not always been successful. There is, however, no lack of hardiness in this variety, and if transplanted very young, when only eight or ten inches high, this tree can usually be moved successfully. This is a slow growing species.

# P. cembra, L. Stone Pine. From Mountains of Central Europe and Siberia.

This tree makes a close, erect symmetrical growth. The leaves are 2½ to 3 inches long in clusters of five. They are slender, flexible, and somewhat triangular, one side a smooth green, the other two with silvery white lines. It is a very slow growing tree, and requires many years before a specimen reaches any considerable si c. The Stone Pine has been under test since 1896, both at Brandon and Indian Head, and has proved quite hardy.

### P. sylvestris, L. Scotch Pine. Northern Europe.

This well known evergreen tree has a symmetrical upright habit of growth, and when allowed sufficient space for development makes a very shapely tree. The leaves are arranged in clusters of two, are from 2½ to 3 inches long—shorter in old trees—

somewhat flattened and twisted, and of a dull, bluish green eolour.

Several hundred young specimens of the Scotch pine were planted at each of the North-west Experimental Farms in 1889 and 1890. At that time there was very little shelter to protect them, and a large proportion died during the winters of 1890 and 1891. A few, however, survived, either from individual hardiness or more favourable surroundings as to shelter, and maintained a somewhat stunted growth for several years, during which time they became established, and have since made satisfactory progress. For the past seven or eight years they have been quite hardy.

#### P. sylvestris Rigaensis. Riga Pine.

This is said to be a somewhat hardier form of the Scotch pine grown from seed obtained in forests near Riga, Russia. A number of young trees of this variety have also been tried both at Brandon and Indian Head. These were put out in 1890, and subsequent years, and some of the trees have survived. The Riga pine has a more upright habit of growth than the ordinary Scotch pine, otherwise they seem to be identical, see Plate VI, fig. 2.

In planting young Scotch or Riga pines in the North-west small well rooted specimens should be chosen, and they should be put, where possible, in the shelter of some protecting trees. This tree, however, is a very hardy one, and would probably endure the winter even in a moderately open place if some slight protection were afforded. If a stake were driven down near the tree and a wisp of straw wound around to pro-

tect the foliage this would no doubt help to earry it through the winter.

## P. montana, Duroi. Mountain Pine. From Mountains of Central Europe.

This is a large, rather compact, bush-like form of pine, from 5 to 15 feet in height, very suitable for planting where space is limited. The leaves are in pairs about two inches long, somewhat twisted, and of a dark green colour.

A considerable number of young specimens of the Mountain Pine were planted at Brandon and Indian Head in 1890 and 1894, a large part of which died. A few survived, which have gradually acquired greater hardiness, and those which are now growing in shelter appear to be quite hardy.

In planting the Mountain Pine in the North-west, small, well-rooted specimens should be chosen, and they should be so placed as to have the shelter of other established trees.

### P. montana mughus. Dwarf Mountain Pine.

This is a low-growing and very compact form of the Mountain Pine, which makes a neat and attractive specimen. In hardiness this is similar to the ordinary larger form. The Mountain Pine appears to be somewhat less hardy than the Scotch Pine.