

THE MINING INDUSTRY.

The sustained high prices ruling for gold and tin and the recovery of silver from a record low figure has stimulated recent activity in the various mining fields of the State, chiefly for gold and tin where deposits offer facilities for successful exploitation.

A great deal of attention is directed to the State by Mainland investors as well as by representatives of Overseas capital.

Despite the fact that copper, lead and zinc remain at bed-rock prices, the interest centred particularly in our tin mining areas discounts to a great extent the lack of interest displayed in other base metal deposits.

Tasmania is richly endowed in mineral wealth, and there is probably no country in the world which can surpass it in facilities offering for the economic exploitation of its mineral wealth. These are -

- (1) Favourable climatic conditions.
- (2) Abundant but not excessive rainfall.
- (3) Natural water conservation represented by many lakes lying at varying elevations ranging up to 3,000 feet above sea level.
- (4) Numerous rivers and streams.
- (5) Facilities for artificial storage of water.
- (6) Provision for cheap transport by road and rail to all known mineral areas.
- (7) Inexhaustible timber resources for mining purposes.
- (8) Efficient labour, skilled miners and artisans.
- (9) Unlimited water power.

The facilities enumerated are very important factors to possess for the successful conduct of mining operations.

G O L D.

The chief source of gold at present raised is the production from copper ores. The total from this amounts to 416,618 ozs. The annual output averages about 8,000 ozs.

Until recently very little attention has been given to gold mining in the State. During the past year renewed interest is being taken in the various fields.

The recorded value of gold raised amounts to £7,754,202. The potentially gold bearing country embraces an area of roughly 800 square miles. This tract of country is mainly restricted to the north eastern district. The various fields are scattered over it but have, generally speaking, the same geological features. The reefs occur in slates and quartzites (Cambro-ordovician system) which are intruded by the granite batholith.

The Fingal-Lyndhurst gold bearing zone which embraces the Mathinna field extends in an unbroken line over a distance of 50 miles, the width being about 10 miles.

At intervals along this belt more or less desultory work was undertaken in what is known as the early days of gold mining forty years or more ago. At that time gold was worth about half its present value. Investors and miners alike were then attracted by the boom in silver lead mining and the alluvial tin deposits. Interest in gold mining ventures waned almost to extinction.

No sustained efforts on a scientific basis have been directed in the development of this promising belt of country. In many places rich vein outcrops were located and worked to shallow depths and then abandoned. This field presents most favourable features for enterprise in the search for the world's most valued commodity. It remains as it were in the same position as when discovered, insofar as proving it at reasonable depth is concerned. Geological deductions are favourable for deeper mining.

T I N.

Tasmania is possessed of extensive deposits of tin. The tin granite area of the North East Coast covers 750 square miles. The discovery of tin here dates back about 55 years. Mingled with these fields are rich basaltic farm lands. The territory is well served by railway and road facilities. The climatic conditions are unsurpassed. The annual rainfall of about 30 inches provides for ample water supplies for mining purposes.

Rich alluvial tin deposits ranging from the shallowest layers to several hundred feet in thickness are being exploited. Attention in the past has been given chiefly to alluvial deposits. Latterly however the possibilities of rock mining on an extensive scale are being explored.

These fields offer every encouragement to this phase of the industry, chiefly in the granitic deposits.

In Avoca district on the south-western slopes of Ben Lomond lode tin mining is being successfully carried out. The lodes or veins consist of quartz occurring in slates and sandstones. They range from a few inches to 14 ft. in thickness. They are regular in occurrence over considerable distances, yield from 1 to 2 per cent tin with a similar amount of wolfram. Their exploitation under existing conditions is highly profitable.

Other tin granite fields occur on the West Coast and include those of North and South Heemskirk.

C O P P E R.

The Mount Lyell copper mine for the calendar year 1933 produced 61,136 tons of ore containing 10,736 tons

of copper, 127,562 ounces of silver and 5,424 ounces of gold. Since the inception of this company 38 years ago the production is as follows:-

Copper 268,814 tons.
Silver 14,598,464.
Gold 411,969 ounces.

Z I N C - L E A D.

Large resources of complex zinc-lead ore have been developed in Mt. Read-Rosebery districts, modern crushing and flotation plants have been erected to deal with large daily tonnages. Production is held over pending improved position of the metal markets. In adjacent fields deposits of high grade silver lead occur. The development of these is retarded owing to the low market price for lead.

C O P P E R N I C K E L.

Also in this district occur deposits of copper nickel ore awaiting development. These deposits are in tabular form up to several feet in thickness. The average metal content is 5 per cent copper 10 per cent nickel.

I R O N.

The State has undeveloped resources of high grade iron ore potentially estimated at 41,900,000 tons.

S O U T H - W E S T D I S T R I C T.

Settlement was established in Tasmania 130 years ago yet it is inconceivable to think that approximately one fifth of its area is still to all intents and purposes terra incognita. This refers to the south western portion being the southerly extension of the West Coast mountain region. The rough mountainous nature of the country clothed as it is in impenetrable forest has up to the present precluded its close investigation. The rock formations are, so far as is known, pre-cambrian, excepting a zone of cambro-ordovician on the western side. - The latter being identical with those intruding Mt. Lyell schists.

At its extreme south near the sea coast tin oxide occurs in association with a small intrusion of granite. Small quantities of gold have been found in some parts.

Here then is an unexplored region of approximately 5,000 square miles. Rich prizes in the form of mineral wealth may be languishing there. Its preliminary investigation could be most advantageously carried out by aerial survey.

M E T A L L U R G I C A L.

The Government being in the position to offer cheap and abundant electric power was the factor responsible

for the establishment of the great metallurgical works of the Electrolytic Zinc Company near Hobart for the treatment of zinc concentrates from the Broken Hill Mines, New South Wales. For the calendar year 1934 this company produced 54,629 tons of slab zinc and 172.5888 tons of metallic Cadmium.

OSMIRIDIUM

Osmiridium mining which, a few years ago, represented a considerable source of wealth to the State besides offering remunerative employment to a large number of men, has declined very considerably during the past two or three years. The cause of the decline is due to two main factors:-

- 1. Depletion of deposits.
- 2. Market price.

Four years ago an effort was made to induce the commonwealth Government to set up an Osmiridium Marketing Board. Following protracted negotiations for various reasons the proposal fell through. The quantity of osmiridium raised in the State is now very small compared to that of a few years ago.

Last year it was recorded in statistical return of the Department of Mines as 487 ounces valued at £4622.0.0. In the year 1925 the value of the metal raised was £103,570.0.0. The price per ounce then was in the vicinity of £30.0.0 whereas to-day it is an uncertain market at £9.0.0 per ounce.

Many reasons are assigned to the drop in price. It, however, appears reasonable to conclude that the demand has slackened until the market is practically lifeless. The latest advices are to the effect that the price in London is £7.10.0 per ounce.

Within recent years Tasmania had a monopoly in the production of the metal, lately however, the position with regard to supplies has completely changed.

The production of the osmiridium in South Africa for the year 1933 is recorded at 6000 ounces. This is recovered as a by product in profitable mining operations.

Tasmanian osmiridium is of superior quality to that found in other parts of the world. The position, however, with regard to production and sale of the metal is unquestionably economic. There is no guarantee that, if larger quantities were produced, a market would be found for it.

The West Coast fields, for many years past, contributed substantial quantities of the metal. Latterly, so far as is known, production there has ceased altogether.

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