

## TIN.

The Stewart Island Tin and Wolfram Lodes (Limited) has constructed a tramway 4 miles 49 chains in length to the alluvial deposits it is proposed to sluice, and towards the Remarkable Range, where a stanniferous lode is reported to exist. The water-race and pipe in connection with the sluicing proposition are completed.

## CINNABAR.

At Puhipuhi, North Auckland, the Auckland Cinnabar Mining Company has put in short drives, and has intersected a lode which is reported to contain fair-grade ore.

## IRON.

At Moturoa, near New Plymouth, Messrs. Heskett and Fraser, who have installed an experimental furnace for smelting the beach ironsand, are reported to have obtained satisfactory results, and claim that pig iron can be produced by them at a cost not exceeding £3 per ton.

The following is an analysis of the pig iron produced: Iron, 94.6 per cent.; graphitic carbon, 2.8; combined carbon, 0.46; silicon, 0.9; manganese, 0.42; phosphorus, 0.5; sulphur, 0.04; titanium, 0.28; total, 100 per cent.

A company, to be called the New Zealand Iron-ore Smelting and Manufacturing Company (Limited), having a capital of £60,000, is now being formed to manufacture pig iron.

It is proposed when the company is formed to erect a first instalment of blast-furnace plant and accessories. Sufficient ovens for the manufacture of ferro-coke will be erected immediately for the production of 150 tons of pig iron per week.

The blast furnace will have a capacity of 75 tons per week, and can, it is stated, be duplicated on a small amount of capital.

## KAURI-GUM.

The considerable decline during 1914 and 1915 in the export of kauri-gum is due to the fact that previous to the war the principal market was in Germany. To afford a measure of relief to unemployed gum-diggers the Government, in terms of the Kauri-gum Industry Act, 1914, has purchased over 300 tons of gum, which is now stored in the Government's store at Auckland. The diggers have received an advance of 50 per cent. of the value of their gum, calculated on the rates ruling in June, 1914. It has now been arranged, in accordance with power granted by the Kauri-gum Industry Amendment Act, 1915, to seek a market for gum in America, and perhaps in Japan, and to purchase and sell kauri-gum. By this Act the Minister of Lands is also given authority to enter into contracts for the purchase of tools and plant for the extraction and treatment of kauri-gum.

The Government at present has over two hundred men employed "face-digging" gum land, the ground on which they have worked being left in a fit condition for agriculture. This has not been the rule in the past. It has been proposed that the Government shall take over the gum industry, and control it for the benefit of the State and for those engaged in it.

The gum land aggregates nearly half a million acres, nearly all of which is the property of the Crown.

## PETROLEUM.

Drilling operations in search of petroleum in payable quantity, which have for a number of years been in progress in the Dominion, have not during 1915 resulted in any additional supplies being tapped. The Taranaki Oil-wells (Limited) towards the latter part of the year furnished evidence that 1,000,000 gallons of marketable crude oil had been produced from its wells at Moturoa, Taranaki, during a period of about eight years, and in consequence was awarded the Government bonus offered for the production of the first million gallons of crude oil by any party. The total bonus gained by this company amounts to £10,000. At the present time the daily production is less than 300 gallons, obtained from wells Nos. 2, 3, and 5, the flow from all the productive wells having gradually declined to small proportions within a year or two of the tapping of oil-yielding stratum.

Drilling operations during 1915 were confined to No. 2 well, which has been enlarged in diameter to receive 10 in. casing for a depth of 2,000 ft.; this well had previously attained a depth of 3,030 ft., being then lined with 5 in. casing. It is now proposed to prove the field by this well at a greater depth than hitherto reached. The obstacle to the deepening of this company's wells was the small diameter of casing used.

At No. 1 (Rotary) well drilling ceased at a depth of 2,514 ft. This well was commenced with 15 in. casing, but was relined with 4 in. casing, rendered necessary by reason of a bit being lost in the hole.

The only other active well-drilling operations were carried on intermittently by the Taranaki Oil Lands, &c., Company (Limited) at its "Blenheim" well at Moturoa, where at the end of 1915 a hole 3,802 ft. in depth, lined with 6½ in. casing, had been drilled. At the time of writing this borehole had attained a depth of 4,250 ft., and a small quantity of oil was being yielded.

## VI. STONE-QUARRIES.

At those 149 quarries and places coming within the provisions of the Stone-quarries Act, 1910, which applies to every place, not being a mine, in which persons work in quarrying stone by means of explosives, and any part of which has a rock-face more than 20 ft. deep, also to any tunnel in the construction of which explosives are used, about 1,571 persons were employed during 1915. The