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The Box Packing of Apples

Ralph S. Eaton, President and Manager, Hillcrest Orchards Limited, Kentville, N. S.

THREE essentials are required in securing good results in the packing of apples in boxes,—good fruit, good boxes and a good and economical arrangement of the fruit. I need not refer to the



R. S. Eaton

I need not refer to the first point, other than to say that unless a fruit grower has clean, well-colored, good-sized fruit for the variety, he should not use boxes at all. With regard to the box, mention of a few points that I have not seen referred to in the many export fruit journals of Canada, and the United States may be worth while to the experienced. Though a box should not be rough handling, it should be strong enough to stand a bit of it, in case it falls into careless hands. The part most likely to give way is the end of the box. It should be made of spruce or of any other equally strong. It should be at least one and not less than three-quarters to seven-eighths of an inch thick. The manufacturer for cheapness in the end prefers to use two pieces for the ends, they should be fastened together strongly with staples or dows that make the end practically as strong as though in one piece. If when making boxes an end is discovered to be weak it should be cleated on the inside with two narrow thin cleats close to the corners. To cleat on the outside of the box is to wrap the box with wire discs that hold the package and should not be used for a moment. The sides should be three-eighths to seven-sixteenths of an inch thick, and if in two pieces they should be grooved and nailed. The tops and bottoms should be three-quarters to one-third of an inch thick and in one or two pieces. Both ends and tops should be of good strong wood, not white pine.

I would insist upon all the wood being stained on the outside. It is claimed by the western packers that their wood, when sawed by fine saws makes a very neat appearance, but though I have observ-

ed a number of their exhibition packages and had samples sent me, yet I have never seen a real neat box from there.

THE MARKING

I would recommend strongly that one end of each box should have the grade and variety of apples, with the name of the grower or packer neatly printed on it. At the top should be the word "tiers" at one side and the word "apples" at the other, with a dotted line or blank space in front of each word for the number of tiers and apples to be marked by the person packing or branding the box. The printing of the end can easily be done in two colors which will add much to the effect. The material for a box as described can be put up in shook form in St. John, N.B., for twelve and a half to thirteen cents. The other end should have a neat label. Good taste applied in selecting from the samples of a lithograph printer should result in something that would add very materially to the appearance and value of the package. Stencilling the ends should not be considered for a moment in comparison with the label and printing. The label should be about the size of the end piece, ten by eleven inches, and should not cover the whole end of the box when made up.

If the ends and sides of the box are both in two pieces it is desirable, even if the end is stapled, to make the sides break joints with the ends when nailing. Thus the strength of the wider side pieces may be added to that of the staples in strengthening the end.

It has often been claimed that the cost of making the box up is about one to one and a half cents. I have found, however, that lads paid seventy to eighty cents a day can make from one hundred to one hundred and twenty boxes in ten hours.

If care is taken, when nailing, to have the sides and tops come just flush with the end pieces, and the side and ends of the cleats on the tops just flush, the sawed ends of the sides, tops and cleats can be quickly and easily smoothed with coarse sand paper and the completed box have a thorough clean and tidy appearance.

PACKING

Though a great many different packs or ways of placing the apples in a box have been illustrated in magazines, we have found at Hillcrest that a three-two or a three-four pack, according to size of apples, will suit the fancy and number one grades of about all varieties of



Packing Room of The Hillcrest Orchards, Limited, at the Noon Hour

apples and make as tasty and firm a pack as desired. The only exception to this is when necessity requires all or part of the last one, two or three layers to be placed on their edges in order to obtain just the proper height of apples to secure the desired pressure by the bottoms. I have found that lads of good ability, from twelve to sixteen years of age, acquire quite quickly the skill for placing the apples properly in these two packs, and for simplicity, solidity, and freedom from bruising this diagonal pack seems, upon the whole, most desirable. If the edges of the lining paper where they meet over the face layer of the apples are figured or fringed, it enhances the appearance of the pack when the cover is removed, especially if the apples are not wrapped. We also like a corrugated pulp head just next the cover to assist as a cushion and keep out dust when two-piece heads are used. The lining paper must be plaited where it turns from the cover to the sides in order to prevent tearing when the cover bends to the pressure of putting on the bottoms. This plait of about one-half or three-quarters of an inch is rapidly made by putting a number of sheets together and turning all at once.

The stem clippers are indispensable for the face layers. Tissue paper made for the purpose, with one side glazed, has proved best for wrapping and a small circle of letters in the middle of the square, giving the name of the packer, adds somewhat to the style of the pack.

PACKING

It pays to pack from tables rather than from boxes or baskets, and the canvassed top packing tables, which allow four packers to stand at the four sides, are thoroughly satisfactory. With two tables, one for the "Fancy" grade and one for "No. 1," we have found just enough variation in sizes of apples to fill boxes properly. The numbers two and three grades are put, of course, in barrels as they go from the grading tables. The only additional expense incurred, as far as the packing into boxes goes, is simply the mechanical arrangement of the apples in the boxes by light help, which with us is not more than two or three cents per box.

Where apples are very carefully thinned on the trees the grading table may not be so necessary, and there is no question whatever about the wisdom and economy of this careful summer sorting to lessen autumn work, dispense with low grades, and conserve vitality of trees.

I go over the pear trees three times in the season and cut out any limbs that show evidence of blight. By this careful attention I find that I can keep it in control.—W. H. Gibson, Newcastle, Ont.

Fall Campaign Against Insects and Fungus Diseases

Prof. W. Lochhead, Macdonald College, Quebec

WHILE many fruit growers and gardeners wage relentless warfare against insects and fungous diseases during the spring and summer months, an armistice is proclaimed in early fall, and practically nothing is done until the following spring. Experience, the best of teachers, bears out the fact that such a practice is unwise; moreover, a knowledge of the life histories of the pests tells us that many of

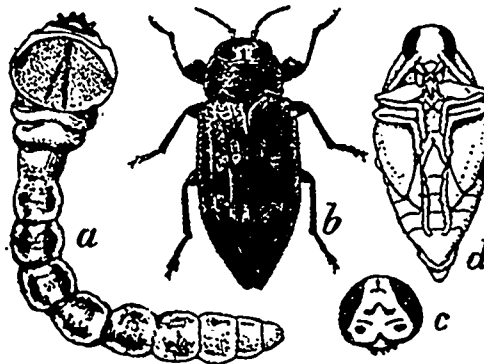
Many young apple trees suffer from the work of the Buffalo Treehopper (*Ceresa bubalus*), which lays its eggs in punctures made in the ends of the twigs, causing them to weaken and fall. If the punctured twigs are pruned out and burned in the fall the eggs will be destroyed.

One of the most injurious pests of apple and plum orchards is the Plum Curculio (*Conotrachelus nenuphar*). It hibernates as an adult under loose bark, among leaves on the ground, and in other protected places. Experience has shown that clean culture in the fall has a decidedly beneficial effect. The unnecessary rubbish that has lain on the ground during the summer, and the leaves that are known to shelter large numbers of insect pests are gathered and burned.

The fall is a good time to get after the borers that affect apple and peach trees. Their presence can usually be detected by discolored bark, frass, or exudations of gum, and the larvæ can be cut out by a knife, or killed by the insertion of a stiff wire into the tunnels. In addition in recent years orchard trees have suffered much from girdling by field mice. To prevent such injury, wire netting two to three feet wide, is cut into suitable lengths, and fastened loosely about the base of the trunks of the trees. The netting should be thrust well into the soil so that the mice cannot readily burrow under it.

BURN THE TREES

The Shothole Borer (*Scolytus rugosus*) is also an injurious pest in many varieties of orchard trees. Badly infested trees should be cut and burned, for they are sources of infestation to other trees. With regard to forms such as



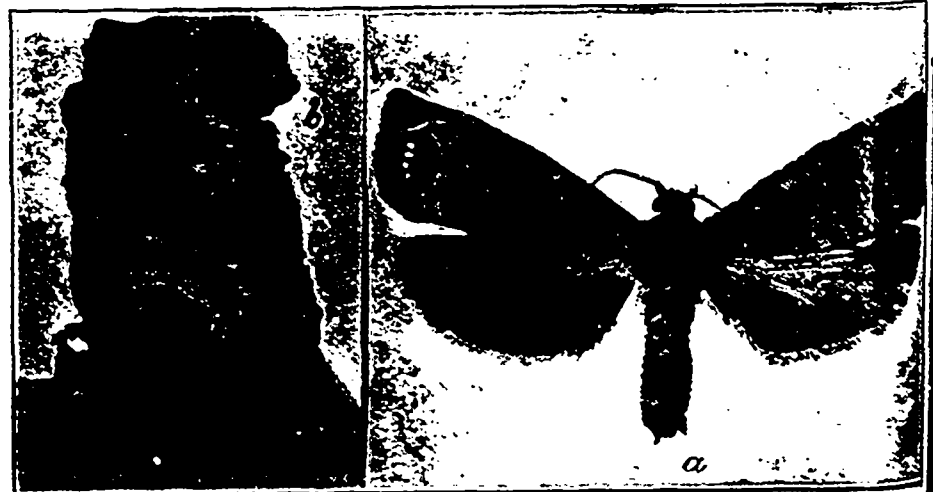
Flat Headed Apple Tree Borer

a. larva; b. adult; c. front of head; d. pupa, all enlarged

them can be controlled to better advantage in the fall than at any other time.

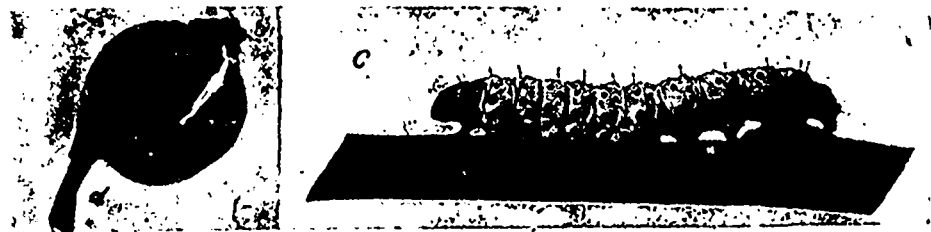
IN THE ORCHARD

In some localities the Fall Cankerworm (*Alsophila pometaria*) is troublesome. These moths, as their name indicates, emerge in late fall and lay their clusters of eggs in the forks of the smaller branches. Inasmuch as the female moth is wingless the deposition of the eggs and the subsequent destruction of the leaves by the worms can be prevented by banding the trees with tanglefoot in early October, before the moths emerge.



Stages in the Life of the Codling Moth

The Codling Moth is one of the worst enemies of the fruit grower. Illustration a shows the moth enlarged to four times its natural size. In illustration b is shown the pupa in its cocoon as they are found on the under side of loose bark or in rubbish in the orchard.



Further Stages in the Life of the Codling Moth

Look at this fellow well so that you may recognize him when you see him. Illustration C shows the codling-worm (larva) magnified three times and d the adult and egg on the fruit.

the Apple Tree Tent Caterpillar and the Tussock Moth, which spend the winter in the egg state in more or less conspicuous masses on the bark of trees, perhaps the most effective method of control is the destruction of the egg masses in the fall when the leaves have fallen.

Moreover, the Codling Worm (*Carpocapsa pomonella*) hibernates in a thick, greyish-white cocoon under bits of bark, in cavities of the wood, and in rubbish about the orchard. Many also are carried into fruit cellars, and in spring the moths produced from them find their way out to the orchard. The scraping of the tree-trunks in late fall and the destruction of loose rubbish would do much to lessen their numbers.

The Oyster-shell Scale (*Lepidosaphes ulmi*) is one of the most widespread insects of our Canadian apple orchards. It hibernates in the egg stage under the scale on the bark, and hatches in late May and June. A late fall spraying with whitewash when the trees are dormant, followed by another in midwinter, will cause most of the scales to drop to the ground.

FUNGUS DISEASES

A thorough cleaning of the orchard in late fall of all unnecessary rubbish and leaves is one of the best preventives of many fungous diseases, such as apple scab, brown rust, mildews, and leaf-spots. Many injurious fungi produce winter spores which mature in the dead

fruit and leaves during the fall, winter, or early spring. In early spring these spores, or spores produced by them, will inoculate the new leaves and young fruit.

The diseased fruit and leaves should be gathered and burned. They should not be thrown on the manure or compost heap, for then many of the spores which survive the winter will reproduce the disease the following season.

Trees affected with Black-rot Canker (*Sphaeropsis malorum*), Black Knot (*Playwrightia morbosa*), and twig blight should be thoroughly pruned and the cut ends disinfected. These three diseases are making rapid headway and the orchardist should give careful attention to the pruning of his trees.

IN THE GARDEN

A fall cleaning of the garden is even more imperative than that of the orchard on account of the smaller area under intensive cultivation. The great majority of the species of cutworms hibernate in the caterpillar stage, and lie concealed beneath old boards, clods, and so forth. The presence of poultry in the fall in the garden is conducive to the destruction of these as well as of many other hibernating insects. Such common sucking insects as the Tarnished Plant Bug (*Lygus pratensis*), the Squash Bug (*Anasa tristis*), the Leaf Hoppers (*Jassidae*), the pupae of the Squash-borer, the adults of the two species of Cucumber Beetles, and even the Potato Beetle, are

destroyed in large numbers by a careful fall cleaning of rubbish.

Deep fall plowing is a good practice, as many cutworms, wireworms, and white grubs and eggs of grasshoppers are killed by exposure to their enemies and to the freezing effects of winter.

BIRDS HELP

Probably the most important single factor in the control of the insects of the orchard and garden is the presence of winter birds such as the chickadees, nuthatches, kinglets, and woodpeckers, which feed upon the eggs of plant-lice, tent-caterpillars, fall cankerworms, the larvae of the codling moth, and the grubs of the shot-hole and apple tree borers. Hawks and owls are also extremely beneficial on account of their destruction of field mice, and should be encouraged. The birds can readily be attracted to orchards in fall and winter if baits of bone, meat, and suet are tied among the branches.

Clean culture in the garden, as in the orchard, in the autumn, the gathering and burning of the rubbish of dead stalks and leaves, prevents the development of many fungous diseases. For example, potatoes affected with rot and scab, turnips and cabbages with clubroot, asparagus with rust, and raspberries and blackberries with orange-rust, should be destroyed by burning, and not fed to stock or thrown on the compost or manure heap. In fact, with most of the common diseases one of the best preventive remedies is clean culture in the autumn.

Finally, but not least important, is the value of cooperation among fruit-growers for the prevention of attacks by insects and fungi. It is very essential that all owners of orchards and gardens, for example, do this important work of fall cleaning if the beneficial effects of the work are to be obtained. Municipal or state control would be advisable from the standpoint of prevention of losses.



The Effect of Brown Rot on Plums

These mummified plums, as found on trees in February, still retain the ability to give off spores.

Common Mistakes in Marketing Fruit

P. J. Carey, Dominion Fruit Inspector, Toronto

THERE is one aim that stands out above all others in the minds of those engaged in any particular business, and that is to so shape or manipulate their operations as to enable them to secure the greatest possible profits. In order to reach this degree of perfection, there are two great essentials, namely, a close and careful study of conditions surrounding the particular business in which one is engaged, and then the application of business methods. This, perhaps, will apply more forcibly to fruit handling than to any other business.

In approaching the subject, "Common Mistakes in Marketing Fruit," one is likely to reach the conclusion, after a

study of the history of the fruit business up to a few years ago, that it has been one huge mistake or that it has consisted of a succession of mistakes. Perhaps the greatest mistake has been the one that was made by the grower when he divorced himself from the idea that he had anything to do with the marketing of his fruit. The common impression with the average grower seems to have been that when he placed the tree in the ground there his responsibility ended, and that every step to be taken further until the fruit reached the consumer, was within the province of dealers. This being the case the grower was not as interested in growing a good quality of fruit, nor in its proper har-



Packing the Apple Crop in the Orchard of F. A. Forster, Bowmanville, Ont.

vesting and packing as he otherwise would have been. This was the grower's mistake, and now he, as well as the trade generally, have discovered, to their sorrow, that as a result of bad practices the consumers of Canadian fruit have been unfavorably impressed with it. In consequence it may take some years to live down the mistakes of the past.

Within the last few years the trade has undergone a great change in its methods of marketing followed. The numerous cooperative associations organized throughout the province has at last set the grower thinking. Now he knows that he is interested in the fruit until it reaches the consumer, and that the size of his cheque will be regulated by the good or bad sales made. Naturally, therefore, he is now interested not only in the quality but also in the proper packing and handling of the fruit.

We come now to the fruit dealer. Some few may say that the dealer or middleman should be cut out. I agree with the majority that there is room and always will be room for the reputable dealer or middleman. With them we have the two mediums through which to market our fruit, namely cooperative associations and reputed dealers.

Have the dealers made mistakes? Just have a talk with a dealer of twenty-five years' experience and ask him. Perhaps the greatest mistake made by dealers has been the handling of too large quantities of fruit. This involves the hiring of a large number of operators and results in a large percentage of men or boys being engaged who know little or nothing about the work. As a consequence, through lack of judgment, large quantities of inferior fruit are placed on the market, shipments are refused, and contracts broken. It also involves on the one hand the picking and mar-

keting of immature fruit, in order to get the work done, and on the other hand, that which is equally as bad, the leaving on the trees of large quantities of the best fruit until caught by the wind storms or frost. This always has been no small cause of our marketing troubles.

One dealer informed me that he made a mistake when he took an advance on his shipments, which necessitated his apples all going to a certain quarter whether it was the best market for them or not. Other dealers may have discovered that they have made similar mistakes, and it is just possible that some of those who gave the advances have made the same discovery.

COOPERATIVE ASSOCIATIONS

Do cooperative associations make any mistakes? They do. The principle of cooperation is perfect. The practice sometimes faulty. The kingpin on which turns the success or failure of an association seems to be the manager. Accepting anyone as manager except a first-class man is the greatest mistake an association can make.

Some of the associations made the grave mistake the first year of their existence of not making their initial pack such as to give their dealer good satisfaction. As a result they had to look for a new dealer the second year. Changing dealers each year is bad business. It never has been known to give more than ordinary results.

It has been truthfully said that the best advertisement is a "satisfied customer." This surely is the key to successful marketing, and should be the aim of not only the association, but of each of their individual members.

At first thought we naturally conclude that the higher the contract price received for our fruit the better. This has

proved to be a great mistake. A manager of an association may, by holding at an exorbitant figure early in the season, secure a contract for his pack at his figure. Later, however, when the fruit is delivered, or being delivered, if the dealer finds that he is being loaded up with fruit of only ordinary quality bought at fancy prices, while his competitor across the street is putting him out of business with fruit bought at a reasonable price, then there is bound to be trouble. If the fruit is at all defective it is refused, or a rebate is demanded, or perhaps a lawsuit results. I would much prefer a good reasonable "live and let live" price, with no rebates and no lawsuits.

Perhaps the greatest problem yet unsolved, and a requirement that should engage the attention of the shipping end of the trade, is the pre-cooling of fruit before shipment. It is required in order that the consumer may get a larger percentage of our fruit at its best.

There is another general practice in marketing which all growers and shippers should war against, and that is the placing on the market of too large a percentage of the lower grades of apples.

With the higher ideals that now seem to be established in the minds of the growers and the packers, coupled with the facilities that are being placed within the reach of all concerned, we should soon be able to eliminate our most serious marketing troubles, and secure for the Canadian fruit industry the high place it is entitled to in the markets of the world.

Orchard Cultivation

T. G. Bunting, C. E. F., Ottawa

Some of our growers are producing better fruit at harvest time than others, and it is noticeable that these more prominently successful ones, when asked regarding what date they commence cultivation, invariably say that their aim is to work their orchards as early in the spring as possible, or when the soil is dry enough to plow. They tell us that to conserve moisture, a loose and fine soil mulch must cover the orchard, that it should be from two to four inches deep, and that it must be put there before the ground dries out.

Plowing should be the first operation practised during the spring on most soils, perhaps on all, with the exception of sand. Sufficient depth of mulch cannot be gotten with the disc harrow or other implement without plowing.

Both sod mulching and clean cultivation as means of conserving moisture have their exponents. The majority of fruit growers prefer to adopt clean cultivation instead of mulching the sod with manure. By clean cultivation, not only is the moisture in the soil held, but also a great work is done in the way of the destruction of many injurious insects.

Garden Work in October

J. McPherson Ross, Toronto, Ont.

THE experienced gardener and enthusiastic amateur always finds this season from now until the ground freezes a busy time of the year. It is also the time to take stock and strike a balance sheet like the careful merchant, showing our gains and losses, our trials and triumphs, to reflect on the experience of the past season, to correct mistakes and to profit on the whole by resolving to secure greater rewards next year and to begin now.

WHAT TO PLANT

Every garden should have beds or clumps of paeonies, phlox, foxglove, and Canterbury bells, as well as shrubbery and a rose bed or border. We cannot ever get the soil too rich for anything, and particularly for our rose bed and tulip and other bulb borders. What applies to one, applies to all.

CLIMBING ROSES

For climbing roses, where planted near the house, the soil, which is invariably poor, should be removed to a depth of eighteen or twenty-four inches and twenty-four inches square and filled with the best fertilized earth. Plant your rose bush in it. Be careful never to put strong manure near the roots. Either put it deeply beneath them and covered with soil or mulched on top. In planting spread the roots out singly and have the hole deep enough to plant the bush well down. The rose should never be planted shallow.

You are often told about firming the soil. There are many reasons for it. Whether it is forest trees or crocus bulbs tread the soil firmly. The foot is a better gardener than the hand. The action presses the soil close to the roots, keeping it moist—it excludes the air and supports the roots so as to prevent the plant swaying with the wind.

Cut the rose branches back to a foot, no lower. This allows the tops to hold the stray litter or mulch placed on them. It also allows for winter killing back an inch or two and when the plant is pruned back, as it should be for two or three buds, it will be properly pruned.

Rose beds may be any shape that taste or convenience suggest, but preferably on narrow beds, which permit close watch and care. A bed five feet permits two rows of hybrid perpetual down the centre two feet apart between rows and plants, and a row on the outside of tea roses.

THE HERBACEOUS BEDS

Fall permits the division and replanting of your herbaceous beds. Many kinds have the habit of spreading by layers. With many kinds a herbaceous border should be reset every three or

four years, if not oftener, with the possible exception of lilies and paeonias.

Those having conservatories or greenhouses will be getting in cuttings of plants for propagating; such as coleus, verbenas and all other tender plants; also repotting and wintering of garden favorites. Oleanders, hydrangeas, and other broad-leaved evergreens not wanted for indoor ornaments may be easily wintered in cool cellars or by digging a pit deep enough to receive the tops and covering over with a glass sash or boards, matting, and so forth, sufficient to keep out very severe frost. These deep garden pits are the favorite method in the middle states for wintering palms, fuchsias, and plants of a like tenderness.

In the vegetable garden the storing and sowing of the season's crops must be attended to. There are always some seeds that have ripened to be gathered and placed in paper bags for next spring's sowing, such as beans, peas, and corn. Leave your cabbage, carrots, and beets till the last thing before hard frost, when they may be lifted and stored in a pit or cool cellar.

Every well appointed vegetable garden should have an asparagus, rhubarb, parsley, and mushroom bed. Asparagus is so easily cultivated, there is no

excuse for not having a bed where there is room to plant one. A bed thirty by five would give sufficient of this useful plant to supply the tastes of an ordinary sized family. Many cultivators go to great trouble to prepare a bed for this plant, and as it is a permanent thing they are quite justified in this work. Select a situation that is well drained and dig it at least two spades in depth. This gives you a deep trench in which you can fill six inches of good rich manure, bones, and any other enriching litter which, if it does not decay rapidly, serves the excellent purpose of drainage and keeping the soil loose and moist. When the bed is prepared procure two hundred strong two or three year old plants from the nursery. This is sufficient to plant the sized bed I have mentioned, making three rows eighteen inches apart and plants six inches more apart. Dig out each row by the garden line a foot deep. Against the bank place your plant, spreading the roots evenly out, having the pips or crowns at least three to four inches beneath the surface. Fill in the soil and tread firmly, levelling it nicely and covering all with a mulch of three inches of old manure. Have a neat path on each side. Allow the plants to grow the first year their full strength



A Bed of Asters as Grown by W. A. Greenslade, Peterboro, Ont.

without cutting the stalks. This allows the plant to become well established and subsequent care consists in forking in annually the top dressing put on in the fall and a good sprinkling of common salt sufficient to whiten the ground.

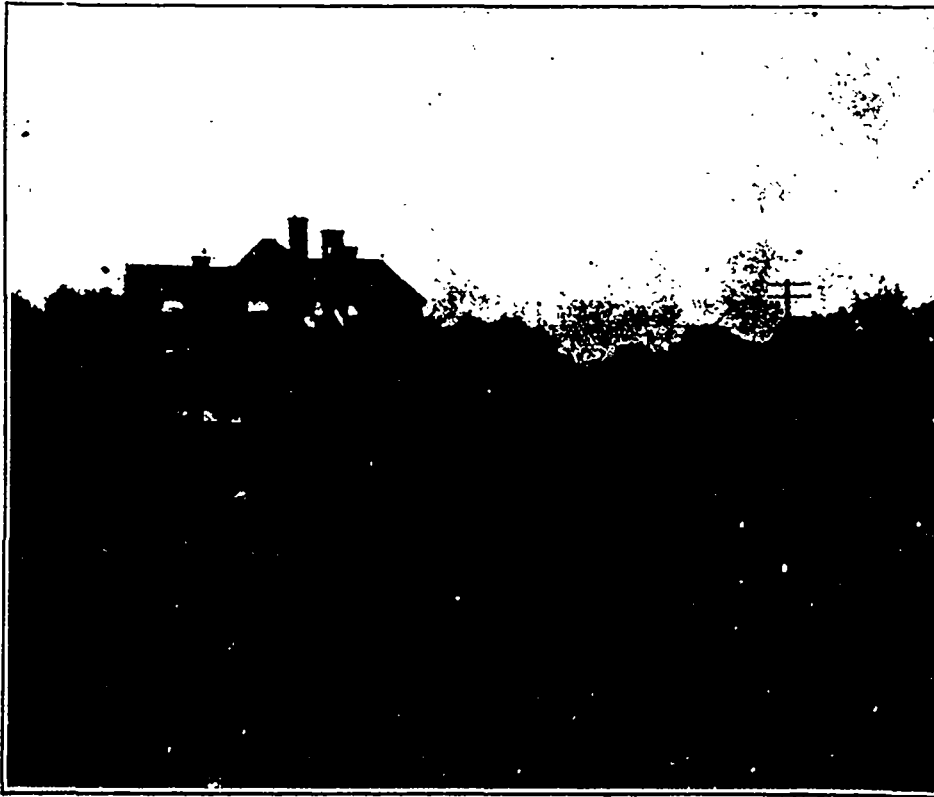
Rhubarb, another indispensable garden necessity, should be planted now. Six roots are sufficient for a family's needs. Plant this in a sunny warm spot in good rich soil, deep enough to cover the crowns at least two inches and two feet each way.

Blanch your celery by earthing up and before stiff frost place two boards V shape, and cover over with straw or leaves. When severe frost sets in remove to a cool cellar, embedding the stalks in clean moist sand.

Cabbage should be pulled, never cut. Save the corn stalks to cover other mulching.

Clean up all litter, leaves, and other decaying vegetable matter and bury in a pit in the corner of the garden, which every good garden should have, to save weeds and garden refuse which, united with ashes and kitchen slops, makes a thick fertilizing material to be dug in the garden next spring.

Heavy clay or retentive soils should be dug up roughly and left for the action of frost and snow. This also allows moisture to penetrate deeper in the ground, also permitting it to be warmed up earlier in the spring by the sun than it would if not thus prepared. Leave your garden in neat order.



A Portion of the Vegetable Garden at Inglewood, Hamilton, Ont.

Notice how the garden is divided by a hedge from the rest of the grounds and also the well-made walks.

Now is the time to make cuttings of currants and gooseberries, grape vines, and many flowering shrubs, as flowering currants, syringas, deutzias, dogwood, privet, and so forth. Make them of well ripened wood nine inches long, and plant in rows in rich loose soil, pushing the cutting down to the top bud; fill in the soil and tramp firmly and mulch heavily. Mulching is indispensable, as it prevents upheaval in the spring by frost.

Fall Planting of Bulbs

John Gall, Inglewood, Ont.

All kinds of bulbs are partial to a deep, rich, well drained soil. This is no small part of their successful culture. The site selected should be well drained, either naturally or artificially. Again, in flatish lands, the beds may be made above the surface, some eighteen inches high, and bordered with grass. A layer of rough stones a foot deep is sometimes used in the bottom of an ordinary bed for drainage, and with good results, where other methods are not convenient.

The soil for beds should be well enriched with old manure. Fresh manure should never be used in the soil about bulbs. The addition of leaf-mould and some sand also improves the texture of heavy soils. For lilies the leaf-mould may be omitted. Let the spading be at least a foot deep. Eighteen inches is none too deep for lilies.

All kinds of bulbs look best planted in masses, or at least in groups, and may be planted any time from October till

the middle of November. During planting or previously, the surface of the beds should be made somewhat rounding to prevent water standing on them in winter, which is always likely to play havoc. A layer of sand below the surface, or a generous handful about each bulb, will also materially assist in carrying away water from the bulbs.

As the time of severe winter approaches, the ground planted with bulbs should receive a mulch of leaves, manure or litter to the depth of from four to six inches, according to the latitude. It will be well to extend the mulch about one foot or even more beyond the border of the beds. When cold weather is past, half of the mulch should be removed. The remainder may be left on till there is no longer danger of frost. Upon removing the last of the mulch, lightly work over the surface of the soil among the bulbs with a thrust hoe. If the weather happens to be very bright during the blooming season, the duration of the flowers may be prolonged by light shading—as with muslin or slats placed above the beds. If planted where they have partial shade from surrounding trees or shrubbery, the beds will not require attention of this kind.

Autumn Work in the Garden

R. S. Rose, Pet.boro, Ont.

Early in October, if you have roses, you can start cuttings. I have found the following method very successful. Take the side shoots near the ground, you will find them the best, and plant them where you wish the bush to stand. Press a glass fruit jar down firmly over your cutting and heap the earth around it until only the top of the jar is visible. In the spring, when all danger of frost is past, remove the jar, being careful not to disturb the tender plant. The first few days it may be well to replace the jar during the hottest part of the day. I have found plants started this way give better results than one year plants obtained from the nursery or greenhouse.

Soon should come the general clean-up in the late autumn when all old growth such as vegetable vines, stalks, and so forth, should be piled in small heaps. Let the air flow freely through the heap so that they will dry thoroughly. At the end of a week or so they will be dry enough to burn. Do not remove the ashes of the burnt up rubbish, as it makes a splendid fertilizer. Where everything has been burned up, trench all down your kitchen garden, throwing up the earth to about six or seven inches. Leave it in this condition for the winter. In the spring level it, then dig up, and turn over the earth twelve inches deep, the deeper the better. By doing this the work is easier and the earth more mellow and free from hard lumps.

Canadian Gardens---A First Prize St. Thomas Garden

A. J. Elliott, Aylmer, Ont.

A MAN who dreamed of a garden and whose dreams have come true, is W. R. Rewbotham, of St. Thomas, Ont. His is the first prize

eye. The lawn extends some twenty feet north of the house, and for that distance there is a border, between the fence and it on both sides, that is sown

starts from a level with the house, goes west till it meets the garden path, north, along that to the end, jumps across it, then back south to the lawn, then west to the fence nearby, then south to the house line, then east to the lawn. Never have I seen sweet alyssum present so beautiful an effect.

Midway of the lot is the only path. It starts from the lawn, and runs north till it reaches a rustic arbor, circular in shape. The sides of this arbor are built of open rustic sticks, and its peaked roof is shingled with large sections of elm bark. It is a neat affair, and gives a grateful shade to the seats and hammock it contains. Sweet peas are trained up the wood-work. The effect is attractive.

An arch introduces one to this path. A moon flower on one side and a rambler rose on the other also enrich the effect. On the right and left is a new perennial border just started in which year-old *Hemerocallis*, *digitalis*, *columbine*, perennial *phlox*, star *anemones*, *fuschias* and *gaillardia* grow together, with the interstices planted with *gladioli*, *stocks*, *salvia*, *pinks* and other similar varieties.

On the right is a small park leading to a tent against the east fence for "the kiddies," two sturdy little lads anyone would like to own. Then come rows of onions, lettuce, carrots, beans, tomatoes, cucumbers and late asters, showing that while the eye is to be pleased, the table is not forgotten.

On the left of the path are a *gladioli* bed, rose garden, asters and *stocks*, cel-



Mr. Rewbotham's Home--The Top of the Rustic Arbor in the Garden may be Seen.

garden among those which have competed for the prizes offered by the local Horticultural Society.

I reached its portals one sweltering afternoon in early July, and just the sight of the red pressed brick residence, surrounded by the lawn, and such a lawn! cooled me nicely. On the front, facing the south, were four rustic vases, containing *petunias*, *geraniums*, *smilax* and *holages*, giving me an idea that something might be expected worth talking about in the rear of the house.

The owner, a railroad man, a big Englishman, was out on his "run," and his pleasant little Scotch wife courteously gave me all the information I needed, especially so when she learned that it was to appear in *The Canadian Horticulturist*, a publication they both appreciate and enjoy, and to which she often referred while I was there.

A BORN GARDENER

As I passed to the rear of the house I was particularly struck with the perfect order, beauty and system displayed. It showed that Mr. Rewbotham is a born gardener, although until quite recently he had no idea that he possessed any talent in this particular line.

After the lawn had been admired, with its composition of a little grass and a bed of white clover, a lovely bank of sweet alyssum forced its presence on the

to sweet alyssum, *stocks* and *convolvulus* or morning glory. This makes a glorious flanking for the lawn. This beautiful alyssum ribbon of pure white



The Path to the Summer House--The Plan of the Garden is Here Revealed



The View from a Corner of the Garden—Notice the Effect of the Border.

ery, cucumbers and dahlias. The rose garden is young and not yet in full bloom, but the owner has a hint that next year will give him great pleasure, judging by the way the bushes are growing. His choice is Mildred Grant, Liberty, La France, General McArthur, Duchess of Portland, General Jacqueminot, Kilkeny, Van Houti and Dean Hale principally.

Mr. and Mrs. Rewbotham are great lovers of stocks and wonder why people do not raise more of these beautiful flowers. He is a chronic prize taker in St. Thomas, and on some occasions has been judge of the local flower shows. Last year he took all the first prizes given by the Horticultural Society, and so far this year has taken three firsts and one second prize.

Asked as the course of procedure in producing such a fine garden, Mrs. Rewbotham told me that ordinary manure and bone meal were used for the garden; whale oil soap diluted for rose pests, and a compost of bone meal, ashes and salt for the lawn.

Mr. Rewbotham's method of celery raising is worth noting. He makes a tile shaped coat of felt paper and fastens it around the plant. While there I saw the young leaves appearing above the coat. It is successful, and saves a lot of hard digging.

When not on duty, Mr. Rewbotham is always in the garden, and certainly this happy pair get all the good there is out of this beautiful home.

Lilium Harrisii—Should be potted in October in six or seven inch pots in good

rich, loamy potting soil. Keep them in a cool window and do not give them too much water for a month or six weeks until well started. After this they require more water. Spray the tops with tobacco water once or twice to keep down green aphids. Spray the tops frequently with clear water.—Wm. Hunt, O.A.C., Guelph.



An Illustration of How Tomatoes Grow in Mr. Rewbotham's Garden.

Fall Planting Recommended

J. McPherson Ross, Toronto, Ont.

Speaking from actual experience as a practical horticulturist, I most emphatically recommend fall planting to the great majority of fruit and ornamental stock with the possible exception of evergreens, peach and cherry trees. Nor would I except evergreens if proper care is given to seeing that the roots are not too long exposed when transplanting, but it is preferable to transplant them in September.

The great requisite for fall planting is good drainage and although this is just as necessary and essential in the spring it is compulsory in the fall. This being provided then there is everything to be said in favor of fall planting. Nor do I believe that this important fact is sufficiently impressed on the mind of the intending planting or gardening public as it should be, or are they aware of its importance.

Let me mention a few of the reasons why fall planting is best. First, the ground or soil is in the most desirable condition. Being dry, mellow, and warm it is easier handled or worked than it can possibly be in the spring, and when the stock is planted it has a chance to get the soil properly settled about the roots and it is all ready to start in to grow the first thing in the spring. The average experience of every spring planter is the loss of the best part of the spring weather before the stock arrives from the nursery. Many delays such as may occur by the nurseryman being rush-

ed with orders, delays by congestion of freight on the railroad, lying at the station before notification is sent of arrival, and so forth. Then frequently, when ordered in the spring, the nurseryman may be out of some particular tree or plant, and has to order from some other nursery, and they have to experience the same delay again that his customer may experience.

Bulbs for Fall Planting

E. F. Collins, Supt. of Parks, Toronto Ont.

TULIPS in variety and color are the only really reliable bulbs which can be depended upon to give a thoroughly good display next spring. There are many ways of using them. They can be mixed or grown in set colors, or planted in groups in the shrubbery or herb-

three rows planted with a scarlet, say Crimson King. In pinks, I think Proserpine is the queen of all. With it can be used Rose Grisdelin or La Reine, which comes sometimes pink flushed.

Double tulips are more lasting, and make a grand mass of color although, of course, they cost much more.

I consider Vuurbaak, a bright red, is the best; in yellow, Couronne d'Or, and in white, Alba Maxima.

For late or May planting the Cottage Gordun and Darwin types are the best. They should be planted much more freely than they are in the perennial bed and shrubberies. In planting, put them down at least eight to ten inches below the surface of the soil. The Parrot tulip is probably the most unique and richest of all the tulips when planted in groups or in the shrubbery or perennial beds. All the varieties can be had either in self colors or flushed and blocked in different shades.

A LIST OF VARIETIES.

The following list will give a good variety of colors for the everyday garden: Clara Butt, rose color; The Sultan, deep maroon; Pride of Haarlem, scarlet pink; Painted Lady, milky white, shaded heliotrope; Wm. Paul, purple to violet; Buffon, rosy lilac; Harry Veitch, dark brown. These are all the plain colored Darwins, and should be planted in permanent positions.

COTTAGE VARIETIES.

The May flowering, or cottage tulip, includes many varieties and shades of color. The following are a few of the best for the small garden: Albion, white; Golden Beauty, yellow; Bridesmaid, cherry rose; Firefly, brilliant orange; Fulgen, scarlet, and Fairy Queen, rosy heliotrope. There are, also, the variegated foliage tulips, some of which are very attractive, such as the Duke of York, a double flower; Cottage Maid,



An Exhibit of Flowers arranged by The Hamilton Horticultural Society

For many reasons, and those not of a selfish nature, most nurserymen recommend fall planting. On the customer's part the only objection is the prevailing notion that fall planting is risky and that they would be out of their money for the winter season; but let us not mention that reason when we consider how much more can be said in favor of fall planting.

PLANT ROSES IN THE FALL

We hear of so many failures in planting roses in the spring that we recommend everyone to be sure and plant their rose bed or border in the fall. Most failures in rose planting in the spring occur through not cutting the wood or young tops back to two or three buds and by not planting the bush deep enough. Let me dwell on this point. Thousands of rose bushes are brought into the country imported from the Old Country with long woody stems on or just barely shortened. These stems being pithy they soon evaporate what sap may be in them and in the roots before the roots make new roots or begin to absorb moisture from the soil.

In the majority of cases the plants are planted too shallow in the soil. The whole stock of the rose, whether on their own roots or warranted stock, should be covered up and thoroughly trampled firm with the foot when planted. Thus spring planting is often fatal to roses—first, by not cutting the tops back at once when received; second, by shallow planting; and third, by not firming the soil thoroughly when planted.

aceous borders.

I shall endeavor to give a few simple directions in regard to the arrangement and planting.

For set beds, red, yellow and whites look well together, or crimson and white, or yellow and red, or a combination of the pink shades. Take a small circle or round bed, plant a mass of Vermilion Brilliant in the centre, and edge with three rows outside of La Reine white, or reverse by planting the centre with Joost van Vondel, a grand tall white tulip, and edge with Vermilion Brilliant.

For ribbons or long borders, plant in rows six inches apart each way. Keizerkroon would be a good one for the centre, then a yellow, either Chrysolora or Mon Tresor, with the outside two or



Horticultural Products of the Famous Niagara District

For nine years now the St. Catharines Horticultural Society has held most successful exhibitions of fruit and flowers. The illustration shows a portion of the fruit and flowers shown at one of them. This year's exhibition was the most successful yet held.

yellow rose, and La Candeur, double white.

The best varieties of Dutch Hyacinths for bedding are following: White, Madam Van der Hoop, La Grandesse, Baroness von Thuyll and Queen Victoria pink, Gertrude, Gigantea and Lady Macaulay; blue, Grand Maître and King of the Blues.

The miniature hyacinths can also be used for spring flowering, but they must be planted a little closer than the other type, about six inches each way, to have a good effect. Many of the varieties of narcissus are excellent for spring flowering, and if planted in groups they are so much the better. Plant ten inches deep, if they are to remain several years.

An added charm is given by planting

Handling the Potato Crop

A. G. Parker, Boston, N.B.

There is money in raising potatoes if they are properly handled. Last season our crop averaged one hundred and twenty barrels to the acre. No one should be satisfied with anything short of one hundred and ten barrels an acre. Such a yield will be easily reached if proper methods are adopted.

In selecting a fertilizer for potatoes, one should be careful to choose a fertilizer strong in potash, as it has been shown by repeated analysis that a crop of three hundred bushels of potatoes removes from the soil approximately sixty pounds of nitrogen, thirty pounds of phosphoric acid and one hundred and five pounds of potash. Thus a fertilizer to be used by potatoes should have these elements in approximately these proportions. If a good clover sod has been ploughed under the previous fall, the nitrogen will not be required, as the clover, being strong in nitrogen, will provide an ample supply.

If barnyard manure is to be used it should be supplied in the fall. Spread it broadcast and in not too large quantities, not more than from ten to fifteen tons per acre. Supplement it by an application of one hundred and forty to one hundred and eighty pounds of sulphate of potash, and two hundred and fifty to three hundred and fifty pounds of acid phosphate.

SEED SELECTION.

Seed should be selected at the time of harvesting. In this manner the size, form, time of maturity and prolificacy of the plant, can be determined quite easily. Carefully select from those hills which make the most vigorous growth of vines, and which have produced potatoes large in size, the well shaped potatoes that are free from protuberances of any nature. If this method of selection is carried out the quality of the crop will improve rather than deteriorate, and fewer unmarketable potatoes will be noticed.

in the same trench with them, about four inches deep, some of the Scilla Sibirica snowdrops and crocuses. These flower in between the foliage of the narcissus, at least two or three weeks earlier. The Polyanthus type include the following suitable for the garden: White, Perfection; Emperor, yellow; Goldfinch, yellow, and Lord Charming, primrose.

The trumpet type includes the following: Ard-righ, golden yellow, very early; J. B. McCann, white petals and soft yellow trumpet; Madame de Graff, a perfect gem; Madame Langtry, pale cream; Horsfieldi, very fine, and Emperor and Empress. Much might be said about other varieties, but space will not permit.

HARVESTING THE CROP.

The sooner the potatoes are dug after the tops are dead, the better. Last season we started digging on September 27th, which was four days after the tops were killed with frost. Our potatoes were perfectly green up to the time they were killed with frost. We used a Cambridge digger, which is of the elevator pattern, and it gave good satisfaction. We worked four horses on the machine, and had six men picking. In this way we averaged about two hundred and fifty barrels a day. Potatoes can be dug very much cheaper by means of a machine, and if proper care is exercised there will not be any more damaged potatoes than if dug by hand.

Potatoes should be stored in a dry, frost-proof cellar, or warehouse, where the temperature is kept even. The temperature should be about two degrees above the freezing point, and kept as near as possible to that during the time of storage. Free circulation of air should be had through the potatoes. Instead of putting the potatoes against the wall in large bins, the way so many farmers do, a small partition made of narrow boards, spaced a little, should be made against the wall, about one foot from the wall. If a large quantity is to be stored, the bins should be divided in the same manner.

On soils containing clay or humus apply basic slag in the autumn and at the rate of from 500 to 600 lbs. per acre.

The fruit growing industry in Lambton County is going forward rapidly. The cold winter of 1911-12 has not in any way discouraged the growers, although about five per cent of the peach trees were killed, as well as most of the blossoms. I expect that the plantings during 1913 will far surpass those of any other year. - D. Johnson, Forest, Ont.

Red Spider on Cucumbers

Prof. Wm. Lockhead, Macdonald College, Que.

"The last three years I have tried to grow cucumbers. I got them to grow nicely until the cucumbers are about two inches long, then the leaves turn yellow. The small cucumbers wither up and the plants die. I have tried different kinds with the same result. What is the matter? - H. W., Toronto, Ont.

Although the information given is too meagre to allow us to decide definitely as to the nature of the trouble, yet we are of the opinion that the injuries are caused by the presence of red spiders on the leaves. These mites are often abundant in dry seasons on cucumbers, as well as on many other plants. They suck the juices, and affected leaves gradually turn pale, then yellowish, and finally brownish, before succumbing. The loss of so much sap from the leaves reduces the vitality of the cucumber plants, and the leaves are unable to manufacture the substances necessary for the growth of the fruit.

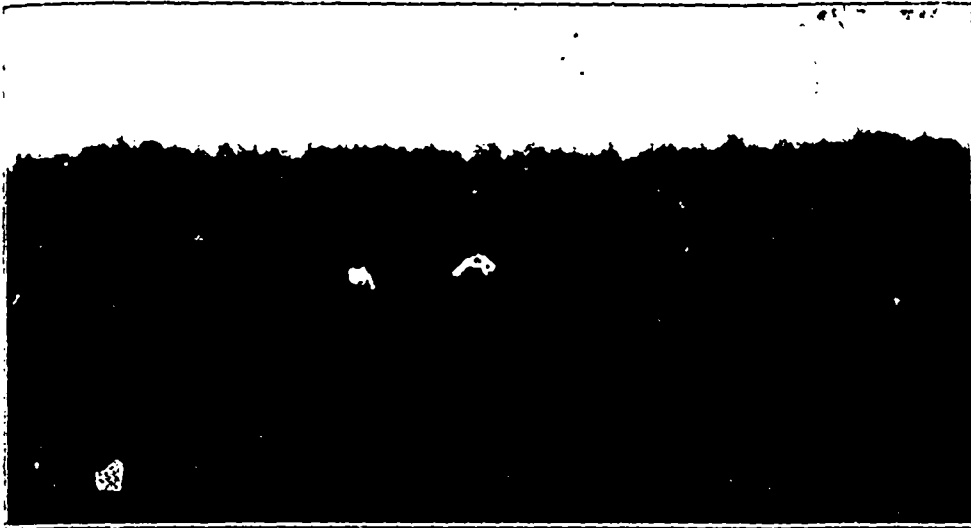
If a leaf attacked by red spider be examined carefully with a magnifying glass a thin web-like tissue will be found on the lower surface within which they feed and reproduce. As these pests are very minute they are apt to be overlooked until much damage is done on account of their large numbers.

Red spiders are usually kept under control by frequent sprayings with water as they appear to thrive only in a dry warm atmosphere. This simple treatment will suffice if begun sufficiently early; but if the webs on the undersurface of the leaves are allowed to be formed, it will not be effective, and some other remedy must be applied. One of the best remedies is a weak summer strength of lime-sulphur, such as fruit-growers use. Tobacco wash, sulphur powder, and soap solutions will also be found useful. Care must be taken to have the under surfaces of the affected leaves sprayed.

Success with Celery

Where the soil and other conditions are favorable celery growing is one of the most profitable lines of vegetable production. The illustration on the next page shows part of a celery field on one of the leading market gardens on the outskirts of Peterboro. The proprietors, Messrs. Card & Williams, have had marked success in the production of celery on this land for a number of years. Celery from this field having won the first prize at the Peterboro Exhibition for the past several years.

A feature which has contributed more than any other to their success is the application each year of a heavy coat of fertilizer. Although the soil is a deep rich, black muck, which has been manured heavily for the past several years it is given an additional heavy application of mixed stable manure before each



Celery as grown by Messrs. Card and Williams, Peterboro, Ont.
(See Adjoining Article.)

crop is planted. The fertilizer which has given the best satisfaction is a mixture of about equal parts of horse, cow, and pig manure, which has been piled together and well rotted before being applied to the field.

The early varieties are planted as soon as the soil can be prepared in the spring. The practice followed is to plant the celery in double rows on the flat, no trenches being dug. The plants are set six inches apart each way, and opposite in the rows, so as to facilitate weeding from either side. The rows are four feet apart. From the time the plants are set out, until they are banked or boarded up for bleaching, the field is given almost daily cultivation.

Boards are used for bleaching the earlier varieties. The later varieties are banked up as this affords a greater protection from frosts. A glance at the illustration on the front cover of this issue of *The Canadian Horticulturist* will show the method of placing the boards alongside the celery. The boards shown on the far side of the row of celery were each ten inches wide. This celery was planted on June 11th, somewhat later than usual, owing to the very wet and backward spring. The photo was taken September 9th, when most of this patch had been harvested.

When the onions are ready for harvesting, run the cultivator along the row, so as to cut off roots and turn onions loose. With a wooden rake put four or six rows into one. Then they are ready for topping as soon as properly dried.

For celery we use White Plume, Paris Golden Yellow and Giant Pascal. The two former kinds can be planted on the level, the latter in a shallow trench. It can be left in the ground until the tenth of November, when it can be taken up and packed in the cellar for winter use.
—E. G. Cooper, Alberta.

Seed Potatoes

Wm. Naismith, Falkenburg, Ont.

When the potatoes are thoroughly ripe, about October fifteenth, in bright, sunshiny weather, I run the digger taking every second row, leaving them a short time on the ground, so that the tubers are dry. I sort out the small potatoes and bag up the seed and remove to the pit. I use a sand bank with a slight incline to the south. This makes an ideal place, it being always dry. The dimensions of the pit are four feet wide, three feet deep, with sufficient length to hold one hundred bags, leaving six inches on top for ventilation. I use strong cross pieces of wood every six feet, a covering of poles lengthways of the pit overlaid with six inches of marsh hay, and covering with a foot of sand, leaving a space for ventilation at each end up to November fifteenth, when all is made secure for the winter. All the material used is found close at hand and costs only the labor.

I have followed this method of storing for twenty-five years, and never have any loss. The potatoes come out dry, no sprouting, and always ensure a full stand of vigorous plants. I stored and sold in the spring of 1911, seven hundred bags. I always find a good market and good prices. My average yield is two hundred and twenty bags per acre, and the land is left in fine condition for the succeeding crop, after which if seeded down in regular rotation several crops of excellent hay are grown.

SELECTING SEED

When the tubers are ripe and just before harvesting the crop, I select the best plants by going up one row and down the next, selecting for producing prolificities and uniformity in shape and size. Long experience and close observation make this an easy matter, even when the stalks are dead, for they still retain their natural form, and there is a best in every

row, just as surely as there is a best in every flock and herd. I believe in planting the best and trying to improve upon it. I plant this selected seed the next season on fresh cleared and burned bush land. I again use the seed taken from the new land to plant the main crop the following spring. I have followed this rotation for many years, growing from the top seed or ball. I have carried on experiments for over twenty years, and have succeeded in getting three good varieties, namely, Rose of the North, Canadian Standard, and a new Empire State not yet sent out, but which may appear in 1912.

JUDGING POTATOES

The first consideration is ability to produce bushels to the acre, coupled with quality and an even surface. Too many points should not be given for appearance, as many of this class are poor producers, and will not repay the farmer for his care. I refer to what are known as fancy varieties. A judge to be able to do his work intelligently must have a practical knowledge of the varieties at present in cultivation, and their adaptability to different latitudes, as some of the most popular varieties grown in the Niagara Peninsula do not adapt themselves to the Nipissing or Algoma Districts.

When growing seed of early varieties of potatoes to get the best returns plant June 1st, so as to avoid any check, as early varieties require to grow rapidly. This gives them June, July and August in which to mature. Better returns are thus obtained than when they are planted earlier.

Sprays for Vegetables

E. M. Straight, Macdonald College, Que.

We have demonstrated that the various leaf spots and blights of the tomato may be controlled by bordeaux mixture, but if early ripe fruit is the thing sought it does not pay to spray tomatoes. If the grower is chiefly concerned with the production of large quantities of ripe fruit for the canning factory the use of insecticides, we believe, would abundantly pay; but if there is no outbreak of beetles we do not recommend spraying them. Tomatoes are subject to the attack of the same beetles as the potato. It is seldom, however, that the outbreak is serious on these plants.

The celery plant is very susceptible to disease. Early and late blight attack it from the seedling stage, until the harvest. At some experiment stations, experimenters have not been able to control the malady. We have, and did last year control these diseases effectually by the use of bordeaux commencing at the seedling stage, and continuing with bordeaux mixture at intervals of ten or twelve days until the end of the season. Plants not sprayed were not taken from the field, while the others were of normal size and quality.

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OFFICIAL ORGAN OF THE ONTARIO, QUEBEC, NEW BRUNSWICK AND PRINCE EDWARD ISLAND FRUIT GROWERS' ASSOCIATIONS

H. BRONSON COWAN, Managing Director

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7. Articles and Illustrations for publication will be thankfully received by the Editor.

CIRCULATION STATEMENT

The following is a sworn statement of the net paid circulation of The Canadian Horticulturist for the year ending with December, 1911. The figures given are exclusive of samples and spoiled copies. Most months, including the sample copies, from 11,000 to 12,000 copies of The Canadian Horticulturist are mailed to people known to be interested in the growing of fruits, flowers or vegetables.

January, 1911	8,062
February, 1911	8,260
March, 1911	8,523
April, 1911	9,469
May, 1911	9,783
June, 1911	10,178
July, 1911	10,062
August, 1911	10,043
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September, 1912 11,477

Sworn detailed statements will be mailed upon application.

OUR PROTECTIVE POLICY

We want the readers of The Canadian Horticulturist to feel that they can deal with our advertisers with our assurance of the advertisers' reliability. We try to admit to our columns only the most reliable advertisers. Should any subscriber, therefore, have good cause to be dissatisfied with the treatment he receives from any of our advertisers, we will look into the matter and investigate the circumstances fully. Should we find reason, even in the slightest degree, we will discontinue immediately the publication of their advertisements in The Horticulturist. Should the circumstances warrant we will expose them through the columns of the paper. Thus we will not only protect our readers, but our reputable advertisers as well. All that is necessary to entitle you to the benefit of this Protective Policy is that you include in all your letters to our advertisers the words "I saw your ad. in The Canadian Horticulturist." Complaints should be made to us as soon as possible after reason for dissatisfaction has been found.

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THE CANADIAN HORTICULTURIST, PETERBORO, ONT.



EDITORIAL

THE JORDAN HARBOR STATION

While the Ontario Government has done much to promote the cause of horticulture, its treatment of the Jordan Harbor Experiment Station, from the inception of that institution, has been disappointing to those who would like to see the station accomplish the purposes for which it was established. Far from being sympathetic in the first place, with the proposal to establish an experiment station in the Niagara District, it was not until the land for the station had been given to the government free of cost that it consented to meet the expense involved in the equipment of the station and its management. Even in this, however, it has appeared to be more anxious to expend as little as possible than it has been to expend whatever sum might be necessary to enable the station to fulfil the work for which it was established.

Three years ago THE CANADIAN HORTICULTURIST protested when it was announced that a man, who, while one of the most successful apple growers in the province lacked a knowledge of the growing of tender fruit such as is produced in the Niagara District, had been appointed as a sort of under manager of the station. Nearly two years ago we protested again when it was announced that the government, instead of appointing a competent resident superintendent at an adequate salary, had decided to vest the management of the station in the hands of an official of the department, resident in Toronto, already overburdened with other exacting duties. We then pointed out that such management was certain to interfere with the efficiency of this official's services in other directions or result in the work of the station being neglected.

The wisdom of the stand we then took has recently been confirmed by an editorial contributor of the Weekly Fruit Grower, published at Grimsby, Ont., in the Niagara District, who, after a visit to the station, made a number of serious charges concerning it in that publication. His charges are that crops intended for revenue have been planted upon the most unsuitable land possible, and are naturally a failure, that experiments are begun and suddenly abandoned without any apparent reason, and that officials who have conducted experiments at the station have left without leaving any record of the work they have accomplished, thereby making it impossible for their successors to continue their work where they left off. The writer in question endorses the demand we made two years ago that the station should be placed in charge of a competent resident head.

No person acquainted with the situation will lay any blame at the doors of the present director of the station, Mr. P. W. Hodgetts. Fruit growers everywhere realize the valuable work Mr. Hodgetts is doing on their behalf and the numerous other demands that are made on his time. Existing conditions will not be remedied until the government takes a more sympathetic interest in the work of the station and appreciates its possibilities more fully. When this change of attitude takes place it will be made manifest immediately by the appointment of a thoroughly competent resident director at an adequate salary, and by the granting of sufficient funds to make

possible the conduct at the station of the broad lines of work which fruit and vegetable growers everywhere expect to see it perform.

RAILWAY GRIEVANCES

The fruit growers of Ontario have been so uniformly successful, since the establishment of the Dominion Railway Commission, in obtaining an improvement in their treatment at the hands of the railway companies whenever they have laid their complaints before the commission, they may look forward with confidence to receiving a sympathetic hearing should they again decide to lay their case before that Tribunal. Month by month, but more particularly during the fruit shipping season, complaint has been growing in regard to the inadequate service given by the railway companies in the handling of Ontario fruit intended for the western markets. The shipping rates west of Winnipeg are so exorbitant as to practically shut Ontario fruit out of the prairie provinces. This has forced the auction of much of that fruit at Winnipeg as soon as it arrives.

When the railway companies last appeared before the railway commission they promised to provide a four and a half day service to Winnipeg. It usually takes seven to eight days. This constitutes a serious grievance both to the growers in the east and the consumers of fruit in the west. The imperative need for an improvement in these conditions is now apparent. It should be possible to present a strong case before the Board of Railway Commissioners.

A NATIONAL DISH

What is the national dish of Canada? A correspondent points out that England has "roast beef," Scotland "oatmeal," and Ireland the "potato," and that these divisions of the Empire have also as their emblems the Rose, the Thistle and the Shamrock. Canada has the Maple Leaf, but nothing that can be recognized as our favorite viand. Our correspondent suggests that we constitute the apple as our provincial delicacy.

The suggestion has much to commend it. Apples are grown in Canada from the Atlantic to the Pacific. Even the prairie provinces are able to produce certain varieties. Apples are beautiful to look upon, delightful to taste, beneficial to the system and are enjoyed by one and all. We wish to move that our contributor be thanked for his suggestion, and that we establish the Apple as our national dish. Speaking for our motion we venture to suggest that a comparison be made between a beautiful red apple and beans, the emblem of the great country to our south, to see the prestige the adoption of our motion would confer upon us as a nation.

IMPROVEMENT OF SMALL TOWNS

Since the use of the automobile by the more wealthy residents of our towns and cities has become general, with the numerous trips through the country districts their use involve, an added incentive has been given to numerous small towns and villages to beautify their streets and surroundings of their homes. In a letter to THE CANADIAN HORTICULTURIST, Dr. E. Klotz, of Lanark, Ont., draws attention to this fact, and says:

"It is now a well-known fact that the 'city autoists take a Saturday, Sunday or other holiday in the country they

variably choose as their destination or "dinner stop" the most attractive hamlet in the district, noted probably for its tidy river and ponds, its avenues of maples and elms, its velvety park, its private lawns and well kept boulevards, its quaint and vine covered porches and walks and its many glorious flower gardens."

When a municipality enjoys advantages such as those described by our correspondent, it becomes a far stronger business magnet than most people realize. Not only does it attract a transient trade but it in many cases becomes the determining factor which had industries to locate in such centres.

Quality

The fruit grower who decides to make a little more money out of his fruit crop by putting all the small, wormy, or bruised apples at the bottom of the barrels with the good fruit on top is careful that his name does not appear on the barrel. He knows that the people who buy this fruit once and get "bitten" will not buy fruit again, knowing it has been packed by the same man.

The same principle holds true with every kind of goods, which are bought and sold. People will not knowingly buy the same goods a second time, if they have bought them once and found them unsatisfactory or unreliable. Take the case of a nurseryman whose stock is not true to name, poorly grown or diseased. Or a seedsman whose seeds are not reliable. Or a manufacturer whose goods are inferior. Could these people hope to build up a big business among a certain class of people with such unsatisfactory goods?

When you see advertisers continue to spend money to tell people about their goods, describing the goods and connecting them up with their name, you may be sure they are finding their advertising profitable, or in other words that people are buying their goods and finding them satisfactory. No firm can afford to spend money to tell people about its goods if these goods are inferior or unreliable.

Notice the firms who have been using space in The Canadian Horticulturist regularly to tell you about their goods. They are all good firms, and their goods, or the service they have to offer, may be depended upon. And the new announcements appearing in The Canadian Horticulturist from month to month are from firms we feel we can recommend.

Sometimes, of course, there are fakes in advertising as in anything else. These people by making a lot of fine promises that they cannot fulfil often secure considerable business but they are soon found out and are obliged to place their advertising in other mediums, where it will reach a fresh crop of prospects. They cannot continue doing business with the same people.

This last kind of people do not advertise in The Canadian Horticulturist because they cannot. Read our "Protective Policy" on the opposite page.

We do not admit advertisers to our columns except such as we believe are thoroughly reliable.

Even more important than such considerations as these, however, is the effect such surroundings have on the citizens, young and old, who are so fortunate as to live in their midst. Most of our city fathers have been far too slow in their appreciation of the aesthetic value of such considerations as these. An improvement is now manifest in numerous sections and we may expect to see this improvement spread. Our horticultural societies are doing much to bring it about.

At long last congress has passed a bill by which a parcel's post system will be established in the United States on and after the first of the new year. It is time that something more was done in Canada than has been done as yet to introduce such a system in this country. Parcels post is general throughout Europe and even in some South American countries. Even although Canada is large and our population sparse we should not lag behind in a matter of this importance.

A greener in the Maritime provinces who recently suffered loss through the receipt of some fraudulently packed fruit made public the treatment he had received by exposing the package and its contents, with the name of the shipper, in his window. His protest would have been more effective had he made it to the fruit inspector, for his district, of the Dominion Department of Agriculture.

PUBLISHER'S DESK

Is not that display of celery on the front cover of this issue of THE CANADIAN HORTICULTURIST something worth being proud of? It was grown in the open field by Messrs. Card and Williams, of Peterboro, and was photographed by a representative of THE CANADIAN HORTICULTURIST just as it was growing at the end of a long row. It was little, if any, above the average quality of the large crop of which it formed a part, and which is illustrated also on page two hundred and thirty-nine of this issue. There is money in such crops as these when you know how to grow them. This accounts for the increasing number of market gardeners and vegetable growers we have in Canada.

We feel a little proud of the contents of this issue of THE CANADIAN HORTICULTURIST. Look over the various articles and the names of the contributors. You will see, if you are at all familiar with our leading authorities in the different provinces, that the articles are almost all by contributors enjoying a national reputation along the lines on which they have written. It is our endeavor to secure as contributors, only such parties as are known to be thoroughly competent to deal with the subjects they handle. The fact that this publication is known as "The Old and Reliable Canadian Horticulturist," and that its circulation and influence continues to grow rapidly is an indication that we are succeeding with our aims. Our November issue will equal this one in point of excellence. Watch for it and, as usual, you will not be disappointed.

During the next three months several thousand subscriptions of THE CANADIAN HORTICULTURIST will expire. A few hundred are already in arrears. Our subscrib-

ers will confer a great favor on us, and possibly save inconvenience to themselves, if they will make it a point to renew their subscriptions promptly. There is a possibility that the subscription price of THE CANADIAN HORTICULTURIST may be advanced at the first of the new year. This being the case, we would advise our subscribers to take advantage of our offer to send THE CANADIAN HORTICULTURIST for two years for one dollar. Do not allow this to escape your memory.

SOCIETY NOTES

We invite the officers of Horticultural Societies to send in short, pithy reports of work that would interest members of other Horticultural Societies.

St. Catharines

The first exhibition of flowers and vegetables grown in the gardens of the Alexandra School, St. Catharines, was given recently. The display was made in one room, and consisted of exhibits grown and arranged by the pupils of the school, and each class was given fifteen minutes to observe the display and learn the names of the various exhibits. The whole was under the direction of Principal Gayman, assisted by Mr. Vasburg, the caretaker of the school, grounds and gardens, and the exhibition was attended by all the teachers of the school, by Mr. Watson, chairman of the Public School Board, and Trustees Moyer and Watts.

The vegetable display consisted of large pumpkins, squashes, ornamental gourds, mock oranges, beets, tomatoes, cabbages, cauliflowers, radishes, beans, corn, flax, sweet potatoes and peanuts, which do not come to maturity in this climate, and all the samples were well grown.

The flowers were of different varieties, displayed neatly in vases, and made a brilliant show. They consisted of a large number of blooms, including varieties of asters, dahlias, mignonne, dianthus, zinnias, phlox, verbenas, candy-tuft, snow on mountain, African and French marigolds, pansies, gladioli, sweet alyssum, nasturtiums, petunias, scabiosa, corn flower, golden rod, geraniums and others.

The vegetable garden is at one side of the grounds, the flower garden at the other, though flowers appear in different parts, for ornamentation. In the vegetable garden are different varieties of seeding pine trees, Kaffir and sweet corn, onions, lettuce, etc.

Tillsonburg

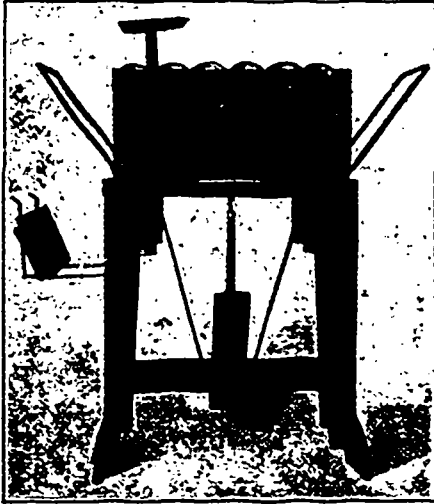
Our local skating rink was a bower of beauty recently with bunting, flags, Chinese lanterns, and many tables filled with brilliant-colored blossoms, the occasion being the annual flower show under the management of the Horticultural Society. A large number of valuable special prizes was an incentive to the members to put forth their best efforts, and so the number of entries was large and the quality of the exhibits of a high order.

The refreshment section of the show vied with the flowers in beauty and was well patronized. Music was furnished by the Imperial orchestra.

The flowers were judged by Mr. Hay, of Brantford, who spoke in very complimentary terms of the exhibition, praising especially the showing of asters and gladioli.

Quick and Easy

That is the way the DAISY APPLE BOX PRESS works. A simple pressure of the foot brings the arms up over the ends of the box, automatically draws them down and holds them in place while being nailed. The fastest and only automatic press on the market.



Pat. No. 104,535

If you pack apples in boxes, this machine will be a great convenience to you and will save you time and money. Write for prices to

J. J. ROBLIN & SON

Manufacturers

Brighton, Ontario

A Central Co-operative Association in Nova Scotia

M. B. Davis, Bridgetown, N.S.

THE present year has seen one of the dreams of the ambitious fruit grower in Nova Scotia brought to a realization. For some years past the more up-to-date and energetic fruit growers of the Annapolis and Cornwallis valleys have been advocating co-operation. This movement commenced at Berwick some five years ago when a company was formed, under the name of the Berwick Fruit Co., Ltd. This pioneer company met with such evident success that it was not very long before other companies were established throughout the valleys, and in 1911 there were about 30 of these companies in operation.

As the number of companies became larger the need of a central organization became apparent, so much so in fact that several of the local companies cooperated and employed a general manager for the season of 1911. The results of this experiment were so satisfactory that in the spring of this year a vigorous campaign for the organization of a central company was made with the result that at the present time, "The United Fruit Companies of Nova Scotia Ltd.," is a realized anticipation, with a well organized office staff and manager. It is now in a position to do business for affiliated Companies under its charge. Probably no greater stride in horticultural work has been made anywhere in Canada than in this instance, for when we think of such a large number of growers working under one head it is surely cause for gratification.

The policy of the company is one which smacks of the true principles of co-operation, leaving out the element of petty prejudices and personal gain. These companies have united to advance the interests of each other in the packing, marketing and shipping of fruit, purchasing of supplies and any other matter beneficial to them. The central will purchase fertilizers, barrer oil, spray materials, and other farm requisites, purchasing the same in such large quantities that they will be enabled to obtain the very lowest prices that the markets afford. This was very successful last season when the organization was not completed, so that now great things are looked for in this line.

Aside from the purchasing of supplies the Central handles all apples for the affiliated companies either selling the same or shipping them on consignment. The prices of these apples are placed in a joint pool and averaged at the end of the season, the prices for the different varieties being kept separate of course.

In this way each company obtains the same price for their fruit regardless of when their own fruit sold at. This of course would not be at all possible unless a uniform pack was obtained from the different companies, and this the Central expects to bring about by a rigid system of inspection accompanied by instruction in the art of packing, grading and handling fruit. Already the buyers are expressing their desire to handle only the cooperative pack of ap

Apple Trees

We are producing hardy varieties of Apples and other fruits for the North. Our Nurseries at Pointe Claire, extending over 170 acres, are devoted to the growing of Hardy Fruit Stocks and Ornamentals, Roses, etc., etc. Our Apple Trees are budded on whole roots and grown under all the rigorous climatic conditions of this section. For this reason they are pronounced by experts to be best suited as stock for Northern planters, both in the Garden and Orchard.

Intending customers are urged to place their orders now while we have a full selection of the best standard varieties.

Catalogues and Lists cheerfully furnished
Free of Charge

Canadian Nursery Co., Ltd.

(Charles K. Baillie, General Manager)

10 Phillips Place - Montreal, P. Q.

You Get

BETTER PRICES

For

APPLES

Packed in

BOXES

Up-to-date growers and shippers have demonstrated this fact. We make the boxes. Write us.

The Firstbrook Box Co., Ltd.
TORONTO

plus, so that here we have one factor which alone is worth co-operating for in this line of business.

Heretofore the transportation facilities afforded the fruit grower have not been of the best, but already the Central has brought enough pressure to bear to have five steamers subsidised in their own name thus obtaining the nest egg which has always gone to the speculator. Not only are expenses thus reduced but the rates for this year are far more reasonable than have been. Considerable improvement is being made, also, in the railway service. The erection of a frost proof warehouse in Halifax has been assured us, so that here again the management finds scope for their ability to better conditions for the producer.

It is the intention of the company to place salesmen in all the larger markets who will study the conditions prevailing and endeavor to cater to their requirements. In this way it is hoped that the producer and consumer will be brought in closer touch with each other and both profit by the same. With the head office in Berwick, under the management of Mr. S. B. Chute, and the shipping office in Halifax the company is in an excellent position to handle the apple crop of this year with the quickest possible despatch. Thus the prevailing conditions in the valleys will be much improved over previous years.

Slack Barrel Material

That Canada is fast losing her possibilities as a producer of tight cooperage is brought out by statistics compiled by the Forestry Branch of the Department of the Interior. These show that, whereas 2,768,000 oak staves were cut in the Dominion in 1911, 7,293,000 were imported.

In the manufacture of slack cooperage,

used for the dry rough commodities such as lime, potatoes, apples, dry fish, flour and cereals, which predominate in Canada's products, elm is the principal wood employed, forming over fifty per cent of the total consumption. Spruce is rapidly coming into more general use as a source of stave supply, eleven million more spruce staves and nine million fewer elm staves having been used in 1911 than in 1910. When elm is exhausted birch will probably take its place, being comparatively flexible and available in great quantity.

Advice to Packers

R. M. Wislow, Victoria, B.C.

Wrap all number one and fancy fruit. Wrap number two's of winter varieties.

A good pack must first of all be firm. It must have a total bulge of about one and a quarter inches before the cover is nailed on. Regularity is essential to good shipping qualities, and honesty as well. The pack must be attractive in appearance.

The apple-box twenty by eleven by ten is suitable for all apples.

The square and offset packs are defective and should be avoided.

The diagonal packs meet practically all requirements.

Your fruit should not fall below the requirements of the "Fruit-marks Act" in any particular. Better keep your grades well above the law.

Mark the number of apples on the box, rather than the tier.

Apply the highest standards of perfection to your own pack. Be persistent in your effort to attain the highest standard. Then use your influence, as well as your example, to influence your neighbor and every other grower and shipper to do the same.

Douglas Gardens

Oakville, Ontario

Paeonies

67 varieties at... 30 cts. to \$3.00 each

Irises

12 varieties at..... 15 to 25 cts. each

Phlox

"Miss Lingard," 20 cts. each, 10, \$1.50

Delphiniums

Gold Medal Hybrids,.... 15 cts. each, 10, \$1.25

Aquilegia (Columbine)

Fine plants, ... 15 cts. each, 10, \$1.25

Daffodils

Eight varieties, 20 cts. to 45 cts. for 10, 45 cts. to \$1.00 for 25.

Carriage Prepaid on all of above.

FALL PLANTING LIST sent free.

JOHN CAVERS



Darr Farm, Niagara-on-the-Lake.

August 1st, 1911

"Regarding the large block of Pedigreed Cherries, Peaches, Pears, Plums and bush fruits we planted last fall, am pleased to tell you the results are in every way satisfactory. The few trees put in this spring do not compare with the fall plant, either in growth or take. We lost considerably more of the spring planted trees, and the growth is much shorter. In future we plant in the fall.

D. A. RODGERS

PEDIGREED CHERRIES, planted November 1910, 99 per cent. thrifty July, 1911.

The property of D. A. R. ROGERS, Darr Farm, Niagara

We strongly recommend the fall planting of all fruits excepting yearling plums, which are inclined to freeze back, and should be planted in the spring. Where the land is suitable and the work well done, fall planting has in every case proved more satisfactory than spring planting. Particularly is this noticeable this dry season. The land is usually in fine planting condition in the fall, the trees quite dormant, the weather cool, and more time can be given to plant carefully. Fall planted trees are well established by spring, and make a much heavier growth than spring planted orchards. These are a few reasons why fall planting pays.

Orders should be sent in early, and we are prepared to make quick delivery as soon as stock is thoroughly matured.

Auburn Nurseries, Ltd., Queenston, Ont.

Nova Scotia's Fruit Growing Advantages

W. T. Macoun, Dominion Horticulturist, Ottawa, Ont.

For the growing of fruit, Nova Scotia has many advantages. In the first place, land is still comparatively cheap. The boom has not fairly set in yet, but I notice that the Canadian Pacific Railway, which controls the railway running through the Annapolis Valley, is advertising the fruit industry of its time tables. The government is doing a great deal now in advertising the free lands, and probably still more systematic advertising will soon take place.

Trees live to be a great age in the most favored parts of Nova Scotia. A man can easily count on productive trees as long as he lives, no matter how young he may be when he plants. Apple trees more than two hundred years old are said to be growing in the Annapolis Valley. The freedom from winter injury makes orcharding a safer investment than where trees are more liable to be injured.

The markets of Great Britain, Europe and South Africa should offer a constant and ever increasing outlet for Nova Scotia fruit, not to speak of other great markets nearer home, and as the fruit can be placed on ocean steamers the same day it is picked, if need be, there is a great advantage in shortness of railway haul. Both in regard to freight rates and to the condition in which the fruit arrives at port.

Owing to the comparatively cool summer and autumn, as a rule Nova Scotia fruit does not mature rapidly, and when it is picked is usually very firm and carries well, enabling the Nova Scotia fruit grower to land his fruit with a minimum loss from slack or wet barrels.

The climate of the more favored parts of Nova Scotia is very suitable for many varieties of apples most in favor on the British and European markets, such as Gravenstein, Blenheim, Ribston, Cox's Orange Pippin, Tompkin's King and others.

But I shall stop here, and lest I be thought to favor Nova Scotia too much, must tell you that the apple scab flourishes there in some seasons as it does in some other parts of Canada; that sometimes the weather in spring injures the bloom, causing a partial failure of the crop; that some varieties of apples do not reach full maturity there and lack high color, and that there are a few other minor troubles which every fruit district, no matter how good, is not exempt from.

Storage Houses Advocated

That British Columbia and Ontario produce fruits that meet the requirements of those who live on the prairies was demonstrated by the exhibits at the Winnipeg Exhibition recently. However, it is but a satisfaction to know that apples can be held in cold storage for several months if the cold storage plants do not deliver them to the consumers. Citizens of the west pay almost any price for sound, well-kept apples in winter, spring or early summer.

It is well-known that good varieties can be held over winter. Then why not build suitable storage houses built in Winnipeg and other cities of the west? Apples can be shipped in the fall and stored ready for trans-shipment as needed. Until Ontario and British Columbia have perfected such a system, they will not have taken full advantage of the willingness of the west to part with cash in an endeavor to get good fruit.—Winnipeg Farmers' Advocate.



Take A Handful Of "St. Lawrence" Sugar Out To The Store Door

—out where the light can fall on it—and see the brilliant, diamond-like sparkle the pure white color, of every grain.

That's the way to test any sugar—that's the way we hope you will test



Compare it with any other sugar—compare its pure, white sparkle—its even grain—its matchless sweetness.

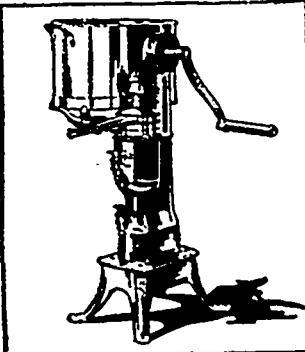
Better still, get a 20 pound or 100 pound bag at your grocer's and test "St. Lawrence Sugar" in your home.

ST. LAWRENCE SUGAR REFINERIES LIMITED, MONTREAL.

67A

Both Cream and Skim Milk Are Delivered Pure and Clean

GOOD reasons are the basis of all buying. It follows then, that the best buyer is the man who has the best reason, or the most good reasons for buying. When this rule is applied to the purchase of a cream separator and each separator on the market is carefully studied for reasons why it should be chosen, the most careful buyers invest their money in



I H C Cream Separators Dairymaid or Bluebell

Assuming for the sake of argument that the best separators are equal in skimming capacity, simplicity, and durability, there is still one best reason why your choice should fall on an I H C separator. The reason is—the dirt arrester chamber which is found only on I H C separators. More or less foreign matter is very likely to find its way into the milk before it reaches the separator. The I H C dirt arrester chamber removes every particle of this matter before separation begins and holds it imprisoned until the last drop of milk has passed through the bowl. Both your cream and skim milk are delivered pure and clean.



Dirt-arrester chamber with part of side broken away to show how the impurities are collected

There are points in the construction of I H C separators, such as the heavy phosphor bronze bushings, trouble proof neck bearing, cut-away wings, dirt and milk proof spiral gears, etc., which taken in connection with the dirt arrester chamber, make I H C separators beyond any doubt the best of all to buy. There are four convenient sizes of each style. Ask the I H C local agent for demonstration. Get catalogues and full information from him or write nearest branch house.

CANADIAN BRANCH HOUSES

International Harvester Company of America (Incorporated)

At Brandon, Calgary, Edmonton, Hamilton, Lethbridge, London, Montreal, North Battleford, Ottawa, Quebec, Regina, Saskatoon, St. John, Weyburn, Winnipeg, Yorkton.

IHC Service Bureau

The purpose of this Bureau is to furnish free of charge to all the best information obtainable on better farming. If you have any worthy questions concerning soil, crops, land drainage, irrigation, fertilizers, etc., make your inquiries specific and send them to IHC Service Bureau, Harvester Building, Chicago, USA





Simmers' Bulbs

For Immediate Planting

WE WANT every reader of The Canadian Horticulturist to have a copy of our AUTUMN CATALOGUE, in which is offered the most complete and comprehensive list of bulbs to be found in Canada. It's free for the asking. To keep up-to-date floriculturally your name should be on our mailing list, and our various Catalogues will be sent as issued.

BULBS.—Thousands of people overlook the planting of Spring Flowering Bulbs in the Fall, and have many regrets when they see them blooming in the gardens of their neighbors in the spring. Send for our Catalogue now, make your selection and plant your Bulbs out before hard frost comes, or selection of sorts may be left to us.

HARDY PERENNIAL PLANTS.—No better time to set these out than now. They quickly take hold and invariably make finer and stronger plants than wehn planting is done in the Spring.

J. A. SIMMERS, Limited SEEDS, BULBS, PLANTS **TORONTO, Ont.**

A PACKAGE of fruit brings the best price when it appeals to the eye. Therefore you cannot afford to neglect the trimmings.

WHITE DUPLEX FRUIT WRAPPER

This is the wrapper used by the Oregon fruit packers for years, and is far superior to the thin tissue wrapper.

9 X 9, 10 X 10, 12 X 12

Corrugated, Pulp and Lace Barrel Heads
Corrugated, Lace and Wax Papers for
Boxes. Samples and prices upon request

Phone or wire orders at our expense

THOS. GAIN & SON
124 Richmond St. W. Toronto, Ont.

Apple Boxes

WE make a good box at the right price. It is especially suited for the apple grower and shipper.

One of our large customers last year used thousands of our boxes for the export trade. Such trade demands a strong, durable box. Our boxes gave every satisfaction.

*Our Boxes are Right.
The Price is Right.
Let Us Quote You.*

Barchard & Company, Limited
135-151 Duke St. TORONTO

APPLES

Representing

J. & H. GOODWIN

Manchester, Liverpool and Hull

THOS. RUSSELL

GLASGOW

Nothard & Lowe

LONDON

Will be pleased to keep you advised regarding the condition of the European Markets. If you any have Apples for Export, call or write:—

FRED. BARKER

25 Church St., Toronto, Can.

FLOWER POTS

Hanging Baskets, Ferns Pans, Etc.



We have a large stock of all sizes on hand, and can ship orders without delay.

Order Now Before the Rush

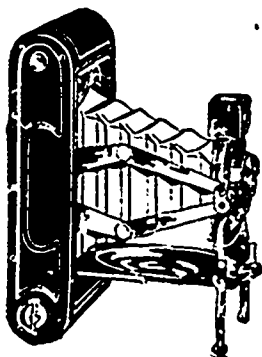
Our pots are smooth and well burnt. We have our reputation to keep up.

Send for Catalogue & Price List

The Foster Pottery Company, Ltd.

Main St., West

Hamilton



Photography with the bother left out.

Pictures 2 1/2 x 4 1/2 inches

Price \$12.00

No. 1A Pocket =KODAK=

Slips easily in and out of an ordinary coat pocket. Snap, it is fully extended and in focus. Snap, the picture is made. Snap, and it's closed again.

Carefully tested meniscus achromatic lens, accurate shutter; daylight loading, of course. Made of aluminum, covered with fine seal grain leather. Kodak quality in every detail. Loads for twelve exposures. Pictures 2 1/2 x 4 1/2 inches. Price \$12.00

Other Kodaks \$5.00 to \$100.00. Brownie Cameras, they work like Kodak, \$2.00 to \$12.00. All are fully described in the Kodak catalogue free at your dealers or by mail.

Canadian Kodak Co., Limited
TORONTO, CAN.

A Unique Display of Nursery Stock

FEW of the many thousand visitors at the Canadian National Exhibition who passed down the main roadway towards the Machinery Hall failed to notice the attractive little building pictured on this page, which was set back a few yards from the walk and was surrounded by a beautiful stretch of green grass, and around which were arranged in an artistic manner, attractive specimens of fancy

est class of nursery stock. Their trees, grown under such favorable conditions, are straight, clean and well developed. These two year specimen trees shown stood from five to eight feet high, and a glance at their splendid root system and the remarkable growth that has been made during the past season shows that the trees were the kind which would establish themselves quickly when planted out in the open.



evergreens planted in tubs and art stone vases. This was the exhibition of Messrs. Stone & Wellington, the well-known nurserymen and landscape architects of Toronto.

The evergreen shrubs shown in the foreground made a collection of rare and choice varieties of cedars, particularly interesting to lovers of the beautiful, and which included a number of varieties of the Spruce, Arbor Vitae, Pine, Juniper and Fir.

The quaint little building in the background of a miniature formal garden made a unique and pleasing effect, which was enhanced by a well-set sun dial.

The building itself was used as an office, in which were shown illustrations of various shrubs, trees and roses, as well as a number of plans of private and public grounds, prepared by their landscape designer, who was in charge of this department, and who was able to answer many questions and enquiries in regard to the artistic and practical laying out of the home or public grounds.

Another feature of this interesting exhibit which attracted a great deal of attention from farmers and fruit growers were a number of bundles of their celebrated two-year-old standard grown fruit trees, consisting of apples, peaches, pears, plums and cherries. These trees were grown at their nurseries at Fonthill, and serve to show the splendid class of stock they are growing for their fall and spring trade.

Their nurseries are situated at Fonthill in Welland County, where conditions are ideal for the production of the very high-

and come into profitable bearing from one to three or four years ahead of stock which had not been grown under equally favorable conditions. Messrs. Stone & Wellington have for this fall and next spring an immense quantity of fruit trees such as those shown at the exhibition.

Those of our readers who, like our representative, stopped to look over this exhibit, no doubt learned much regarding the methods followed in producing high-class nursery stock, which well repaid them for the time spent. Those readers who are interested either in landscape architecture or in high-class fruit trees for the orchard, and who have an opportunity of calling at the head office of this firm at 49 Wellington St. East, Toronto, or of visiting their nursery at Fonthill, Ont., will be assured of a hearty welcome, and may count on learning much that will be of value to them. Those who may not have this opportunity may, by writing to the head office at Toronto, be placed in touch with the nearest Stone & Wellington representative, or will receive direct any information desired.

If these of us who are engaged in getting fruit in Ontario will rise to the dignity of the situation, and by every means in our power seek to put our product on the public market in such a manner as will remove every cause for complaint due to careless and indifferent packing and grading of what might otherwise be a high class produce, there is a bright future in store for the fruit growers of the premier province in the Dominion.

Special No. 25. Sent by Express for \$2.50

A Collection of Six Desirable HOUSE PLANTS

Send us \$2.50 and we will forward by express, to your express office, this very choice collection of House Plants. We select these as the most desirable plants for you to buy, chosen from our large assortment; they are full grown plants, now in their flowering pots, healthy, thrifty and beautiful. Our regular selling price of these plants is \$4.00. To make a large number of sales we give this lot, an exceptional bargain, for \$2.50.

- 1 Choice House Fern, Ostrich Plume.
- 1 Choice House Fern, Bostonensis.
- 1 Splendid Kentia Palm.
- 1 Large Asparagus Fern.
- 1 Xmas Cherry (in fruit).
- 1 Fine Cyclamen.

Cultural directions for these plants will be found in our Catalog, which we mail free with this order.

THE HAY FLORAL AND SEED CO.

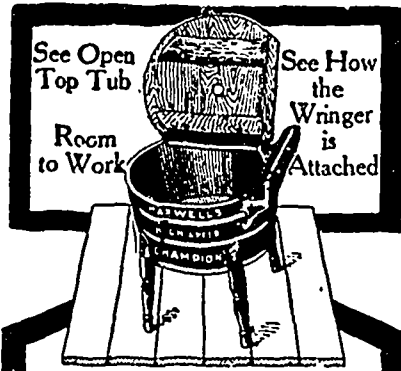
Seedmen and Florists

BROCKVILLE - - - ONT.

Ginseng Growers Meet

The fifth annual meeting of the O.G.G.A. of Canada met in the Amphitheatre of the Women's Building at the Canadian National Exhibition Grounds. In the absence of the president, Rev. Mr. Martin acted as chairman. The secretary reported that one of its members, Mr. Murray, of Uxbridge, had suffered the loss of plants to the extent of four hundred dollars by some parties who robbed his garden at Utica, Ont. The society took the matter up and offered a reward of twenty-five dollars, provided that Mr. Murray supplemented it with a like amount for the apprehension and conviction of the guilty ones. To this sum a friend in Michigan has added ten dollars more. The officers were all re-elected.

An important feature of the meeting was a lecture by Prof. J. E. Howitt, B.S.A., of Guelph, on "Ginseng Plants and their Diseases," which was full of interest and very instructive. A copy of this was sent to the secretary for publication in THE CANADIAN HORTICULTURIST. The members asked many questions, which made the lecture very interesting. It was decided to ask the Provincial Government for a small grant for the purpose of assisting in further investigating plant diseases of Gin-



MAXWELL'S HIGH SPEED CHAMPION

The Wringer Board extends from the side, out of the way of the cover. This allows practically the whole top of the tub to open up—makes it easy to put in and take out clothes.

No other washer has as large an opening. No other washer can be worked with crank handle at side as well as top lever.

Do you use Maxwell's "Favorite"—the churn that makes quality butter?

Write us for catalogues if your dealer does not handle them. 89

DAVID MAXWELL & SONS, ST. MARY'S, Ont.

← DIRECT FROM FACTORY TO KITCHEN →



SAVE OVER \$25 WHEN BUYING YOUR RANGE THIS FALL.

\$41.00 TO \$49.00

AND WE PAY THE FREIGHT

You Can Buy "DOMINION PRIDE" RANGE At Factory Price
Direct From The Largest Malleable Range Works in Canada

If you want to save from \$25 to \$30, and at the same time get the most satisfactory kitchen range made, write for our Catalogue and look into the merits of the "DOMINION PRIDE," at from \$41 to \$49.

If we sold you identically the same range in the usual way, through a dealer, you would have to pay from \$69 to \$78 for it. You would be paying two extra profits—to wholesaler and retailer—which would add \$25 to \$30 to the cost of your range, but absolutely nothing to its value.

Besides costing much less than other ranges in its class, the "DOMINION PRIDE" is much more satisfactory. It is made of tough, strong, malleable iron and the best blue polished steel—materials which will not warp, crack or break.

The polished steel does not need blacking—simply rub it over with a cloth. With its cold rolled steel plate oven—sectional iron fire-box lining, with air chambers—and double-walled flues lined with asbestos—the "DOMINION PRIDE" is the most economical range you can buy. Actual tests have proved that it saves over 30% of fuel, burning either wood or coal.

WE PAY THE FREIGHT

A "DOMINION PRIDE" Range, with high closet shelf and elevated tank or flush reservoir, with zinc sheet to go under range, 3 sections blue polished steel pipe and two elbows, will be delivered to any station in Ontario, Quebec or the Maritime Provinces for \$41, or to any station in the four Western Provinces for \$49—\$5 to be sent with order and balance to be paid when the Range is delivered at your station. If not convenient to pay cash we will arrange to accept your note.



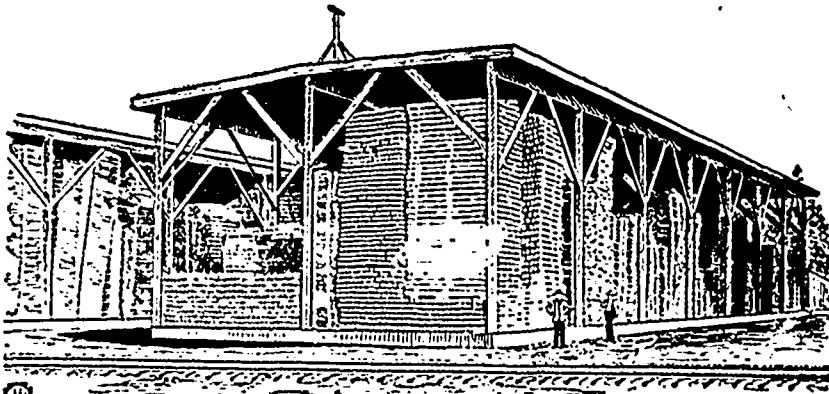
"The Evolution of the Cook Stove"

TALKS about cooking from the time the Cave Dwellers dropped hot stones into the pot to boil it. It also tells all about "Dominion Pride" Ranges. Whether you need a Range just now or not you will enjoy reading this book.

Write for Free Copy.

Canada Malleable & Steel Range Mfg. Co., Limited, Oshawa, Ont.

When writing it will be a distinct favor to us if you will mention this paper.



A Plain Statement of I H C Wagon Value

There is money saved for one farmer every time an I H C wagon is sold. Not because it costs less money to begin with, but because of the length of service it gives, an I H C wagon is the cheapest wagon you can buy. A new wagon costs you the price of so many bushels of wheat or oats, or so many bales of hay. The longer the wagon lasts the more you get for the original purchase price, and the cheaper your wagon becomes. That is why it is economy to buy the best wagon—one that will outlast any ordinary wagon. When you buy an I H C wagon

Petrolia

you invest in a wagon built of the highest grade material which experience and care can select or money can buy; built in the most thorough, painstaking manner, by skilled workmen, in factories which have modern appliances for doing work of the highest standard at the lowest possible cost. The conditions under which I H C wagons are built are nearly ideal.

All lumber used is air-dried in sheds with concrete floors. This insures toughness and resiliency. All metal parts are made of especially prepared steel, guaranteeing the longest service. Each wagon undergoes four inspections before being shipped so that it reaches the purchaser in first class condition, ready to be put to work at once and able to carry any reasonable load over any road where a wagon should go.

The I H C local agent knows which wagon is best suited to your work, will tell you why, and will sell you that one. When you see him have him show you all the good points of I H C wagons, and hear what he can tell you about the experiences of I H C wagon owners. You can get literature from him, or write the nearest branch house.

EASTERN CANADIAN BRANCHES
INTERNATIONAL HARVESTER COMPANY OF AMERICA
(Incorporated)

Hamilton, Ont.
Ottawa, Ont.

London, Ont.
Quebec, P. Q.

Montreal, P. Q.
St. John, N. B.

I H C Service Bureau

The purpose of this Bureau is to furnish, free of charge to all, the best information obtainable on better farming. If you have any worthy questions concerning soils, crops, land drainage, irrigation, fertilizer, etc., make your inquiries specific and send them to I H C Service Bureau, Harvester Bldg., Chicago, U.S.A.



seng. The president and secretary were appointed a committee to attend to the matter. The secretary of the association is P. Wilson, 233 Evelyn Ave., Toronto, Ont.

British Columbia

In the Penticton district peach growers were kept busy this year harvesting the heaviest crop in the history of the district. The total output reached about one hundred cars. One-tenth of this amount was produced by the Munson ranch alone. It is owned by a well known Winnipeg lawyer who makes a side line of fruit growing.

The majority of the growers are shipping through local packing companies, and in this connection there is an element that is getting some criticism. The share which the packing company gets is considered to be out of proportion to what the grower gets. For instance in shipping peaches where seventy cents, f.o.b. Penticton, is secured the grower will only get half this amount. The selling commission of 10 per cent amounts to seven cents, the box cost one cent more and the charge for packing is 29 cents. The opinion is expressed that a co-operative organization would save money for the growers.

The Okanagan Fruit union are about to erect a large warehouse near the depot at a cost of \$15,000. The Vernon Fruit company already have their own building.

The Creston Fruit Growers Union are shipping over one hundred boxes of apples per day to points on the Pass and are expressing large quantities of col. corn, pickling cucumbers, ripe tomatoes and different kinds of vegetables, which are in great demand.

Eastern Annapolis Valley, N.S.

Eunice Watts Buchanan

Owing to the fine quality of last year's apple crop, some of the leading growers did not spray as thoroughly this year as formerly, but now they are regretting it, as black spot was prevalent everywhere, except in orchards that had been well sprayed. Instead of covering the trees with a fine mist in spraying, as formerly, it is found that larger nozzles and drenching the trees give the best results.

It is now estimated that there will only be about one-half of last year's apple crop—perhaps eight hundred thousand to nine hundred thousand barrels.

Seeding down orchards with buckwheat and hairy vetch is fast going out of fashion; summer vetch and clover are succeeding them.

One grower shipped two hundred barrels of Crimson Beauty apples in the second week of August, and expected to ship two hundred more. Duchess number one realized \$3 a barrel in the Halifax market. A lot of the early apples and berries were shipped to Sydney, C. B. Astrachan are fast going out of date.

Thinning apples is becoming more general. The fruit is thinned to about 8 inches apart, unless it promises to be a better one. No two apples are allowed to grow together. Pears, plums, and currants are bearing down the trees.

Enclosed please find one dollar, for which send me THE CANADIAN HORTICULTURIST for two years, 1912 and 1913. This magazine is the one I cannot do without, as I always anxiously await its arrival and never put it down until I have read the contents including the advertisements, which I find nearly as interesting as the other portions. H. Wood, 608 Spadina Ave., Toronto.

SMALL FRUIT PLANTS

Gooseberries, Josselyn, Red Jacket, Downing, Pearl, Houghton.—Currants, Perfection, Ruby, Cherry, White Grape, Lee's Prolific, Champion, Black Naples, Victoria.—Raspberries, Herbert, Cuthbert, Marlboro, Brinckle's Orange, Golden Queen, Strawberry-Raspberry.—Garden Roots, Asparagus, Rhubarb Write for Catalogue.

WM. FLEMING, Nurseryman, Box 54, Owen Sound, Ontario

BULBS AT SPECIAL PRICES

I have Imported direct from the Growers A LARGE QUANTITY OF EXTRA CHOICE BULBS for House and Garden Culture. Extra Good Named Varieties for Bedding. It will pay you to get my prices. Write at once.

C. MORTIMER BEZZO, Bulb Importer, BERLIN, CANADA

READ

ing and Gardening. the list.

The man who reads these days is the man who knows. He is considered the successful man in his neighbourhood. Now is the time to add to your knowledge along horticultural lines. We have prepared a list of a few excellent little Books on Fruit Growing and Gardening. You may buy these books or get them free as premiums. Write for the list.

THE CANADIAN HORTICULTURIST, BOOK DEPT.

APPLES WANTED

and FRUITS OF ALL KINDS

CONSIGNMENT OR F. O. B.

GEO. VIPOND & CO. - MONTREAL

BRANCHES: WINNIPEG REGINA OTTAWA

APPLES APPLES APPLES

W. S. BUCKOLL

Fruit Importer and Merchant

NOTTINGHAM, ENGLAND

Solicits your consignments.
Write for particulars early.
Highest references given.

Telegraphic Address, Buckoll, Nottingham

APPLES APPLES APPLES

I have the pleasure of reporting nothing but satisfaction from those who consigned me apples last crop, and there is no reason, so far as I can see, why last season's satisfactory results should not be repeated on 1912 crop.

My best personal attention is offered to every shipper with every package consigned. Everything sold privately with prompt returns each time.

I have an increasing outlet for really good fruit.

Where there are no direct steamers from Montreal, ship via Liverpool or via Glasgow; through bills of lading can be got from any point in Canada.

Early advice of intended shipment will be esteemed.

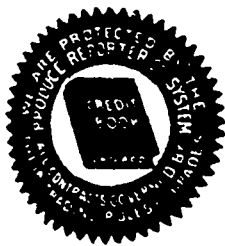
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12 Regent Quay

ABERDEEN, SCOTLAND

Cables--HALCYON

Use A. B. C. Code, 5th Ed.



We Solicit Your
Consignments

Send for
Shipping Stamp

Branch Warehouses: Sudbury,
North Bay, Cobalt, Cochrane
and Porcupine

Good Prices Always

For Your Fruit and Vegetables

OUR facilities enable us to realize top prices at all times for your fruit, vegetables or general produce. Aside from our large connection on the Toronto market, we have established branch warehouses with competent men in charge at **Sudbury, North Bay, Cobalt, Cochrane and Porcupine**. In time of congestion on the Toronto market we have a ready outlet through these branches. We never have to sacrifice your interests.

H. PETERS

88 Front St. East, Toronto

References: The Canadian Bank
of Commerce, (Market Branch)
and Commercial Agencies.



Imperial Bank

Established OF CANADA 1875
HEAD OFFICE TORONTO

Capital Paid-up . . . 6,460,000.00
Reserve Fund . . . 6,460,000.00
Total Assets . . . 72,000,000.00

D. R. WILKIE, President and General Manager
HON. R. JAFFRAY, Vice-President

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Letters of Credit, Drafts and Money Orders
Issued available in all parts
of the world

Special attention given to collections

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Interest allowed on deposits at best current rates

Established 1896
Cable Address:---Rhubarb, Manchester.

George Johnson

Fruit and Produce Broker
Smithfield Market, Manchester

CONSIGNMENTS OF APPLES SOLICITED

Takes charge at Liverpool, Manchester
London, Hamburg, Havre

All Boxes or Barrels to be marked—
Geo. Johnson M/c

*All correspondence and advices direct to
Manchester, Head Office*

Highest Possible Prices and Prompt Returns

Marking Packages

R. M. Winslow, Victoria, B.C.

I understand that this year some of our biggest shippers have adopted the practice of stamping on the end of the box the exact number of apples contained in it. This has a number of very important advantages:—

The purchaser, whether jobber, retailer, or consumer, prefers to have the number stamped, because he knows then exactly what size he is getting. If the apples are for the fruit-stand trade a glance tells him what price can be paid per box if they are to be sold at certain set prices by number. He sells by number, and wishes to buy in the same way. The consumer buying for dessert purposes, whether for his own use or for hotel use, also appreciates the information given by the number.

With the adoption of the diagonal pack the old description of apples by tiers is not now accurate. Under our present system some apples, such as two—three, five—five, (one hundred and twenty-five), are marked "four-tier," while in reality there are five actual tiers of apples. The two—three, six—six (one fifty), is marked "four and a half tier," but has five actual tiers. The two—two, eight—eight (two hundred) is marked "five tiers," and it actually does have five tiers of apples. The same anomaly occurs all through. The designation of tiers must soon be discarded as obsolete. The use of the number cannot come too soon. It is now used by the principal Washington and Oregon shippers.

The designation by tiers is just as misleading to the grower as to the consumer. Only a technical expert knows how to interpret his packs in the terms of "tiers." Our highest class shippers are taking to numbering this year.

The Dominion Government Bulletin recommends the following system:—



What Is Soil Fertility? How Does It Interest You?

WHAT is soil fertility? Why is its lack considered so serious a matter? Why is it that authorities on better farming agree in considering it one of the most important questions requiring solution by farmers today? The answer is found in the small average yield of farms in this country as compared with those of other countries where correct fertilizing is practiced, and in the rapidly decreasing quantity of available new land. There are two things that every farmer can do, both of which will make his farm more productive. One is to practice a proper rotation of crops; the other to buy and use an

I H C Manure Spreader Corn King or Cloverleaf

Every farm can be benefited by the use of an I H C manure spreader. It will distribute the manure in an even coat, light or heavy, as may be required. Manure spread in this manner does the most good to the soil at about half the expense and much less than half the work of hand spreading. An I H C manure spreader is a scientific machine, built to accomplish a definite purpose in the most economical manner. It is constructed according to a well-thought-out plan, which insures the best work in the field with the least strain on machine or horses. To take one example of the thoroughness in detail, all I H C spreaders are so constructed that a reach is unnecessary. This construction allows the spreader to be managed handily in small feed lots, backed up to barn doors opening into narrow yards, or turned completely in its own length. Yet the absence of a reach in no way interferes with the strength or field efficiency of the machines.

See the I H C local agent or write the nearest branch house for catalogues and information.

**CANADIAN BRANCH HOUSES:
INTERNATIONAL HARVESTER COMPANY OF AMERICA**
(Incorporated)

At Brandon, Calgary, Edmonton, Hamilton, Lethbridge, London, Montreal, N. Battleford, Ottawa, Quebec, Regina, Saskatoon, St. John, Weyburn, Winnipeg, Yorkton

I H C Service Bureau

The purpose of this Bureau is to furnish, free of charge to all, the best information obtainable on better farming. If you have any worthy questions concerning soils, crops, land drainage, irrigation, fertilizer, etc., make your inquiries specific and send them to I H C Service Bureau, Harvester Building, Chicago, U.S.A.



Tier	Number	Grade
		Variety

Below is a box marked as is the custom in the Okanagan. This method, for the sake of uniformity, is on the whole to be commended. The packer's number is placed in the lower corner. Any brand may be used. Where the shipper's brand is given the law does not require that of the grower, though usually the grower's name or number is stamped on, so that the fruit can be identified in case of complaint:—

Variety	Grade	Tier or Number
	Brand	
Packer's Number		Grower's Number

One of our advertisers, Mr. James Marshall, of Aberdeen, Scotland, writes as follows regarding market prospects: "You can report prospects of an excellent market is the indication for home-grown apples here is rather poor. There will be an excellent opening for early shipments of good McIntosh Red, Fameuse, or some such varieties."

When you see it advertised in THE CANADIAN HORTICULTURIST it's all right. Patronize our advertisers. They are reliable.

Nova Scotia

The United Fruit Companies of Nova Scotia, Limited, organized early for the work of the fruit-shipping season. Mr. A. E. McMahon has been appointed chief inspector. It will be his duty to examine fruit in warehouses, and in process of packing and placing on cars. Capt. C. O. Allen has taken charge of the shipping business at Halifax, looking carefully after the treatment accorded to the fruit from time of arrival of loaded cars until placed on board the steamers. Mr. John N. Chute will be sales agent in Europe, attending to the marketing of the fruit in Great Britain and Germany. He left for Europe recently and was tendered a farewell banquet by his fellow growers.

Most of the apples hitherto exported from Nova Scotia have been shipped to two or three British ports only. This year there is to be a change in this respect. Arrangements have been concluded with brokers in twenty-eight of the larger towns of Great Britain to sell Nova Scotia apples. In this way extra freight charges and sometimes a double commission will be avoided. Similar arrangements have been made with brokers in Holland, Belgium, Denmark, Germany, and Newfoundland. This widening of the market will bring about an increasing demand for Nova Scotia apples. Farmers of the Annapolis Valley are therefore planting more orchards, finding that the fruit industry in Nova Scotia is a splendid investment.

Horticultural Exhibit at the Canadian National

The quality of fruit shown at the Toronto Exhibition is steadily improving year by year. Whereas on former occasions it was frequently not difficult to find faulty specimens, especially in the case of apples, it was difficult this year to find fruit with even small blemishes. The practice of spraying, which is becoming more general among all commercial fruit growers, and the increasing thoroughness with which this branch of fruit growing is being carried out, is having its effect.

While the quality was excellent and practically all classes of fruit were fairly well represented, there was not the same quantity of fruit on exhibit as on one or two former occasions. The backward season had much to do with this. Owing to the fact that more space was available for the horticultural exhibit this year, and also that cold storage facilities were provided for the more perishable fruit, the general appearance and arrangement of the fruit exhibit from the standpoint of visitors to the exhibition was much superior to previous years.

EARLY APPLES

The quality, as regards both size and coloring of the early varieties of apples, was excellent. The fruit was smooth, well formed and very clean and free from defects. The later varieties lacked coloring, but this was easily explained by the backward season. The box exhibits were well displayed and the individual boxes of fruit were well graded and the majority of them well packed. Practically all the boxed fruit, both apples and pears, came from the vicinity of St. Catharines and elsewhere in the Niagara District. A good range of varieties was shown in the plate exhibit. The cone collection was confined almost altogether to the early varieties, such as Duchess and Astrachan.

He Bought Her a 1900 Washer

ONE OF OUR READERS TELLS HOW HER HUSBAND LEARNED

What Washday Means to a Woman

DEAR EDITOR:—Most men have no realization of what "wash-day" means to a woman. My husband is one of the best men that ever lived, but he laughed when I asked him one day to get me a 1900 Gravity Washer. I told him it would wash a tubful of clothes in six minutes. "Why, wife," said he, "a washing machine is a luxury. And besides, there's no better exercise than rubbing clothes on a washboard. It's good for the back. I think we had better wait 'til we get the farm paid for before fooling away money on such new-fangled things as washing machines."



John's "Busy Day"

That settled it. I gave up the idea and kept right on washing in the same old way. I confess that I felt hurt, but I knew John had no notion how hard it was to do the washing for a family of five—three of them little tots. I am not very strong, and the washing, with all my other work, finally got the better of me. I had quite a sick spell, and after things had gone at sixes and sevens for nearly two weeks, I suggested to John that he had better do the washing. We couldn't hire a girl for love or money, and the situation was desperate.

So one morning he started it. My, what a commotion there was in the kitchen! From my bedroom I occasionally caught glimpses of poor John struggling with that mountain of dirty clothes.

If ever a man had all the "exercise" he wanted, my husband was that man! Couldn't help feeling sorry for him, and yet it made me laugh, for I remembered how he made fun of me when I hinted so strongly for a 1900 Gravity Washer. When he finally got the clothes done and on the line, he was just about "all in."

That evening John came to my room, and said kind of sheepishly—"What's the name of the firm that makes those washers you were telling me

about?" I looked up their advertisement and found the following address:

K. L. MORRIS, Manager
THE 1900 WASHER CO.,
 357 Yonge St. TORONTO, CAN.

That's all he said, but he lost no time in sending for their Free Washer Book. The book came in due time and with it an offer to send the 1900 Gravity Washer on thirty days' free trial. My husband jumped at the chance to try the Washer without having to spend a cent. "We'll have four weeks' use of the Washer anyway, even if we don't decide to keep it," he said. So he told the Company to send on the Washer.

It was sent promptly, all charges paid, and the 1900 Washer Company offered to let us pay for it in little easy payments. The next week I felt well enough to use it. It is the nicest Washer I ever saw, and it almost runs itself. Takes only six minutes to wash a tubful, and the garments come out spotlessly clean.

We were all delighted with the Washer, and wrote to the Company that we would keep it and accept their easy payment terms of 50 cents a week. We paid for it without ever missing the money and wouldn't part with the Washer for five times its cost if we couldn't get another just like it.

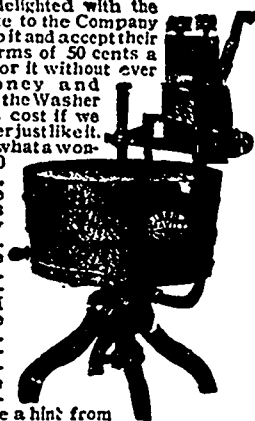
If women knew what a wonderful help the 1900 Gravity Washer is, not one would be without it. It saves work and worry and doctor's bills. Takes away all the dread of wash-day.

I feel like a different woman since I have quit the use of the washboard. And if any woman's husband objects to buying one of these labor-saving machines, take a hint from my experience. Let the man do just one big washing by hand—rubbing on the old-fashioned washboard, and he will be only too glad to get you a 1900 Gravity Washer.

Anybody can get one on free trial, by first writing for the Washer Book.

Excuse me for writing such a long letter, but I hope, Mr. Editor, you will print it for the benefit of the women readers of your valuable paper.

Sincerely yours, MRS. J. H. SMITH.



Sprayers

Sulfur Dusters

For Fighting Every Disease of Cultivated Plants

Knapsack, Pack Saddle or Horse Drawn Power Sprayers

Send for Catalogues and particulars to: **VERMOREL** Manufacturer, VILLEFRANCHE (Rhone), FRANCE



Central Nurseries, St. Catharines, Ont.

Have a Fine Assortment of

Trees, Vines, Plants, Ornamentals, Etc.

For Fall Planting

Mr. Caverly tells us the 700 CHERRY Trees sent him last Fall came through the Winter fine. Only lost ONE Tree. The finest lot in the Township.

Look over our Price List. No Agents.

A. G. HULL & SON



Southern Farm Facts
Land at \$10 an acre up
 Alfalfa makes 4 to 6 tons per acre; Corn 60 to 100 bu. All hay crops yield heavily. Beef and Pork produced at 3 to 4 cents per lb.—Apples pay \$100 to \$200 an acre; Truck crops \$100 to \$400; other yields in proportion.
THE SOUTHERN RAILWAY
 Mobile & Ohio R.R. of Ga., So. & Fla. Ry. will help you find a home in this land of opportunity. Booklets and other facts—free.
M. V. RICHARDS, Land and Industrial Agent
 Room 18 Washington, D. C.

DAISY APPLE PRESS



Used by all leading apple packers in Canada, United States and England.

Write for prices and complete information to—

J. J. ROBLIN & SON
 Manufacturers
BRIGHTON, ONT.
 Canada

SPECIAL NO. 26 Sent to your Express Office carefully packed, for \$5.00

8 BEAUTIFUL HOUSE PLANTS
 AND
100 Choice Winter Flowering Bulbs
 All for \$5.00

We stake our reputation on this Special Bargain. The most careful buyer cannot select better quality or get more for the money. The plants are all thrifty and healthy; of full blooming size, and such only as will do well in the ordinary home atmosphere. The bulbs are those that are sure to bloom and thrive and give delight to the inmates of the home all through the long Canadian winter. Send us \$5.00 and we will express to you as follows:

PLANTS

- 1 Choice Ostrich Plume Fern.
- 1 Fine Boston Fern.
- 1 Splendid Chinese Primrose
- 1 Beautiful Cyclamen.
- 1 Rare Begonia.
- 1 Fine Cineraria.
- 1 Strong Asparagus Fern
- 1 Large Kentia Palm

Our regular selling price of these plants will average \$6 each, and some of them we retail at One Dollar each.

BULBS

- 12 Early Narcissus Paper White.
- 12 Early Roman Hyacinths.
- 12 Freesia Mammoth size.
- (The above are for early Xmas bloom).
- 12 Choice Single Tulips (all colors).
- 12 Superb Double Tulips (all colors).
- 12 Double Daffodils, a choice assortment.
- 12 Single Daffodils, a choice assortment.
- 2 Chinese Sacred Lillies.
- 2 Bermuda Easter Lillies.

Cultural directions for these Plants and Bulbs are found in our Catalog, which we mail free.

The above bulbs will give continuous bloom until Easter. Catalogue price of these bulbs is \$4.00
 This Order is Not Good after December 15th.

THE HAY FLORAL AND SEED CO.
 Seedmen and Florists
BROCKVILLE ONT

The British Apple Market
 The first important consignment of United States apples was sold in Liverpool on September 6th, consisting of 1,070 barrels and 200 boxes of United States and 350 barrels of Virginian apples.
 The condition on arrival, of the bulk of this parcel, left much to be desired even for early apples. That portion of the shipment which had been stored in the refrigerator landed in much better condition than the portion placed in the ordinary stowage, and consequently realized much better prices, the difference amounting to five shillings and seven shillings per barrel.
 The demand was fair for anything in good condition. The prices obtained were as follows:

1,070 barrels United States apples: Gravensteins, 8s 3d to 17s 6d per barrel; Blush Pippins, 11s per barrel; Ramshorn, 12s to 12s 3d per barrel; Wealthy, 10s 3d per barrel; Rivers, 9s per barrel; Red Pippins, 9s 9d per barrel.
 200 Boxes United States apples: Wealthy, 6s 9d per box; Gravensteins, 6s 9d per box.
 350 barrels Virginian apples: Yerk Imperials, 15s per barrel; Yorks, 12s 9d per barrel; Ben Davis, 12s per barrel; Rebels, 13s 3d per barrel, Red Streak, 10s per barrel.

CANADIAN APPLES
 The first arrival of Canadian apples were sold in Liverpool on the eleventh September, and consisted of some 230 barrels, chiefly of the Duchess variety.
 The fruit landed in excellent condition, and was of good quality. The color of the No. 1's was good, the No. 2's lacking color. They met with a very fair reception. The following prices were obtained: 230 barrels Canadian apples: Duchess, No. 1, 21s 6d per barrel, bulk 21s 6d; de., No. 2, 13s 9d to 14s 3d, bulk 14s 3d.

A National Dish for Canada
 C. D. Peart, Nelson, Ont.
 The question was asked by a Spanish gentleman, what is the national dish of Canada? And the lady addressed had to answer, I do not know, really I never thought of one.

England has "roast beef," Scotland "oat-meal," Ireland "potatoes"; they also have "The Rose," "The Thistle," and "The Shamrock" as national emblems. We have our emblem "The Maple Leaf." Why should we not have a national dish also?
 In thinking the subject over, my idea is that "The Apple" is one of the most staple and enjoyable of all our products, as it can be used in some form at every meal, and between meals as well. The matter was referred to at a meeting of the Burlington Women's Institute some time ago, but nothing was done in the matter. Might it not be interesting to have a discussion through the columns of the The Horticulturist, and have the opinions and suggestions of others?

Nelson, B. C.
 Next year the Nelson, B.C., Improvement Association will again distribute rose bushes at cost price to residents of Nelson and district. R. Jarvis, the president of the association, reports that the distribution of these bushes, inaugurated this year, proved so successful in aiding in beautifying the city it has been decided to follow the same course next year.
 In order that the bushes may arrive in Nelson early next spring, preparations for securing orders for the bushes are already under way and it is expected that many thousands will be taken up.

ROSS & SON
 NURSERYMEN
 LANDSCAPE GARDENERS
 HORTICULTURAL EXPERTS
 1167 Queen Street East T JRONTO ONT.
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HARDY BULBS AND PLANTS
 For the Canadian Climate
 One of the largest collections in the world. Catalogues all free.
Perry's Hardy Plant Farm
 ENFIELD MIDDLESEX, ENG.

WE ARE INTERESTED
 In New Varieties of Canadian Raised Fruit and invite growers to submit offers.
Gebrueder Gehlhaar, Baumschuler
 JUDITTEN, OSTPR., GERMANY

WESTLAND'S HARDY PLANTS
 I have a large stock of all kinds of hardy perennial plants. Catalogue tells all about them. Send for a copy now and order early. Early orders have the best choice of stock and varieties.
MALCOLM WESTLAND
 Tambling Corner London, Ont.

Cold Storage Fruit Warehouse
 Finest Apple Rooms in the Dominion for EXPORT AND LOCAL TRADE
 Special Rooms for All Kinds of Perishable Goods
THE CANADA COLD STORAGE CO.
 LIMITED
 53 WILLIAM STREET, MONTREAL

Send your consignments of APPLES to the Home Country to
Ridley Houlding & Co.
 COVENT GARDEN
LONDON, ENGLAND
 who specialize in APPLES and PEARS during the Season. Personal attention, prompt account sales and remittance
 Correspondence invited

IRON PIPING BARGAINS
 We have over 250,000 feet of slightly used iron pipe just as good as new and first class for water, steam, heating greenhouses, construction, mining, posts, etc., at 25 per cent to 50 per cent below regular value.
NOTE THESE PRICES
 DIAMETER 1/2 in. 3/4 in. 1 in. 1 1/4 in. 1 3/4 in.
 Price per ft. 2c 2 1/2c 3c 4c 5c
 Also other sizes up to 10 inch.
 Send us a list of the lengths you need, and we will give you a special low price on the lot and threaded, ready to put together. We also have enormous quantities of Wire Fencing, Barbed, Poultry, Cable Rails, New Roofing, Saw Vices, Forges, Etc., at 25 per cent to 75 per cent less than regular value.
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The Imperial Waste and Metal Co. 99 Queen Street West