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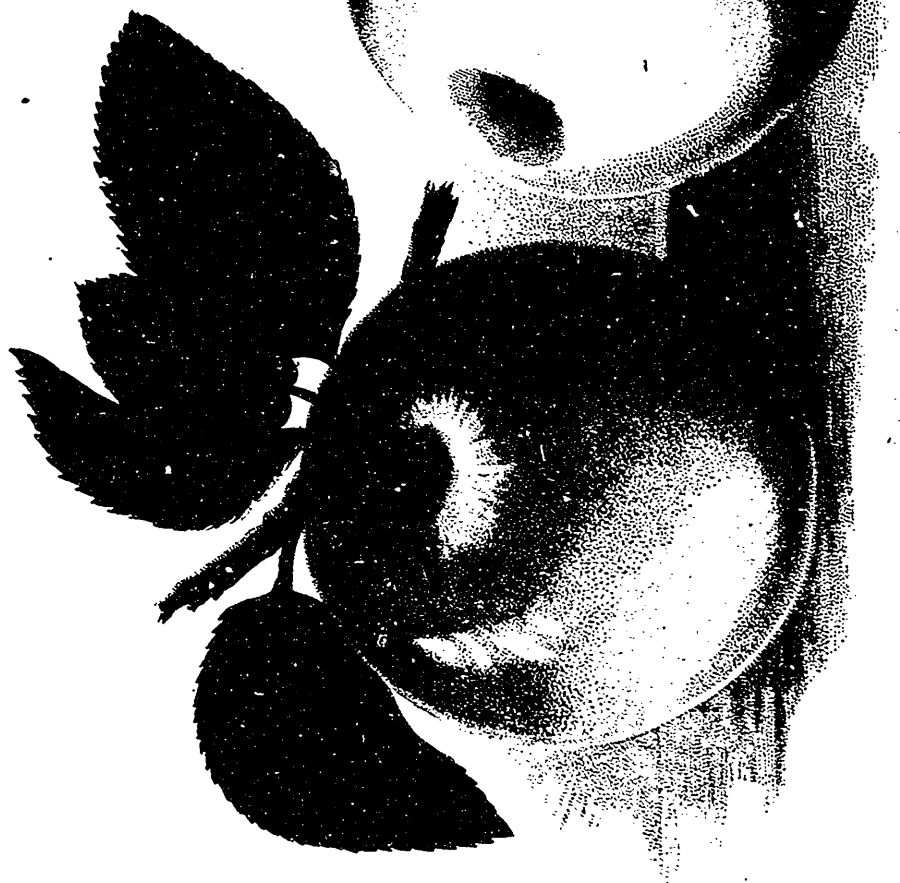
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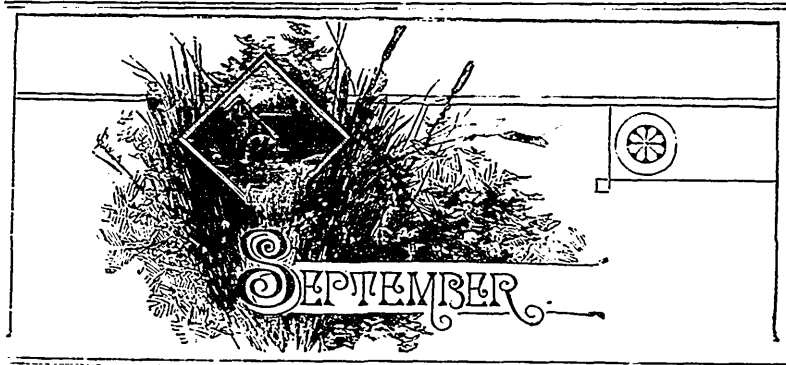


THE
Canadian Horticulturist.

VOL. XI.

1888.

No. 9.



SEPTEMBER waves his Golden-rod
Along the lanes and hollows,
And saunters round the sunny fields,
A-playing with the swallows.

The Corn has listened for his step ;
The Maples blush to meet him,
The gay, coquetting Sumach dons
Her velvet cloak to meet him.

Come to the hearth, O merry prince !
With flaming knot and ember ;
For all your tricks of frosty eyes,
We love your ways, September.

—*Ellen M. Hutchinson.*

THE PRINCESS LOUISE.

A HIGH sounding title for an apple surely ! and complimentary or not to Her Royal Highness, according to the beauty and real worth of the apple which bears it. It is not, however, an unnatural one, for we have already among our apples a "King" and a "Queen." Why then not expect a "Princess" ? This apple is a true Canadian seedling, and the original tree is growing

where it first sprung up, on that part of Maplehurst Fruit Farm lying upon the side of the so-called "Mountain," at Grimsby. It was first shown at Hamilton before the winter meeting of our Association in the year 1879. On page 33 of the report for that year appears the first mention in the report of the fruit committee, A. H. Pettit chairman, as follows:—"A fine sample of seedling, past its season; a little above medium size, yellow, with a fine, bright blushed cheek, oblong, marked with a light raised streak descending from the calyx; said to be crisp and juicy, resembling the Snow apple in season, from which tree it is probably a seedling. The committee suggest, from its beautiful, clear appearance, that it be named "Princess Louise." In the report for 1881, page 93, the fruit committee, A. McD. Allan chairman, again describe it, adding, "Our impression now is that this Seedling is an improvement on the Snow, and should be brought into more general cultivation."

In volume 4, page 74, of THE CANADIAN HORTICULTURIST, appears a good description of this apple from the pen of Mr. D. W. Beadle, then editor of this Journal, from which we quote the following description:—

"In form, this apple is nearly conical, flattened somewhat at both ends. The stem is not very stout, and projects beyond the cavity, which is deep and regular. The calyx is closed, and set in a shallow, slightly wrinkled basin. The skin is smooth, free from all blemishes, and has a very bright, waxy lustre, as though it had been highly polished. The color is a clean, bright carmine, on

a transparent, light yellow ground. The surface is moderately sprinkled with light grey dots. No description will convey any adequate idea of the extreme beauty of this fruit, which is so very striking that it would command attention in any market from its attractive appearance. But to this rare beauty of appearance it adds excellence of quality. The flesh is pure white, like that of the Snow apple, tender, juicy and nearly as melting, with a richer flavor and higher aroma: indeed, one of the most fragrant of apples. Mr. Woolverton informs us that the tree is about eight years old, is a chance seedling of the Snow apple, has borne for three years, the crop being heaviest in alternate years, and that it has established its character for uniform beauty and excellence of fruit. He considers it to possess all the good qualities of the Snow apple, besides being more beautiful and a better keeper. We fully coincide with him in the opinion that it is destined to take a leading place among our Canadian varieties, and are confident that this fruit will command attention in the English market whenever it may be produced in sufficient quantity."

On page 87 of the present volume, some further items in connection with the history of this apple, and also in the July No. of *The Horticultural Art Journal* for 1888, published at Rochester.

Miss Evvy Smith, daughter of our esteemed Vice-President, has painted a very good picture of this apple, and we now give our readers a copy. The color is not quite the shade of the original painting, and the abrupt transition

from bright carmine to light yellow, which is so characteristic, is not represented; but in other respects it is truthful, and does not at all exaggerate the beauty of a fully developed specimen.

THE APPLE HARVEST.

SEPTEMBER is a busy month with the fruit grower. The early part finds him in the midst of his Bartlett pear harvest, which must be completed quickly before they are over-ripe for shipping; and, later on, full of anxiety to exchange his golden Crawfords for golden dollars before their ephemeral glory fades. Closely following upon the summer fruits come fall apples and fall pears, and then the great harvest of winter apples. No time for pleasure excursions, nor even to attend to fairs, unless at a sacrifice of the most precious days of the whole year.

Generally speaking our winter apples are allowed to hang too long to be handled to the best advantage. At one time it was the rule to begin gathering them about the 9th of October, but the high winds of that month made such havoc with them that we soon changed that rule. The 20th of September is none too soon to begin with such kinds as have attained full size and color, and if by that time all the apples upon a tree have not reached maturity, it will pay to make two pickings, leaving the greener and smaller ones to grow and color up. Attention to the details of preparing fruit for market always returns a good profit and must not be grudged. Careful handling and careful sorting are of paramount importance. Many throw apples into the basket as if they were

potatoes, or squeeze them with thumb and finger as if they were made of stone, and so leave marks which spoil their beauty. Round swing-handle, cloth-lined baskets, attached with a wire hook to the rounds of the ladders, are the best for apple picking.

Most orchardists empty their apples in piles upon the ground, but sorting, in that case, is back breaking work, and every rain delays it. Some empty them in heaps upon the barn floor, but in a large orchard this means much labor in carting. Our custom has been to empty into barrels in the orchard, head up with out pressure, write the name of apple on the end, and store under cover; and then in packing empty them out on a packing-table for sorting. For young orchards and scattered varieties this is the best plan we know of, for the important work of packing can then be done in a clean, dry place without moving about with nails and mallets and press from one part of the orchard to another. A handy bushel crate is described in the *Farm and Home*, and a similar one is used by the Grimsby Evaporating and Canning Company. Fig. 735 represents this crate, which may be made 18 inches long, 15 wide and 11 deep. Four slats, 3 inches wide, are used for the bottom, the two outside ones coming flush with the outside bottom slats, to which they are nailed. Handles are cut in the ends, using a

gauge for marking, as shown at *a*. These are more convenient for handling than barrels, and, when filled level, can be stored in piles on the barn floor to any height and then emptied out upon the packing-table for sorting.

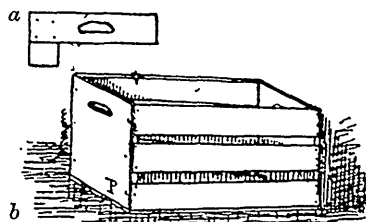


FIG. No. 73.

Mr. R. W. Starr, of Cornwallis, N.S., advises packing in the orchard as fast as the apples are picked. This plan is no doubt the most economical, and if the fruit is to be shipped and sold immediately, no doubt it is the best. And probably in Nova Scotia and our Northern sections the plan might succeed, but in Southern Ontario we often have some hot October weather, and we are glad of the opportunity at the last moment of overhauling our fruit, and removing many a decayed apple which was apparently sound when first picked from the tree. This is especially the case with such varieties as King and Cranberry Pippin. But with firm varieties such as Baldwin, Russet and Spy, perhaps the plan would work well and is worthy of a trial. The first requisite for this mode is a movable sorting-table. This is made light and strong of about the following dimensions, viz:—length 7 ft., width $3\frac{1}{2}$ ft., with a rim around the edge from 4 to 6 inches high. The legs at one end are just long enough to permit of a barrel

being set under the opening, and at the other about 4 inches longer so as to give the apples a tendency to roll down toward the packer. For convenience of moving some attach wheels to the legs of one end. We copy from the *Prairie Farmer* a drawing of such a packing-table, believing that it may prove of interest to many of our readers.

Of course the first basket-full will need to be carefully laid in the barrel by hand, but after that the packer can so break the fall of the apples with his hands that they will suffer no bruise, and can sort as rapidly as two or three would do picking them up from heaps on the ground. With this table the packer may follow his pickers from tree to tree, and have each basket-full emptied upon his table as it is brought down from the tree. If he is making two qualities of firsts, or two sizes, of course he would need a second barrel close at hand to receive the extras; and the seconds, whether from the tree or the ground, may be left in heaps till the choicest are shipped away. Mr. Starr

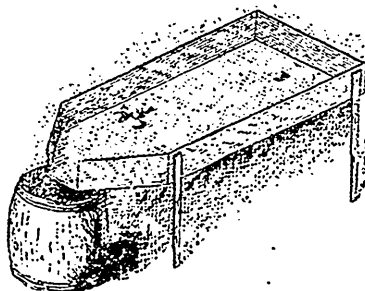


FIG. No. 74.

says he uses fine, dry shavings in each end of the barrel, covered with good white or manilla paper; and thus pro-

protects the fruit against bruises, and provides an absorbent for any moisture exhaled by the fruit.

Yankee ingenuity, which provides us with so many labor-saving devices, is also promising to lighten the labor of apple picking. A New York State fruit-grower has invented an apparatus constructed chiefly of canvas, somewhat

like an inverted umbrella, into which the fruit is shaken from the tree. A small aperture empties the fruit into the baskets. We must confess our fears about thus shaking off our finest apples, but at the same time hope that some speedier mode may soon prove commendable, in place of the present slow process.

VICTORIA PARK, NIAGARA FALLS.

BY T. HOYES FANTON, M.A., F.G.S.

HAVING had a desire to spend a portion of my summer vacation in the study of practical botany, a few weeks ago I proceeded to Niagara Falls, believing that conditions are present there which are likely to develop a varied flora. Making headquarters in the vicinity of the Victoria Park, from day to day, for some weeks, excursions were made, not only by myself, but others who became interested in this popular study. To our surprise we found our expectation more than realized. Flower after flower was found, that is not obtained in the interior of the Province. Scarcely a trip was made without a new acquisition to our herbarium. No field was more productive than our Provincial park, in which an exceedingly varied collection of wild plants is found. This beautiful resort possesses conditions admirably suited for the development of plant life, a varied soil, suitable temperature and continual moisture from the ceaseless rising mists, which fall and bathe continually the vegetable forms near the Falls.

In one week upwards of 200 species of plants were obtained, and I have reason to believe 400 could be discovered.

Our visit being made in July, most

of the species obtained are in bloom during that month, consequently many of the spring flowers were not to be seen, and the comprehensive group of *Asters* had not appeared.

Surrounded by such attractive conditions, the idea at once was suggested to me, that here we had a most magnificent combination of things suited for the practical study of botany, that here fatigued teachers could repair in vacation, and while becoming reinvigorated for approaching duties, resting beneath the attractive shade-trees of the Park, they could be mastering a subject, which, above all others, should be taught in a practical way. Here in the shade you will always find it cool, no matter how intensely the sun may shine. It certainly is warm in the sun, but that makes the shade more fully enjoyed, and also explains the marvelous outburst of plant life in Victoria Park. Would it not be worth while for the park commissioners to have the gardener make a collection of these plants as they bloom each month? These could be put in an herbarium, named, and so arranged that access to them could be obtained for reference, and thus students of botany be greatly assisted, while spending a vacation at the Falls. Our park would

thus become a great botanic garden, in which plants indigenous to our Province could readily be examined.

Here we see the "Lover's Walk," "Way to Cascades," etc. Would not a path skirting the bank that bounds the park be well named the "Botanist's Ramble?" Here as he threaded his way for more than two miles, a magnificent panorama of plant life would pass before him, and many species be seen, which are comparatively rare away from this phenomenal botanical hunting-ground. Aside from the study of botany geological features of the river are at hand for examination.

Thus we have, if our Canadian students of science appreciate it, through the wisdom of our government, an El Dorado for the practical study of two of the most interesting, attractive and instructive departments in natural science. In the past, many avoided going to the Falls on account of exorbitant charges and the unprincipled conduct of hackmen. A day or two secured the extreme limits of a visit, except to those whose purse was of a more or less inexhaustible nature.

Hotels, too, charged excessively, and it did seem as if the tourist, who sought this attractive haunt, must be prepared to spend carelessly.

That state of affairs has passed away. The opening of Victoria Park as a free resort for our people has shut out the aggressive hackmen; once within its gates you hear no more his vexing importunity; unmolested you may wander along serpentine paths, undisturbed sit at ease on seats arranged at points, from which inspiring views of the great cataract, leaping into the abyss before you, can be seen. At such hotels as the Wesley Park House, commanding a magnificent view of the Falls, for very moderate rates you can secure pleasant rooms and a well furnished table. Thus the barrier of exorbitant charges is swept away, and the time has come when those who can thoroughly appreciate the works of nature and read from its fragmentary leaves the story of the earth, have placed within their reach the possibility of spending a vacation where rest, pleasure and instruction may be readily found.

HORTICULTURAL.

Russian Apples.

Those who have formed their estimates of the dessert quality of Russian apples upon their knowledge of Astrachan, Oldenburg and Alexander, ought to be told that their judgment is no fairer than it would be to judge American apples by the Ben Davis, the Mann, the Willow Twig, or a large list of inferior sorts that are yet largely grown. I do not hesitate to say that, among the 300 or more Russian varieties of apples already in this country, there are fully as many kinds which possess fine dessert quality as can be selected from a miscellaneous list of

the same number of American sorts. Already many have had the opportunity to realize this in Russian apples of the Yellow Transparent class. But a large number of the later Russian, like St Peter, Golden White, Autumn Streaked, Heidorn and Popaff, are still finer in quality, and the same may be said of the winter sorts, like Longfield, Borsdorf, Bogdanoff, and others. They are also handsome apples, and the trees are healthy and productive. So far, however, very late keepers are scarce among them.—[T. H. Hoskins, M. D.—*Newport, Vt.; in Our Country Home.*]

Handling Fruit for Market.

Cold storage will not make good fruit out of poor. Seckel pears into Bartlett's nor bruised fruit solid. Much depends on the picking. If the fruit be left on the tree until fully ripe it will not keep; nor fallen fruit nor that whipped off the tree. The fruit should go to the cooler before any sound specimen shows ripeness, and a single pear, apple or grape that is imperfect may and probably will entirely spoil all that are put with it in the same package. The nearer to the cooler the orchard is, and the sooner the fruit is stored after picking, the better it will keep. Where late winter pears and apples are stored they are often, after late picking, put in bushel boxes and stacked on the north side of some building to remain until quite severe weather before going into the cooler. These same boxes are then removed to their places in the retarding house and piled one on another with thin pieces of lumber between them to admit the air. Summer pears should be picked before they ripen and put in the cooler if the best prices are expected. To know whether the fruit is ready, raise a specimen carefully by putting the hand under it, and if it part readily from the tree, although it be "as green as grass" it is ready to artificially ripen. Pears that become mealy on the tree, often rotting at the core, are juicy and delicious if ripened in the low, steady temperature of the cooling-room.

A great point in profits is in properly selling what is handled. A good reputation and neat packing are as necessary as good fruit. Attractive packages and surroundings often sell the fruit at once. So important is this that very choice cases of fruit often "go begging" for a buyer, while handsomely arranged lot; of inferior varieties in poor condition sell rapidly.

Evaporating Fruit.

This is one of the leading industries in our county. Years ago large quan-

tities were dried in the sun, but now it is nearly all done under cover. The price explains the reason. In our local papers common dried apples are quoted as retailing at five cents a pound and evaporated at ten cents—a very satisfactory reason truly.

Many growers dry their own fruit, generally using a small dry-house about four feet by six and six feet high, with a little furnace at the bottom for heating and racks filling the space above. These are sold for about \$25. Others for greater safety from fire, are made entirely of metal. With one of these, ten bushels can be dried daily. But the most of the evaporating is now done by large establishments, using from 100 to 300 bushels per day. Probably in this town and the next one north there are over a dozen such. The owners evaporate their own fruit and buy from others, either by the bushel delivered or on the trees in the orchard. Last year the price paid by the evaporators varied from 15 cents a bushel for windfalls to 30 cents for good, picked fruit.

Not only are the best portions of the apples saved, but the whole is utilized. The skins and cores are dried and sold for jelly stock, and the small ones are cut up and dried without peeling. Some have also a cider press and use these for cider and vinegar.

Whether this evaporating is done in a large dry-house or a small one, the fruit, after being prepared for drying, is exposed to the fumes of burning sulphur before putting on the racks. This is done to keep it from turning a dark color. "Fire and brimstone" are a necessity for this end—as for bleaching in other cases.

In these same establishments, both great and small, raspberries are also evaporated in immense quantities. They are cultivated hereabouts extensively for this object—some growers raising from five to twelve acres each. Of course one of the special benefits to any locality from such industries is the

employment they furnish to the neighborhoods, especially in berry-picking time. Women and children are then in great demand, and hired girls are wont to desert their mistresses for a few weeks during this period.—*Farm and Home*.

Selling Direct to the Consumer.

SIR,—I see a good deal of correspondence from time to time in regard to the business done in the various British Markets in selling fruits on commission. Viewing the subject from a Canadian standpoint, my experience of many years has been quite against dealing with commission houses. Sometimes I made money, but oftener lost; and when I examine into the methods they have of doing business, I do not wonder at all at my losses. They only appear to get rid of the fruits in the quickest possible manner, never holding off from

a bad market day to find a better price. Then I find in some cases, that the broker either owns or is interested in one or more retail fruit stores, and of course sells to these at a sacrifice, so far as the shipper is concerned. For the past eight years I have shipped only to direct orders, and only the choicest samples of fruit, and every year I find orders far more than I can supply; in fact, we find some of these brokers appointing agents in Canada to purchase finest samples and pay cash on delivery at the local railway station. What we want, however, is to get closer to the consumer; that is, instead of consigning to a broker, who generally sells to the wholesale fruiterer, and he to the retailer, who supplies the consumer, we want to get orders direct from the retailer, so that the consumer will get a better sample of fruit and at a reasonable price.—*Correspondent Horticultural Times*.

VITICULTURAL.

Marketing Grapes.

MR. J. H. SKINNER gave the following points, based on the practice in the famous Chautauqua County Vineyards, before his Horticultural Society, some time since: The grapes are all picked by girls. The pickers each have a number; and in picking, each one, on filling a basket, marks with the picking-shears her number on the handle. In this way the responsibility for any careless picking can be traced. Not how much, but how well is the rule. The picker is not allowed to touch the bunches with the hand, but to handle them by the stem. In packing, the clusters are lifted with thumb and finger, and with the sharp pointed grape scissors, all green, imperfect or bruised berries are deftly removed. Thus the bloom on the grapes is preserved. The fruit, after picking, stands three and

four days to wilt, before packing. Of 10,000 baskets sold last season, the average weight was eight and sevenths pounds per basket. None but perfectly seasoned baskets are used; green baskets causing mold. Where Concord has been picked two weeks or over in the warm fall weather, all the cracked and bruised berries will show some mold, but as in picking all these are scrupulously removed, no harm is done. The Concord is never fit for shipping long distances, except it has been first carefully picked, then wilted, and then packed. The packers soon learn to lay in the clusters so as to fill the baskets just level.—*Popular Gardening*.

Keeping Grapes.

THE fruiterers are, at certain seasons of the year, quite constantly in receipt

of packages of Malaga (White Ham burg) grapes. So far as is known, the valuable packing material (cork dust), in which these grapes usually come, is not returned to the trans-Atlantic vineyardists to be used a second time, nor is it applied to any specially useful purpose here. Sometimes it is ruthlessly burned; generally it is wasted. Yet this substance has been found to be as reliable and useful a preservative of our own native grapes, as of the imported sort. Of course the stems and peduncles of the bunches will wilt somewhat, and turn a dark color, as do also those of the foreign variety, but the fruit itself will, when put away in this material in good condition, continue sound, and in unimpaired quality for a long time. When this packing material is at hand, and it can, as yet, be secured

without much difficulty, the keeping of grapes by this method, especially for family use, is attended with so little care and trouble that those who admire this fruit should not fail to avail themselves of the opportunity afforded for practising it. The writer, by way of experiment, has tried keeping grapes in this way during the present winter, and as it has succeeded beyond all his expectations, hopes to repeat it next season and thereafter so long as cork dust can be had by asking for it. The varieties put away were chiefly Gœthe (Rogers No. 1) and Montgomery, a half-hardy white grape of indifferent quality, but which seems to keep well. At the date of this writing (Jan. 12th) the bunches of this latter sort remain unbroken, while the berries are as perfect as when they were put away.—*Montreal Witness.*

STRAWBERRIES.

Bulletin No. 5

of the Ohio Experiment Station gives the following result of tests made with the varieties named:

Bubach.—The most luxuriant in foliage of all varieties tested. It was, however, somewhat disappointing in fruit, the quantity seemingly being less than such plants ought to produce. The quality is rather poor, and towards the last of the season the berries do not make a good appearance in the basket. On the whole, however, it is a remarkable variety, and possesses sufficient good qualities to win for it a permanent place on the list of profitable market sorts. It can hardly take high rank for family purposes, but as a market variety it will prove to be valuable, and may be planted with safety by commercial growers. It ripens the main part of its crop rather late. It withstands drought well.

Crescent.—In most sections this is still regarded as the most profitable of

the old varieties. It is the standard here both for productiveness and earliness.

Cumberland.—Too well known to require an extended notice. It can be recommended for private growers only, not being sufficiently productive for market purposes.

Covell.—This variety is about one picking earlier than the *Crescent*, and deserves trial by those who find early berries profitable. It will thrive on light soil, hence could be grown on gravelly or sandy southern exposures, where it would ripen nearly two weeks in advance of most varieties. It yields the bulk of its crop at two pickings, after which the berries are too small to be marketable, even with good cultivation. It is not a profitable market variety, except as indicated, or possibly for forcing.

Itasca.—All that can be desired as to productiveness and quality, but the berries are too small for it to become a profitable market variety.

Jewell.—Essentially the same may be said of this variety as in former reports. It will succeed only under favorable conditions, but responds readily to high cultivation. It sends out very few runners, and is especially well adapted to hill cultivation.

Jessie.—This variety has, for three seasons, given very satisfactory results here, on both fall and spring set plants, and on several different kinds of soil. It does not yield as heavily as the Crescent, but does not fall far below, while the fruit would sell as high in market as that of any other variety, because of its fine appearance and good quality. Commercial growers can hardly fail to find profit in the *Jessie*, and it will surely please amateurs. It is one of the best varieties for the family garden. Some unfavorable reports have been heard concerning it, as many of the plants first sent out failed to grow, and it does not seem to be equally well adapted to all localities, being rather more restricted in range than the Bubach and Crescent. It is not far from the truth to say that it yields more first-class fruit than any other variety at the Station, but this locality cannot be taken as representing the whole State. Every grower ought to try it on his own soil, especially if he can sell choice berries at a premium, otherwise he may find more profit in the Crescent and Haverland.

Fall Planting of the Strawberry.

WHAT are the wants of the strawberry when planted in the fall? The soil for the strawberries should be rich and moist, but not wet. It matters not whether it be sand, clay or muck, so that it furnishes anchorage for the plant and contains an abundance of the elements necessary to its growth. It should be stirred to a good depth, but little or no poor subsoil should be brought to the surface. It is well to have it prepared some little time in advance, so that it may have time to settle somewhat before the plants are

set. The surface should be rich. This is especially important with fall-set plants, as their roots have comparatively little time to go far in search of food. There is another advantage in encouraging surface roots: they are not drawn out nor broken by the expansion of the water in the soil when it changes to ice, but rise and fall with the ground. Roots that run deep are apt to be broken or drawn out—as red clover—while white clover roots remain uninjured, although frozen and thawed a dozen times. If the soil has been enriched for a previous crop, so much the better; but if not, well decomposed stable manure may be worked into the surface either before or after setting the plants. Bone dust and wood ashes will supply all that may be lacking in any soil, and these can be obtained in nearly all parts of the country.

A plant receives more or less of a check by being taken up and reset, in the growing season, even though this be done in the most skillful manner. The following method I have used with great success for more than a quarter of a century: The plants are taken out of damp soil, with great care, divested of all runners and superfluous leaves and thrown into a pail of water. They are then carried to the new bed, and each one taken out as planted. The roots are spread out in fan shape, with the crown even with the surface, and a little damp soil put over the roots and pressed firmly against them. The balance of the soil is then filled in loosely. If the weather be very hot after transplanting, a little shade during the middle of the day, for a time, will be an advantage.

Soon after the plants are set out they will commence to send out runners, which must be cut off as soon as they appear. The soil should be kept well stirred from the time the plants are set until the end of the growing season; but all deep cultivation should be discontinued after Oct. 1, lest the

surface roots be injured. Plants set in the fall—the earlier the better—will produce fine fruit the following June, and will make a far greater growth than if the planting be postponed till spring.

As soon as freezing weather comes, the whole surface of the bed should be

covered to the depth of two or three inches with straw or any light litter. Early in the spring, when the plants begin to grow, the covering should be removed from over the crown of each plant, and left between to keep the ground moist and the fruit clean.—[M. Crawford, in *Farm and Home*.]

USES OF FRUITS.

Fruits for Health—How to Eat Them.

THE *Moniteur d' Horticulture*, of Paris, France, is now one of our exchanges, and we shall have pleasure in occasionally translating an article for the benefit of our readers. The last number, under the head of Hygienic Gossip, says:

"For more than one reason fruit should be regarded as both wholesome and curative. Its influence upon the human system has not been sufficiently pointed out, and this is a fault, for we can, with the aid of fruits alone, alleviate, or else completely cure all the ills to which our wretched body is subject. It is a fact, discovered by science, that persons of robust constitution, who eat good fruits in moderation, live to a very advanced age. Yet, for all that, one should just know how to eat them.

"Avoid swallowing the skins of pears, peaches and apples, the stones of cherries and apricots, likewise the seeds of oranges and lemons. These insoluble substances lie heavy upon the stomach, and sometimes cause very serious trouble in the intestines.

"Reject the skin of the grape as well as that of the orange; by itself, the fleshy part of any fruit, when mature, is very nourishing; but take it as a sort of substantial dish, and not as dessert. Plums, cherries and grapes are not as easy to digest as peaches, which contain a larger proportion of soluble elements; also, one can recommend the latter for weak stomachs.

With your fruit eat some dry bread, because it has the effect of cleansing the tongue and enables you the better to taste the flavor of the fruit itself."

A doctor once said: "Nothing does more to rid me of patients than the daily use of fruit. It clears the organs of every impurity."

Cider Vinegar.

UNLESS near a large market it is often difficult to sell the surplus of summer and fall apples owing in great measure to their lack of keeping qualities. One good way to dispose of them is to work them into vinegar. It will not be long now before apples will begin to ripen, and those who have a large number of early apple trees will find the following article from the *N. E. Homestead* suggestive and of value:

Good wholesome cider vinegar, is seldom met with nowadays in a grocery. The product called cider vinegar sold everywhere in groceries is manufactured on a large scale directly from alcohol by diluting it with water, adding a little yeast, and exposing the mixture to the air. The last operation is best effected by causing the liquor to trickle slowly through a cask filled with beech or oak shavings which have been previously soaked in vinegar. This process is known as the quick process of making vinegar, and it is very sharp. It is reasonable to suppose that good vinegar cannot be made in this way. The best vinegar, therefore, can be

made on every farm from the sugar contained in the juice of apples, and is the one in the manufacture of which farmers are interested, and which is the best for general domestic use.

When cider is exposed to air the yeast principle soon begins to operate and cause the first fermentation by which a little starch is converted into sugar, but almost simultaneously the stronger fermentations begin by which the sugar is converted into alcohol. If the temperature is low, and the cider left undisturbed, it will rest here for weeks and perhaps months. With a rise of temperature, or stirring frequently, the third fermentation begins, called the acetic acid. The change will be slow or rapid, according to the atmospheric exposure.

If the cider fills the barrel the change will be slow; if the barrel is half full the exposure will be greater, and the change will consequently be more rapid. If this amount be stirred vigorously once a week it will be still more rapid, and if stirred once a day it will be more rapid still. These very rapidly made vinegars are always of inferior quality, having a stinging taste. No vinegar can be called a good article that has not a rich "body" and a fine aroma. It cannot be made in a hurry. A certain amount of old stock in casks thoroughly impregnated with acetic acid is necessary for its production. The cider, after having passed through the fermentation which converted the sugar into alcohol and precipitated all solid matter to the bottom, or threw off when the cask was full and the bung open, is racked off into other casks. A certain quantity, say five gallons more or less, is weekly, during the summer season, drawn out and added to the half-filled hogshead containing stock.

After the cider is added to the stock the whole is stirred vigorously. This operation may be repeated once or twice a week, or not so often during the summer, just owing to the tempera-

ture. Good vinegar cannot be made from poor, watery cider. Sweet apples make the best. Unfortunately your city markets are full of poor stuff, quickly and cheaply made from whiskey and water. A little of the former mixed with a large quantity of the latter produces acetic acid very rapidly. This now greatly injures the market for pure cider vinegar.

A barrel of pure cider vinegar was offered on the market by a farmer. The grocer, after tasting the vinegar would not buy it, saying that he could not sell it, as his customers wanted sharp vinegar (made out of whiskey) and consequently no sale. Hence we do not see why every farmer who owns an orchard should not only have for his own use the pure cider vinegar, but also sell to those less fortunate in the ownership of an orchard.

Unfermented Grape Juice.

A writer in *Pacific Rural Press* tells his method of making a wholesome beverage as follows:

"In the first place, I stem the grapes and press out the juice into a tank, letting it stand over night to settle. In the morning I rack it off and then filter, thus rendering it free from all vegetable matter. I also take a quantity of black grapes and put them in a boiler, letting them come to a boil, in order to produce a dark juice. This juice I also filter. Now, by blending these juices, any shade of wine I desire is produced, from a light pink to a deep claret color.

"I then put the wine in a boiler (which should be of copper, with a faucet at the bottom for convenience in bottling), and let it come to a brisk boil, skimming what rises to the surface. It is now ready to draw off into bottles, which should be standing in hot water to prevent breaking on the introduction of hot juice. When the bottles are filled they should be corked immediately, and then dipped into melted resin, which seals them air-tight.

"I think that wine made in this way and brought into notice would soon become the most popular beverage used, taking the place at dinner that coffee does at the breakfast-table."

Apple-Butter in Pennsylvania.

ONE of the most delicious dishes among our Pennsylvania German farmers is apple butter. It is made in the fall of the year, of ripe apples and pure sweet cider. I remember in childhood, how, long before daylight, the great copper kettle, holding more than a barrel of cider, was placed over a roaring wood fire, where it continued to boil until the cider was reduced to less than one-half the original amount. As soon as the morning's work was done up, the whole family began to pare and cut into quarters the apples. This was a long task, keeping five or six persons busy until the noon hour. My earliest remembrance reaches to the time when the paring machine was not in common use; so that all hard work had to be done by hand.

When the cider was reduced to one-half, the cut apples began to be introduced, a painful at a time. The fire was kept roaring all the while. With the introduction of the apples began the stirring. This was done with a stirrer having a handle over ten feet in length, the stirrer being fastened at right angles to the handle. From noon until 10 o'clock at night the stirring frequently went on without intermission. The contents were boiled and boiled, until there resulted a sweet stiff mass, considerably less in volume than half a barrel. When done, it was dipped out into earthenware vessels, over the top of which was tied brown paper, and then the vessels were stored away in the garret, where the butter has been known to keep for twenty-five years.

Apple-butter is a very healthy food, and in great demand among farmers in Pennsylvania during the butchering season to assist in the digestion of fatty

foods then so largely in use. Sugar is sometimes added, if the cider and apples both are sour, but if the cider is made from ripe apples, not too sour, and boiled down well, sugar will not be needed. Some season with various spices, but generally it is best with no spices.

Pear-butter may be made in the same way as apple-butter, using apple cider and pears. It is richer than apple-butter. An excellent butter is also made by using half pears and half apples. Quinces may also be used to flavor the butter, but they are too rich to be used alone.

So far as I know the apple-butter here described is a Pennsylvania dish. It differs from that made elsewhere in the long boiling to which it is subjected, but this gives it its principal excellence. It has often occurred to me that apple-butter might be made with profit on a large scale, but the public taste would probably first have to be educated to use it.—*Ex.*

Tricks of the Trade.

"What b-e-a-u-tiful peaches," said an old lady as she stopped at a stall in the market and admired a basket of early peaches. They were covered with pink gauze and looked very tempting.

The old lady bought the peaches and took them home. The next day she appeared again at the stall and showed the stall-keeper a small piece of pink net.

"Do you keep that kind of veiling for sale?" she asked.

The stall keeper told her that he did not.

"Well," she said, "when I got them peaches home they were small, and sour and green, and I thought if I could get some of that stuff that made them look so pretty and plump in the basket, I'd wear it myself. If it would improve me as much as it did the peaches, folks would think I'd found the *Elixir of life*."



THE HOLLY-HOCK.

By L. H. WILDER, COOKSVILLE.

ON a long and slender stalk
 Blooms the jaunty holly-hock ;
 Who so saucy, who so tall,
 Peeping o'er the garden wall ?
 Rosy red and softest white ;
 Sunshine is its keen delight ;
 Dainty pinks, dark crimson shades :
 Fav'rite beau of the old maids.

Is he near some humble cot,
 'T will become a lovely spot ;
 If the curtains are not high
 Look within—he is not shy ;
 In broad daylight, him you see,
 Kissing butterfly and bee :
 Hale and hearty on his stalk
 Sways and smiles the holly-hock.

Coleus.

My practice with Coleus is to grow fine healthy plants this summer, and in August and September, before frost, take cuttings for my winter stock. This may be done without the aid of glass or any protection, if some shade and moisture is secured. Under trees or dense shrubbery, the temperature is about right to root them.

Mellow the soil in the place intended for them, cover this with some two or three inches of sharp, clean sand, level it off and water well. Never take off more cuttings at one time than can be attended to immediately, as they wilt if cut long, and never recover from it. Cut them with three or four pairs of leaves, leaving the lower pair attached, but cutting close to them, insert in the sand only enough to secure them in

position, placing them in rows, say an inch or more apart each way. When fully rooted, which should be in a few days, either pot them in small pots or transplant to another bed, in either case observing to give them full morning sun, but shading the first day or more after disturbance. If inclined to grow tall or spindling, pinch the tips ; this checks elongation, and furnishes strength to the incipient buds at the axils of the lower leaves and causes them to break and form branches. When these have made their third or fourth leaf, pinch as before ; this will form beautiful shaped plants, very bushy and desirable. They should be regularly watered and well protected from chill or frost.

If grown in window garden, they will need the sunniest and warmest

shelf and extra protection at night. After the holidays take cuttings, observing the same rules, etc., substituting a shallow box for the garden bed, discarding the old plants altogether, as at this season in room-culture, especially, they will have lost nearly all their foliage, except the tips of each branch. But these will make splendid new plants. In the greenhouse the work is about the same, except that it is more sure, bottom heat being available with full sunshine.—[*Vick's Magazine* for September.]

The Garden Walk.

IN the best kept gravel walk the irrepressible weeds are forever coming up, and unremitting attention is generally required in keeping these paths free from them. Pulling the weeds up is objectionable, because of the holes which are made in the walks; salt plentifully scattered is the popular way of killing the weeds, but the great drawback to its use is the wet appearance of the gravel, which is caused by the slightest approach to dampness in

the atmosphere. Undoubtedly the best method of effectually destroying the weeds, without disturbing the walk, is to use diluted carbolic acid, using the proportions of one part acid to a 100 parts of water. This mixture must be applied through a watering pot with the rose on. Great care must be taken that none of the liquid splashes on to the hands; also, if the edgings are of box grass, or any other vegetation, the liquid must not be allowed to fall on them, as it will destroy them as effectually as the weeds. A somewhat similar plan to the proceeding is to use common vitriol diluted in the proportions of one part of vitriol to thirty of water. This must be administered in the same manner as the carbolic acid, great care being taken that none of the liquid falls either on the borders, or the clothes or boots of the operator. For using the vitriol the evening of a hot day should be selected, and the person using the liquid should pour it on the path while walking backward. A day or two after using the vitriol the dead weeds may be swept up.—*English Gardener*.



THE BEST TREES FOR SHADE.

THE best trees that can be planted for affording shade in pastures are those that are hardy, stately, that have wide-spreading branches, and which cast a dense shade during the hottest portions of the summer. Those which grow quickly and can be propagated by means of sprouts and cuttings are to be preferred. Everyone has observed that soft-wood trees grow much more rapidly than those that produce hard wood, and that nearly all of them succeed

best on land that is somewhat low and moist. One of the best trees for moderately moist land is the American linn, or common basswood. The tree is beautiful in all stages of its growth. It is very hardy and attains a large size. Insects are not likely to injure its roots, trunk or leaves. Its leaves are of remarkable size, thick, and of an agreeable, green color. It casts a very dense shade, which is agreeable during the hot days of midsummer. It is a

very clean tree and highly ornamental. If the trees are isolated and stand in suitable locations, they ordinarily have very wide-spreading branches. Sometimes several trunks will grow close together, and present a very beautiful appearance.

The sycamore, buttonwood, or "button-ball tree," is another excellent tree for land that is somewhat moist. It is one of the largest trees found on this side of the Rocky Mountains. Along the banks of the Mississippi River and its tributaries it often attains the height of eighty feet, and has a trunk from six to ten feet in diameter. The tree is possessed of great vitality. If the trunk becomes hollow a living shell remains around the cavity, which protects the life of the branches. These hollow trunks were utilized by the early settlers of many of the Western States for grain bins, smoke-houses, and shelter for fowls and pigs. Hollow sycamore trunks have afforded shelter to many families of Western pioneers. The trees can be easily propagated by seed or ripe wood cuttings of either one or two-year old wood cut late in the spring or early in the fall. The wood is very hard to split, quickly decays, and is of very little value for timber or fuel. Sections of large trunks make good blocks for cutting meat. The tree, however, is of very little value except for ornament and shade, but for these purposes it is very desirable.

For higher land the silver-leaf poplar has many advantages. It is readily propagated to cuttings, grows rapidly, and attains a large size, while its branches extend over a large space, and afford a good shade. The tree is healthy, not liable to be injured by insects, and attains a large size. A few of these trees on a farm serve a useful purpose by way of ornament. The wood makes excellent fuel. The tree, however, is very objectionable in one respect. If its roots are broken or

disturbed they throw up a large number of suckers that are very hard to kill or keep in subjection. In planting in a permanent pasture, however, this proneness to throw up sprouts from the roots is not likely to prove a serious objection. If the sod over the roots remains unbroken the suckers will not appear as they do on land that is plowed every year. The silver poplar is an imported tree, and we are just finding out what it is good for. When first introduced it was planted in lawns, gardens, and on the sides of streets in large towns. The numerous suckers thrown up in land that was cultivated condemned it for these places. It is, however, an excellent tree for producing shade in pastures and for affording fuel.

The common cotton or whitewood possesses most of the advantages of the basswood and sycamore, but in an inferior degree. It is not as beautiful, and does not produce so dense a shade. When the trees stand at some distance from each other and are kept properly pruned they are quite attractive, and serve as ornaments to well-kept grounds. All these trees are mentioned because they are easily propagated and grow quickly. Maples, elms, birches, beeches and hickories, are far more valuable for most purposes, and most of them afford good shade. It is necessary, however, to raise the trees from seed, to purchase them from nurserymen, to move them ordinarily long distances, and to wait many years before they will produce much shade. Trees that are late in leafing out in the spring, which have scant foliage, which are liable to disease or to attacks of insects are not desirable for planting in pastures. Neither are trees whose foliage is eaten by cattle or sheep. The quicker a tree grows the shorter will be the time that it will require protection against animals, and the less will be the cost of raising it to a size to afford shade.—*Fruit Growers' Journal*.



SUBSCRIPTION PRICE. \$1.00 per year, entitling the subscriber to membership of the Fruit Growers' Association of Ontario and all its privileges, including a copy of its valuable Annual Report, and a share in its annual distribution of plants and trees.

REMITTANCES by Registered Letter are at our risk. Receipts will be acknowledged upon the address label.

WE may congratulate ourselves upon the outcome of our discussions at Picton upon the fruit carrying by railways and steamships for exportation. Our president, Mr. A. McD. Allan, has been interviewed by the leading newspapers of Montreal upon the subject, and to them he explained the points of complaint against the railway companies, and that New York lines of steamers gave Canadian shippers better accommodation than Montreallines. The result was a general investigation of the whole matter. The Beaver line has already agreed to take Canadian fruit from any points, and give us through bills to any market, apples to be at their count and not at the shipper's count. They will store them in a separate compartment of their vessels, and give such an atmospheric cool blast that the fruit will be kept in a very fine condition. This line will have the system complete in good time for us in their three finest ships, the Ontario, Huron and Superior. Mr. Allan says he went over the Ontario and is charmed with the way their "Fan System"

works. Besides this they have the latest port ventilation, which is most ingenious and effective.

Such exertion in our interests on the part of steamship companies merits our patronage, and no doubt this will be freely accorded, as a reference to Mr. J. B. Thomas' letter shows that exportation of apples promises this year to be more than usually remunerative.

THE HOUSE SPARROW.—The *American Garden* says this bird preys upon the elm leaf beetle in the large cities, and, where abundant enough, prevents its extended ravages. Is it possible that passer domesticus ("devastatus") has a single redeeming feature.

THE YELLOW TRANSPARENT, according to Dr. Hoskins, is a comparatively short-lived tree, and hence better adapted to gardens than orchards. He recommends planting it 12 x 24, with gooseberries or currants in the rows, and peas or potatoes between; with him the trees kill themselves with overbearing. He also advises top-working of the Wealthy, because it seems to lack vigor in the trunk. As

stock for this purpose he advises the Oldenburg, or Tetofsky.

PROF. WM. BROWN has retired from the chair of Agriculture, at the Ontario Agricultural College, Guelph. His ability has been generally acknowledged and he carries away the assurance of the high estimation in which he is held both by his students and by the general public. Mr. Thomas Shaw, editor of the *Canadian Live Stock Journal*, and Secretary of the Central Farmers' Institute, has received the appointment as his successor. The qualifications needed for such a position are rare; as for instance both a practical and theoretical acquaintance with Canadian Agriculture; a first-class general education, and aptness to teach. Mr. Shaw is a successful farmer, an untiring student, and well-fitted to instruct; therefore we think there can be no mistake in his appointment.

THE LUCRETIA DEWBERRY is wholly condemned in the R. N. Y. of August 11. The berry is large, early and a good quality, but it is no better than such upright growers as Kittatinny, Lawton, etc. and its prickly leaves and spreading canes of some twelve feet in length are serious objections. "Our final opinion," says the editor, "of the Lucretia is that if we were obliged to have Lucretias, or go without blackberries, we should vote to go without."

We do not feel prepared to sound the death warrant of the Lucretia quite so soon, although it may prove just in the end. Our hope was that its trailing habit would enable it to pass the winters uninjured, quite far north, and thus provide this refreshing fruit where it would be more appreciated than in such a land of plenty as the neighborhood of New York City, or of Grimsby. We shall be pleased to hear from members of our Association their experience of this summer with the Lucretia.

OSTHEIM CHERRY.—Mr. J. L. Budd, of Iowa, writes the *American Garden* that he had, on June 4th, several hardy dwarf cherry trees in bearing, and that,

notwithstanding a previous severe winter, the little round topped trees were well loaded with half-grown fruit. Of the *Cerise de Ostheim* he says: "All things considered, we think this the most valuable of the Ostheim family. It comes into fruiting when only four or five feet in height, and is very hardy in tree and in fruit buds. Fruit larger than Early Richmond, with small pit, flesh and juice, red; tender, juicy, and when ripe nearly sweet."

It was the Ostheim cherry which was distributed last spring to the members of our Association.

ALGONQUIN FOREST.—It is proposed to form an immense forest preserve about the head waters of the Muskoka river and the feeders of the Ottawa river, a well-watered and well-wooded territory of nearly 400,000 acres in all. This would be known as the Algonquin Forest, and, under the management of a skilled forester would not only exert a direct influence upon the water supply of our country, but would be a source of permanent supply of lumber, instead of being mismanaged and destroyed in the present reckless fashion. Even the passing tourist can't help observing the sad disfigurement that is rapidly defacing that country through forest fires and reckless methods of lumbering. Our foresters should awake to the importance of pressing such a wise measure upon the notice of our Government.

ROSE APHIS.—According to the *Canadian Entomologist*, Mr. A. R. Grote has been quite successful in his experiments with a weak solution of Creolin upon Rose Aphides, without in the least damaging the plants. He thinks this disinfectant may prove an exceedingly valuable help to the gardener.

AN APPLE AND PEAR CONFERENCE, according to the *London Evening Post*, is to be held in the gardens of the Royal Horticultural Society in Cheswick next October. The notion of the benefit of such a meeting, annually, seems to be derived from the use-

fulness of such societies as the Fruit Growers' Association of Ontario, in commending varieties best suited to various localities, and the object is similar.

CO-OPERATION WITH FARMERS' INSTITUTES.—At the last meeting of our Directors it was ordered that the secretary correspond with the secretary of the Central Farmers' Institute expressing the readiness of the members of our Association to co-operate with the Farmers' Institutes of Ontario and with the Central Institute.

In reply, Mr. Thomas Shaw, the Secretary, writes, enclosing the following:

At a meeting of the Executive of the Permanent Central Farmers' Institute, held in Toronto, 27th July, the following motion was unanimously passed:

"*Resolved*—That the thanks of the Executive be tendered to Mr. L. Woolverton, the Secretary of the Fruit Growers' Association, for the intimation just received of the desire of that body to co-operate with the Central Farmers' Institute in its work. It is the opinion of this committee that such co-operation would be mutually helpful. We, therefore, recommend that the by-laws of the Institute be so changed as to admit two delegates of the Fruit Growers' Association, the Eastern and Western Dairymen's Associations and the Ontario Creameries Association."

It was ordered that the secretary forward a copy of this resolution to the secretary of each of the associations named, with the request that it be brought before the Executive of these bodies at the first opportunity.

We hope much good may result from such friendly relationships. The farmers are the ones with whom our work chiefly lies, and many of them are finding their orchards the most remunerative part of their farms. The subject of fruit culture, therefore, in some of its departments should always be a prominent one at Farmers' Institutes,

and our directors in each agricultural division will always be ready to attend and impart any information upon their favorite subject. In addition, we have among the directors and members of our association several specialists in fruits, flowers and forestry, whose services could be secured to give lectures or addresses before such institutes as may desire them.

An Inspector of Apples for Export.

MR. W. BOULTER, of Picton, forwards us a letter from Mr. N. Hudgin, South Bay, advocating the appointment of an inspector of apples for export, for the purpose of fostering the trade, from which we make the following selections:—

"1st.—The export trade, which is our only hope, is largely on the increase, and requires a more careful selection and proper branding, as a considerable quantity go forward improperly named. 2nd.—The shipper employs a number of packers who endeavor, if by the barrel, to pack as large a number as possible regardless of the employer's interest, and as it is hard to trace this, results in heavy loss,—“or if by the day,” are subject to influence by the farmers who are always in attendance, compelling them to pack apples that are hardly fit for evaporating,—thus injuring the apples in a foreign market, and subjecting the shipper to a heavy freight bill on goods that would not pay transportation and robbing our industries of stock that should be left for home uses. Lastly.—The farmer could pack his own apples and save fifteen cents per barrel, and the trouble and board of a lot of men, if desirous to do so, and likewise take the consequences. On the other hand ‘the packer’ would have to look after his own interest or be subject to discharge and curtailment. Every tenth barrel could be gone through, or more or less as necessary, and this would have, in my opinion, a tendency to check the abuse.”

QUESTION DRAWER.

Hardiness of Climbers.

90. WILL Bignonia Radicans and Ampelopsis Veitchii stand the climate here without being covered in winter. If they need covering what is the best material to cover with?—L. F. SELLECK, *Morrisburg, Dundas Co., Ont.*

NEITHER of these climbers is hardy enough for Dundas county without protection. Even at Grimsby the young wood of the former is usually more or less killed back every winter; but after a time it becomes a stout vine and succeeds well here unprotected. Ampelopsis Veitchii is perfectly hardy here. At St Catharines, Mr. Dunlop has a fine specimen climbing over a brick wall; but at London, Ont., it is reported tender. As the plant is soon to be sent out for testing we hope to know exactly how far north it will succeed. Probably nothing is better for protection than coarse strawy manure, or leaves.

Asparagus.

91. CAN an asparagus bed of four or five years' standing be removed, and when is the best time for doing it?—ROBT. STEED, *Cole's Corners.*

Reply by D. W. Bault, St. Catharines, Ont.

YES. Take up the roots in the fall after the summer's growth is dead, remove all the dead parts from the roots, plant in the new bed and cover with coarse manure from the horse-stable to the depth of six inches. After the weather has become settled in the spring remove the coarse portions of the manure, and fork the remainder in between the rows of asparagus.

Fungus on Raspberry Canes.

92. ENCLOSED I send you three pieces of raspberry canes all diseased in the bark with something resembling rust in wheat. Two of the pieces are canes of this year's growth, one showing the commencement of the disease in spots near the ground, another shows it spreading over all the cane, which becomes a light steel-blue color. The other is a cane of last year which bears a few tasteless berries. What is the disease or is there any remedy? The

soil is loam, with a hard clay subsoil, with open cultivation. Distance 7 x 4 feet shaded somewhat by fruit trees.—ROBERT STEED, *Cole's Corners (near Sarnia).*

Reply by Prof. Panton.

THE canes sent have been received. Specimens of this nature have not come under my observation before. I cannot just now identify the fungus which causes this diseased appearance of the canes, but am inclined to attribute the trouble to a fungoid growth of some kind. It is likely the raspberries are not in a very vigorous condition and while in this state the fungus finds suitable surroundings for its growth. The hard clay subsoil referred to in the enquirer's note likely prevents proper drainage and thus favors conditions unsuitable for vigorous growth.

To bring about a healthy state of affairs I would suggest thorough cultivation, good drainage and manure. If the canes are much affected get rid of them and introduce new as soon as possible. Where plants are weak you generally find them attacked by parasitic fungi, hence the necessity of a healthy vigorous growth.

Wood Ashes.

93. WILL wood ashes injure a tree, if put close to the stem?—W. W. R., *Toronto.*

YES; if fresh unleached wood ashes is piled against the trunk of young trees it will burn through it, and possibly kill it. As a fertilizer the ashes should be scattered about the tree evenly at least as far each way as the branches extend.

Protecting Grapes from Frost.

94. WHEN seasons are wet here, we are subject to frosts that kill grapes early in Sept. Could you tell me where tarred paper could be bought suitable for covering vines at night? Would you explain in next No. of HORTICULTURIST about above and starting smoke on frosty nights in vineyard, same as they have to do in northern France and Germany.—R. GILLIES, *Williamsburg.*

CAN any readers reply concerning the tarred paper? The plan of starting bon-fires throughout the vineyard on frosty nights has been tried in America as well as in France, and carefully managed, may succeed if the material is at hand and set on fire just at the right time.

• Cutting back Peach Trees.

95. CAN you give me some information concerning the proper time for pruning or cutting back this year's growth of peach trees. Some recommend its being done now, in order to throw them into full bearing the next year. Mine have grown most rampantly. The trees are some I set out two years old, three years ago, and others the same ages were taken up a year ago last spring. If it be safe and beneficial to cut this year's growth back, how much should be taken off? Any further information or suggestion you will kindly afford me, will greatly oblige.—WILLIAM McMURRAY.

THE *shortening* in system of pruning the peach tree has been long practised by the most careful peach growers both in the United States and in England, with the most evident benefit both in prolonging the life of the tree, and in the increase of the size of the fruit. Everyone knows what an ugly object an unpruned peach tree soon becomes: its black ugly trunk, and straggling branches bare of foliage, except at the extremity, are an eyesore to its owner: but this mode of pruning will keep the tree in a healthy, vigorous state, with abundance of fresh young wood, and dense foliage. It consists simply in cutting off one half or more of the last year's growth all over the tree; or if a tree has been neglected, it may be cut well back into the old wood. This should be repeated year after year, and thus the tree kept in a well rounded shape, and a luxuriant growth result each season.

We have never practised cutting back the peach trees in the fall, because too occupied with the fruit harvest and other important fall work at that season. The usual time is in early spring, but we see no reason why it should not be performed in October, as soon as the summer's growth is completed.

Morse's Seedling Harvest Apple.

DEAR SECRETARY.—I mail you here to-day a package containing specimens of my Seedling Harvest Apple, picked on the 8th inst., average size, neither the largest nor the smallest, but not equal in flavour to those grown on original tree which I removed in the spring and therefore not in bearing this year. The fruit sent is from buds inserted in another seedling which I suspect has reduced the flavour. The Seedling Harvest is superior to the old in size. It is a regular good bearer. Has never through all our "Test Seasons" shown the least "spot," when the old was regularly and utterly ruined. Never anything like "Leaf Blight." It is a very vigorous grower. Time of ripening, same as old variety, earlier if any difference. We are a week or ten days later than generally.—S. P. MORSE, Milton.

JUDGING from the samples sent us by Mr. Morse, his seedling is all he claims for it. The fruit is above medium size, and round in form, while the Early Harvest is medium in size, and roundish oblate. The skin is very smooth with obscure white dots of a straw color, but not so bright as the Early Harvest. The Stem is shorter and stouter and set in a deeper and more irregular cavity. Calyx closed, set in a round basin, deeper and more regular than that of the Early Harvest. Flesh white, tender, juicy, sub-acid, but lacking the crispness, and the sprightly flavour of the Early Harvest.

However, its fine size, its earliness and freedom from spots, commend it to the notice of fruit growers with whom the Early Harvest does not succeed; coming, as it does, in advance of the latter, it should command a high price in our markets.

Aylesworth's Seedling Apple.

I send by express to you to-day a small box of my Seedling Apple. The season is late here and it has been very dry. Yet I have been eating them—mostly such as had been stung about a fortnight. I send a sample to you for your opinion. We are all (I suppose) inclined to a favourable opinion of our own. Hence the use of the opinion of others after searching us out. Any way I have eaten of them without harm a larger number these two or three years, from the hand, than I did of all kinds in twenty years before that.—J. B. AYLESWORTH, Collingwood, 16 Aug., 1888.

THIS apple is also above medium size, and rather larger than the preceding,

but oblong in form, and slightly conical. The colour is not so attractive, being a dull green, with a very faint splash of brownish red on one cheek, with white dots. Stalk one inch long, in a deep, narrow, even cavity. Calyx closed in a small shallow basin. Flesh white, tender, juicy, mild; quality good. To our taste this apple is inferior in quality to the Early Harvest, and also to Morse's Seedling; yet on account of its fine size and freedom from spot, it may prove worthy of cultivation in some sections, especially as an early cooking apple, for home use and for market.

Seedling Gooseberries.

DEAR SIR,—Mr. S. Greenfield has just handed me in some samples of seedling gooseberries raised from an English one. The samples were raised on ground that never had any manure and grown below trees. If proper cultivation were given to them they would be twice the size they are. Mr. Greenfield deserves every encouragement. He has numbered them and expects your opinion of them through the HORTICULTURIST.—N. ROBERTSON, *Ottawa*.

The samples came to hand in bad order, because not packed tightly enough in the box. Our friends in sending specimens should use cotton batting or other material, and pack the fruit tightly.

The seedlings are numbered from 1 to 5. No. 1 strikes us most favorably, being very large, and light green in color. Numbers 2 and 5 are somewhat alike in appearance, but both of a dark green color, resembling the Ottawa, and both large in size but inferior in quality to No. 1. Numbers 3 and 4 are light yellow in color, but both too small for propagation as market berries.

So far as we can judge from the state of the samples, we would advise Mr. Greenfield to propagate numbers 1 and 5, and send some plants to the Experimental Farm for careful testing. For the best results, however, we must depend upon varieties having more or less native blood, and if Mr. Greenfield

would attain the highest success, he should at least cross the English varieties with some of our best natives. European varieties of apples, pears, grapes, strawberries, etc., are not as a rule the varieties most suited to our soil and climate, and the same rule is found true of gooseberries, unless under the most favorable conditions

Crosby's Seedling Gooseberry.

DEAR SIR,—I have sent you by to-day's mail a sample of gooseberries grown on a bush which I received from Mr. L. Crosby, of Markham, about seven years ago. They seem to be free from mildew, and if propagated I think would prove a valuable addition to our small fruits. Mr. Crosby called it Crosby's Seedling. Four years ago I gave Mr. Ellis, of Orillia, some gooseberries and he raised some bushes from them. They are now fruiting well and bearing good fruit. I have been moving about or I would have had more bushes by this time. I remain yours, A. KEEFE, *Highland Creek*.

If this gooseberry is a Canadian seedling it is truly a marvel of excellence. The box sent us by Mr. Reeve contained four samples in excellent condition, and so large, and of such a very dark red color, that one would at first declare they were plums, and not gooseberries at all. The fruit may be described as very large, roundish, slightly oval, skin smooth, thin, very dark red, with veins of lighter red, mostly dotted with small grey dots; stem stout, calyx prominent. Quality excellent.

At present it appears there is no fruit with which we are so behind the English gardeners as with gooseberries. While they have more than a hundred choice varieties of red, white, green or yellow color, we have only two or three green varieties and one or two red worthy of general cultivation, and these too small in size to bring much money in the market. Such a gooseberry as Crosby's Early, if it continues mildew proof, would take wonderfully in our markets. It has, however, every appearance of being a full blooded English gooseberry.

OPEN LETTERS.

First Canadian Grapes.

SIR,—I have this day shipped to Toronto two baskets of grapes, and I think they are the earliest in Ontario; some of them were ripe on the 21st, but not enough to ship. They are the Worden, and I have the Jessica, Niagara, and Concord, growing under similar conditions, but they are not nearly ripe. They were grown on the face of a hill looking south. Please publish in the HORTICULTURIST, and let us hear from other growers about their early shipments. —JOSEPH BOURNE, *Niagara Falls South, August 25th, 1888.*

Apple Crop Prospects.

SIR,—I am obliged to you for your "Journals" which appear very interesting. The object of the present is to acquaint you that I have carefully examined the various reports I have received respecting the "Apple Crop" prospects in the European Centres and to inform you as concisely as possible the results for your guidance and those of your friends:—

Germany will have almost no apples for export. *Belgium*, though reported a shade better will be in very short supply. *Holland* has a very inferior crop, and as regards *England* such an utter failure is not known to have happened before. The result will be that we shall require to draw our supplies from America and Canada much earlier than usual and I am prepared to see a large and remunerative season's business. —J. B. THOMAS, *Blund.*

A Letter from Middlesex Co.

The Fruit Crop, Seedling Gooseberries, The Dewberry, Freak of a Rose.

SIR,—This has been a rather remarkable season with us in this part of Middlesex Co., for we have had very few real heavy showers of rain since the snow went away, but taking it on the whole, there will be a very good crop of most things except fall apples, of which there will be very few shipped this year; small fruits also were a shorter crop than usual.

I do not like the dewberry as well as the blackberry, for it is much harder to attend to and cultivate. I have been testing some gooseberries this year. The Industry midwived the most; then Crown Bob a little, while Whitesmith was as free from it as the Houten Seedling. Some seedlings of it that I have grown now for some time are doing real well. I had two black currant seedlings fruit for the first time this year, and although the season was extremely dry, they were splendid and promise well. One of my roses played a strange prank in the way of flowering. It was a White Perpetual Moss, and always gave pure white flowers until this season, when it sent up a fresh sprout from the root upon which grew both white and bright rose and light pink

flowers at the same time, and some flowers were one half rose coloured and the other half pure white. Have you ever heard of such a freak of nature? I have had some seedling roses bloom this season for the first time, among which was a White Scotch, perfectly double and a very early bloomer. I have some more that I expect will bloom next summer. I planted some of Bliss's Hybridized Potato seed this spring, and now some of the young plants are in bloom and have large potatoes under them already. —J. M. W., *Maple Grove, August 15th, 1888.*

[Perhaps the Moss Rose had been budded on other stock, from which the fresh shoot sprung.—Ed.]

U. S. Apple Crop Prospect for the Fall and Winter of 1888.

APPLES in the Middle and the Eastern States will average only a light crop, especially Greenings, not over 65 per cent., excepting in lake counties of New York State, where *Baldwins* promise a very fine yield; but these generally go to New York city for exporting. Pa. and Conn. don't promise enough for home use.

In Ohio and Mich. and westward the crop is scattering; good in spots, but in many places very light, running one third ($\frac{1}{3}$) to two thirds ($\frac{2}{3}$) a full crop in some sections—probably averaging half ($\frac{1}{2}$) a crop in the western apple States and of uncertain quality. Michigan promises very few Greenings. Pears and plums are a lighter crop than usual in the Atlantic States.

Our fruit market outlook is therefore favourable. —PANCOAST & GRIFFITHS, *Phila., Aug. 31st, 1888.*

The European Apple Crop.

DEAR SIR,—I am in due receipt of your favour of the 4th inst. I have posted you my circular report.

There will be nothing to report to be of any practical use to the Canadian fruit growers this month; our season is always later than the other shipping ports in this country:—

(1) Because we are in the midst of the best apple growing districts.

(2) Our wants are well looked after by our continental neighbours, who are pouring in their product as it ripens, but which this season will not last so long as in the past, owing to the shortness of the crop, as well as the failure of it in some parts; hence we may look for a commencement of the Colonial fruit season about the middle of September, and only good eating or large cooking apples, but no common fruit, will do for early shipments; good King apples and Northern Spy will do in October and later.

CIRCULAR REPORT.

In accordance with my usual custom, I have the pleasure of submitting to you my reports regarding the prospects of the "Apple Crop" in the most important European Centres from which London often draws very large supplies—

France.—The northern sections report indifferent crops, except for "Cider Fruit." Southern sections, above an average, especially for those kinds generally forwarded to England.

Germany.—My correspondents from the best known districts appear almost unanimous in reporting that there will be almost no apples for export.

Belgium.—The reports are more varied; some districts show a fair average crop, but taking the average yield of past seasons with the probable estimate for this, a limited supply of the best kinds suitable for the English markets can only be reckoned upon.

Holland.—Will have a fair average crop, but chiefly of inferior kinds, the better class fruit being a comparative failure.

England.—In the principal apple districts a very early blight set in which practically destroyed our prospects; the home supplies are therefore reported to be the shortest on record.

The conclusion to be drawn from the above is, that a much earlier demand must set in, and that London will require a share of the early foreign shipments of prime fruit, although perhaps not to the extent of Liverpool and Glasgow during the first month, but later London will require supplies far exceeding the

average of previous years.—J. B. THOMAS, *Corent Garden Market, London. 17th August, 1888.*

Fruit in Ontario.

The dry season has not been without its effect upon orchard and garden. Although summer apples are rather small in size, fall and winter sorts will likely be well up to the average in size as well as quality. The borer and codlin moth have appeared in a few places, and occasional complaint is made of wormy apples, but the crop generally will be a good one. The pear blight is reported in portions of Kent, but the general yield will be an ordinary one. Stone fruits are all light in yield. Only a few correspondents in Lincoln speak hopefully of the peach; the majority report the crop as a failure. Plums and cherries are being steadily destroyed by the black knot, and where the plum has escaped that enemy it has been weakened by the curculio. In some of the Lake Erie counties, however the cherry is reported as having yielded a big crop of large fruit. In the grape growing counties a magnificent yield is anticipated, but in Oxford and Brant the rose bug attacked the vines as the grapes were budding and wrought much injury. Other small garden fruits have been about an average, except strawberries, which were hurt by the drouth of last summer and fall. In the County of Grey, where the huckleberry is regarded as a standard fruit, the crop is light.—*Bulletin for Aug., Bureau of Industries.*

REVIEW.

Transactions of the American Horticultural Society. Vol. v., 1888. W. H. Ragan, Greencastle, Indiana, Secretary. 350 pages, bound in cloth.

This volume embraces a report of the 8th Annual Meeting held at San Jose, Cal., Jan. 24, 25, and 26, and at Riverside, Cal., Feb. 7, 8, and 9, 1888, together with a full list of papers read, with accompanying discussions, also a sketch of the overland trip by John Clark Ridpath, L.L.D. It is free to members, the fee being \$2.00 per annum.

Eighth Annual Report of the New Jersey Agricultural Experiment Station for the year 1887. Geo. H. Cook, New Brunswick, N. J., Director. A report of the results of analysis of various commercial fertilizers, and the Sorghum Sugar industry.

Proceedings at the Thirteenth Annual Meeting of the American Association of Nurserymen, held at Detroit, 1888. C. A. Green, Rochester, N. Y.

This volume is got up in an attractive style, and contains many papers of great interest to nurserymen. We would advise all our Canadian nurserymen to unite with this Association and attend its meetings. The objects are relaxation, acquaintanceship, exhibition of fruits, plants, etc., and exchange and sale of stock, and the member's fee is \$2.00 per annum.

Price List Central Canada Exhibition Association, Ottawa, Sept. 24 to 29, 1888. R. C. W. MacCuaig, 39.

American Pomological Society. The next meeting will take place at Sanford, Orange Co., Florida, beginning Feb. 6, 1889. We hope some Canadian representatives may be in attendance.

Thirteenth Annual Report of the Montreal Horticultural Society. 1887-88. 123 pp. Secretary, W. W. Dunlop. P. O. box 1145. Montreal.

T. C. Robinson's Catalogue and Price List, 1888. Owen Sound, Ont.