

CHAPTER VII

THE BAMBOO

The bamboo is usually associated with the Far East, mainly with the people of Japan and China. After centuries of experience they have learned to use it in countless ways. It requires the deft hands, patience, and experience of the Oriental to convert the bamboo into many articles of daily use.

First, it is a tree-grass, second it grows with marvelous rapidity, and third it possesses great strength in proportion to its weight.

It is not confined to the tropics of the Far East but grows in the tropics and sub-tropics of the whole world. It claims full possession of the land. Other things will not grow with it. Even its litter is disliked by other plants. It is hard to work and splits easily when nailed. It is usually bound together with plaits and vines. I doubt if it ever becomes popular in the western world, except for poles for various purposes. Because of its strength it forms excellent rafters, scaffold-poles and many other uses for which poles are needed, especially fish poles. A split bamboo fish pole has been the favorite with many fishermen for a long time.

The beautiful pendant leafage of the bamboo adorns the banks of almost every stream and river in the American tropics. The mass of matted roots checks erosion in times of flood. Often when undermined by torrents great masses of bamboo fall into the water and float into the sea. In time these islands break to pieces and bamboos wash ashore on many tropic strands. These poles are very buoyant and no doubt many small creatures hiding in these hollow stems

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are transported to distant parts. It is classed by many as the most useful plant on earth. The Chinese say that without one useful plant, like bamboo, no people can thrive. It seems to me this title belongs to the cocopalm and not the bamboo for several reasons. It is not a single species but many species of very different characters and uses. It is not a great indispensable food plant. It is only of great use in those regions where the natives over a period of many years have learned how to handle it. It takes full possession of the land and when it is used as a wind-break it is necessary to surround it with a trench to prevent its roots from invading the whole neighborhood. In cases of severe winds in the Far East the natives seek shelter in their bamboo groves.

Nature's experiment in a hollow pipe-like stem is successful in the bamboo. The stems are reinforced at regular intervals with nodes and partitions. To add to the strength the stem is encased in a layer of silica or natural glass. In a tropical gale they sway and creak in the wind and if flattened to the ground send up fresh shoots which in good soil grow sometimes at the rate of three feet in twenty-four hours. In fact, in a hot climate and rich soil a bamboo reaches a height of thirty or more feet in as many days. It has great strength, splits straight, and so many uses that it is useless to try to name them. They are cut into canes, strips, splints and shavings. They are used in baskets, pipes for water, hats, mats, house construction, pipe stems, chop sticks, plant pots, flutes, and other musical instruments, Victrola needles, pens, broom and brush handles, fish poles, bird cages and all kinds of furniture, pumps, ropes, paper, and bamboo shoots for food creamed like asparagus. Over one thousand uses have been listed. Many kinds of bamboos have been introduced into the southern United States and so far have served more for ornament than other uses.

A tree is a plant with a central erect woody axis.

I presume a bamboo stem can be classed as a hollow stemmed giant grass-like tree. This stem in grasses is called a "culm". Like the palms and tree-ferns and unlike our common woody trees the culm does not increase in diameter. At first tender and soft it pushes upward then hardens and stays that way.

In some places it is so rampant that it is almost a weed and unless there are natives present to use it it takes possession of the land. In the West Indies much money has been spent in trying to find a wholesale use for it. One man long ago split it into tow for packing to prevent hot boxes in car wheels. It can be flattened into a rough kind of board and it might be used for pulp for paper. With its feathery plume-like foliage it is surely a thing of beauty and bamboo groves when cleaned and well kept are a never-ending curiosity to even those who are accustomed to a tropical environment. Like the palms they can be used to great advantage in landscape planting if properly placed. Like many other striking tropical landscape features you must live with it for a long time in order to become fully attuned to it. The plumed bamboo, the exquisite tree fern and the patrician palm are exotic to northern eyes till there has been time for friendly acquaintance.

The little hollow culm of grass is a bamboo stem in miniature and a grove of bamboo is merely a giant field of grass grown big under the stimulation of a tropic sun and soil. A grass field in the north and a bamboo grove in the tropics is a fair measure of the difference in productivity of the two zones. It is like the difference between the ferns of the temperate zones and the magnificent tree ferns of the tropics, surviving remnants of the great carboniferous age when these trees corraled the sunshine of long ago in the form of coal.

The question is often asked as to the possibility of converting the Everglades into a vast grove of bamboo. There are probably several species of bamboo

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which might grow there and there are other trees which would probably yield more useful materials for the western world and have better effects on the soil but it is worth a trial. All grass stems are not hollow. Corn is a grass which in many places almost reaches tree size. Unlike the bamboo the stalk is filled with pith.

Like the elephant and water buffalo the bamboo needs the Oriental. Many centuries of use-association have united the two to such extent that I doubt if the bamboo ever becomes popular in the western world. The American is used to the axe, a board and a pocket full of nails. It is not, therefore, only a question of growing a certain kind of tree—the habits and demands of our people must first be considered.

I have never seen a bamboo in flower or fruit. In some parts of the world they bear edible grains. The flowering and fruiting of these bamboos are curious. Bamboo is probably popular in the Orient because of the scarcity of other woods.

The cane-brakes of our South are small bamboos. These culms are woody and grow to be ten or more feet in height. Southern reeds are also of the same kind only more slender in nature. Every Southern country boy is familiar with the cane-brakes. They are excellent hiding places for wild game and run-aways. The cane-brakes are really bamboo thickets and although common and well known to all of us are really of as great botanical interest as is the oriental bamboo. There are two canes in our South, the large-cane and the switch-cane. The large-cane inhabits the alluvial bottoms, more or less submerged throughout the year. The switch-cane occurs on land less subject to overflow. The area occupied by the switch-cane has been reduced in clearing land for agriculture. This dense growth was conquered by fire because in dry times this small cane burns with much crackling. These two canes or bamboos are alike in

habit but differ in their mode of reproduction. In the case of the switch-cane which grows to be ten or more feet in height the slender stem branched from the base is seldom more than half an inch in thickness. These tall canes are flowerless. Once every three or four years early in the spring flowers are produced on naked shoots only eighteen inches high. Although the slender canes spring copiously from the **rhizomes** or underground stems, the flower or seed-bearing shoot is only produced once in every three or four years.

In the case of the big-cane which reaches a height of twenty-five or more feet and an inch in diameter panicles of its flowers are produced in the axils of its branches at long and indefinite intervals of time. In certain parts of our South old residents were astonished to suddenly see the large cane-brakes bending under the burden of heavy nutritious grains on which birds and beasts were feeding. This may occur only once in a person's lifetime. The farmers thought a new plant had suddenly appeared in the country. The stock grew fat on the seeds. Quantities were picked and stored for future use. After this crop the plant dies and the cane decays. From the seed a new crop comes. During the first year they are simple sprouts. They furnish sweet and tender pasturage and are called "**mutton-cane.**" In time they grow into a dense thicket reproducing for another half-century from their underground stems, forming the almost impenetrable cane-brakes in which the bear finds the securest retreats. So far as I know these cane-brakes have never been fully studied but it is strange indeed for a plant to reproduce itself from its underground stems, for a half-century, then bear an immense quantity of seed and then die. Mysteries are not confined to the bamboo groves of the East. They can be found in the common cane-brakes of our own South. In these dense cane-brakes the wild bear and other creatures safely hide and even with the help of

bloodhounds many runaway slaves have never been found. If these cane-brakes were in Asia or the Asian in the canebrakes these stems might be used. Like grasses of all kinds throughout the world when once in possession of the land they hold on for a long time in spite of fire. In this curious method of fruiting and dying at the end of fifty years after producing many plants from its mat of underground stems called "rhizomes" there is an indication that nature recognizes the need of reproduction from seed at stated intervals to assure vigor of growth. It appears that a combination of both methods of reproduction gives great vigor of growth, if we read aright the lesson of the bamboos and cane-brakes. These cane-brakes may prove a fertile source of paper pulp some day. Although not so steeped in story and glamour as the bamboo groves of the Orient they are full of interest to the old Southerner whose heart is always in the corn and cotton fields, swamps and cane-brakes of his native land.

The word "bamboo" is of Malay origin and the plant has been so long associated with the people of the orient that it is used as a measure of length, about eleven feet, and also as a measure of capacity, about five pints. In the western world it has not entered extensively into our language unless it is the basis for the word "bamboozle." The negroes of Louisiana called a drum constructed from a bamboo cane a "bamboula." The dance accompanied by this drum was also called the "bamboula."

There are bamboos over one hundred feet in height and a foot in diameter. With a skin stretched over one of these sections a most excellent drum could be easily produced, but in Africa, the land of talking drums, they use hollow logs of many sizes.

There are, of course, many kinds of bamboos, some of which grow in high altitudes in the tropics where the climate is colder than that of Florida. Some of them yield valuable grains but little is known of the

fruiting of many species. A collection of all kinds of trees is caled an "arboretum," of all kinds of pines a "pinetum," of willows a "salicetum," of palms a "palmetum." A bambuetum in the Everglades muck along the Tamiami Trail might prove an interesting experiment. There are already many kinds here and there through the State of Florida. Testing of all these species on canal banks and in the muck would not be expensive and would no doubt yield some interesting and valuable results. Even if not of commercial value they form most excellent windbreaks and are not excelled in the beauty of their foliage, and as to fish poles, in spite of the many fancy kinds on the market, the common, everyday ordinary man—and there are lots of us—prefer the bamboo pole of boyhood days. They are imported in great quantities from China. We ought at least produce our own supply of fish poles. A fish pole farm ought to prove a profitable novelty.