Mill Construction At Tuba Well Advanced

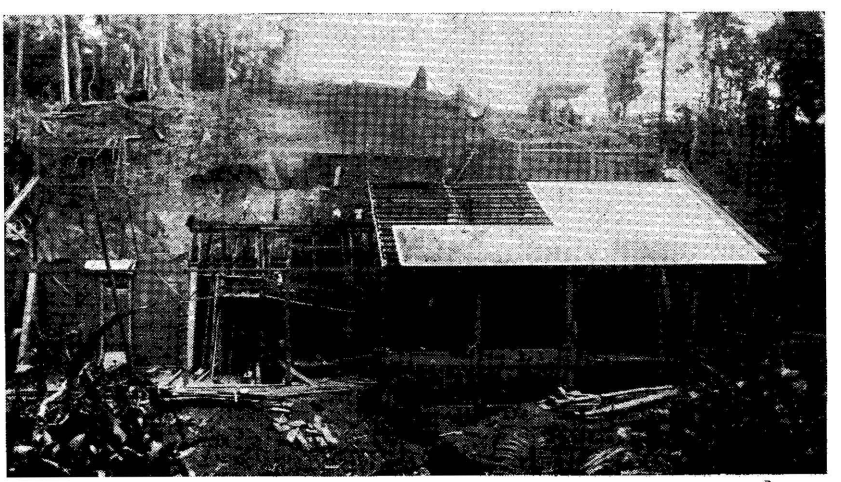
Construction work on the Tuba project in the Paracale district is well under way, and the plant will go into operation sometime in January, 1939.

The mill will be an all-slime cyanide plant with the exception that some free gold will be removed in the grinding circuit by the use of simple hydraulic gold traps.

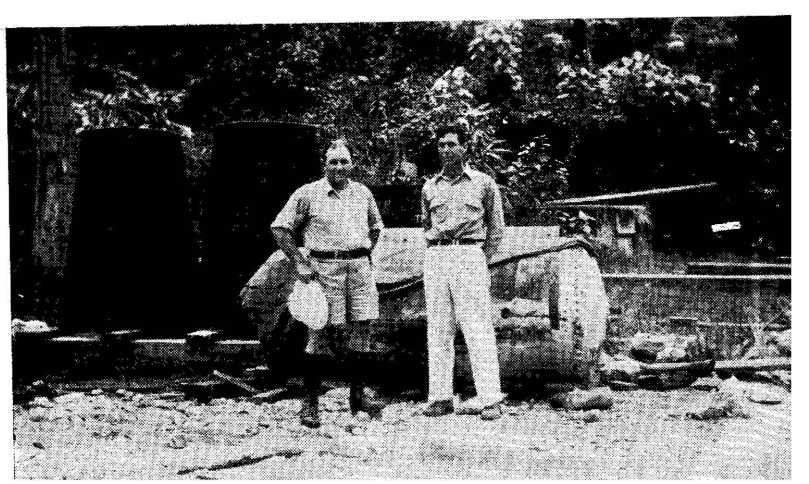
The capacity of the pilot plant will be 50 tons daily. Through this plant will be run the large accumulation of ore derived from development work. At present the mine is in a position to furnish the mill with 50 tons of ore daily; as development work progresses and more ore is exposed, additional units will be added as required.

The ore will be trammed from the main shaft to an inclined hoist which will deliver the ore to the mill bin. At the bin the ore will be dumped over a grizzly spaced at 2-1/2 inches. The oversize will go to a wheeling jaw crusher and be reduced to one inch size. The undersize from the grizzly will be conveyed to a trommel washer. The washer oversize will go to the crusher and the undersize to the Akins high weir type classifier which will also handle the circulating ball mill load.

From the fine ore bin the crushed ore will be fed to an Eimco 5′ x 4′ grate discharge ball mill. Hydraulic gold traps



The Tuba mill building takes shape.



C. A. Weekley, left, head of he metallurgical department of Marsman & Company, and L. H. Hinckley, general superintendent of the Tuba project.

will be placed between the ball mill discharge and the classifier to remove a concentrate rich in coarse free gold. This material will be tabled, amalgamated, retorted, and smelted along with the precipitate from the cyanide plant.

Dorr type agitators and thickeners of sufficient capacity are provided to give the required contact time for the economical dissolution of the values. From the final thickener the pulp will be filtered and washed with barren solution and water before discarding to waste.

Test work on the mine run ore indicates that a recovery of 90% or better can be expected. No elements detrimental to cyanidation have been encountered in the ore and no trouble from this source is anticipated.

The Crowe-Merrill precipitation system will be used and the clean-up melted in a DFC tilting furnace.

L. H. Hinckley is in charge of the property and is supervising the construction work at the mill site as well as the mine development.

Testing of the ore and the designing of the mill were done by the metallurgical department of Marsman & Company, with C. A. Weekley in charge and H. G. Iverson as assistant.