

# THE TROPICAL FOREST IN THE WORLD

## Untold Wealth of the Philippine Islands in the Finest of Hard Woods.

## Projected Railways will Soon Open Up the Timber to Mill Men.



ENORMOUS CANES HOLLOWED FROM LIGHT HARDWOOD LOGS.

CARABAO PULLING LOGS ON THE BEACH.

A TINDALO TREE WHICH MAKES PRECIOUS JEWELS OF FURNITURE AND IS VALUED BY CHINESE LIKE SILVER.

MANSON BUILT OF SOLID MAHOGANI.

HARDWOOD LOG 96 FEET LONG BEING HAULED BY CARABAO TEAM.

**D**ALUPAON, Ambos Camarines Province, July 1.—(Special Correspondence of The Sunday Oregonian).—What are probably the richest tropical forests in the world will be opened up to exploitation by the projected railway lines to be built in the Philippines under the supervision of the Insular Government of the Archipelago. The line leading from Manila south to the southern peninsula of Luzon will tap a dense virgin forest on the west coast of Ambos Camarines and Albay Provinces, 150 miles long and 15 miles wide. The Government has accepted a bid for this line from Speyer Bros., and it will, with its total length of a little over 200 miles, including feeders, tap the timber belt of Pasacao, on the Gulf of Ragay, in less than two years. The line will place such important lumbering stations as Octoc Point, Binahian, Dalupao and Jamuraun within easy railroad communication. The line leading north to Aparai, for the building of which a little over 200 miles, including feeders, tap the timber belt of Pasacao, on the Gulf of Ragay, in less than two years. The line will place such important lumbering stations as Octoc Point, Binahian, Dalupao and Jamuraun within easy railroad communication. The line leading north to Aparai, for the building of which a little over 200 miles, including feeders, tap the timber belt of Pasacao, on the Gulf of Ragay, in less than two years. The line will place such important lumbering stations as Octoc Point, Binahian, Dalupao and Jamuraun within easy railroad communication.

### Glory and Wonder of Forests.

Standing on the low-lying hills of the Southern Peninsula of Luzon, one sees a typical Philippine forest—a vast sea of interwoven tree tops stretching for miles and miles in every direction and in the distance growing indistinct and merging into the vista of bright green color that is characteristic of the foliage. Wonderful are the forests of the Philippines! Either from the viewpoint of the artist and nature-lover or the capitalist and lumberman, the forests of the Philippines probably excel the forests of any other portion of the world covering an equal area. With a charm and grandeur all their own, with giant trees meeting in thick crown 80 to 100 feet overhead and shading the earth so that it is twilight at midday, with a firm carpet of dry mold clear of underbrush, like the park of a peer of England, and giving way often to huge tree ferns 20 to 35 feet in height that seem like pigmy hothouse weaklings beneath such Cyclopean hardwood growths; there is a glory and wonder in the forests of the Philippines such as you will find nowhere else in the world.

### Riches Going to Waste.

In face of these statements one is apt to ask how it is that capital, ever seeking investment, has not entered into the Philippine lumber field. The answer comes back two-fold. In the first place, the Forestry Bureau has, until very lately, hampered even the legitimate development of the forests by a series of academic and unbusinesslike restrictions, so that millions and millions of feet of the finest timber in the world have come to maturity and passed through the period of its commercial usefulness on to decay without vibrating to the stroke of the woodman's ax. The annual growth of the Philippine forests is estimated to be 1,600,000,000 feet, or about three times the cut for 1906 in the entire United States. Fully 50 per cent of this annual growth is going to waste.

In the second place, it is only recently that the true worth of the Philippine forests has been recognized, or that anything like modern methods of lumbering have come to take the place of the antiquated, costly and inefficient logging and milling systems of the old Spanish and Philippine lumbermen. Outside of Manila, Dalupao, in the southern peninsula of Luzon, and Santa Maria, on the island of Mindanao, there is not a modern plant

on the islands. Of course even these plants do not compare with some of the vast sawmilling plants in the States. But a giant plant would pay tremendously. There is nothing but grief and waste from the time that the native begins to fell the tree with a bolo until it is worked up into marketable lumber.

### Beginning Exploitation.

When the Americans first occupied the archipelago the fear was expressed that capital might exploit and ruthlessly destroy the forests regardless of the future. It was a part of the general scheme of things to preserve the resources of the islands to the Filipino people, whether they were developed or not. Accordingly the most stringent regulations as to the manner of cutting the trees were adopted; rigorous, almost prohibitive, taxes per cubic foot on lumber cut were imposed. One of these regulations, absurd but not important, was that the trees before cutting should be marked for lumbering by a trained expert of the forestry bureau. Often it happened that the expert on going out with the cutters was unable to identify the trees he had previously marked, the order of things is changed. The forestry bureau is inviting lumbermen with capital. The Philippine Chamber of Commerce is beginning a vigorous campaign to advertise the insular government's wealth in timber. A new era is at hand for the Philippines.

It is estimated that two-thirds of the Philippine archipelago is covered with timber. With the exception of a few most densely settled areas and the interior mountains of Northern Luzon, almost the entire Philippines are covered with huge forests of dense trees. The finest merchantable forests in the islands are found in the southern peninsula of Luzon, the island of Mindoro and Negros and on the island of Mindanao.

### Value Beyond Comprehension.

A few weeks ago the writer sought out John Orr, a Scotsman of 14 years' residence in the Philippines, who he said to be the best authority on timber in the islands. Mr. Orr lives at Dalupao, Ambos Camarines Province, Luzon, and is manager of the forests of the Philippines throughout a forest area of 55 miles long and six miles wide. During all his years in the islands Mr. Orr has been constantly lumbering. These hardwood forests, with Mr. Orr, investigating the size, texture, character and extent of the forests, revealed the fact that it is difficult for the man who has not actually seen in the great lumber districts to understand their tremendous value and possibilities. In fact, the forests of the Philippines possess possibilities for development as great as any of the once great lumbering regions of the United States.

With the exception of the pine forests on the east and west coasts of Northern Luzon and the huge calantas or Philippine cedars found throughout the islands, all of the commercial woods of the islands are hardwoods. Their specific gravity is so dense and their texture so close that most of them, even when dry, will sink in salt water like wood. These hardwoods not only occur in ebony and mahogany, but in which is made the most exquisite furniture, but they possess timbers of wonderful strength for building purposes and peculiarly suited to the tropics.

### Various Hardwoods.

There are two kinds of hardwoods in the islands, known roughly as construction woods and cabinet woods. Even many species of the construction woods, which are used in shipbuilding and house-building, take on a brilliant polish, and would be deemed adapted to decorative work in any country where hardwood is less abundant. Taking up the construction woods, probably the most plentiful commercial building timber is that known as molave. In external appearance, the molave resembles a huge oak, growing even larger than the greatest American oaks. In color, the wood, after being sawn, is gray. In markings, it has something the appearance of the curly maple, but it has more the texture of the American oak than any other tree of the tropics. Huge molave logs are attained which are 40 inches in diameter, and 40

to 60 feet long. Molave weighs 76 pounds to the cubic foot. Thus it sinks even in salt water. It is used for shipbuilding (and they make the strongest, finest little ships in the world in the Philippines), for posts, windows and joists of houses, and rollers in the old type of sugar mills, etc. In one of the old cathedrals here I saw an immense molave beam that had stood in place for 200 years, and was unaffected by the annals (gnats) or by the water.

Battinan is the teak wood of the Philippines. The wood is really better than the famous teak of India. It is very elastic and resists the action of salt water. It is one of the finest woods for the planking and decks of ships in the world. It is found all over the Philippines, and probably in appearance resembles black oak more closely than any other tree. The logs come straight 40 feet long and 20 inches in diameter. A wood something like the molave is the yacal, having a yellowish color. It is a tremendous weight-carrier. The logs come 20 feet long and 40 inches in diameter. The yacal is not as exceptionally hard as is the molave. One of the lighter woods in the Philippines is the mangachupay. It weighs about 60 pounds to the cubic foot, and, though much heavier than our commercial woods in the United States, many of the mangachupay logs will float. Mangachupay is used for all ordinary house construction and planking. It makes the best stocks for ships' masts in all the Orient.

### Value as Jewels.

A magnificent wood is the tindalo, the tree being somewhat larger in size and every greater in specific gravity than the yacal. It is "one of the most valuable jewels of the home, where it remains forever impervious to decay," says an old Spanish padre (priest). "In China formerly it sold for its weight in silver. Even now it is extremely valuable. They make from it many curious desks, chairs and stools." When first cut the tindalo is bright red, then gradually it takes on a deep red color, and in the course of years becomes a clear red. The Chinese preserve the bright red color permanently by a solution of salt water. Tindalo can be used in all kinds of construction. It is used for desks and tables, for doors, windows, siders, and for bedsteads. It is very durable exposed to the weather, and probably no American wood can compare with it. If care is taken to keep the

### Using the Carabao for Work.

In the Philippine forests the logs, after being cut, are hauled down to the water's edge by carabao teams. Frequently these huge timbers are of such extraordinary weight that, even when skidways are built, it will take from eight to 12 enormous carabao to haul them through the woods. Often when a difficult place is encountered, where there is a slight upward grade, it is necessary to make use of blocks and rollers to pull the logs up the grade. The great swamps which are such a hindrance to commercial lumbering in most tropical forests are not present here in the archipelago, where the forests are usually found on the hillsides or rolling country. These hills would allow of working overland cable stages, as worked in California and Canada.

### Money Value of a Tree.

Already the islands are filled with numerous small cuttings, and there are five or six large concerns engaged in lumbering, several of which own sawmills. Those owning sawmills are making from 30 to 50 per cent on their investment. Americans, French, Germans and Spanish business men are becoming interested. The forests of the Philippines offer a tremendous opportunity to capital and industry, for here is a vast field of virgin forest with prac-

tically no competition. When the writer was recently on the island of Mindoro he met three representatives of a big French firm who, after a year's tour over the world, had decided to locate in the Philippines.

At a conservative estimate, fair stands of timber in the Philippines will run about 100 valuable commercial trees to the acre, which, when put into log, will run not less than 80 cubic feet to the log. A cubic foot is equal to 12 feet board measure. The cheapest Philippine wood, red lauan, is bringing \$40 American money per 1000 feet, board measure. Molave is bringing \$25 per 1000 feet, board measure. In the states now, a forest running 5000 feet to the acre is a fortune. In general the Forestry Bureau counts on about 40,000 feet b. m. to the acre as the forest run, taking in both thick and thin growths.

### Apaches Worship the Sun.

Pray to Orb of Day at Outset of Every Great Undertaking.

The Apaches, like many other North American tribes, are sun worshippers. Their myths tell them that the sun is the all-powerful deity, and to it all supplications are addressed. On going into battle, planting corn or starting on a cattle-stealing expedition the sun is asked to look with favor.

That they believe in a future world is proved by their custom of killing horses and burying them, as well as their clothing and implements of the chase, for life in the future world. Not only the medicine men, but the people, claim to hold communion with the Chindi, or spirits of their ancestors.

They are also great believers in omens, talismans and amulets, but are very conservative, and it is with difficulty that one gets them to discuss things supernatural. They will not talk about God among their own people with familiarity, and scarcely at all with the white man.

### Are You a Millionaire?

Pittsburg Gazette.

You may be a millionaire and yet not be aware of the fact.

Don't faint—here's the smelling salts. Now we'll proceed.

A "millionaire" is worth that number of dollars.

A "cent" millionaire is the possessor of \$100,000.

A "mill" millionaire is worth just \$100.

But to what class do you belong? Aha, we thought so.

Your millions, like our own, can only be figured in Chinese money.

blood. The natives make cups of the narra, and when water is put into the cups the dry wood imparts a bluish tinge to it, and this decoction is highly thought of by the natives as being good for dropsical troubles. There are two species of narra, the yellow and the red; the one having a golden straw color and the other a blood red surface. When rubbed with a little linseed oil or banana peel (varnish does not do well in the tropics on account of the heat), the narra sparkles and glistens like a plate-glass mirror. One can see his face in it.

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