

hens have been off hour, I see that they see, I can do in my f I have a fixed time A dust bath and grit as to a laying hen. out the sod and put i with insect powder, ty-four to thirty-six hard boiled eggs for eal of very crumbly cracked wheat and is method in the Old ccess both there and in a building with a t brings them to as possible to get.

A. M. R.

## TURE

arden

atchewan or any arden, is, I think, everyone who has it, knows that the h we may obtain with profit.

e in contact with ch work to make in acre of wheat a family will use. at and buy your them keep their, crisp vegetables, a small garden? w willing we may fresh vegetables n use.

r aim to grow in do this month in

nd plants can be ould be done as mistakes are made e time to correct will presume that ily use only, not

vegetables will be

Golden Wax Crosby's Eypod Red; cabbage, d Early, Danish nd Red Rock; Snowball; carrot, and Giant Short y, Paris Golden s, Extra Curled; s, Cumberland; Globe Danvers, tralian Brown, tian Perennial, n, and Shallots; Gradus, York-pkin, Common n Moss Curled; rican Wonder, ench Breakfast, ubarb, Victoria h, Golden Hub- stable Marrow; erbs, caraway, turnips, Extra Golden Ball,

orget to include much trouble, r your work by All the hardy ls do unusually not neglect the lifornia poppy, c drummondii, sweet sultans. be added, with l succeed. Of dianthus, lych- st the hardiest arden beautiful scarce. Space owers, but their felt in every

The seeds are chosen and ordered. The first seeds to plant will be the Earliana tomatoes. These should be planted in a box in the house, as early as possible after receiving them. If kept moist, and in a warm room, they will germinate in twelve days. Give plenty of sunshine, water, warmth and air. When they are about four inches high transplant, giving them more room. Old tomato and salmon tins make good pots. Let the plants grow in these till they can be safely transferred to a place in the hot-bed, where they can remain till the second week in June, when they can be set out in the garden. These are the only seeds you will find necessary to plant in the house.

As soon as possible in April a hot-bed should be made. You will not need to go to much expense to build it. Dig a hole two feet deep in the ground. Make a frame of old boards, into which one or more storm sashes off the house, will fit. Let the south side of the frame be four or six inches lower than the north side. Now, fill the hole with fresh horse manure, tramping it firmly to a depth of eighteen inches. On top of this place a layer of soil four inches deep. Put on the sash, and bank all round the frame with manure or earth, to prevent the wind from drying or chilling the bed. If very dry, water well with a sprinkler. Leave till you see a few weed seeds commence to grow. Then you may safely plant your seeds. Cabbages and cauliflowers, and perhaps celery and tomatoes, will be all you need to plant in the hot-bed.

Now you can plan the size and shape of your garden. Arrange it so it can be planted in long rows, and cultivated with a one-horse cultivator. Good summer fallow is the most suitable for a start.

It will be best to plan for a windbreak of hardy trees along the west and north. If fruit bushes are to be grown, plant them in rows so that the ground can be easily cultivated on either side the row.

Of fruits, the following varieties will thrive in most locations:—red currants, Ruby Castle and Red Cherry; black currants, Lee's Prolific; white currants, White Grape; gooseberries, Houghton; red raspberries, Turner and Cuthbert; strawberries, Senator Dunlap and Bederwood. Currants and gooseberries need no shelter, therefore, they are the best for the first garden. If summer fallow is selected, all it will need before planting will be a thorough harrowing, to make it fine and smooth. If you are not particular about having very early cabbage, the hot-bed can be done away with altogether.

In another issue I will deal with the method of planting the seeds, and the time they should be planted to insure good results.

BRENDA E. NEVILLE.

## British Columbia Apples Popular in England

That a big market for British Columbia fruit is opening up in England is the opinion of Mr. G. A. Hallett of Proctor, B. C., who has just returned from a trip to the Old Country. Mr. Hallett made a thorough study of the question while in London, and made a special point of interview, both the large Convent Garden wholesalers, and commission agents, and also the retailers in different parts of the metropolis. He states that golden opinions were expressed with regard to the fruit of the Province, generally, and he found that the Kootenay product was becoming well known and considered as being among the first in quality. British Columbia cooking apples were retailing at three pence each; Baldwins and Jonathans cost four pence each, and Spitzenbergs were sold at six pence each.

These were prices actually paid by Mr. Hallett and he made mention of this, to emphasize the demand that there was for a first class apple from British Columbia. All this fruit was in first class condition and showed no ill results from its journey of nearly six thousand miles.

Convent Garden dealers informed him that there was a large and increasing demand for certain varieties of apples particularly Cox's Orange Pippin, Yellow Newton Pippin, Jonathan and a very scarce, but remarkably good cooking variety known as the Wellington. With regard to the Gravenstein Mr. Hallett found that the competition of the Nova Scotia growers was very strong but from what he saw and the comments of the dealers the Gravensteins sent from British Columbia were quite able to more than hold their own with the apples of this variety coming from the maritime province.

Mr. Hallett took with him some samples of Cox's Orange Pippin grown on his ranch at Proctor and no better proof can be given of the admiration that these apples excited in England, than to mention that Messrs. Rivers and Company, a large nursery firm from whom Mr. Hallett purchased his trees requested him to ship them a box for display purposes. Mr. Hallett expressed his gratification that the fruit-growing possibilities of British Columbia were becoming better known in the old land.

E. W. D.

## Dominion Forest Reserves in the West

Mr. A. Knechtel, Inspector of Dominion Forest Reserves, has written an account of these reserves, which has been published as Bulletin No. 3 of the Forestry Branch of the Department of the Interior.

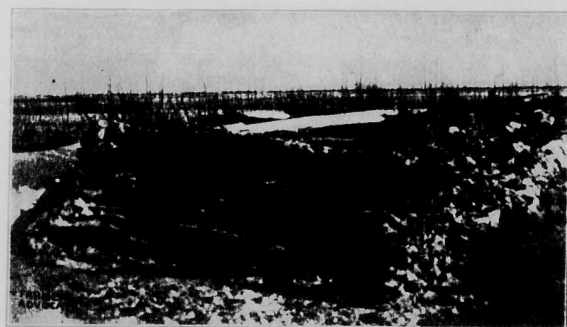
In regard to the purpose of the forest reserves, Mr. Knechtel writes: "The Dominion Forest Reserves are intended to preserve and produce a perpetual supply of timber for the people of the prairie, the homesteaders' needs being considered of first importance. They are not intended to furnish wood for the lumber trade. Hence the policy of the department is favorable to small mills rather than to large ones, which need large tracts of forest and manufacture lumber beyond the needs of the settlers."

Mr. Knechtel then gives in detail the area of the different reserves, with the dates of their formation. The areas are summarized as follows:

Manitoba (6 reserves) .....	3,575½ sq. mls.
Saskatchewan (4 reserves) ..	740 sq. mls.
Alberta (6 reserves) .....	9,702 sq. mls.
British Columbia (10 reserves) .....	2,295 sq. mls.

Grazing will be allowed, under certain restrictions, on those portions of the reserves that are adapted for this purpose. Good grass should not be allowed to go to waste, the Inspector thinks, besides, grazing may be desirable on portions of the reserves, as the cattle will consume the grass and peavine, which, if dried, would be very inflammable. Besides, the cattle, in going to water, make paths, which, narrow as they are, serve to check any fire which may come along that way.

The fire problem in the West, Mr. Knechtel shows to be one of special difficulty, much more so even than in the East. The number of rainy days and the amount of rainfall is shown, by tables supplied by the Weather Bureau, to be much less in Alberta,



File of cottonwood poles planted in 1902 and cut in 1906 show that fuel can be grown in four seasons.

Saskatchewan and Manitoba than in Ontario. The velocity of the wind, moreover, is about twice as great in Winnipeg as in Toronto. The reserves are under constant patrol summer and winter. Only two fires of any consequence occurred in 1908. Of these one in "The Pines" reserve burned over 22 square miles, but destroyed no merchantable timber; the other, in the Turtle Mountain Reserve, burned over 28 square miles, mostly covered with grass. Both fires, however, damaged large quantities of young growth. Various methods employed to prevent fire, such as the burning of fire lines and the plowing of fire-guards are mentioned. Roads through the reserves and along their boundaries are also being constructed, largely with this end in view. One hundred and fifty miles of such road were made last year.

Experiments are being made with a view to reforesting areas on the reserves that have been denuded by fire; sowing is favored rather than planting. A number of squatters were removed from the reserves during 1908—one hundred and twenty-six from the Riding Mountain Reserve, and twenty-five from the Turtle Mountain Reserve. In spite of the delicate nature of this work, it has been so carried out that all those removed have made affidavit to the effect that they have been well treated and are pleased with the change.

The boundaries of the forest reserves are being marked, and timber surveys conducted on them with the object of ascertaining the present amount of timber and the annual growth. The species of timber-growing on the reserves, with their average size and condition, are stated, and an approximate estimate given of the timber on the different reserves. The estimates total as follows: Manitoba, 602,933,000 board feet of saw-timber, and 6,250,000 cords of fuel wood; Saskatchewan, 55,000,000 board feet of saw-timber and 690,000 cords of fuel wood; Alberta, 3,402,000,000 board feet of saw-timber and 54,220,000 cords of fuel wood; British Columbia, 600,000,000 board feet of saw-timber and 6,000,000 cords of fuel wood. The saw-timber cut from the reserves during the year ending 31st March, 1908, totalled about 45,751,325 board feet, and the cord-wood 105,943 cords. The regulations of homesteaders' permits for cutting on the reserves are given in full. Proposed regulations for portable mills (the only kind to be allowed on the reserves) are also given. Similar regulations have already been imposed on one mill in the Cypress Hills (Alta.) reserve this winter, and have apparently been a success. This Bulletin may be obtained by addressing R. H. Campbell, Superintendent of Forestry, Ottawa.

## Planting for Winter Beauty

ADDRESS BY D. W. BUCHANAN, AT THE WESTERN HORTICULTURAL SOCIETY CONVENTION, 1909.

Although the season for annuals and budding plants is quite short in this latitude, it is possible to maintain a garden in continuous bloom from April to late October.

The snow is hardly off the ground before some of these hardy plants will be found appearing through the soil, to be followed soon by the bloom. And again in the fall, there are species and varieties that seem to thrive in the frosty air of October. To those who wish to have a good flower garden, with an abundance of bloom for the longest possible season, I would say indulge liberally in the hardy perennials. The severe cold of our steady winter seems more favorable to these hardy plants than the freezing and the thawing which they are subjected to in milder climates. We leave our perennial flower plots unprotected, except for the cover which nature provides in the snow, and have not suffered any severe loss from winter-killing.

But the flower garden is not everything. In beautifying the surroundings of the home, and especially the rural home, where abundant space affords opportunity for spreading out, trees, shrubs and vines should be used liberally. We cannot have the flowers blooming outdoors in the winter, but by a judicious use of shrubs and trees, we can produce pleasing effects for all seasons of the year, and make the garden, or the home surroundings, beautiful, even in midwinter. Some people may smile at the idea of planting for winter effect in our climate. Granted, that with the thermometer away down below zero, we are not likely to linger to contemplate landscapes or artistic effects in planting, after all, the really severe days of winter are few.

For fall effects, pleasant views may be created by attention to the coloring of autumn foliage. When Jack Frost has touched the leaves with his magic wand, many of our trees and shrubs take on a richness of coloring that is hardly equalled in beauty by the fresh foliage and flowers of spring and early summer. There are other shrubs which hold the leaf green until very late in the season. Of the shrubs where foliage is particularly attractive in the fall, we may mention, among others, the beautiful Ginnala maple. The coloring of the foliage differs with individual plants. Some will be found beautifully tinted quite early in the season, increasing in richness as the season advances. The foliage of the Virginia Creeper is nicely tinted in the fall, but drops early. Another little shrub is the Japan Barberry, a beautiful foliage plant all the season, but especially beautiful when it has taken on its rich autumn coloring. This plant holds its foliage well. Our native plum and also the Sheepberry, have finely-colored foliage in autumn. The Russian alder holds its leaf late in the autumn; its light, silvery color blending nicely with the richer coloring of surrounding trees. Of plants which hold the green leaf late in the fall, we may mention the common lilac, buckthorn and common Barberry. The purple-leaf Barberry also retains its peculiar shade well into the fall.

Planting for winter effect naturally leads first to a consideration of the evergreens as the subject of greatest value. Good use can also be made of those bushes which carry their ornamental fruits through the winter. Again some trees and shrubs with richly-colored bark are very ornamental in winter. Thus with these combinations, there is no lack of material suitable for winter effect, even in this climate. The evergreens are, of course, of first importance in any scheme for winter effect. They afford an appearance of warmth and comfort that cannot be essayed without them. Our experience with evergreens in this country is as yet quite limited, but we have some trees that we know we can depend upon, and will, no doubt, find more as time goes by. Our natal spruces, of which the white spruce has the preference, take first place among the evergreens. The Balsam spruce is also good. The Scotch or European pine is succeeding well in many locations, and seems destined to become thoroughly acclimatized here. The Austrian pine is spoken of favorably, although my own experience with this tree is somewhat limited. The Colorado blue spruce is also doing well in rural locations. Among the dwarf evergreens, the mountain pine is promising for our climate. In Junipers, we have the Savin, which seems fairly hardy. The Virginia Juniper is effective where it succeeds, but possibly is not hardy enough for general planting. We have a few that seem to be gaining in hardiness. We must not overlook our noted arbor Vital, usually known as the white cedar. This gives us quite a list to start with, sufficient to afford variety in size, form, leaf and shade of green.

Of the berry-bearing plants, we may venture a few. Our native Verburnum, commonly known as the High Hill Orange berry, is a handsome shrub in foliage, flower and fruit, and the bright-colored berries hang through the winter without impairment of color. The Rugosa rose, so beautiful a runner with its rich glossy, green foliage, is scarcely less attractive in autumn, when the frost has colored its leaves, and, still, in winter it is ornamental in fruit. The Barberries are not always entirely hardy enough to be worth growing, and will sometimes produce fruit which remains to make the bush ornamental in winter.