

favourable conditions of growth. It is particularly valuable for pulp, as its wood is heavier than that of other spruces. The red spruce (*Picea rubens*) is confined to the Province of Quebec and the Maritime Provinces and its wood is similar to that of the white spruce, with which it is commonly marketed. The western species, Engelmann (*Picea Engelmanni*) and Sitka spruce (*Picea sitchensis*) are confined to the interior and coastal regions of British Columbia, respectively. Engelmann spruce is similar to white spruce. Owing to the large size of the trees, Sitka spruce lumber may be obtained in greater dimensions free from defects than that of the other spruces. It is therefore used extensively in aircraft.

Pine.—There are nine pine species native to Canada, six of which are of commercial importance. Eastern white pine (*Pinus Strobus*) is the most valuable coniferous wood in Canada and for many years was the most important in point of quantity of lumber sawn and square timber produced. Owing to increased scarcity of good material, production has fallen and is now surpassed by spruce, Douglas fir and hemlock. The wood of the white pine is soft, easy to work, and has the valuable quality of holding its shape with a minimum of shrinkage or swelling, making it a most valuable wood for patterns. The western white pine (*Pinus monticola*) is similar in most respects to the eastern species but does not grow in pure stands as the eastern species often does. It is confined to the Province of British Columbia, while eastern white pine is found from eastern Manitoba to the Atlantic Coast.

The wood of the red or Norway pine (*Pinus resinosa*) of Eastern Canada is valued as structural timber as well as sawn lumber. It is easy to work and seasons uniformly, being slightly stronger than eastern white pine. Ponderosa pine (*Pinus ponderosa*) occurs in Canada only in the southern interior of British Columbia, where it is a valuable source of lumber for boxes and other requirements of the fruit industry of that region. The sapwood yields a fine quality lumber, light in weight, fairly soft, similar in texture to white pine, and suitable for pattern stock, fine woodwork, and other exacting uses. The heartwood is considerably heavier than the sapwood. Jack pine (*Pinus Banksiana*) occurs across Canada from Nova Scotia to Alberta and the valley of the Mackenzie River, and is used in large quantities for lumber, railway ties, pit-props, and poles; the manufacture of certain kinds of pulp from jack pine is also well established. Trees that reach lumber size are often cut and marketed with other species, such as spruce. Lodgepole pine (*Pinus contorta* var. *latifolia*), found in British Columbia and western Alberta, resembles jack pine and is put to the same uses.

Douglas Fir.—Douglas fir (*Pseudotsuga taxifolia*) occurs in Canada from the east slope of the Rocky Mountains to the Pacific. It occurs commercially in the southern interior of British Columbia, but its main economic development is on the Pacific Coast. From the point of view of lumber production in Canada, it is second only to spruce. It is Canada's largest tree and is noted for its strength, relative durability, and the large dimensions of structural timber and clear lumber that can be obtained from it. It is used extensively for structural purposes, interior and exterior finish, flooring, and veneers for plywoods, as well as for railway ties and mining timbers.

Hemlock.—There are three hemlock species in Canada, two of which are valuable timber trees. The eastern hemlock (*Tsuga canadensis*) is abundant throughout its range in the eastern provinces but is not found west of the Province of Ontario.