---------|-------------------------------------|--|
| | From Quartz. | Alluvial. | Cyanide & chlorination. | From Blister Copper. | From Silver-lead Bullion. | TOTAL. | | |
| | ozs. | ozs. | ozs. | ozs. | ozs. | ozs. | | |
| Beaconsfield | 6956 | 252½ | 2432 | ... | ... | 9640½ | 7075¾ | 11,943 |
| Mathinna ... | 1273½ | ... | 40 | ... | ... | 1313½ | 2711¼ | 930 |
| Mt. Victoria | } 214 | } 28½ | } 31 | } ... | } ... | } 273½ | } 25 | } ... |
| Warrentinna | | | | | | | | |
| Mt. Cameron | ... | ... | 88 | ... | ... | 88 | 315½ | 112 |
| Lefroy | } 21 | } 35 | } ... | } ... | } ... | } 56 | } 45 | } 12 |
| Lisle | | | | | | | | |
| Golconda ... | ... | ... | ... | ... | ... | ... | 2 | ... |
| Bell Mount. | ... | 42 | ... | 5297 | 841 | 6180 | 6232 | 6826 |
| West Coast. | ... | ... | ... | ... | ... | ... | ... | ... |
| TOTALS | 8464½ | 358 | 2591 | 5297 | 841 | 17,551½ | | |
| Totals corresponding Quarter, 1905..... | 8432¼ | 113 | 1670½ | 6006 | 185 | ... | 16,406½ | |
| Totals for Quarter ending 31st Mar., 1906..... | 9935½ | 206 | 2899½ | 5893 | 889 | ... | ... | 19,823 |

Value £73,842; equal to 17,383·886 ozs. fine gold.

BEACONSFIELD.—The quarter's statistics for the district are as follows:—

| | Gold produced, ozs. | Men employed. |
|------------------------------------|---------------------|---------------|
| Tasmania Mine..... | 9313 | 747 |
| North Tasmania..... | 75 | 4 |
| Other Claims and Prospectors | 252½ | 32 |
| Total..... | 9640½ | 783 |

Tasmania Mine.—15,591 tons quartz crushed, and 9313 ozs. gold obtained (by amalgamation and chlorination), which makes a total of 613,924 tons quartz crushed, and 655,408 ozs. gold obtained since the mine was first started.

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

| | Gold produced, ozs. | Men employed. |
|--|---------------------|---------------|
| New Pinafore G.M. Co. | 88 | 14 |
| Others Claims and Prospector tors | — | 40 |
| Total..... | 88 | 54 |

Bell Mount.—Five men employed in gold-mining.

Lisle, Golconda, &c.—35 ozs. of alluvial gold have been won from the Lisle field, and 21 ozs. of gold from 25 tons quartz crushed at Wyengatta Mine, at Denison. Thirty-one men have been employed in these districts.

South Mt. Cameron.—28½ ozs. gold were obtained by the South Mount Cameron Tin Mining Company from 45 tons of tin oxide.

Mt. Victoria.—25 men were engaged in these mines, winning 245 ozs. gold from 244 tons quartz and sand treated.

MATHINNA.—The quarter's statistics are as follows:—

| | Quartz crushed, tons. | Gold produced, ozs. | Men. |
|--|--------------------------|------------------------|------|
| New Golden Gate | 507 | 315 | 45 |
| " from sand | ... | 40 | |
| Tasmanian Consols | 1972 | 900 | 78 |
| The Constant | 60 | 5 | 15 |
| Old City of Melbourne | 25 | 6½ | 3 |
| Other Claims and Prospector tors..... | 93 | 47 | 18 |
| | 2657 | 1313½ | 159 |

May Gold Mine.—Lynchford:—Two men are prospecting, but the result of their labour is not promising.

Woody Hills and Macquarie Mines.—Murray Brothers, at Woody Hills, are putting in an intermediate drive on a small but likely make of stone, that, when crushed, should yield satisfactorily; 7 men are working at these mines. Forty-two ozs. of alluvial gold are recorded for the quarter; of this, 26 ozs. were from South Darwin, and the balance was obtained from the Queen River, and near Harris' Reward. Seventeen men were occupied in this work.

TIN.

The statistics for this metal for the past quarter are as follows:—

| | Ore won. | | Men employed. |
|--------------------------------|----------|-------|---------------|
| | tons. | cwts. | |
| Northern and Southern Division | 3 | 0 | 18 |
| North-Eastern Division..... | 658 | 0 | 816 |
| Eastern Division..... | 99 | 2 | 401 |
| Western Division..... | 28 | 11 | 71 |
| North-Western Division..... | 307 | 7 | 341 |
| Totals | 1096 | 0 | 1647 |

NORTH-WESTERN DIVISION.—The output has been as under:—

| | tons. | cwts. | Men employed. |
|--------------------------------|-------|-------|---------------|
| Mount Bischoff | 284 | 0 | 270 |
| Mt. Bischoff Extended | 10 | 13 | 23 |
| The Stanhope Alluvial | 5 | 1 | 6 |
| The Waratah Alluvial..... | 4 | 0 | 4 |
| Weir's Bischoff Surprise | ... | ... | 12 |
| Others | 2 | 0 | 13 |
| King Island | 1 | 13 | 13 |
| Totals..... | 307 | 7 | 341 |

King Island.—A beginning has been made to treat the deposit of auriferous tin-bearing sands on the British Flag Company's mine, at the Fraser River. Mr. H. M. Rivett-Carnac, manager, reports:—The quarter's output was 1 ton 13 cwts. tin concentrates, containing 1 oz. 18 dwts. 8 grs. gold, worth £128.

Mt. Bischoff Mine.—Mr. H. W. Ferd. Kayser, general manager, reports:—The very dry summer which followed the rough spring affected the shed-work considerably, and from the end of January 20 head of stampers were idle, in addition to the total suspension of work for three weeks, from the 27th March to the 7th April, and then work could be begun on a small scale only. The quantity of crude ore treated during the half-year is as follows:—60-head battery, 29,007 $\frac{3}{4}$ tons, producing 369 tons 16 cwts. 1 qr. of dressed ore. The reduction of ore by the stampers, after allowing for holidays and drought, is 5850 tons per stamp-head per 24 hours. The percentage of ore from the whole mine is 1·811.

At the slime sheds the production totalled 66 tons 18 cwts. 2 qrs. of dressed ore for the half-year.

The same remarks apply to the ring-tail sheds, and considering the loss of time caused by floods in the river, the output of 13 tons 7 cwts. is fairly good.

The diamond-drill plant is at work, but so far nothing of any commercial value has been met with.

The work for the electric power scheme was commenced early in January, and the race from Waratah to the head of the pipe-line has been finished, the pipe-line cleared and formed, and the inclined haulage line to Ringtail, with a portable engine at its head, is now being laid. The excavation for the power station has been finished, and the foundation masonry is now being laid in cement.

The following particulars will show the cost of mining, crushing, and dressing a ton of crude ore for the past half-year:—

| | s. | d. |
|---|----------|---------------|
| Mining, including new work, maintenance, and other expenses | 3 | 1 745 |
| Filling, hauling, and emptying trucks | 0 | 5 900 |
| Crushing, dressing, and maintenance of plant..... | 0 | 9 646 |
| Slime-sheds..... | 0 | 1 182 |
| Ringtail sheds | 0 | 2 652 |
| Management and supervision | 0 | 11 081 |
| Plant, including all machinery | 0 | 0 389 |
| Development and progressive work * | 0 | 11 500 |
| Waterworks | 0 | 0 368 |
| Ore-bugging | 0 | 0 577 |
| Stores | 0 | 0 439 |
| Sundries | 0 | 1 276 |
| | <u>6</u> | <u>10 692</u> |

* Of this, 6 991d. has been expended on diamond-drilling.

Ore obtained since the formation of the company, 65,376 tons 18 cwts. 2 qrs. 2 lbs.

Total dividends declared to 30th June, 1906 (including No. 351), £2,061,000.

NORTH-EASTERN DIVISION.—RINGAROOMA DISTRICT:—

| | Tin ore won. | | Men employed. | |
|--------------------|--------------|----------|---------------|----------|
| | tons. | cwts. | Europeans. | Chinese. |
| Cascade River..... | 5 | 16 | 32 | 6 |
| Black Creek | 1 | 15 | 11 | 1 |
| Dorset River | 1 | 0 | 11 | ... |
| Dunn's Creek | 0 | 11 | 6 | ... |
| Tin-pot Mine | 5 | 17 | 15 | ... |
| Gorge Creek | 1 | 8 | 7 | 1 |
| Others | 0 | 18 | 7 | ... |
| Total | <u>17</u> | <u>5</u> | <u>89</u> | <u>8</u> |

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PIONEER AND GLADSTONE DISTRICT.—

| | Tin ore won. | | Men employed. | |
|------------------------------|--------------|-------|---------------|----------|
| | tons. | cwts. | Europeans. | Chinese. |
| Pioneer Tin Mine..... | 119 | 0 | 80 | ... |
| South Mt. Cameron | 14 | 13 | 32 | ... |
| Gladstone Dredge | 8 | 12 | 14 | ... |
| Ringarooma „ | 4 | 4 | 14 | ... |
| Cybele Tin Mines | 0 | 6 | 13 | ... |
| Scotia „ | 2 | 8 | 7 | ... |
| Grove's Claim | 2 | 7 | 4 | ... |
| Garibaldi „ | 2 | 13 | 4 | 5 |
| Ching Wing | 0 | 12 | ... | 10 |
| Pioneer Extended | ... | ... | 18 | ... |
| The Argus | 3 | 16 | 13 | ... |
| Other Garibaldi Claims | 14 | 15 | 58 | 21 |
| Mt. Horror Claims..... | 3 | 8 | 20 | ... |
| Boobyalla | 0 | 15 | 3 | ... |
| Garibaldi (Yee Gee)..... | 2 | 8 | ... | 15 |
| South Mt. Cameron Claims... | 0 | 17 | 1 | 3 |
| Pioneer (Kip Tit) | 0 | 8 | ... | 1 |
| Total..... | 181 | 2 | 281 | 55 |

South Mt. Cameron Tin Mine.—Mr. H. P. Cecil, manager, reports:—20,250 cubic yards of material were treated for 14 tons 13 cwts. tin ore. Quantities of tin-bearing wash are showing which, it is estimated, will take many years to treat.

DERBY DISTRICT:—

| | Tin ore won. | | Men employed. | |
|-------------------------------|--------------|-------|---------------|----------|
| | tons. | cwts. | Europeans. | Chinese. |
| Briseis Tin Mines | 252 | 10 | 150 | ... |
| New Brothers' Home, No. 1 ... | 112 | 0 | 33 | ... |
| Briseis Extended | 22 | 0 | 18 | 23 |
| Other Derby Claims | 3 | 2 | ... | ... |
| Total..... | 389 | 12 | 201 | 23 |

BRANXHOLM DISTRICT:—

| | Tin ore won. | | Men employed. | |
|------------------------------|--------------|-------|---------------|----------|
| | tons. | cwts. | Europeans. | Chinese. |
| Arba Tin Mine..... | 25 | 0 | 38 | ... |
| New Ruby Flat | 4 | 0 | 12 | ... |
| Other Branxholm Claims | 6 | 19 | 18 | 13 |
| Total | 35 | 19 | 68 | 13 |

MOORINA DISTRICT:—

| | Tin ore won. | | Men employed. | |
|----------------------------|--------------|-------|---------------|----------|
| | tons. | cwts. | Europeans. | Chinese. |
| Native Youth | 5 | 0 | 9 | ... |
| Weld Tin Mine Co. | 8 | 9 | 11 | ... |
| Other Moorina Claims | 11 | 10 | 33 | ... |
| Total | 24 | 19 | 53 | ... |

MT. STRONACH DISTRICT:—

| | Tin ore won. | | Men employed. | |
|---|--------------|-------|---------------|----------|
| | tons. | cwts. | Europeans. | Chinese. |
| | 9 | 3 | 25 | ... |
| <i>Total North-Eastern Division</i> | 658 | 0 | 717 | 99 |

EASTERN DIVISION:—

| | Tin ore won. | | Men employed. | |
|---|--------------|-------|---------------|----------|
| | tons. | cwts. | Europeans. | Chinese. |
| <i>Weldborough Mines.</i> | | | | |
| Weldbrook Tin Mine | 9 | 6 | 25 | ... |
| Weldborough | 3 | 3 | 6 | ... |
| Cascades | 2 | 0 | ... | 12 |
| Dickenson and party | 0 | 16 | 2 | ... |
| Nicholas and party | 0 | 7 | 3 | ... |
| Chinese (Weldborough)..... | 8 | 3 | ... | 50 |
| Symons and Party | 1 | 6 | 3 | ... |
| Other Claims..... | 4 | 12 | 20 | ... |
| Total | 29 | 13 | 59 | 62 |
| <i>Lottah and Blue Tier Mines.</i> | | | | |
| Anchor Tin Mine..... | 48 | 0 | 113 | ... |
| Jas. Symons | 0 | 8 | 2 | ... |
| Chinese Blue Tier | 0 | 6 | ... | 6 |
| W. P. Kirwan | 0 | 13 | 2 | ... |
| Other Claims | 1 | 18 | 17 | ... |
| Total | 51 | 5 | 134 | 6 |
| <i>St. Helens Mines.</i> | | | | |
| Macmichael, J. C..... | 3 | 6 | 8 | ... |
| Williams, A..... | 1 | 2 | 4 | 1 |
| Miller, C. | 1 | 18 | 4 | ... |
| Thureau's Deep Lead..... | 1 | 5 | 6 | ... |
| Royal Ruby | 1 | 5 | 6 | ... |
| Other Claims..... | 1 | 3 | 7 | ... |
| Total | 9 | 19 | 32 | 1 |
| <i>Avoca Mines.</i> | | | | |
| Mount Rex | 2 | 7 | 4 | ... |
| Cash's Freehold | 3 | 7 | 3 | ... |
| Togo | ... | ... | 60 | ... |
| South Esk | 1 | 0 | 4 | ... |
| Other Claims..... | 1 | 11 | 36 | ... |
| Total | 8 | 5 | 107 | ... |
| <i>Total for Eastern Division</i> | 99 | 2 | 332 | 69 |

Anchor Tin Mine.—Mr. J. B. Lewis, manager, reports:—During the quarter just ended, 35,625 tons of ore were crushed, for a return of 48 tons of black tin. An average of 113 men were employed. For the first part of the period we were still affected by the drought, but when rain began to fall, it fell almost ceaselessly, making work in the open-cuts difficult and unpleasant. Heavy winds have also been incessant, doing a good deal of damage to head-races, &c. The battery efficiency has been increased by various improvements, and we now crush about 6 tons per stamp in 24 hours. The grade of ore still keeps low, and there is no indication of any permanent increase in value. With the present price of tin, however, the results are satisfactory. The working of our alluvial was hampered in various ways, but for the current quarter we expect a substantial output.

WESTERN DIVISION:—

| | Tin ore won. | | Men employed. |
|----------------------------|--------------|-------|---------------|
| | tons. | cwts. | Europeans. |
| Renison Bell..... | 11 | 7 | 10 |
| Renison Bell District..... | 5 | 8 | 7 |
| Mayne's Tin Mine..... | 5 | 0 | 9 |
| Per York & Co..... | 3 | 10 | 12 |
| Munro, J. S., & Co..... | 1 | 0 | 3 |
| From Kemp's Track..... | 1 | 14 | 7 |
| Others..... | 0 | 12 | 23 |
| Total..... | 28 | 11 | 71 |

SILVER.

WEST COAST.—The recorded production of silver ores in the Western Division for the quarter ending 30th June was as follows:—

| | Ore. | Tons. | Value. | Men. |
|----------------------|----------------------|-------|--------|------|
| | | | £ | |
| <i>Zeehan Mines:</i> | | | | |
| Mount Zeehan, Tas. | galena..... | 1573 | 23,401 | 196 |
| Zeehan-Montana | "..... | 1302 | | |
| " | tailings | 310 | 20,775 | 217 |
| Zeehan-Western | galena..... | 612½ | 6967 | 131 |
| Zeehan-Queen | low grade..... | 167 | 1214 | 26 |
| Oonah | galena & gossan..... | 100½ | 410 | 10 |
| Queen Extended | galena..... | 34½ | 371 | 15 |
| New Mount Zeehan | "..... | 76½ | 806 | 5 |
| Florence | "..... | 260 | 3370 | 54 |
| Maxim | "..... | ... | ... | 17 |
| South Comstock | galena & blende..... | 423 | 2873 | 26 |
| Nubeena | galena..... | 8 | 148 | 10 |
| South Nubeena | "..... | 39½ | 564 | 5 |
| Silver King | "..... | 8 | 6 | 6 |
| Tas. Smelting Co.'s | | | | |
| Lease | "..... | 220 | 3744 | 14 |
| Sylvester Mine | "..... | 138 | 593 | 11 |

| Ore. | Tons. | Value. £ | Men. |
|------------------------------------|--------|-------------|------|
| <i>Dundas Mines :</i> | | | |
| West Comet flux ore | 7500 | 3200 | 50 |
| Ring Valley fahl ore | 42½ | 305 | 11 |
| Comet galena | 1336½ | 2533 | 60 |
| Mariposa flux ore | 191 | 442 | 3 |
| <i>Mt. Farrell Mines :</i> | | | |
| North Mt. Farrell galena..... | 630 | 6237 | 95 |
| Murchison River „ | 175 | 1400 | 35 |
| Mackintosh „ | 15 | 128 | 3 |
| <i>Rosebery Mines :</i> | | | |
| Primrose Mine mixed sulphides..... | 2626 | 11,926 | 18 |
| Tasmanian Copper „ | 3260 | 11,357 | 32 |
| Tasmanian Smelting Co. | ... | ... | 305 |
| Others „ | ... | ... | 193 |
| Total | 21,049 | 102,770 | 1548 |

MOUNT ZEEHAN (TASMANIA).—*Spray Mine.*—Mr. T. Vincent, manager, reports:—Shaft, 92 feet, water easy, and good progress is being made. Boiler foundations ready for placing boiler in position. Main shaft sunk 40 feet below No. 4 level. No. 5 level south, 184 feet; lode carrying bands of seconds. Three winzes sinking in No. 4 level; lode fair. No. 2 shaft—Nos. 6, 10, 13, and 30 lodes, drive faces poor.

Zeehan-Montana.—Mr. J. Craze, manager, reports:—No. 1 shaft has been sunk to 830 feet, but owing to heavy rain, water became heavy, and the cutting of station at 800-foot level is consequently delayed. The general appearance of the mine is good.

Zeehan-Western.—Mr. J. Craze, manager, reports:—No. 1 lode, No. 11 level, has been driven on for 1000 feet in length, but nothing of value met with. The west crosscut has intersected the west lode, which has been driven upon south for 130 feet without result.

Oonah.—Captain W. Fisher, manager, reports:—The stannite crosscut has been driven 135 feet past the main lode without meeting with anything of value so far. It is still being extended. A fair amount of gossan is being won from the shallow workings of the Junction. The Brice drive, from Brice's tunnel to below the old copper show, is in 520 feet, leaving 265 feet to intersect the copper lode. It will cut the lode 200 feet below the shaft on the hill. An option is held over the mine, and preparations are being made to unwater it for inspection.

Florence.—Mr. F. K. Astell, manager, reports:—At No. 2 level, crosscut extended 300 feet, cut McKay's lode, and now stoped out

to tributors' workings. At No. 3, driven on Astell's lode; 200 feet west cut McKay's lode; driven on it 100 feet; rose through to and connected No. 2 level. Stopping commenced. Shaft preparations are being made, and the necessary pumping-plant purchased for sinking further 200 feet. As soon as the plant is in position tenders will be called for sinking.

Silver King.—Captain W. Fisher, manager, reports:—A tribute has been let on No. 3 lode, just across the Smelters' road. The shaft is down 17 feet on 12 inches of good seconds. The water is not likely to be troublesome before a depth of 50 feet is reached.

DUNDAS AND MOUNT READ.—*Ring Valley.*—Mr. John Moyle, manager, reports:—An intermediate drive between main levels, north of No. 1 winze, has disclosed a formation 12 to 14 feet wide, carrying a small vein of ore on the hanging-wall side.

Mount Read Mine.—Mr. John Moyle, manager, reports:—Operations are confined to driving the 600-foot tunnel. The total length of tunnel is 1230 feet.

Tasmanian Smelting Company.—Mr. T. Kapp, manager, reports:—Ore smelted during the quarter ending 30th June, 11,940 tons, containing 2621 tons of lead, 387,152 ozs. silver, and 778 ozs. gold. During the year ending 30th June, 47,928 tons ore were smelted, containing 10,166 tons of lead, 1,618,339 ozs. silver, and 2950 ozs. gold. During the quarter ending 30th June, 2400 tons bullion were exported, containing 368,973 ozs. silver and 841 ozs. gold; and during the year, 10,231 tons bullion, containing 1,582,382 ozs. silver and 3095 ozs. gold.

MT. FARRELL DISTRICT—*Murchison River Mine.*—Mr. E. Oliver Smith, B.M.E., manager, reports:—The mine looks very promising. The chief work done during the quarter was as follows:—No. 2 level: Winze started to connect with No. 3 level; lode 6 feet wide; all good milling ore. No. 3 level: tunnel driven further 577 feet; total length, 630 feet. Lode struck at that distance, 8 feet wide; good milling ore. South drive put in 14 feet on lode 8 feet wide, 1 foot of which is first-class ore, remainder good milling material.

NORTH-WESTERN DIVISION.—In this division the Magnet Mine was the only producer. 2066 tons silver-lead ore were raised, valued at £15,777, and sent for smelting at Zeehan and in New South Wales. One hundred and ninety men were employed. Six men were employed at the Godkin Mine, Whyte River.

COPPER.

Mount Lyell Mine.—Mr. Robert Sticht, general manager, reports:—The quantities of ore treated and metal produced during the quarter ending 30th June, were as follows:—

| | Dry weight. | | | |
|-------------------------------|-------------|-------|------|------|
| | tons. | cwts. | qrs. | lbs. |
| Mt. Lyell ore | 66,011 | 8 | 1 | 11 |
| North Mt. Lyell ore | 28,207 | 16 | 1 | 18 |
| Purchased ore..... | 463 | 1 | 1 | 26 |
| By-products from Crotty | 23 | 2 | 1 | 22 |
| Metal-bearing fluxes : | | | | |
| From North Lyell Mine | 980 | 10 | 1 | 20 |
| " Lyell Tharsis Mine..... | 3437 | 13 | 0 | 26 |
| Total | 99,123 | 12 | 1 | 11 |

Quantity and value of metal produced:—

| | £ | s. | d. |
|--|----------|----|----|
| B blister Copper, 2116 tons, containing — | | | |
| Copper, 2094 tons, valued at | 179,476 | 14 | 9 |
| Silver, fine, 157,490 ozs., valued at..... | 19,778 | 2 | 5 |
| Gold, 5297 ozs., valued at | 22,512 | 5 | 0 |
| Total..... | £221,767 | 2 | 2 |

Number of men employed:—

| | |
|---------------------------------------|------|
| At the Company's Mt. Lyell Mine | 297 |
| " " North Lyell Mine | 524 |
| " " Lyell Tharsis Mine..... | 30 |
| " " North Crown Lyell Mine ... | 3 |
| " " Royal Tharsis Mine | 9 |
| Reduction Works..... | 1123 |
| Mt. Lyell Railway | 223 |
| North Lyell Railway..... | 17 |
| Total | 2226 |

Inspector Curtain reports that work at the Mt. Lyell Mine has continued on the usual pyritic extraction, in addition to advancing the south prospecting drive from No. 8 level along the contact. At the North Lyell and Lyell Tharsis the last sink of the main shaft has been put down 145 feet below the 700-foot, and enlargements are being made for the purpose of opening the next level. This and the winze sink have been in difficult country, which retarded progress, but serviceable ore-rock has been carried for the whole of this depth. The 700-foot level has opened up most satisfactorily. Stopping and open-cut extraction continue at the Lyell Tharsis, where the underground work is chiefly conducted through

the North Lyell workings. At the South and Royal Tharsis, a 13-foot by 5-foot underlay shaft has been sunk 50 feet, which will be continued to 95 feet before opening out, in order to attack the low-grade siliceous, or fluxing ores, that abound in both properties. At the Reduction Works, 4 furnaces are constantly in blast, with a corresponding number of vessels operating at the converters, where the production, in consequence of severe weather at the open-cuts, for the present term is somewhat below recent averages.

Lyell Blocks Mine.—Mr. Robert Ferguson, manager, reports:—20,099 tons cupriferous clay have been mined and milled, and 234 tons fine copper produced. 1700 feet have been driven, and rises, and 257 men employed.

Tasman and Crown Lyell Extended.—Mr. Edward Holehan, manager, reports having crosscut 305 feet west from No. 3 tunnel in mineralised schist, containing prospects similar to those of the sulphide lode at No. 2. Nine men employed.

DUNDAS DISTRICT.—*Ring River Mine.*—Mr. George Barker reports raising 176 tons of copper sulphide ore, valued at £523. Six men employed.

NORTHERN AND SOUTHERN DIVISION.—*Copper King Mine.*—This is being worked on option by an Adelaide syndicate. Mr. John Stanton, manager, reports producing 53 tons hand-dressed ore, containing 9.54 per cent. copper, and valued at £583. The mine employed 21 men.

WOLFRAM.

The production of wolfram ore during the quarter has been as follows:—

| | Tons. | Men employed. |
|------------------------|-------|---------------|
| Ben Lomond | 4½ | 7 |
| All Nations Mine | 1 | 2 |
| | <hr/> | <hr/> |
| | 5½ | 9 |
| | <hr/> | <hr/> |

IRON.

The Tasmanian Iron Company, at the Penguin, raised 1200 tons of hematite ore, employing 16 men.

COAL.

The output this quarter was 13,091 tons, against 10,719 tons the previous quarter. The raisings at the respective collieries were as follows:—

| Colliery. | Tons raised. | Men employed. |
|-------------------------------|---------------|---------------|
| Mount Nicholas Colliery | 6111 | 67 |
| Cornwall " | 5638 | 62 |
| Dulverton " | 95 | 4 |
| Spreyton " | 526 | 8 |
| York Plains " | 71 | 1 |
| Mount Cygnet " | 297 | 3 |
| Catamaran " | 303 | 5 |
| Sandfly " | 50 | 120 |
| Total | <u>13,091</u> | <u>270</u> |

DIAMONDS.

A small diamond, weighing $\frac{1}{8}$ carat, was recently submitted to the Department of Mines by Mr. H. H. Gill, as having been found in the course of gold sand washing in Harvey's Creek, which flows from the Donaldson Range into the Savage River. It is a brilliant octahedral crystal, with a rather unusual tint of faint greenish yellow at the projecting apices, and showing characteristically curved faces. Mr. W. F. Petterd, who has been carrying on experiments with Tasmanian minerals with a view of determining their radio-active properties, submitted the present diamond to the radium test. The gem became illuminated with a greenish fluorescent light, removing all possible doubt as to the genuineness of the stone. This fluorescence of diamonds when exposed to the emanation from radium was noticed by Sir William Crookes. Strutt, in his work on the Becquerel rays and the properties of radium says (p. 52):—"This fluorescence of diamonds forms a very convenient test of their genuineness, quite within the reach of anyone who can obtain the use of a little radium; for imitation diamonds do not fluoresce, or at least so slightly, compared with the real ones, that there is no possibility of mistaking them." Levy and Willis, in their "Radium and other radio-active elements," state (p. 54):—"One of the most interesting of the luminous effects is that produced in diamonds. It affords a ready method of distinguishing real from artificial stones. The former fluoresce brightly with a pale green light, whilst false stones, or white sapphires (frequently used in their place) show little or no luminosity. All diamonds of equal size and value do not glow with equal intensity, some appearing much more luminous than others. This may be due to slight differences in their composition or in their cutting."

This is not the first time that diamonds have been found in Tasmania. Mr. Petterd has two which L. Harvey found in the

same creek in 1894. They are a little larger than this one, and some others were found in Sunday Creek, on the other side of the Donaldson Range, by a prospector named Lawson. Mr. Godkin also brought in one from the Donaldson District about that time.

Another small diamond is stated to have been discovered in the forties in a parcel of gem sand from near the Hellyer River, sent to England by the Van Diemen's Land Company, but the locality is not known now.

It is intended to thoroughly prospect the Donaldson Range, from which Harvey's Creek heads. It has been hitherto but little explored, and such knowledge as is possessed of it points to it being composed of Silurian or pre-Silurian conglomerates, quartzites, schists, &c. Gabbro, or serpentinous rocks, are not known to exist on the range, but the association of osmiridium with the gold and diamonds in the sand indicates serpentine as the source. At present this rock is not known to occur nearer than the Upper Savage.

There is no doubt that, if looked for, more gems will be found, and possibly of larger size. Many have doubtless been passed over, mistaken for topaz or quartz. It may be difficult to trace them to their exact source. This will possibly be done by casual discoveries. Meantime renewed geological examination of that part of the country would be desirable in the fine-weather season, especially to fix the boundaries of the geological formations, all of which in this tract carry ores of some description or other.

CONCLUSION.

The value of the mineral output for this quarter was £558,188, compared with £546,847 the previous quarter. The increases in tonnage were in silver-lead, tin, and coal. On the other hand, the gold obtained decreased 2300 ozs. The advance in the market-price of tin has had a substantial effect on tin-mining, increasing both the quantities raised and the realisation figures.

The following return shows the average number of men employed in or about the mines during the quarter ending the 30th June, 1906:—

| District. | European. | Chinese. | Total. |
|-----------------------------|-----------|----------|--------|
| Northern and Southern | 1071 | ... | 1071 |
| North-Western | 537 | ... | 537 |
| North-Eastern | 742 | 99 | 841 |
| Eastern | 627 | 69 | 696 |
| Western | 4143 | ... | 4143 |
| Total | 7120 | 168 | 7288 |

Value of the mineral output per man employed, £76 3s. 6½d.

Dividends paid by Mining Companies during the quarter ending 30th June, 1906:—

| From Copper Mines— | £ | s. | d. | £ | s. | d. |
|---|---------|----|-----|---|----------|-----|
| Mount Lyell Mining and Railway Company, Limited | 150,000 | 0 | 0 | | | |
| From Gold Mines | | | Nil | | | |
| From Tin Mines:— | | | | | | |
| Bischoff T.M. Co., Registered | 18,600 | 0 | 0 | | | |
| Pioneer T.M. Co., Ltd. | 8775 | 0 | 0 | | | |
| Mayne Tin Mine, N.L. | 750 | 0 | 0 | | | |
| Briseis Tin Mining Co. | 22,500 | 0 | 0 | | | |
| New Brothers' Home ditto | 4500 | 0 | 0 | | | |
| South Mt. Cameron ditto | 1800 | 0 | 0 | | | |
| | | | | | 56,325 | 0 0 |
| From Silver Mines:— | | | | | | |
| Zeehan-Montana Mine, Ltd. | 5000 | 0 | 0 | | | |
| Magnet Silver Mining Co., N.L. | 2000 | 0 | 0 | | | |
| North Mt. Farrell | 859 | 0 | 0 | | | |
| | | | | | 7859 | 0 0 |
| Total | | | ... | | £214,184 | 0 0 |