

CASTANEA (*Tournefort*). The Chestnut.

*Castanea vulgaris* (*Lamarck*). "Spanish Chestnut." Southern Europe, Western Asia.—Height, 60ft. to 100ft. Timber strong, elastic, and durable; nearly equal to English oak in value, although not of equal density. Highly valued for its fruit in all temperate countries. In this colony it commences to fruit at an early age.

FAGUS (*Linne*). The Beech.

*Fagus obliqua* (*Mirbel*). Chili.—Height, 70ft. Affords a stout heavy, timber; used for general building-purposes, and stated to be durable.

*F. sylvatica* (*Linne*). "Common Beech." Europe, Temperate Asia.—Height, 50ft. to 90ft. Attains its highest development on calcareous soils, and requires close planting to develop straight trunks of any great length. Wood hard, compact, smooth; used for a large variety of purposes, most extensively for cheap furniture, millwright's work, turnery, baskets, tool-handles, &c. It has been profitably utilized for railway-sleepers when treated with creosote, although in its natural state it is not durable when exposed.

*F. Menziesii* (*Hooker f.*). "Silver Beech." New Zealand, Te Aroha to Riverton.—A noble species, 60ft. to 90ft. high, and from 2ft. to 4ft. in diameter. Wood compact, firm, even in the grain, fissile, and easily worked. Used as fencing-posts it does not last more than from three to five years—house-blocks may last seven years; it is, however, of great value for inside work, and still more for pipe-staves and furniture; not unfrequently used for shingles.

*F. fusca* (*Hooker f.*). "Tooth-leaved Beech." Kaitia to Southland.—The most valuable of all the New Zealand beeches, affording timber of large dimensions, and of great strength combined with great durability. Highly valued for railway-sleepers, bridges, and constructive works. The New Zealand beech-forests are easily renewed if fenced so as to exclude cattle, and left to Nature. All the species may be cultivated with ease.

*F. Solandri* (*Hooker f.*). "Entire-leaved Beech." New Zealand, from Hokianga southwards.—A valuable species, but the timber is inferior to that of the tooth-leaved beech.

*F. Cunninghamii* (*Hooker f.*). "Tasmanian Beech." Victoria, Tasmania.—An evergreen species, often attaining large dimensions. In general appearance and in quality of timber approaching the silver beech (*F. Menziesii*) of New Zealand.

SALIX (*Tournefort*). The Willow.

*Salix triandra* (*Linne*). "Triandrous Willow."—A variable species, several forms of which are of great value for basketwork; one of the best of these is var. *amygdalina*—the almond-leaved willow—which is highly esteemed for the finer and medium kinds of basketwork.

*S. Russelliana* (*Smith*). "The Bedford Willow." Europe.—Height, 60ft. to 80ft. Timber light, tough, and elastic, but not durable; not readily combustible. Used for the manufacture of cricket-bats, planking for carts and wheelbarrows, brush-backs, &c.; but not durable when exposed. The bark contains salicin. An infusion of the bark of young shoots is employed in England as a tonic. Although this willow is often planted for poles, for hoops, and bendware, its wood is less tough than that of the Huntingdon willow (*S. alba*). By many writers it is considered to be of hybrid origin, and is usually referred to *S. fragilis*. It is the *S. viridis* of Fries.

*S. alba* (*Linne*). "Huntingdon Willow." Europe, Northern Africa, Western Asia.—Height, 40ft. to 60ft. Timber similar to that of the Bedford willow; has been used for rafters and other inside building-purposes, and will last for over a century; but is not durable when exposed. This species is extensively planted in Europe for poles for crates, hoops, bendware, rake- and broom-handles, &c.; but is not suited for basketwork, although occasionally used for that purpose when good kinds are not available. Affords good charcoal for the manufacture of gunpowder.

*S. caprea* (*Linne*). "Goatsallow." Europe, Northern Asia.—A small tree, 30ft. to 40ft. high. Wood used for sheep-hurdles, hoops, bendware, broom-handles, and affords good charcoal for the manufacture of gunpowder. Extensively planted for undergrowth in coppice-woods, as it does not burn readily.

*S. daphnoides* (*Villars*). *S. daphnoides* (*Villars*), var. *acutifolia*. Northern Europe and Asia.—A rapid-growing species, 30ft. to 50ft. high, applied to the same purposes as the preceding, and of greater value. Var. *acutifolia* is an excellent osier for superior basketwork.

*S. viminalis* (*Linne*). "The Common Osier." Europe and Northern Asia.—One of the best osiers for strong basketwork, hoops, crates, &c.

POPULUS (*Tournefort*). The Poplar.

*Populus alba* (*Linne*). "The Abele." Southern Europe, North Africa, and Asia, China, and the Himalayas.—Height, 60ft. to 90ft. Wood, reddish-white, soft, but not easily ignited; used for similar purposes to the willows, although not so tough.

*P. tremula* (*Linne*). "The Aspen." Europe, North Africa and Asia, Japan.—Usually of smaller dimensions than the preceding. Wood used for similar purposes, also for flooring.

*P. Euphratica* (*Olivier*). Temperate Asia, Algeria.

*P. Canadensis* (*Desfontaines*).—Height, 120ft. Remarkable for its rapid growth and large dimensions. Wood white, soft, and light. Valued for flooring, as it does not readily take fire.

*P. nigra* (*C. Bauhin*). "Black Poplar." Europe, Temperate Asia.—Almost equalling the preceding species in dimensions, but of less rapid growth. Wood valued for flooring, especially for factories, workshops, &c. *P. nigra*, var. *fastigiata*, is the Lombardy poplar.

LIBOCEDRUS (*Endlicher*). Incense Cedar.

*Libocedrus decurrens* (*Torrey*). "Californian Incense Cedar." Oregon, California.—Height, 150ft., with a trunk from 3ft. to 6ft. in diameter. Timber rather light, but extremely durable; used