

a greater degree than any of the other species.

Silver Maple is sometimes used when the Sugar Maple is unobtainable, but it is inferior in many respects as it is not so strong as that of the Sugar or "hard" Maple.

The principal uses to which the Maple is put in organ building is in the construction of the following and especially in those parts where minimum warping and maximum strength is required:—

- (a) Pedal keys.
- (b) Anything that belongs to combination racks.
- (c) Drawstop rods.
- (d) Special pipes.
- (e) Contact rollers of the electric switch-board in electro-pneumatic organs.
- (f) Coupling bars of electric switch-board.
- (g) Dowels—To hold parts together.

NOTE.—Wooden dowels are very freely used in constructing an organ as they can be more readily used in the less accessible places than nails or bolts. They cost less, have great strength and the ease with which they can be used in different other parts too numerous to mention, makes them a valuable instrument.

7. *Ash*.—Black, White, Red and Green.

The Black and the White Ash are more extensively used than the two other varieties which latter are used as substitutes for White Ash when it is not readily obtainable.

For all exterior work, plain or decorative, on the case or console of an organ Black Ash is the variety most employed. In addition Ash is used for the following:—

- (a) Frame-work.
- (b) Swell-boxes (The skeleton frames of which are often made of this wood).
- (c) Pedal-board and bench, if console is of Ash.

8. *Birch*.—Paper and Yellow.

The wood of the Paper Birch is soft and tough. It is also compact and easily worked. Birch is the most important hardwood sawn into lumber in Canada and Yellow Birch forms the greater

part of the Birch lumber produced. This wood is used extensively throughout the organ and the following list will give the reader an idea as to the extensive use made of same:—

- (a) Cases (both organ and console).
- (b) Frames for pedal boards.
- (c) Special pipes.
- (d) Frames (Extensively used)
- (e) All the frames of the console.
- (f) Small pneumatics of the auxiliary chests.
- (g) Blocks on caps and pipes.

9. *Beech*.—

This wood is very little used in organ building but when it is, it is most suited to the mechanical parts.

10. *Elm*.—White.

Elm is often used in the cases, but more frequently the lower grades of this wood are used for crating the organs for shipment.

11. *Chestnut*.—

Chestnut is often used, when obtainable, for the case and for the exterior of the console. The close grain of this wood and texture causes it to take glue well.

12. *Butternut*.—

This wood is used in making cases for organ and console. It is also used throughout the mechanism, where truthness of shape is necessary. Butternut constitutes the foundation of most of the veneer used at the organ building establishment visited.

13. *Black Walnut*.—

Black Walnut is an exceedingly beautiful wood and its popularity for fine cabinet work, etc., has resulted in the almost commercial extinction of the tree in America. It is only used in the visible exterior portions of the organ and console.

14. *Ebony*.—

This tree is not indigenous to Canada, but according to "Sargent" it is common in the bluffs of the Gulf Coast and on both banks of the lower Rio Grande. South of the Rio Grande it is one of the commonest and most beautiful trees. The wood is used for the black keys of the manuals and pedals and for stop nob. It is also used for delicate moulding in the panelling of the case and console.