

## MANCHA TRAMMERS STAND UP UNDER SERVICE

The following communication from C. C. Austin, general manager of the Mancha Storage Battery Locomotive division of the Goodman Manufacturing Company, will be of considerable interest to mining men in the Philippines and in the Far East. Mancha "Little Trammers" are already well known in the Islands; they are in use at San Mauricio, Antamok Goldfields, Balatoc, North Camarines, and Mambulao Consolidated, and have proven their worth in rough going. Marsman Trading Corporation has the Philippine agency for this product.

Here is a report which was made by one of our representatives just after visiting the mine of Magma Copper Company, Superior, Arizona.

"Photographs taken on day shift, November 17, 1938.

Location: 2550 level, West drift.

Conditions: Temperature, 95°F; humidity 90%.

Trammer: Mancha, serial No. 992, installed Dec. 28, 1924.

"At present this Trammer is handling about 200 tons of waste per shift, over a distance varying from 200 to 800 feet. Trains consist of three to five cars per trip. Cars weigh about one ton empty and hold 2½ tons of waste rock. The mine operates on two shifts per day. Track is in very bad shape and grade somewhat uncertain. No attempt is

made to keep this track in good condition because this drift will soon be abandoned.

"The Chief Electrician informs me that this Trammer has never burned out an armature, nor broken the armature shaft, and that the original worms and gears are still in it. The only re-

placement parts have been for the controller, new wheels, bearings and head light. The cab has been repaired several times.

"No figures on the cost of maintenance, nor a measure of the work

done in the past, are available. It has operated all over the mine, handling ore, waste, timber and supplies, also on the surface at times."

This Mancha Trammer pays handsomely, but what is its mining value? A quick way to find out would be to take away the trammer and order the cars pushed by hand. What an uproar that would start!!! Temperature 95°F, humidity 90%, loaded car 3-½ tons, track bad and grade uncertain!!!

Such an attempt might prove that Mancha's LITTLE TRAMMER had made this operation possible, which would be proof enough for any mining man. Will you tell us what a locomotive must do in your mine? In reply, we will quote prices, if a Mancha will pay.

