

a hardy winter apple is well illustrated, we think, in a number of cross-bred apples which have fruited at the Central Experimental Farm. Of a cross between Scott Winter male and McMahan female, made by Prof. John Craig, when horticulturist, 23 trees fruited. Both of these varieties are hardy at Ottawa. None of these are earlier in season than McMahan and 11 of them are later keeping apples. Practically all of them have some visible resemblance to the parents and some are very similar to both parents. All withstood the test winter of 1903-4.

On the other hand, trees of crosses between Lawver and McIntosh and vice versa are, on the whole, tenderer than McIntosh, the Lawver having proved tender at Ottawa, while the McIntosh is hardy.

It is believed that the basis for the production of the desired winter apple for the north should be a variety or varieties which have withstood test winters in the north and are also the latest keepers of such varieties.

It has been already said that late keeping varieties mean late ripening of wood, hence tender trees, but most of the late keeping hardy varieties that have already been originated in the north are of a different class. They are varieties which, although they mature or are fit for use early in the winter, keep all winter with good care. The fact that they are fit for use early means that the wood has ripened comparatively early, and hence is able to withstand the cold. Pomologists are well aware that certain varieties of fruits which are ready for use at the same time as other varieties will keep much longer. It is to this class that the desired winter apple for the north belong.

The following winter varieties originated in the north stood the test winter of 1903-4 at Ottawa and are just such apples as have been described.

Canada Baldwin, originated in the province of Quebec.

Winter Rose, originated in Dundas County, Ont.

Calumet, originated on Calumet Island, in the Ottawa river.

Baxter, originated near Brockville, Ont.

La Victoire, originated in the province of Quebec.

Stone, originated in Vermont.

Scott Winter, originated in Vermont.

Milwaukee, originated in Wisconsin.

Other promising unnamed late keeping seedlings obtained from the colder parts of Canada and the United States are growing at Ottawa. None of the varieties above mentioned have all the desired points, but with the many promising winter varieties originated at the Experimental Farm, Ottawa, we consider the outlook very bright for obtaining a hardy, productive, long keeping variety of good colour and best dessert quality for the north.

RUSSIAN APPLES.

When the Russian apples were first introduced into Canada it was thought that some of them would prove to be the solution of the winter apple problem in the colder parts of the Dominion where apples were being grown. Most of the varieties, and a large number have been imported, have proved to be of inferior quality, and almost all of them summer or autumn varieties, in this country. There are, however, a few of them which are very valuable, and, being hardier than most varieties of American origin, are useful to those who live near the extreme limits of successful apple culture. As far north as Ottawa, however, which is about latitude 45°, many apples of American origin succeed well, and these are, in most cases, preferable to the Russian. North of latitude 45° the Russian apples increase in value the further north they are grown. The Yellow Transparent and Duchess apples are exceptions to almost all the others, these being standard varieties in nearly all parts of Canada where apple trees are grown.