OUR CANADIAN NUT TREES.

By F. E. BUCK, OTTAWA.

The nut trees of Canada belong to two families. The walnuts and hickories belong to the Walnut Family and the chestnuts, hazelnuts, beechnuts and oaks to the Beech Family. They vary in size from the shrub-like hazel to the stately hickories. One peculiarity of most of the nut trees is that the small branches dip down and then grow up again. The walnuts, when growing as single specimens, form roundish or triangular shaped crowns and frequently stand out as land marks in old pastures and rocky fields. Both walnuts and hickories, when growing with other species in the woods become modified in form, generally growing taller with a much smaller crown.

The heights which are given in the following descriptions relate to specimens growing throughout Canada, but as we go south into the United States these measurements, in most cases, must be increased.

Nut trees are valuable for their wood and for their fruit. The United States has a considerable import trade with nuts and 19:0 figures give the total value of imported nuts at thirteen million dollars, or in quantity, one hundred and fifteen million pounds. This does not, of course, take into consideration the very considerable quantity of home-grown nuts. The food value of nut trees, therefore, must be looked upon as already considerable and of growing importance.

THE WOOD.

Nearly all of the nut trees produce a very hard quality of timber and, in the case of black walnut. much of it is used for fine cabinet work and for high-class furniture. Owing to its popularity in that connection it now has an almost prohibitive price. The wood of the butternut is somewhat softer and lighter in weight. It is used for boat building and interior finish work. The wood of the various species of hickories is very similar and is seldom separated on the market. It is amongst the hardest. toughest and strongest of the timbers of commerce. In Canada it is used chiefly for vehicle stock, tool handles, agricultural implements, machinery parts and sporting goods. Chestnut wood is highly prized for the manufacture of tanning extracts and also for fence posts because of its durability in contact with the soil.

THE FRUIT.

The following brief descriptions of the fruit of the most important nut trees may be interesting:—

BLACK WALNUT. Nut almost round, about one inch in diameter or smaller. Shell hard, black, cut with deep ridges. Husk blackish with an aromatic

odour. Kernel oily, sweet and edible. A marketable nut.

BUTTEPNUT. Nut oblong, pointed at one end, two or t' ree inches long. Shell deeply furrowed with many sharp irregular ridges. Husk brown and very sticky. Kernel good flavor anl edible.

HICKORIES. (1) The Bitternut hickory has a very bitter kernel with a thin shell and thin husk. (2) The Shagbark has a nut which is compressed laterally and is four-ridged. The kernel is sweet and edible and is of greater commercial value than that of any of the other hickories. (3) The Mockernut has a very thick shell and the nut is large. The husk is also hard and thick. The kernel is sweet but small and difficult to extract. (4) The Pignut produces nuts which vary in size and in shape. The kernel is bitter or sweet. The husk of the hickories split into four sections as the nuts ripen.

CHESTNUT. The fruit of the chestnut is contained in a spiney burr which holds one to three shiny, brown, thin-shelled, sweet, edible nuts. The burrs split open as the nuts ripen. The native nuts are much smaller than those of the European species.

HAZELNUT. The fruit, which is a small nut about one-half inch long, is enclosed within a pair of broad, leafy, cut-toothed bracts. It is chestnut brown in color and almost globular in shape. The fruit of the beaked hazelnut is ovoid in shape and is enclosed in a leafy covering terminating in a long tubular beak.

HORSE CHESTNUT. The nut of the horse chestnut is not edible. It is large, varying from one to one and one-half inches in diameter, contained singly within a smooth pod covered with soft spines. The nut itself is aromatic and bitter narcotic.

THE FOOD VALUE OF NUTS.

Nuts have an important food value on account of the large percentage of protein and oil which they contain. It is for this reason that they are recommended for diabetics, except perhaps the chestnut which is the only one which also contains a considerable percentage of starch.

Nuts are used also in very large quantities in commercial work, especially by confectioners. They are used for making candies of all kinds and in the icing on various cakes, etc. Nuts are also used in salads. The flavor of nuts depends upon the oil. All nuts are rich in mineral matter and contain, on the average, about two per cent of mineral substances.

In the cracking of nuts it should be remembered that the hickory nut can be cracked most easily by