

## 40000 to 40039—Continued. (Quoted notes by Mr. F. N. Meyer.)

They call this tree on this account *Shih mien shu*, meaning 'stone cotton tree,' reference being made apparently to the resemblance of this caoutchouc or rubber to asbestos. The bark of this *Eucommia* is a valuable drug, used as a heart stimulant and said to benefit especially those whose hearts have become affected by overindulgence in opium. The bark is called *Tu chung*, meaning 'heart's ease,' and the tree also passes under that name, although in Shensi and Kansu the name *Shih mien shu* is the one commonly used. It seems that the bark is mostly taken from trees that are from 7 to 12 years old. Here and there the Chinese have taken advantage of the rapid growth the *Eucommia* makes when young, and they have planted them along roadsides, together with poplars. The long, slender, and straight stems are used for house-building purposes. This tree reaches a height of 80 feet, but it seems to grow best when sheltered by other trees. Of value as a quick-growing ornamental tree for parks in those sections of the United States where the winters are not too severe. It also might be planted in plantations, after careful inquiries have been made as to the amount of bark China could take annually, and its bark exported to China. Obtained from the garden of the Belgian Roman Catholic missionaries in Huihsien."

"A deciduous tree, not yet found by Europeans in a wild state, but from 20 to 30 feet high, as seen cultivated by the Chinese. It probably reaches a large size. Leaves alternate, ovate to oval, long and slender pointed, toothed, 2 to 8 inches long, slightly hairy on both surfaces when young, becoming smooth above. Flowers unisexual, the sexes on separate trees; they are inconspicuous, the males consisting of brown stamens only; female ones not seen by me. Fruit flat and winged, 1-seeded, rather like an enlarged fruit of wych-elm, oval oblong, 1½ inches long, tapering at the base into a short stalk, apex notched.

"Introduced to France from China about 1896, and a few years later to Kew, where several plants raised from the original plant (a male) are 15 to 20 feet high and have several times flowered. It was first discovered in China by Henry as a cultivated tree, 20 to 30 feet high, but as its bark is and has been for 2,000 years highly valued by the Chinese for its real or supposed tonic and other medicinal virtues, it is never allowed to reach its full size, but is cut down and stripped of its bark. To Europeans the most interesting attribute of this tree is its containing rubber. What its commercial value may be is doubtful; the rubber is apparently of inferior quality, but the tree is of peculiar interest, as the only one hardy in our climate that is known to produce this substance. If a leaf be gently torn in two, strings of rubber are visible. At Kew, grown in good loam, it has proved absolutely hardy and a vigorous grower; it can be propagated by cuttings made of half-ripened wood put in gentle heat. Wilson introduced seeds to the Coombe Wood nursery, from which, no doubt, trees of both sexes have been raised. Some authors place it in the witch-hazel family." (*W. J. Bean, Trees and Shrubs Hardy in the British Isles, vol. 1, p. 534-535.*)

For an illustration of these gum-producing trees as found growing in China, see Plate IX.

## 40029. TRACHYCARPUS EXCELSUS (Thunb.) Wendl. Phœnicaceæ. Palm.

"(No. 2167a. Huihsien, Kansu, China. September 28, 1914.) The Chinese fan or coir palm, cultivated in gardens in southern Shensi and southern Kansu as an ornamental tree, reaching a height of 30 to 40