

dark colour contrasting strongly with the lighter shades of the other trees. In the race to get above the deciduous trees they develop tall trunks with the branches high up. In one hundred years the poplars are dying and falling down, and the canoe-birch has attained maturity and soon after shows signs of old age. Meantime the older conifers have overtopped the other trees, and given a new character to the general appearance of the forest. The younger conifers of various ages which have been springing up from seed every year take possession of the ground left by the decay of the first occupants, and in about 150 years the forest has again become almost entirely coniferous. Such is the rotation of crops of trees which is perpetually going on in these regions. Perhaps one-third of the whole area consists of second growths of less than fifty years, one-third of trees from fifty to one hundred years old, while the remaining third may be a hundred years and upwards."

Notwithstanding her own wealth of timbers Canadian furniture-manufacturers are always on the lookout for something new, and no doubt Canada would be a good market for many of the New Zealand timbers for cabinetmakers. As Canada does not impose any duty on raw sawn timbers, there ought to be a splendid opening for enterprising New Zealand timber-merchants.

In this connection it will come as a surprise to New Zealand timber millers and merchants to know that Canada, notwithstanding her wealth in quantity and variety of timbers, imported in 1907 raw sawn lumber to the amount of \$8,412,256 on which no duty was paid, and \$2,565,341 subject to a duty of 17½ per cent. *ad valorem*. New Zealand imported during the same period £270,770, or, roughly, \$1,350,000, on which from £1 to £2 per 1,000 ft. duty had to be paid, or, in many instances, from 35 to 70 per cent. of the value.

The finer-class New Zealand furniture-timbers could be exchanged against the coarser Canadian building-timbers and such furniture-timbers as are not procurable in New Zealand, to the advantage of both countries.

PRINCIPAL CANADIAN TIMBER-TREES.

The principal commercial woods of Canada are the following, taken from a list of 123 indigenous trees of the Dominion.

YELLOW-CEDAR, YELLOW-CYPRESS (*Thuja excelsa*, Bong.).—The yellow-cypress is not nearly so abundant in British Columbia as the arbor-vitæ, nor is its circumference so great. Its height is about the same as the arbor-vitæ—150 ft.—and its average diameter about 4 ft., though occasional trees attain 5 ft. The yellow-cypress is confined to the coast and the adjacent islands. Its wood is very close, and, as the wood takes a very high polish, it is greatly valued for interior finishing and for the manufacture of furniture. It commands a higher price than either Douglas fir or arbor-vitæ. The Natives along the northern coast of British Columbia make many articles for domestic use from this wood. Average price at seaboard, £1 2s. 6d.

WHITE-ASH (*Fraxinus americana*, Linn.).—The white-ash ranges from Nova Scotia to western Ontario, increasing in abundance and size until its western limit is reached. It enters largely into the manufacture of agricultural implements of all kinds, wagons, carriages, and sleighs, as well as handles of tools.

WHITE-ELM (*Ulmus americana*, Linn.).—The American or white-elm is of wide distribution in Canada, being found from the maritime provinces westward to rivers falling into Lake Winnipegosis, in Manitoba. It increases in size and abundance until western Ontario is reached, where it is often found 6 ft. in diameter and over 100 ft. in height. It also grows to a large size in the valleys of the Winnipeg and the Red Rivers. As lumber it is rather coarse, but is very largely used in the manufacture of furniture, coffins, and flooring. Varying greatly in colour and grain, it is employed to imitate other woods, nearly all the cigar-boxes used in Canada being made of elm, while practically all coffins are made of either elm or basswood stained and polished to imitate other woods.

WHITE-OAK (*Quercus alba*, Linn.).—Though the true white-oak is *Quercus alba*, several other species are so classified commercially. The most important among these is the bur-oak, *Quercus marcoparpa*, Mich. The true white-oak is found in western Quebec and in Ontario as far west as Lake Huron. The bur-oak has the same range as *Quercus alba*, but is also found in the maritime provinces and in the west throughout the wooded portions of Manitoba. The wood of both species is very heavy, hard, tough, and durable, that of the bur-oak being the most durable of any American oak when in contact with the soil, which makes it very valuable for use as fence-posts, railway-ties, and piles. The wood of the white-oak is also largely employed in shipbuilding, carriage and wagon making, and cooperage, the manufacture of agricultural implements, and for cabinet and furniture work, flooring and interior finishing. Quarter-cut it exhibits a great variety of grain and colouring. Average price per 100 sup. ft. at seaboard, £1 15s.

WESTERN WHITE-OAK (*Quercus Garryana*, Douglas).—Though a few trees of this species grow on the mainland of British Columbia, it is practically confined to the southern part of Vancouver Island, the finest trees growing in the vicinity of the City of Victoria, where trees three or four feet in diameter from which logs from ten to twenty feet long can be obtained are not uncommon. The wood resembles that of English oak, and is very beautiful when made up into furniture and cabinet-work.

RED-OAK (*Quercus rubra*, Linn.).—The red-oak extends from the maritime provinces westward to Lake Superior, reaching the greatest size in the Province of Ontario. The wood is inferior in quality to that of the white-oak, but is almost as hard, heavy, and strong. It enters more largely than the white-oak into cooperage work, and, as with white-oak, second-growth wood is much used for handles of all kinds, wheel-stock, axles, whiffletrees, &c. For furniture, cabinetmaking, and interior finishing it is almost as valuable as the white-oak. The bark is rich in tannin. Average price per 100 sup. ft. at seaboard, £1 5s.