

which do not. But ducks do trample down the plants and tilled earth, and eat young leaves. This is the most serious charge against them, but it may be reduced to a small thing, by not giving them free range at all times. Turn them into the garden only for an hour or two hours daily, and that in the morning when the dew is on the plants. Then they will seek mostly for slugs and similar pests. At other times they may be about the lawn. Where there is no natural bed of water for ducks, pains should be taken where they are kept to provide a change of water in a clean tank every day. This should be located near the water tank or other supply, for convenience.—[Popular Gardening.]

Papers for Amateur Fruit Growers.

BY L. WOOLVERTON, GRIMSBY, ONT.

NO. IV.

THE PEAR—ITS HARDINESS.

The pear is not quite as hardy as the apple, and therefore the area of its successful cultivation is less extended. In the southern part of Ontario, that is, south of latitude 43½, and even higher than this along the lake margins, the question of hardiness need not be much considered; indeed, almost every variety may be planted with confidence, providing the ground is in a suitable condition. In this region, however, one of the choicest of pears, the Flemish Beauty, is a perfect failure, on account of cracks and spots; and the Seckel, that most famous pear in some American markets, is unpopular on account of its small size. The Bartlett holds the first place as a market pear, except in the county of Middlesex, where it is reported as being somewhat tender.

Between latitudes 43½ and 45, except as the climate is modified by the proximity of large bodies of water and other conditions, the question of hardy kinds becomes prominent. The counties of Huron, Bruce, Grey and Simcoe report the Flemish Beauty as the leading kind, both for quality and hardiness, while they place the Bartlett at the foot of the list. The same is true of Dundas, Stormont and other counties in the east. For hardiness and general excellence, the Clapp's Favorite is growing in favor. It is most highly commended in Ontario county, and also in Frontenac.

North of latitude 45, pears are a failure. Lanark, Renfrew and Russell report them as too tender to be grown there.

Among the Maritime Provinces, Nova Scotia takes the lead in fruit culture, and in some favored sections compares very favorably with southern Ontario. From some reports collected by Mr. Charles E. Brown, of Yarmouth, we learn that in the counties of King, Digby, and Annapolis, all the leading varieties of pears may be grown; and in Yarmouth county, although they fail on the coast, they do well inland.

In Manitoba, and the Northwest generally, pears are a failure. Yet, even for Manitoba there is a gleam of hope, for Mr. Charles Gibb, of Montreal, says he saw in Russia, as far north as latitude 54, very large orchards of Bergamot and other pears; and when these kinds are tested in Canada, some good varieties may be obtained that will endure the cold of the Canadian Northwest.

KINDS FOR SUCCESSION.

There are at least a thousand varieties of pears, and it is obvious that the amateur cultivator would have very great difficulty, without advice, in selecting from any extended list those varieties most desirable for his purposes.

To assist in this, and save the intending planter much vexatious disappointment, we will here give a list of a dozen of the very best kinds for succession, beginning with the early summer, and closing with the late winter pears.

(1.) The *Osland's Summer* is a very good pear, ripening about the first of August. The tree is vigorous and a good bearer, but unfortunately rather subject to blight.

(2.) The *Rostiezer* is the best early pear, being nearly equal to the famous Seckel in flavor, but it does not bring its value in the market, because it is below medium size, and its dull, yellowish-green color, though shaded with reddish-brown, does not make it sufficiently showy. It ripens from the middle of August to the middle of September.

(3.) The *Clapp's Favorite* is a very beautiful pear of large size, and of excellent quality when picked in good time. It ripens about the last of August, and frequently contends for the first place with the Bartlett.

(4.) The *Bartlett*, like the Baldwin among apples, and the Concord among grapes, stands first among pears wherever the climate is not too severe. It ripens from the last of August to the middle of September, and may be picked even before it is full grown, and ripened in close boxes or barrels. It is too well known to need any description.

(5.) The *Louise bonne de Jersey* ripens in September and October. It is a very pretty pear of good size and color, and of fairly good quality. Its chief fault is its liability to grow knotty when the tree is not well cultivated and shortened in. It succeeds best as a dwarf.

(6.) The *Sheldon* is an American seedling of medium size and very good. Its color is greenish-yellow covered with light russet, and ripens in October.

(7.) The *Seckel* is also an American pear, and there it is very popular, but it is too small to be popular in Canada. Its flavor is esteemed to be the best of any pear known, and therefore it deserves a place in every home garden. It ripens in October.

(8.) The *Duchesse d'Angoulême*, when well grown on quince stock, is one of the largest and finest of dessert pears, but some seasons it grows unshapely. Its season is October and November.

(9.) The *Beurre d'Anjou* is a fine large pear of green color shaded with crimson. The flesh is melting and juicy, and usually of the best quality. It ripens in October and November.

(10.) The *Lawrence* is only medium in size, but is the best early winter pear, and ripens in December. It is an abundant bearer.

(11.) The *Winter Helix* is also of medium size, but keeps till the middle of January, and is of the first quality among winter pears.

(12.) The *Josephine de Malines* closes our list. It keeps until well on in February, and is most satisfactory, so far, wherever it has been tried in Canada.

The market for pears is nearly always good. The chief discouragement to pear growers is the blight, and not the sale of the fruit. Every small town in Canada is a market for pears, and when these are stocked they may be shipped to our cities, such as London, Guelph, Kingston and Toronto. The latter is an excellent distributing point, and it is almost impossible to

glut that market with early good fruit, notwithstanding the immense quantities of American fruit daily arriving by both land and water. Montreal and Ottawa too are good pear markets, though not quite as good of late as in past years.

During the last summer pears have been unusually low all around, and at one time last summer even the Bartlett would only bring 50c. per basket in St. Catharines market. But every kind of fruit has shared a similar fate, and no doubt another season will give the grower more satisfactory returns.

PRIZE ESSAY.

The Advantages of Planting Nut-Bearing Trees.

BY P. E. BUCKE, OTTAWA.

The advantage of planting any kind of tree in a country like this, where timber is liable to become scarce, and where there are no special regulations for the purpose of keeping up the supply by planting, as there is in most of the countries of Europe, is so obvious, that it would scarcely be worth while to take up space in so valuable a paper as the *Advocate*, to point it out to so intelligent a class as the farmers of Ontario. But there are special reasons why the nut-bearing trees should have our preference and first attention when planting for timber, for ornament, or for profit.

The nut-bearing trees of Canada may be divided into four families. 1st.—The oak, *Quercus*, of which there are some ten native species. 2nd.—The hickory, *Carya*, four species. 3rd.—The walnut, *Juglans*, two species. 4th.—Chestnut, *Castanea*, one native species. It would be difficult to find four more valuable classes of trees than the above. The oak has been celebrated in poetry and prose from the earliest ages. Its durability, strength, and the beauty of its grain, the polish which it takes, makes it suitable for almost every purpose, from the frame of the most stately ship, to the finest cabinet-ware. This timber has been specially used wherever lasting qualities are required. Any one who has been in Europe will remember the exquisite carved oak work in the cathedrals and many of the churches of the finest sort wherever ornamental wood-work is requisite. The handsome carved doors of the government buildings at Ottawa are of this wood, which show that new ideas have not yet superseded old ones in the use of oak, where strength and beauty are desired. Before me is a descriptive catalogue which contains forty-two varieties of native and foreign oaks. It must be confessed that the acorn as a nut has no special advantages, but the beauty of the leaf makes the tree a favorite for shade, or for purposes of ornamenting public parks and grounds.

The hickory, *Carya alba*.—The shell-barked variety was, at one time, very plentiful in the township of Warwick, county of Lambton, and in many parts of Western Ontario. The timber of this tree grows large and splits freely; when plentiful thirty years ago, it was largely used for rails for fences and fuel. Hickory in combustion is celebrated for giving out more heat than any other wood; with one pound of wood of shell-barked hickory, of hard maple and beech, the value as a heating material stands as follows, respectively, 100, 60 and 65. The ashes of the hickory are very rich in potash; its