

FORESTRY IN THE PHILIPPINES.

Capt. Geo. P. Ahern, Director of the Forestry Bureau at Manila, recently spent several months in the United States studying forestry conditions. He visited the forest schools of Cornell, Yale, and Baltimore, and conferred

The work at this laboratory will include the investigation of all native woods, methods of preservation, and economic uses. During the first year or two the effects of the Bureau will be concentrated on learning what we have in the way of forest products, the uses

present Bureau only 26 per cent. of the revenues goes for service and materials. Spain on an average issued 1,000 licenses per year, while the United States has about 500 licenses operating.

As to the question of markets, at present every stick of timber cut is sold in Manila. People in other provinces are unable to get timber owing to the high prices paid by consumers in Manila; but in a year or two people in other provinces will begin to build and when they are somewhat satisfied, builders in Hong Kong and other Oriental ports may secure a few cargoes. Engineers at Hong Kong were informed last December that it would be three years before they could receive any timber from the Philippines.

The United States will receive only a few of the high grade cabinet woods which can be delivered at San Francisco, at a figure to compete favorably with the hardwoods of Central and South America. In, say, from five to ten years the Philippines will be able to supply the entire demand of the archipelago and a great deal of Oriental trade, especially at Hong Kong and other Chinese ports. China will certainly be the best market.

A great deal of building is going on in Manila, and better houses are being erected since the arrival of the Americans. Many towns were burned during the war, and the people have been unable to rebuild them owing to lack of material.

Present methods of lumbering are entirely too primitive. The Spaniards and Filipinos do the bulk of the cutting, very few Americans being engaged. The natives are poor lumbermen and in comparison with the Americans



FIG. 1.—MEASURING LOGS IN RAFT ON TONDO BEACH, MANILA. THIS PICTURE SHOWS METHOD OF MAKING A RAFT BY TYING LOGS WITH BAMBOO STRIPS.

with the professors, graduates, and students of those institutions. To the editor of the Forester, from which the accompanying illustrations are reproduced, he gave the following particulars regarding the forests and forestry work in the Philippines:

"I consider the Philippines the most interesting field in the world for the practice of scientific forestry. There are more than 50,000,000 acres of public woodland in the archipelago. Up to date 665 species of trees have been classified and it is the opinion of botanists that a close examination will bring the total up to fully 1,000. In several large districts of the southern islands of the archipelago, more than 50 varieties of rubber trees are found. The true gutta percha (*Isonandra gutta*) is found there. Hardwoods make up the bulk of the timber found, a number of these being especially valuable for ship-building.

The forest service in the Philippines will grow, and more men will be needed from time to time. The Bureau of Forestry of the United States Department of Agriculture has been made an agent for the Forestry Bureau of the Philippines in securing men for the service there. Only men who have had some training in forestry will be considered, and all applicants will be required to take the Civil Service examination. Arrangements are being made with the forest schools of the United States looking to the establishment of courses in the study of gutta percha and rubber. At present there is no special in the Philippines competent to take charge of the large rubber and gutta percha districts.

A timber testing laboratory is to be established at Manila, and will be in charge of Mr. S. T. Neely, who conducted the timber testing for the Division of Forestry a few years ago.

of the woods, and looking up markets.

The Forestry Bureau of the Philippines during its first fiscal year produced in revenue over \$199,000 (Mexican), solely from forest products, and it may be stated that the receipts were quite poor during the early months, thus showing a remarkable gain as the year ad-



FIG. 2.—HAULING LOGS IN TARLAC PROVINCE, LUZON, P. I. THE WAGON WHEELS ARE SOLID WOOD

vanced. At present the revenues are almost \$30,000 (Mexican) per month.

The Spanish administration in its best years never collected over \$12,500 per month (Mexican) from the sale of forest products, and there is this interesting difference to be noted: Spain charged more than 90 per cent. of the revenue receipts for service and materials. Under the

workmen are greatly outclassed, one American being as useful as half a dozen Filipinos.

In lumbering operations in the Philippines the question of transportation is the most serious one. Wagon roads are poor, there is no railroad, and the rivers are not in good condition for log driving; though there are many streams that with a little cleaning