

# Philippine Rock Asphalt Offers a New Industry

*The Philippines use about  
₱400,000 worth of asphalt a  
year, heretofore nearly all imported*

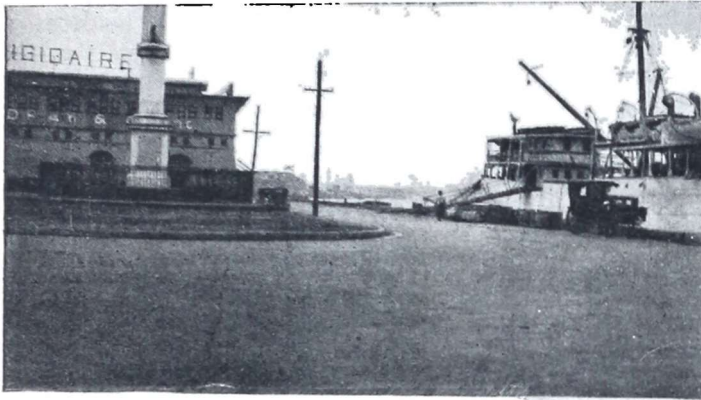
In rock asphalt the Philippines have the foundation of a new industry for these islands. In some other countries, where the merits of rock asphalt are well known, it is an old industry well approved by practical and economic experience. Rock asphalt was the first asphalt pavement used, some 50 years before substitutes were ever thought of. In a pamphlet recently issued by the Manila Rock Asphalt Company, this statement appears:

"Rock asphalt has been in commercial use since 1710, but it was not until about 1832 that it was used for pavements. The first asphalt pavements of which we have any authentic record were laid with rock asphalt

Leyte. The pavement in the upper view is that laid in September last year on plaza Isabel II, between the Magellan monument and the quay. Truck traffic incident to the loading and unloading of interislanders is very heavy here. The pavement in the lower picture is being laid at the printing-bureau premises.

The process of laying rock asphalt is economical. It is laid cold and then compacted with an ordinary roadroller. This is the whole process, no mixing or heating being involved and no expert supervision being necessary. Rock asphalt, being waterproof, protects road foundations thoroughly and prevents *foundation failures*. Where foundation failures occur—they are often due to a too scanty use of asphalt—reconstruction is necessary. The whole question in a nutshell is this: what is the cheapest and most serviceable permanent paving, for highways especially?

This leads to discussion of costs. It is claimed that a highway can be made ready for surfacing with rock asphalt at less cost than for surfacing with any other type. If this is so, it is a material saving at the outset. It is illustrated in calle España, 800 meters of which is paved with Leyte rock asphalt. The waterbound macadam surface, in use for some time, was simply swept clean of loose material and the rock asphalt spread and rolled into place. Those who use calle España may observe how well this pavement wears. It is on the Manila side of the bridge. The cost of a completed job with Leyte rock asphalt is claimed not to exceed the cost of a completed job with imported asphalts. The price of Leyte rock asphalt per ton is ₱15, about a third of the price of the cheapest imported asphalt per ton; but a thicker coating of the rock asphalt is recommended and commonly used. Only



Philippine rock asphalt in place at the quay on Plaza Isabel II between the Magellan monument and the river

in the Rue Bertere in Paris in 1854, and in Thread-needle street in London in 1869. Rock asphalt was the only type of asphaltic pavement used until Trinidad Lake asphalt came on the market about 1885. Synthetic asphalts, from oil refineries, were not used to any extent until 1895. Thus rock asphalt was the forerunner of all the asphaltic types of pavement, and has always been given preference when transportation charges were not excessive. In no instance has rock asphalt been superseded by any other type of asphalt pavement where quality and durability were the deciding factors."

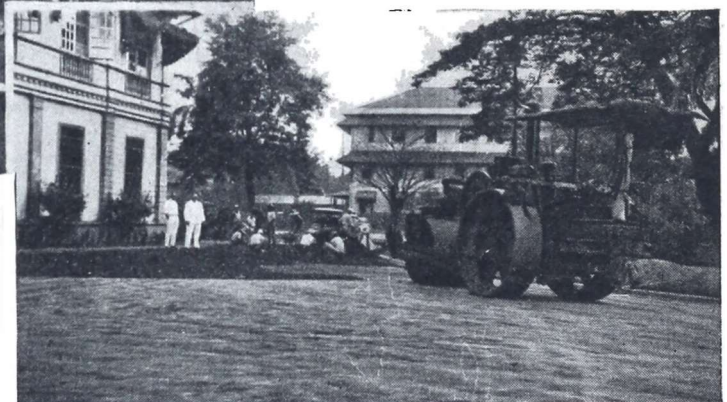
The baggage platforms at the Tondo railway station were laid with rock asphalt from Leyte in 1920. Subject ever since to the most trying wear, they are in prime condition today and have required neither relaying or repair—save patches where steam from engine exhausts cut holes in them. This applies to two of the platforms. The third was paved with synthetic asphalt, and has been relaid twice since it was put down in 1920.

Three of the main traffic streets in Cebu are paved with Leyte rock asphalt. Calle Comercio and calle Mártires were so paved in 1920, calle Juan Luna in 1925. Calle Comercio has required minor repairs; it is said that the rock asphalt here was mixed with imported asphalt as an experiment. The pavements of Leyte rock asphalt on calle Mártires and calle Juan Luna have not required repairs, though subject to the heaviest traffic in Cebu. A new rock asphalt job in Cebu is 2,000 tons of it laid on the reclaimed port area. The district engineer, Fidel Larracas, recommends this rock asphalt particularly for areas of heavy traffic.

The illustrations accompanying this comment are of Leyte rock asphalt laid in Manila, with a view of a small portion of the quarry at Vallaba,



At the asphalt deposits in Leyte



Laying Philippine rock asphalt at the Bureau of Printing in Manila

one company produces Leyte rock asphalt, the one already mentioned. Given steady patronage, this one company would employ 150 men a day. The tax is the 11% sales tax. Such payrolls are none too numerous in the Philippines. Here is a budding industry whose product might turn to domestic channels an outlay of tax money for road material that now leaves the islands. The public works bureau is closely studying this asphalt and working out problems of cost, with out being prepared at the moment to say anything definite on data merely in the process of being assembled. But it is assumed that larger orders would lower the price.