Section 2.—Main Types of Forest Growth.

Physiographic, climatic and soil conditions in Canada favour the coniferous type of forest. While the more fertile portions of Ontario, Quebec and the Maritime Provinces once supported a heavy virgin growth of hardwoods, the greater part of Canada's forest area is covered with spruce, pine, balsam, Douglas fir and other coniferous soft woods. Three main groups of forest growth in Canada follow the main physiographic divisions already mentioned. These groups are the Cordilleran, the Great Plains and the Eastern forests.

The Cordilleran Forests.—The Cordilleran Forest Region extends from the Pacific Coast to the eastern foothills of the Rocky mountains and may be subdivided into the Coast Belt, the Interior Dry Belt, the Interior Wet Belt and the Rocky Mountain Belt. The Coast Belt includes several distinct forest types, their character being determined by variations in climatic and topographic conditions, among which altitude and precipitation have the greatest effect on forest growth. In the southern portion of the belt Douglas fir and red cedar are the principal species at altitudes below 2,000 or 2,500 feet. With these are associated western hemlock, western white pine, Sitka spruce and the *amabilis* and lowland firs. Toward the north and at higher altitudes, Douglas fir disappears and red cedar and hemlock are the important trees, with Sitka spruce, *amabilis* fir and yellow cedar as subsidiaries. On the northern end of Vancouver island, the Queen Charlotte islands and the adjacent coast Sitka spruce and western hemlock form a lowland type.

In the Interior Dry Belt, *ponderosa* or western yellow pine predominates at low altitudes bordering on the grass lands. With rising altitude Douglas fir gradually increases in importance until it predominates at elevations up to 3,500 and 4,500 feet. Western larch covers a limited area usually between the true yellow pine and Douglas fir types. At the northern latitudinal and upper altitudinal limits of the Douglas fir type, an Engelmann spruce type develops, which merges into a spruce-alpine fir type at still higher altitudes. Lodgepole pine has taken the place of Douglas fir, Engelmann spruce and, in some cases, yellow pine on burned-over areas and has become, to a considerable extent, established as a distinct type.

Forest types similar to those of the coast have developed in the Interior Wet Belt. In the southern portion of this belt, red cedar predominates in the wetter situations, mixed with Douglas fir, Engelmann spruce, white pine, hemlock, western larch, alpine fir, lowland fir and cottonwood. On the benches and lower valley slopes, hemlock and cedar are the important species. Engelmann spruce replaces hemlock at higher elevations, cedar gradually disappears and the spruce-alpine fir type stretches up to timber line. To the north, Engelmann spruce and alpine fir are more prominent and the other species are gradually eliminated.

The Rocky Mountain Belt includes portions of the Dry Belt types to the south and those of the Interior Wet Belt further north. Otherwise the typical forest of the Rocky mountains is made up of Engelmann spruce and some white spruce, with an increasing proportion of alpine fir as the altitude increases. This type has suffered so severely from fire, especially on the dry eastern slopes, that lodgepole pine has established itself permanently in some cases and temporarily in others on burned-over areas.

In the Sub-Arctic Belt, comprising the Yukon plateau and that part of the Rocky Mountain system north of 58°, the general elevation is over 4,000 feet, the climate is severe, the growing season short and precipitation scant. As a result, tree growth is slow and confined to favourable sites in valleys. The timber is small