

with shutters. Unlike a piano where the keyboard is attached to the instrument, the keyboards or manuals and pedal keyboards in most organs, together with all the controlling devices, are built in a separate unit known as the "Console" and may or may not be attached to the instrument. As nearly all our modern organs are controlled either by pneumatic or electro-pneumatic action, the "Console" may be located in the most suitable position which may be any distance from the organ to which it is connected by electric wires or lead pipes. Figure 1 shows a four manual "Console" and Figure 3 the exterior of an organ. We might build the largest and most costly organ but in order to play it we must furnish it with the necessary breath or wind to make it speak, so the next most important feature is the blower-fan which furnishes the wind. The constructional details of this and the other portions of the organ will be dealt with later.

Our largest organ building establishment, that of Messrs. Casavant Freres Limitee, located at St. Hyacinthe, employs between 175 and 200 men all the year round and has built to date in the neighborhood of 900 organs varying in size from the small Chapel organs to the mammoth five manual organs which cost anywhere from \$50,000 to \$100,000. The average 4 manual organ requires between 20,000 and 25,000 feet board measure of lumber to construct it and the total annual consumption of wood by this one organ building firm is about 500,000 feet board measure of all species. The following are the different kinds of wood which are used:—

Oak, Pine, Basswood, Spruce, Poplar, Mahogany, Maple, Ash, Birch, Elm, Chestnut, Butternut, Beech, Black-Walnut, Ebony, and Rosewood or 16 species all told. Some of these species are used entirely on the exterior and others in the interior.

Table showing the principal woods used in order of amount consumed:—

Interior.

1. Poplar or Whitewood.
2. Pine.
3. Basswood.

In Cases and Consoles.

1. Oak.
2. Basswood.
3. Ash.

Before showing which species enter into the make-up of an organ let us first see what are the principal parts of an organ:—

Exterior.

1. Case.
2. Console—(a) Frame.
(b) Drawstop action.
(c) Keyboards.
(d) Switchboard.
(e) Couplers.
(f) Combination pistons.
(g) Other accessories.

Interior.

1. Frame—(a) Main Organ.
(b) Rests or frames for big pipes.
2. Chests—(a) Main chests.
(b) Pedal chests.
(c) Auxiliary chests.
(d) Drawstop boxes.
3. Pipes—(a) Metal.
(b) Wood.
4. Swell-boxes—Fitted with shutters.
5. Wind Supply—
(a) Blower.
(b) Wind Reservoirs.
(c) Wind Trunks.
(d) Concussion bellows on path of wind which serve as regulators.

To those entirely unfamiliar with organs it will be necessary to briefly describe the function of each of the principle parts mentioned above. As the primary object of this article is to show what woods are used in constructing an organ, it will not be possible to describe very fully the construction or function of the many complicated portions.

The Exterior.

1. *The Case.*—Figure 3 is a good illustration of an average case. It is usually of an artistic design. The necessity of a case will be observed on referring to Figure 2, where we have an organ, practically completed, but minus the case.

2. *The Console.*—The Console of an organ is like the switch-board in an electric power-house as it controls the entire