

The Gold Mining activities in Tasmania have not materially changed since the issue of the report relating to "The Gold Mining Industry of Australia" issued by the Development and Migration Commission in June 1928, which embodies a resume of the industry in this State prepared by the Government Geologist at the end of 1927. At that time a company was working in a limited way the old Golden Gate Mine, subsequently operations ceased. At the present gold production by direct crushing methods is no longer being carried out in the State.

PROSPECTING

Individual parties of prospectors continue in the search of deposits chiefly in the old fields, many of these men have received sustenance from the State, but their efforts have not resulted in any discovery of note being made. During the past few months applications to the Department for sustenance allowance have been very numerous.

Assistance to prospectors to investigate old fields by surface prospecting such as "loaming", trenching or testing visible outcrops of reefs has failed to be of any benefit tending to the revival of the industry consequently prospecting on these areas is not now being supported.

A number of prospectors are investigating more remote-situated areas chiefly for superficial alluvial gold deposits. The slump in the base metal market is the direct cause of unemployment of miners in the various mining districts, excluding Mt. Lyell; hence attention is directed towards the discovery of Gold and Cassiterite deposits.

There are always possibilities of new discoveries being made but the prospects at the moment are not definitely encouraging under the conditions in which the search is being carried out. Limited areas of superficial alluvial deposits are being investigated with the hope that they may afford remunerative employment to miners. These are chiefly confined to the north eastern portion of the State. The exploitation of these deposits under the most favourable conditions is not likely to have any marked increase on the production of gold in the State.

In the more remotely situated places where gold is known to exist as well as those potentially gold bearing, the search for deposits is fully warranted.

Efforts to resuscitate the industry may be narrowed down to:-

1. Prospecting in unexplored and partly explored areas for superficial alluvial deposits and lode outcrops.
2. Investigation of known deposits of alluvium such as occur at Lefroy and Back Creek districts. Some drilling work has been carried out on the latter many years ago. A Montgomery M.A., formerly Government Geologist when reporting on the field in the year 1896, expressed the opinion that the bore holes were wrongly placed to test the lead.
3. Exploring old fields such as Mathinna, Beaconsfield or other approved areas, by diamond drill for hidden reefs, preceded by geological examination.

BACK CREEK AREA.

The prospects of locating gold in the deep leads of this district are fully dealt with in A. Montgomery's report an extract of which is embodied in the report of the Development and Migration Commission relating to the "Gold Mining Industry of Australia" 31/5/28. The conditions for testing the extent of the lead by Diamond Drilling are very favourable and worthy of attention in that respect.

LEFROY

This field is worthy of attention in investigating the alluvial deposits referred to in the report of A. Montgomery M.A. on the Geological Structure and Mining Developmental of the field dated the 9th March, 1927.

MATHINNA

This field was an important producer of gold 30 years ago. In a limited way, work by private enterprise is being continued from shaft workings to a depth of 400 feet. The productive stage has not been reached.

This field probably offers the best inducements for testing for hidden reefs by Diamond Drilling, this is exemplified in the fact that only one of the three reefs profitably worked in the Golden Gate Mine outcropped at surface. Comparatively large areas of the gold bearing zone remain to be tested.

BEACONSFIELD

A little work is being carried out by private individuals and syndicates at shallow levels, nothing of a comprehensive character for the resuscitation of mining has been attempted on this field since the closing of Tasmania Mine some years ago. Last year the Mines Department carried out some drilling work on the so-called alluvial deposits with discouraging results. A diamond drill bore was put down on the Tasmania Mine where the object of locating what was known as the "South" reef stated to be an unworked body of stone located in one of the crosscuts in the Mine. The bore failed to intersect the reef. Small quantities of gold are being produced from the cyanide treatment of the dump sands of the old reduction plant.

In the Tasmania Mine a definite body of gold bearing stone occurs at the 1,200 feet level over a length of 1,200 feet, thickness $4\frac{1}{2}$ to 7 feet, the average value per ton is approximately £2/10/0. In 1913, the total operating costs using steam power were 33/7/86 per ton. To keep this mine drained it is necessary to raise 2½ million gallons of water daily.

Since the inception of gold production at Beaconsfield a great deal of work was carried out on areas adjacent to that of the Tasmania Mine without anything in the nature of a payable deposit being discovered. The field is worthy of an intensive geological examination in order to determine if further diamond drilling is warranted. The Tasmania Mine yielded gold to the value of £3,612,680 and paid £772,671 in dividends.

GENERAL

In most of the goldfields worked in the earlier days such as those at Mangana, Mt. Victoria, Golconda, Denison, Warrantina and Waterhouse the reefs proved to be narrow and limited in length. The work carried out on these fields

fields was confined to shallow depths only, in some instances the reefs revealed geological structures of such a character as to justify testing at greater depths, preferably by Diamond Drilling.

GOLD OUTPUT

For the year 1929, the State produced gold to the value of £23,759 to this total the Mt. Lyell Company and the West Coast Department of the Electrolytic Zinc Company contributed as a by-product from metallurgical operations £18,558, leaving a value of £5,201 produced from other sources of the latter the Golden Gate Mine (now closed) produced £1,631.

Summarising the position of gold production in the State the rehabilitation of the industry will depend upon:-

1. The possibility of new discoveries being made in the known or unexplored areas.
2. Results of boring tests by Diamond Drilling for concealed reef deposits on the old fields.
3. Results obtained by systematically boring areas containing alluvial deposits herein referred to.

With regard to (1) it is recommended that adequate grants under the Precious Metals Prospecting Act be continued until the unexplored and partly explored gold bearing areas have been investigated, expenditure on track cutting to facilitate access to remote districts to be regarded as bona fide prospecting work.

(2) It is recommended that the sum of £2,000 be made available for Diamond Drilling at Mathinna and other fields (3). For testing Back Creek and Lefroy deep alluvial leads and other areas is recommended that the sum of £3,000 be allocated for that purpose.

STATE MINING ENGINEER

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28th November, 1930