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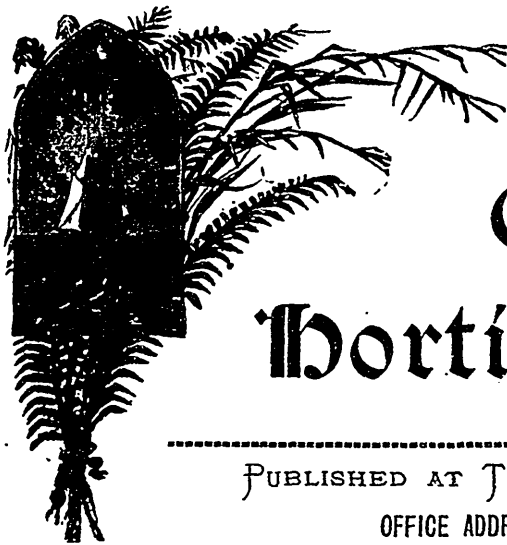
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WEeping DOGWOOD.
(*Cornus Florida Pendula.*)



The Canadian Horticulturist.

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THE NEW WEEPING DOGWOOD.

TOO MANY weeping trees would be out of place in a pleasure ground. They give a stiff and sombre appearance to a place, and are suggestive of grief rather than of good cheer. Yet an occasional weeping tree in a group of other trees, or standing alone in the rear of a yard, is a graceful object. One old Weeping Willow (*Salix Babylonica*), standing for a hundred years or so on the roadside near Grimsby, is most conspicuous for the beauty of its long, slender drooping branches, and we never pass it without looking upon it with admiration. But this is a tree of colossal proportions, and one that would be out of place in a lawn of limited extent. For such a place there are several suitable weepers, as for instance the Cut-leaf Weeping Birch, the Kilmarnock Weeping Willow, the Weeping Mountain Ash, and the new Weeping Dogwood.

The latter, known technically as *Cornus Florida Pendula*, shown in our colored picture for this month, belongs to the Dogwood Family or Cornaceae, a name derived from the Latin word *cornu*, a horn, alluding to the hardness of the wood. The bark is bitter, and by some considered medicinal. It is a variety of the White Cornus (*C. Florida*), which is common in rocky woods southward—a tree which only attains a height of twenty or thirty feet, and which is also a very attractive ornamental tree, with showy white flowers in spring and clusters of red-berries in autumn. The Weeping Cornus is similar in flower and fruit, as is well shown in the upper part of the painting. The so called flowers are in reality close heads of flowers surrounded by a four-leaved corolla-like involucre, the whole somewhat resembling a clematis flower.

. The tree is unique among weepers in one respect, that is in having a perfectly upright leader, from which the opposite pendulous branches curve downward most gracefully of their own accord; this characteristic is shown in the illustration, which was drawn from a three-year old tree, grafted near the ground, and allowed to follow its own habit, without any aid whatever from string or pruning knife.

THE RED-OSIER DOGWOOD (*C. Stolonifera*) is quite common in the Niagara district growing wild in damp places,

and forming dense clumps. It is only a shrub, growing from three to six feet high, and very ornamental even when stripped of its foliage, on account of its smooth, bright red-purple branches, the annual shoots of which are like the osier or basket willow in habit of growth. Its berries are white and fewer in number than those of the tree above described. It is easily propagated by layers, and we see no reason why this shrub should not have a place among our ornamentals, especially where hardiness is a virtue.

THE JEWEL.

On page 127 Mr. Win. Mead Pattison wrote of the persistent and successful labors of Mr. John Burr, of Leavenworth, Kansas, U.S., in producing varieties of grapes of superior quality and earliness, capable of resisting the severe climatic changes of northern sections. Three of his new varieties of black grapes are there commended as giving great promise, viz., the Standard, the Ideal, and the Jewel. Of the latter, by favor of Messrs. Stayman & Black, of Leavenworth, we are able this month to give our readers an engraving said to be made from a photo-

graph of a medium sized bunch and berry.

It is claimed for this grape that it is an extra early black grape of superior excellence; that it colors quite as early if not earlier than the Champion, and that it is ripe soon after commencing to color; that in quality it is nearly equal to the Delaware, and in appearance very attractive, being jet black with a handsome delicate bloom. It is also claimed to be quite hardy.

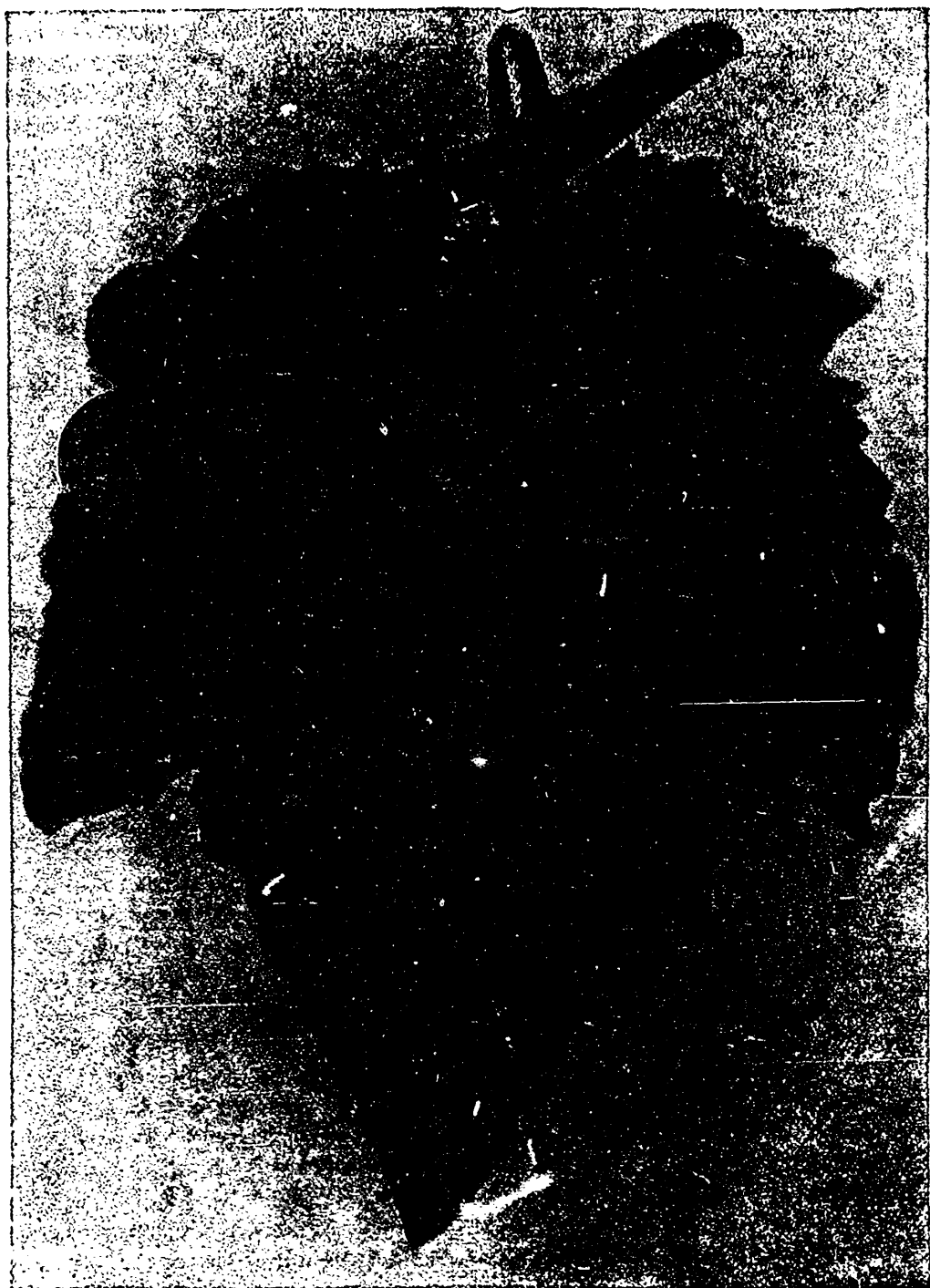
From all that we can learn of this grape we believe we are justified in recommending it for trial in Canada.

FRUIT IN NORTH SIMCOE.

By G. C. CASTON, CRAIGHURST, *Director for Agricultural Division No. 15.*

NOW that the fruit season is over, I herewith send you a short report on the fruits in this locality during the season of 1887. Strawberries showed a profusion of bloom and encountered no frosts, but we had a very dry spell

of weather in May that retarded the growth. Still there was a fair average crop; I think in most places rather more than an average. But the hot, sultry weather of July caused the latest berries to ripen prematurely, and ren-



dered the last two or three pickings rather hard to save. The

OLD RELIABLE WILSON

is still the best all round berry here, although we have several other varieties, viz., Crescent, Sharpless, Manchester, Triomphe de Gand, etc. I have also the Jessie, Jewel, Daniel Boone, and Belmont; but have not had them long enough to report as to their good or bad qualities.

RASPBERRIES

were very fine the first of the season, but were much injured toward the last, by the continued hot, dry, weather of July and August. I grow the Cuthbert red, and Gregg Black cap. The Cuthbert is a fine berry, but just a little too tender for our winters. We want something a little hardier, as it should be well sheltered and grown in a place where the snow lies deep in winter.

APPLES

were not as good a crop as usual. Though showing an abundance of blossoms, they yet failed to set much fruit. This was more especially true of the winter varieties (for the Astrachan was better than it had been for several years). The Duchess, though the fruit was very fine, did not bear as well as usual. Golden Russets, and in fact all winter apples, are likely to be scarce. There is one thing remarkable about this season, and that is that, although the crop was small and the weather unusually dry, the apples were the finest I have seen for several years, and not a sign of the fungus or scab on any of them which proves that the extent of this fungus

growth is some way connected with the season, as in the case of the rust in wheat, but in what way I leave to scientific men to explain. The Codlin Moth is getting worse with us every year, causing a premature ripening and dropping of the fruit. I think we shall have to give them Paris green if we are going to stop their ravages. The varieties of apples most suitable to our climate are, for summer: Duchess, Astrachan and Yellow Transparent; and for winter: Wealthy, Mann, Golden Russet, Red Pound or Simcoe, Pewaukee, and Spitzenburg. It is only the hardy kinds that will succeed here. But those that do succeed bear very very fine specimens of fruit, and I believe that the farther north you can succeed in growing them the finer the fruit, and this applies to other fruits as well as apples. I have been very much interested in the reports of Mr. A. A. Wright, of Renfrew. He seems to have a pretty cold climate to contend with, colder even than ours, and his experience is valuable to us, for any variety that Mr. Wright succeeds with will be sure to succeed with us in Simcoe. This was the best season for

GRAPES

I have yet experienced. I never saw finer Concords than I had this year of course my vines are young, well manured, and pruned; all the varieties I have ripened perfectly. I have Moore's Early, Rodger's No. 3 and 19, Worden, Early Victor, Vergennes, Prentiss, Champion, and Brighton. I have also the famous Niagara, but fail to see wherein it excels the Prentiss in

quality. Among the red grapes I prefer the Brighton. It is far the best with me. And among the black varieties, take it all round, the old Concord beats them all. The Concord

seems at home here. It has ripened now two seasons in succession perfectly, and hope it will continue to do so, for it is unsurpassed. Mildew is a thing unknown here so far.

LESSONS OF THE DROUTH AND ITS EFFECT ON GRAPE VINES.

THE DELAWARE, CLINTON, BRANT AND CONCORD.

BY A. HOOD, BARRIE.

LITTLE as we may desire at any time to be visited by such a prolonged drouth as the one we have just passed through, and dearly bought as we consider any lessons it inculcates, still there is something to be learned even from misfortunes; something which it is frequently possible to turn to good account.

The first thing that strikes me on looking back is a feeling of surprise that vegetation has not suffered more than it has; with the thermometer day after day, and week after week in the neighbourhood of the nineties, and with soil as dry as dust, it is surprising to me that some of my plants continue to live; and that they have lived and in some cases flourished, would seem to indicate that they must draw their supplies from other sources than rainfall. When considering this subject I have sometimes supposed that as the simple elements of which water is composed are found in abundance in the soil, and in the atmosphere, that roots of plants might possess the power of so uniting those elements as to furnish themselves with the needed supply; be that as it may, if they have no such power, then the moisture they require must be drawn largely from the sub-soil by capillary attraction; not in sufficient quantities, however, under a scorching sun—especially if accompanied by wind—to answer the requirements of vegetation.

I noticed during the very hottest

weather, and when we were longing for those showers which we knew fell to the south, while we only got a few drops that would scarcely wet a leaf, that plum trees and grape vines were suffering severely; the latter losing a great many leaves and threatening to dry up the whole of the fruits; a week or two later, although no rain had fallen, both appeared to revive quite perceptibly; the cause being I presume that as the weather had become much cooler, and the evaporation from leaves so much less, that the moisture brought from the sub-soil by capillary attraction was sufficient for ordinary requirements.

As therefore we had more of the drouth than our neighbours to the south, we have had better opportunities of observing its effects, and as regards grapes I find that the Delaware has suffered less than any other kind on my grounds; having ripened perfectly the whole of its fruit; which is more than can be said of any of the others; Clinton and Concord lost so many leaves that part of the fruit shrivelled up and was worthless; part of it filled out but never perfectly ripened, and was worthless also, and scarcely half was fit for sale or use. Roger's No. 9, 15, and Salem, were nearly as bad, and might have been worse if the crop had been as heavy.

With the exception of the time when the grape vine leaf hopper attacked my Delaware I have always raised as

many pounds on a vine of that variety as of Concord; I obtain from one to two cents per pound more for them; they ripen earlier; the vine is quite as hardy, and, which is far from being the case with Concord, every bunch is fit to sell; if therefore it paid to raise grapes in this locality for market, which at this season's prices it certainly does not, I would grow nothing but Delaware.

I have a few vines of the Brant—Arnold's No. 8—a variety that originated with the late Chas. Arnold, and which deserves, I think, more attention, especially in the north, than it has received; it has stood next to the Delaware with us this year in withstanding the effects of the drouth, having ripened nearly all its fruit. It is a rampant grower, and runs so much to wood when young that it bears but little fruit; quite as much, however, as the Clinton, but both improve in this respect by age. The vine is exceptionally hardy, its vitality being so great that I have never known a vine to die or fail to grow, when first planted; the berries run a little larger than Clinton, are not quite so acid, have smaller seeds, and ripen a week or ten days earlier, coming in about with Moore's Early, and a week earlier than Concord. The bunches are long—double or treble the size of Clinton—and the berries packed so close on them that,

in a wet season, they are apt to squeeze each other to bursting; this is a fault, a well filled bunch is a good thing, but a bunch filled to bursting is not desirable, but it is certainly the case with Brant; the flavour is vinous, less acid than Clinton, and should I think be equal, if not superior, to that old standard as a wine grape; it cannot be called a table grape, neither is the Clinton; but the late Editor of the *Horticulturist* has frequently said that he prefers a perfectly ripe bunch of the latter, to any other grape for his own eating, and in some seasons I think he is right, but I believe Brant is better; I certainly prefer it as grown this year to any other grape on my grounds, not excepting even the Delaware, but it must be thoroughly ripe, and so must the Clinton, and so must the Concord, before their good qualities can be palatably experienced, or their value as table grapes properly appreciated.

I can imagine a person growing any or all of these three varieties for years—in fact I have done it myself—without being aware of the perfection they will attain when really ripe; they are generally plucked, for fear they may be stolen, as soon as coloured; when they are certainly far from being ripe. Is it too much to say that half the fruit grown by private individuals is plucked in an imperfect state from a fear of this kind?

NOTES FROM EXCHANGES.

EXPORTATION OF APPLES.

C. P. DEWEY, in the *American Agriculturist*, says that the plan of sending American apples to Europe, was first devised by a Scotchman, named Buchanan, who, in 1845, sent five barrels from Boston to Glasgow. The venture being successful, he repeated it year after year, until he had established

a regular trade. The business has now become general, and instead of five barrels, seven or eight hundred thousand are shipped annually.

During ten years, from 1876 to 1886, Canada alone has shipped to England 721,813 barrels of apples, and the prospect is that the business will reach gigantic proportions in time to come.

PROMISING NATIVE CHERRIES.

In the same journal, Prof. C. H. BESSEY, of Nebraska, writes a description of two native cherries, he has discovered in Northern and Northwestern Nebraska, and which are worthy of cultivation, with a view of furnishing new and useful varieties for the West. One was the *Sand Cherry* (*Prunus Pumila*), a very small shrub, with slender trailing stems, which creep over the soil and strike roots here and there. The cherries ripen in July, and closely resemble the common garden cherry in size and shape. The color is a deep black-red, which changes to black when fully ripe. The bushes bear profusely.

The other was the *Rocky Mountain Cherry* (*Prunus Demissa*), is a shrub from three to eight or more feet in height. The cherries are borne in long racemes, like those of the wild black cherry, but are a little larger. When ripe they are black, and very agreeable in taste, and are much used for pies.

SHARPLESS AND CUMBERLAND AHEAD.

Mr. D. M. DUNNING, of Albany, a careful cultivator, says in the *Country Gentleman*, that he has tried Jewell, Parry, Ontario, May King, Bubach, Manchester, Bidwell and many other strawberries, and does not find any of them equal to Sharpless and Cumberland. The Cumberland is a strong grower, free bearer, and extra good in quality, though lacking in color and a little soft for shipping to distant markets. With proper cultivation, he prefers the Sharpless for all purposes.

Next to these two varieties he would

choose the Wilson. He believes that if it were sent out now-a-days as a new variety, it would "take the strawberry world by storm, and create a tremendous excitement."

THE JESSICA GRAPE.

The Jessica out-does in flavor any garden grape known, and it is a wonder that no more is said of it. The little white grape, with its small clusters, is not over attractive, but once between your lips, you will avow it has all the good qualities a grape can have in one. Sweet, with a honeyed touch, at first taste, succeeded by a freshness of mild acid, and a bouquet that lingers on the sense, it is a grape for connoisseurs to linger over and praise.—*S. Power, in Vick's Magazine for October.*

HARDY FRUITS—VARIETIES RECOMMENDED FOR THE COLD NORTH.

APPLES FOR QUEBEC.—In the report of the Fruit Growers' Association, for the Province of Quebec, Mr. R. W. Shepherd, jun., recommends the following varieties for profit, in the order named: (1) Wealthy, (2) Fameuse, (3) Duchess, (4) Canada Baldwin, (5) Winter St. Lawrence. He says further:

I hope to increase the list of my commercial apples by adding *Yellow Transparent* (Russian) and *Brockville Beauty*. These two apples have not yet been put on this market. Being hardy and productive, and ripening, respectively, just before and after Duchess, they fill a gap in my list of marketable varieties. The Brockville Beauty is one of the most attractive looking apples, and its quality is *very good*; marketed in baskets, it ought to command high prices. I have not cultivated the Montreal Peach or Montreal Strawberry to any extent, because, Montreal being my principal market,

these varieties seem to be too plentiful and too cheap.

Mr. John M. Fisk recommended the following as the five best varieties for table use: *Summer*—1. Yellow Transparent, or Charlottenhaler, equal; 2. Duchess of Oldenburg. *Fall*—3. St. Lawrence. *Early Winter*—4. Fameuse. *Late Winter*—5. Golden Russet.

Mr. C. Gibb of Abbotsford, Quebec, says that the five best varieties of apples for profit in that province are in his opinion, (1) Duchess, (2) Alexander, (3) Wealthy, (4) Yellow Transparent, (5) Haas.

PLUMS FOR QUEBEC.—Mr. Shepherd says, "Last year Mr. Wm. Evans asked me to visit his nursery, I think in the month of September, and I was very much struck with the *Moore's Arctic* Plum. The trees were bearing, and he allowed them to grow and bear in the nursery rows, and certainly the crop was the most extraordinary I ever saw. The trees were bent to the ground with the weight of fruit. It is a very dark blue plum, very fair size, as large as the Lombard."

Mr. Gibb says: "My special hopes now are turned toward the improved varieties of the North-Western States. I fruited *De Soto* and found it an advance on any I have tried. Another I think a good deal of is the *Wolf*, a large plum of but fairly good quality, and one of those hardy and vigorous trees with rough, coarse leaves, that look as if they could stand any amount of summer heat. I have more hopes of North-West plums from my own experience, and from what I have seen in the West, than I have of even the Russian plums.

NEW FRUITS.

During the discussions on this subject at the meeting of the Am. Pom. Society at Boston, the *De Soto* plum

was spoken of by many as a special favorite, Mr. Brackett of Iowa placing it at the head of the list for Iowa. The *Stevenson's Rareripe* peach was stated by Mr. Caywood to be the leading sort on the Hudson; being "larger than the *E. Crawford*, better in quality, twice as good a grower, and quite as healthy." The *Moore's Early* grape was considered valuable only because of its earliness; otherwise inferior to the Concord. The *Empire State* was put down as less productive than the Niagara, the clusters small, and in some places subject to mildew—but in quality it was acknowledged to be better in quality than any white grape yet introduced.

THE BALDWIN APPLE FAILING.

Until the last few years the Baldwin has held the first place among market apples. The increased severity of the winters, resulting from the destruction of timber, has caused the Baldwin to suffer above most other popular varieties. During the winter of 1884-5 50 old trees were killed in the college orchard at Lansing (latitude 40 degrees) of which over 40 were Baldwins, the remainder being mostly Rhode Island Greenings. In fact, there is not a vigorous tree of these varieties left in the orchard. All others among the market sorts were not injured. It is more and more evident that the Golden Russet is one of the best market apples for this region. The tree is remarkably hardy and vigorous, and a good bearer. The apples are uniform in size and color, very firm, fair, and good keepers. In market they bring 20 per cent less than Baldwins, but this difference is overbalanced by their productiveness and hardiness. Russets should be barreled in the fall to prevent withering. The Spy is a tardy and unreliable bearer; the apples are often imperfect, and they are too tender for distant markets. I

should not recommend it here for the flatter lands. Fameuse is one of the best when the fruit fair, but it is unreliable. Canada Red, top-grafted, is one of the very best, and in this vicinity undoubtedly ranks next to the Russet, or perhaps superior to it. The St Lawrence, Oldenburg, and Twenty Ounce appear to be among the best fall apples for this vicinity. The Oldenburg demands a close market, however, as it decays soon. The Russian apples of recent introduction are not yet sufficiently known to be recommended for profit.—*Prof. L. H. Bailey, Michigan Agricultural College.*

SCOTT'S WINTER APPLE.

Scott's winter is an apple which is coming strongly to the front as an iron-clad long-keeper of merit. Our local paper, the *Newport Express*, of August 10th, says:—"Last Tuesday Cushman Gilbert brought in the proof that we can have good fruit the year round in this country. He had some fine Yellow Transparent apples just ripe and also Scott's Winter of last season's growth, which were still sound and of good flavour. With the apple season continuing the year round we ought to be well content." Prof. Budd, of Iowa, speaks highly of it, while at the winter meeting in Montreal, above referred to, in reply to the question, "What about Scott's Winter?" Mr. Shepherd said, "I suppose my trees are about ten years old. So far they have been very satisfactory: the tree is very hardy; its quality is very good. It is a little acid, but it tones down about the middle of January and gets to be a very good quality. It keeps until spring without any difficulty." Mr. Gibb added: "I would like to endorse what Mr. Shepherd says about Scott's Winter. Its keeping qualities are good; it is a little under size, but I have nothing better of its kind." I may add that

Scott's Winter is the only keeping apple that is carrying a full crop with me this year. I think it is quite as hardy as the Wealthy and as productive. In good land, especially if thinned, it is a full medium in size, but when not properly cared for, and allowed to over-bear, small.—*Vick's Magazine.*

PEAR TREES IN SOD.

BY W. F. MASSEY.

My experience is that pear blight is much less destructive where the trees are kept in sod, and the fertility of the soil maintained by annual top-dressings. While I would not assert that cultivation is the cause of blight, I have no doubt that the tearing of the roots during the season of rapid growth leaves the tree in a weakened condition, favorable to the spread of fungoid growth. Years ago I grew pears in a piece of land which was annually heavily manured and cultivated in vegetables. I noticed that blight almost always followed to some extent the deep plowing in midsummer, made necessary by second crops following the early vegetables. I have never known pear trees grown in properly kept sod to be seriously injured by blight. My experience is confirmed by a brother orchardist, who states that his pears in cultivated land were larger and better looking than those in sod, but that those grown in sod were finer flavored, and that when the blight swept through his cultivated trees, those in the sod escaped altogether.

But it will not do that fruit trees in sod should be neglected. Their proper treatment will probably be more expensive than cultivating them. They should have the grass mown as regularly as a lawn, but never removed, and should have an annual dressing of bone dust and kainit. In other words the fruit crop must be the only crop taken from the land. Treated in this way

the feeding roots will be found near the surface and within reach of all the favorable influences of air, moisture and fertilizers, and will not be driven by the plough to seek sustenance from the cold subsoil. Even the peach is no exception to the rule. The oldest, best and most productive peach tree I ever knew stood in a tough blue grass sod on a lawn. It survived for ten years all its companions planted at the same time in a piece of cultivated land adjoining, and for aught that I know may still be thriving.—*Phil. Weekly Press.*

HOW TO MAKE VINEGAR.

A correspondent wants to know how to make merchandise vinegar from apples.

As, ordinarily made the juice of the apple or cider, is put into barrels and then placed in the sun, or where the temperature is high and the contents allowed to ferment and "work" into vinegar. Whiskey, molasses or old vinegar barrels are the best to use, as what little is left of the former contents of the barrels will assist in the formation of vinegar. New oak barrels should not be used, as the tannin in the oak will injuriously affect the vinegar. If the barrels are to be placed out of doors in the sun and air it is quite essential that they be thoroughly painted, hoops and all, to prevent shrinking, and keep borers, etc., from working through the wood and thus cause serious loss.

As the oxygen of the air plays a very important part in the process of fermentation, it is necessary that means of access be provided for this; hence the bung hole is left open, though covered with a piece of mosquito netting or similar material to keep out the insects.

In vinegar factories vats are provided and the liquid is some times passed from one to another, and to still more bring every portion into contact

with the air it is made to run through beechwood shavings. These shavings also collect many of the impurities. Shavings from other wood are sometimes used but are generally objectionable, as they may impart unpleasant tastes to the vinegar. We have heard of corn cobs being used as a substitute for the shavings, with good results. The practice is too prevalent of working up the poorest apples into vinegar. The better the apples and the less water is used the better will be the product.

Many formulæ exist for making vinegar by the use of chemicals, but the best article is made out of the pure juice of fruit. Manipulation may vary, but we have given the essential points.—*Rural World.*

BETTER SYSTEM IN MARKETING FRUITS NEEDED.

I wish to say, in a cautionary way, that a man who goes into fruit growing should have some definite plans about reaching his markets. The weakness of our whole fruit growing system, next to slovenly cultivation and handling, is found in a lack of a good system of distribution of our products. There are many sections of the country, north and south where fruit growing has become unprofitable, largely on this account. We do not reach out widely enough, or our fruit does not bear carrying far enough. Our limited markets break down under the supply, and we lose money from over-production.—*Hon. Parker Earle.*

PRESERVATION OF FRUITS.

Marshall P. Wilder has said that to preserve fruit we must have perfect control of temperature, light and moisture. The apartments where it is expected to keep fruit must be so arranged that the temperature within may be kept cool. If warmth enters the conditions of fermentation are present. Mr. Wilder

did not use ice. He had thoroughly experimented both with and without it. He built his fruit house in a cool, shady place, with the door on the north, and with a thoroughly drained and cemented cellar, with small double windows which he could open and close at pleasure. In such a house he kept fall and winter pears in good condition until March. Apples can be kept at a lower temperature than pears—say thirty-four to forty degrees. J. J. Thomas has said that in such a room as this, and by admitting air on cold nights, and closing the entrances when the air is warm, he has kept some varieties of pears until April, and Baldwin apples into June.

THE VALUE OF FORESTS.

The importance of forestry management in the estimation of older nations, better skilled than we are in economic administration, appears in a volume of Consular Reports extending to 315 pages, lately published by the Department of State. The reports cover the particulars of government control and management of forests in Austria-Hungary, Germany, France, Italy and Switzerland, and are full of matters of great use to students of the subject in this country. Consul-General Jussen reports that no proper returns are published in Austria-Hungary of the profits of Government forests for the whole empire, but for Bohemia alone the clear annual profit is about 14,000,000 florins. The net income from the Prussian State forests, Consul-General Raine reports, stands at about 24,000,000 marks annually. The French net annual income is about 16,000,000 francs, as reported by Consul Roosevelt. Consul-General Alden reports that it is impossible to give trustworthy figures of the revenue and cost of forestry in Italy. According to Consul-General Winchester, the Swiss Confederation derives no revenue from

forests. The total value of yield from cantonal forests, however, is about 33,000,000 francs, and the returns from the forests of the Canton of Zurich show a nearly three-fold increase of profit yielded during a period of fifty years of cultivation—from 31.28 francs per hectare (nearly two and a half acres) in 1830-40 to 90.58 francs in 1870-78. Returns in money, however, are the lightest evidences of the true value of the forests. Their influence upon the climate and rainfall, and the consequent benefit to agricultural land and to the public health, are considerations of far greater importance, besides which is the provision of useful and wholesome employment for numbers of the population.—*N. Y. Evening Post.*

Uses of Fruits.

Next in importance to the best modes of cultivation and the selection of the choicest varieties, comes the most approved methods of preparing fruits for use. We would be glad therefore if the ladies, who read this Journal, would make free use of this column for an interchange of ideas on this subject.

APPLES FOR ANIMALS.

Prof. L. B. Arnold writes the following to the *New York Tribune*:

The feeding value of apples is not large; they rank with mangels, turnips, cabbage, and the like. Their food properties are mostly carbo-hydrates, or heat producing, their protein being only about one-half of one per cent., and their nutritive ratio about one to thirty, and hence are most effective when fed in connection with more nitrogenous food, like clover, but may be fed sparingly with grass. They have a higher value than the weight of their food constituents indicates, on account of condimental qualities, and from having a large per cent. of those constituents in a condition to be at once absorbed and appropriated without waiting for any special action of the stomach. Using hay as the unit of

measure, apples compare with it and other common feeding stuffs as follows, per 100 pounds of each :

Hay	\$0 50	Cabbage	17
Corn meal	1 12	Apples, ripe	16
Oat meal, bran, and middlings	1 00	Turnips	16
Potatoes	20	Rutabagas	15
Sugar beets	19	Mangels	14
Parsnips & carrots	18	Pears	13

Good ripe apples have a feeding value of not less than eight cents per bushel of 50 lbs., and are as good for other stock as for milch cows. For any one who has stock to consume them, it is as much of a loss to waste good apples as to waste good roots. When fed with reason and appropriate food they are health-inspiring as well as nutritious, and are only injurious when fed immoderately. An experiment in feeding three cows with moderately sour apples, ripe and mellow, for several weeks, at the rate of 12 to 20 lbs. to each cow daily, gave me a finer flavored butter than I ever saw from grain or grass. I have known others to feed them in larger quantity and for a longer time with satisfactory result, and their butter to be not only fine flavored, but to have remarkable keeping quality, and the stock to remain perfectly healthy. I have also proved them to make excellent milk for cheese. The managers of cheese factories have noticed an improvement and increase of milk when their patron's cows have been fed moderately with apples.

QUINCE PRESERVES.

Pare, core and quarter a peck of quinces, then weigh them; put the parings, cores and seeds into a preserving kettle, cover them with water, and boil slowly for twenty minutes; then strain them, put the water back in the kettle and put in the quinces a few at a time, and simmer gently until tender, say five or ten minutes; lay them on a dish; when all are done add the sugar

and a little warm water. Let this boil for a few minutes until clear, then put in all the quinces and boil them without stirring until they become a clear garnet, which will be about one hour. Have ready two lemons sliced thin and seeds taken out; put them in a few minutes before taking from the fire.

EVERYTHING IN ONE ROSE.

An old German florist relating his tribulations on this subject to me a few years ago, said: "I have so much trouble with the ladies when they come to buy mine Rose, they all wants him hardy, they wants him dooble, they wants him nice gooler, they wants him nice shape, they wants him fragrant, they wants him moonldy, they wants him everydings in one rose, now I have to say to dem ladies, though not what you call an ungallant man, I says, that I sees not that lady that is rich, that is young, that is good demper, that is beautiful, that is healdy, that is smart, that is everydings in one lady, I see her not much."

This was true of the roses when my old German friend told me of his troubles, but since then we have been fortunate enough in getting a new class of roses known as the

HYBRID TEAS.

all of which, by covering with four inches of leaves, put on in December around the roots prove perfectly hardy in most of the Northern States. These now compose many fine kinds, among which are: Dinsmore, bright scarlet crimson, splendid form; Ball of Snow, pure snow white, fragrant; La France, deep pink shading to light rose, splendid; American Beauty, rich, light crimson, grand form, large size, and exceeding all other roses in its delightful odor; Lady Mary Fitzwilliam, rosy blush, globular, large; Pierre Guillot. These are all "monthly," all "fragrant," all "double" and of fine "form," and are

all particularly rich in color. In fact, they are all that the good old German's customers wanted: they are "everydings" in one rose, and besides are all "moondly," "nice gooler," "fragrant and ever-blooming."—*Peter Henderson.*

CAN WE IMPROVE OUR PRESENT VARIETIES OF ROSES.

P. MITCHELL, INNERRIP, ONT.

I am at present engaged in an experiment which will take me some years yet to fully prove the value of, by which I am in hopes that varieties of Roses and other plants, which we now possess, may be vastly improved. I find that in our Hybrid Perpetual roses, (with their intermixed and diverse ancestry) certain plants will show characteristics varying from the ordinary type of the variety to which it belongs. As examples, among others in my own garden, I may mention the case of a plant of Prince Camille de Rohan, which has for years proved itself a true ever-blooming rose, although this variety is generally known as rather a shy bloomer, except at the ordinary blooming season. Again on the other hand I notice a Marguerite de St. Amande, which year after year ignores the fact that this variety is noted as a prolific autumn bloomer, and has never given me one bloom after the first blooming season is over. I might go on and give many other examples where certain individual plants have their own marked variations from the ordinary type of the variety, but these are enough to illustrate the principle upon which my present experiments are based. I have propagated from those plants where I have noted a desirable departure from the original type, and from these I will again select and propagate, until I have fully tested my theory. I would be very glad to hear from anyone who has any knowledge of what it is possible to do in this direction.

CHRISTMAS DECORATIONS.

Very pretty decorations can be made for Christmas by using heads of wheat and oats. They can be mixed with evergreens with good effect. Dried grasses can be made useful in working out some of the smaller designs. Mountain Ash and Bittersweet berries are charming when used in evergreen wreathing. If they are not to be obtained, the seed clusters of the Sumach make good substitutes. If you have autumn leaves in considerable quantities, they will work in charmingly with whatever may be used as the foundation of your decorative work. To use nothing but evergreens gives the place you use them in a somewhat sombre look, and touches of bright color are needed to produce a more cheerful tone, and one more fitting to the season. If clusters of leaves or berries are placed wherever festoons of evergreens are fastened against the walls, the general effect will be vastly more pleasing than it would be if they were not used.

For the altar nothing is prettier, especially by lamplight, than crystallized grasses used liberally against a background of evergreen. They sparkle like gems, and suggest natural frostwork. A most beautiful effect can be produced by making the words, "A Merry Christmas," with letters formed of these grasses against evergreen. The background can be made on a strip of cloth of whatever width is thought desirable, covered with ground pine or hemlock. These are better for such purposes than ordinary pine or cedar. This cloth can be suspended back of the pulpit or stage, and when the light falls on the letters they will seem to be formed from bits of icicles. As the grasses are brittle and easily broken after being crystallized, it is well to make each letter on a foundation of pasteboard and put it in place after the evergreen background has been hung up.—*Vick's Magazine for December.*

Forestry.

THE SCOTCH AND THE AUSTRIAN PINES.

MR. LOUDON speaks of the Scotch Pine (*Pinus sylvestris*) as being one of the fastest growing species of the Pine genus, and speaks of one having attained the height of fifty feet in twenty years. Surely this rapidity of growth which characterizes it in the old country, cannot belong to it here in Canada. The Austrian Pine 100 (*Pinus Austriaca*), which in Lower Austria grows to a height of 120 feet, and is considered a rapid grower, seems to us to "make haste more slowly" in our country. We have here at Maplehurst (near Grimsby) several specimens of these two pines growing on our grounds, which are about thirty years of age, and neither variety has reached a height of over twenty-five or thirty feet. Norway Spruces of the same age are from fifty to sixty feet in height, and have left them far behind.

We write in explanation of a reference to these pines on p. 231, where they are compared with our native white pine (*Pinus Strobus*) as being of slower growth, and less handsome in foliage. Probably the statement should be somewhat modified with respect to ultimate size, and no doubt in a large lawn or park a rich effect could be produced by using the dark-green of the Austrian, and Scotch pines to vary the prospect. But if we could only have one, and wanted it near our home, we would choose our own White Pine, with its slender, and gracefully waving foliage.

INFLUENCE OF FORESTS.

The annual address of Hon. Warren Higley, of New York, at the Denver meeting of the American Forestry Congress last year is full of practical

and helpful suggestions to all foresters. He gives the following as some of the most important conclusions regarding the influence of forests.

1. The forests exercise an influence upon the climate of the country; they modify the extremes of temperature.

2. They have a decided influence upon the water supply of a country. Clear the forests from the valleys and headwaters of streams and rivers, and these water courses, perennial before, become dry in summer and raging torrents in spring time.

3. Forests exert a beneficial influence upon agriculture by forming a wall of protection to the growing crops when most needed.

4. Growing forests on mountain sides and steep declivities hold the loose soil and accumulating humus in place.

5. Forests in adequate areas tend to preserve the healthfulness of a country or district by their influence on the surrounding atmosphere.

6. Forest products afford the most indispensable and necessary economic element in the industries and prosperity of a nation. The total value of the forest products of the United States for 1880 exceeded \$700,000,000. — *The Farmer*.

THE ASH-LEAVED MAPLE.

The best tree to plant for quick shelter, shade and fuel, is the Ash-leaved Maple (*Negundo aceroides*). It is extremely hardy, as is proved by its being found in river and creek bottoms, and on hill-sides which have been protected from the prairie fires; it is sometimes frozen back slightly the first year after starting from seed, but will make a steady rapid growth thereafter.

The tree attains a height of from fifty to sixty feet, with a diameter of eighteen or twenty inches; and although

it cannot be recommended for timber, it is of great value for fuel and shelter. It grows very rapidly, can be trimmed to any shape desired, and will stand the roughest treatment. A syrup and

sugar is also made from the sap, approaching the maple syrup in its richness and whiteness; a pailful of sap is said to make half a gallon of syrup.—*American Agriculturist.*

Flowers.

CULTIVATION OF ANEMONES.

BY HERMANN SIMMERS, TORONTO.

THE ANEMONE is a genius of plants of the natural order Ranunculaceae. The name is derived from the Greek word, *anemos* wind, because many of the species prefer very exposed situations to flower properly. The species are numerous and generally beautiful. Most of them flower early in spring. They are natives of temperate and cold climates, chiefly of the northern hemisphere. *Anemone nemorosa*, or the Wood Anemone, is a common native of all parts of Great Britain, and its white flowers, externally tinged with purple, are an ornament of many a woodland scene and mountain pasture in the months of April and May. Another species, *A. pulsatilla*, the Pasque Flower, adorns chalky pastures in some parts of England at the same season; its flowers are purple and externally silky. The garden Anemone is a favorite florists flower; the varieties are very numerous, and whole works have been published on them, and their cultivation, which is most extensively carried on in Holland, and has prevailed for a very long period.

It is generally supposed that all these varieties have originated from two species, *A. coronaria* and *A. hortensis*

or *stellata*. Both are natives of the Levant; the latter is found also in Italy and the south of France. By cultivation the size of the flower is increased, its form and colours are modified, and many of the stamens are often changed into small petals, forming a sort of heart of the flower. The cultivation of the Anemone requires great attention in order to develop the perfection it has now attained. To grow them most successfully, secure a light sandy soil, plant the bulbs two inches below the surface of the ground, and cover for the winter with a light litter of leaves. Growing them in the house has not proved successful, therefore, I would suggest that the amateur confine himself to growing in the open air altogether. The root consists of clustered tubers, which are taken up after flowering; the plant is propagated by parting the roots or by sowing the seed. In the latter way new varieties are obtained, but the seedlings do not flower until the second or third year. Besides the species which have been named, others occasionally appear as ornaments of our flower garden, such as *Anemone Japonica*, a most beautiful species, which has only recently been introduced from

Japan. The species of this variety are characterized by the acidity prevalent in the natural order to which they belong, and the rhizomes have been recommended in obstinate cases of rheumatism. *Anemone Hepatica*, with three lobed leaves, grows wild in most parts of Germany, but is not a native of Britain. Varieties of different colours, and both single and double, should be among the finest ornaments of our flower borders early in spring.

My practical experience in growing *Anemones* successfully in the open air, has been to plant the bulbs in a box during winter, occasionally watering to prevent the bulbs from drying up, then planting out as soon as the frost is out of the ground, when they are pretty certain to flower, and may remain permanently in the place they are planted.



BY FRANCIS MASON, Peterborough, Ont.
WINTER.

"WHAT is Winter? Why, just the ghost
Of the dear old Summer we've loved and lost;
The white reflection of all things sweet,
All the most perfect, most complete;
All that the heart goes out to meet
Lies under the snow and frost."

Yes, we are right into winter; and I often think if we had no winter, but were all summer, we would not be able to appreciate rightly the beauty, grandeur, and reinvigorating process of nature. So it is in our everyday life; without losses and crosses we would not be able to appreciate the sunshine

that comes into our lives after the storm has past. The great fault with most of us is that we live too much in the future, instead of making the most of every day, enjoying the streaks of sunshine that slant across our pathway. Come, let us enjoy this fine winter weather, not waiting for the seasons to change. Once more, I wish all my old readers of the *Florist*, as well as the whole family of subscribers to the *Canadian Horticulturist*, *A Merry Christmas*.

CHRISTMAS CHIMES.

Chime, chime, sweet Christmas bells,
Tidings glad your music tells.
Merry Christmas rings for all
From the snow-wreathed steeples tall;
Children's eyes shine bright as stars
Through the cloud-tipped azure bars.
Merry, merry Christmas day,
Holy, happy holiday.

I want in this number to say something about some plants that have a charm for me above many others. Why I do not know, only that I love them, and think there is nothing so enchanting as the rambling, climbing, running vines for the window, or mantel during the winter. I will just name a few that may be easily grown.

ENGLISH IVY,

though slow at first to make much growth, yet, after it is established and growing a year or two, it makes great progress. It may be trained around windows, pictures, brackets, or clocks; and anything else that may be fancied can be done with those branches of the vine, even to forming letters and words on the wall. It will help and give vitality to the ivy to place it outside under the verandah, or in some shady place, during the summer; as the plant grows increase the size of the pot or vessel it may be in; occasionally wash both sides of leaves, stems and body, as the scale insect troubles this plant badly is it becomes once infested with it.

GERMAN OR PARLOR IVY

is much quicker in growth than the above, but is not so easily managed: still it is beautiful when given strings to run on, and will make itself at home anywhere in the light.

SMILAX

is the most graceful of climbers, and cannot be equalled for its beautiful green foliage and peculiar waxy formation. Though of a slender growth it is strong and wiry, and is much used

in the formation of wreaths and other floral work: it is even used for the trimming of dresses at parties; indeed I do not know what florists would do without smilax. The plants may be purchased from any florist at a very reasonable price, or seed may be purchased and sown at any time; but plants are preferable for the amateur. Give them long strings to run on.

Vines for the window, and for the hanging basket, will be continued in the January number of this magazine.

The Canadian Horticulturist.



Monthly Journal, devoted to the interests of Fruit Growers, Gardeners, and Gentlemen owning rural or suburban homes.

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.

This Journal is not published in the interests, or for the pecuniary advantage of any one, but its pages are devoted wholly to the progress of Horticultural Science and Art in Canada.

Time to Renew.—It will greatly favor the Editor if all subscriptions for 1888 could be sent in this month, so that he may know how many copies to print

for the new year. Remittances should always be sent by registered letter.

Baskets for Peaches.—Cuts representing the packages for peaches referred to on page 248, and kindly furnished by the writers of that article, came to hand just too late for use in November

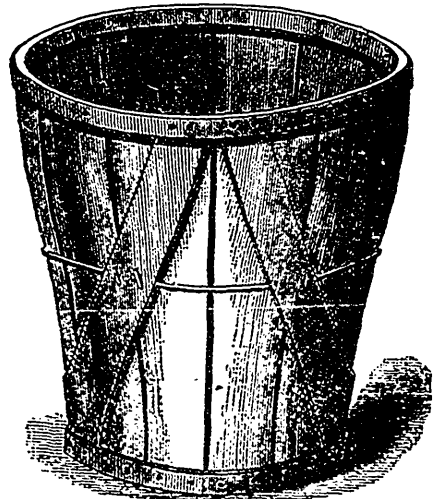


FIG. 1.

Number. The slat or truck basket, that is now commonly used in New Jersey and Delaware, is shown in Fig. 1. We have tried this basket in shipping peaches by the car load to Toronto

and Montreal, but we found that express men would not handle it as carefully as they would the 12 qt. basket with a handle, shown on p. 152; and in packing them on platforms, or in unshelved cars. they would set one on another, to the great damage of the fruit. The flat handle basket may be piled several deep without bruising the fruit, if care is taken to set every alternate pair at right angles with the former two. This latter basket is universally used by our Canadian peach growers, costs no more than the truck basket referred to, and is in our opinion the most useful basket.

For very choice samples of early Crawfords, no doubt the four-quart-basket crate, as shown in Fig. 2 is most desirable. Indeed it or a very similar

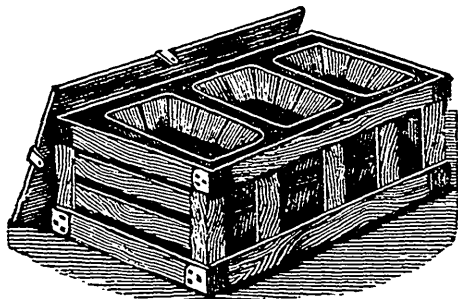


FIG. 2.

crate has been used by some of our peach growers at Grimsby, and they speak well of it for fancy fruit, but even these growers use the 12 qt. basket for their main crop.

The paper cell crate is a very ingenious contrivance for carrying extra choice peaches, of uniform size, carrying each one in a separate cell just as eggs are sometimes packed for shipment. Our plan with such fruit is to row them in the 12 qt. basket, three layers of four peaches wide and eight long, thus getting about one hundred extra choice samples in a basket. Such fruit netted us from \$1 to \$1.50 per basket during the past season.

Baxter's Red, or the Pound Apple. — A sample of this beautiful apple was received from Mr. Geo. Leslie, of Toronto. It is a very large apple, about the size of the King, and much the same in general appearance. The calyx is closed in a deep basin; the color deep red with yellow specks; the stem, short slender and deep set, in a slightly russeted cavity. From its large size this apple has been called the "Pound" apple, but the name Baxter after its originator, seems to be its proper one.

The tree is said to be perfectly hardy about Ottawa, and if it is an abundant bearer, may prove a most valuable apple for export.

Macklim's Seedling Pear also sent in by Mr. Geo. Leslie, has every appearance of being a valuable winter Pear. It is too early to test its quality, but its appearance is in its favor. The fruit is large, pyriform, having some resemblance to the Vicar, about four inches long, besides a stout stem of two inches obliquely inserted without depression. Skin yellowish green with small brown dots. Calyx large, closed, in a shallow corrugated basin. Said to have originated near Markham, Ontario.

The Kieffer. — A dwarf tree of this variety at Maplehurst, the home of the Secretary, has borne this season several beautiful samples. In point of appearance it is everything that can be desired, and the tree is a fine grower. But alas! the disappointment with which one attempts to enjoy the eating!

The merits of this pear were discussed at the meeting of the American Pomological Society, at Boston. It was maintained that it was valuable in the Southern States at least for cooking; but it was acknowledged to be of little value at the north. It was agreed that the name should be pronounced as if spelt Keffer, with e short.

Best table Pears.—The *Country Gentleman* gives the following list of pears selected with regard to flavor, and regardless of productiveness or market value: Seckel, Bosc, Belle, Lucrative, Sheldon, Josephine de Malines, Dana's Hovey and Grey Doyenne. The Ros-tiezer is classed as *almost* equal to the above list, a pear which in our opinion is *fully* equal in quality to any one of them.

Peaches for Succession.—The same Journal gives the following list of peaches which were grown at Albany, and gave a constant succession of ripe fruit each day from the 25th of July until the middle of October: Waterloo, Alexander, Briggs Red, Early Beatrice, Early Rivers, Hales Early, Early York, Coolidge, Troth, Morris White, Crawford's Early, Foster, Old Mixon Free, Stump, Crawford's Late, Ward's Late, Smock, Salway.

HORTICULTURE FOR WOMEN.

MISS SARA SMITH read a paper on this subject before the Massachusetts Horticultural Society on the 29th of January last. She said among other things:—

"Do we think, when walking in our beautiful gardens, of the many New England farms and homes without gardens? Do we think that there are daughters to inherit these places who are not taught as we are every day by the beauties around us, and who do not learn to know and love them?

"School days over, the excitement of graduation, the crowded house, the applause, all are ended, never to return. No more city life, no more railroad rides, no more excitement. A quiet coming home, and to a home which perchance may not be the home of beauty, of luxury, of comfort, or pleasure, that many can welcome their daughters to, but a home such as we know hundreds of our brothers have on these bleak though beautiful hills, and damp yet smiling valleys of New Eng-

land. Totally ignorant of what might make such homes abodes of pleasure, it seems a coming to a round of cooking and cleaning and small economies that fret day by day. What a dull routine! Seldom company to enliven, no money except for the most essential needs—a weary, dreary home—a tired mother, a silent father, an absent, or worse, an indifferent brother, work that crowds, no luxuries, no garden, even the songs of the birds recall the songsters of the city parks and have a homesick sound to her, and so comes the sad, final break with home.

In all the culture of soil and fruit and flower and flocks, is there no pleasant place, no welcome duty for these daughters hands? Is there no way that they may be taught that they, too, have a mission—a heaven-given mission—on a farm?

What we want now is not this higher education; it is a new one; an education in horticulture and home culture that shall make a happier girlhood; happier because hands are full and bodies healthy, and brains less strained for book lore; more alive to Nature's truths and vivified with a practical knowledge of what goes to make health, happiness, home and wealth. Among all the schools of our land there is not one to offer our girls this."

The tendency of our age is toward extremes; and every girl in our land is expected to go through the same round of French, Music, etc., whether fitted by taste for these studies or not.

No doubt very many of these would be happier and more useful if a portion of the time spent in the study of accomplishments for which they have no taste, were devoted to the practical study of the care and culture of flowers and trees, and to the kindred science of Botany.

Scott's Winter.—Mr. Charles Gibb, of Abbotsford, sends a sample of this very promising winter apple for the North. It is a very handsome apple, and a native of Newport, Vt. Dr. Hoskins of that place says of it: "The value of

this apple grows upon me every year. With the exception of Bethel, it is the only true "iron-clad" that is a long keeper, while it is an early and prolific bearer. It surpasses the Wealthy in the same orchard in vigor, and in endurance of climate vicissitudes, and produces about as much marketable fruit, which keeps well into June, and sometimes through July. It is medium in size (small on poor land), round, very brilliant red in color, keeping until June, without difficulty, and after March very good in quality, being crisp and spicy, but too tart for some people."

HAT-BIRDS

"One London dealer in birds received, while the fashion was at its height, a single consignment of thirty-two thou-

sand dead humming-birds, and another received at one time thirty thousand aquatic birds and three thousand pairs of wrens."

Think what a price to pay,
Faces so bright and gay,
Just for a hat!

Flowers unvisited, mornings unsung,
Sea-Ranges bare of the wings that o'er swung,
Bared just for that!

Think of the others, too,
Others and mothers, too,
Bright eyes in hats!

Hear you no mother groans floating in air.
Hear you no little moan—birdling's despair
Somewhere—for that!

Oh, but the shame of it.
Oh, but the blame of it—
Price of a hat!

Just for a jauntiness, brightening the street,
This is your halo, O faces so sweet—
Death, and for that!

Faith and Works.

Open Letters.

THE BROCKVILLE BEAUTY AND THE WINTER ST. LAWRENCE.

Montreal, Oct. 17, 1887.

SIR,—I procured my original trees of the *Brockville Beauty*, twelve or fourteen years ago, from James Cumming, of Lyn, (near Brockville, Ont.) I regret that I cannot send you any sample of this apple. It is a September apple, and comes in directly between *Duchess* and *St. Lawrence*, hence I prize it as filling a gap. It is a very handsome apple, above medium in size, and the quality is better than *Duchess*. The tree appears to be quite hardy here.

I mail you to-day three samples of the *Winter St. Lawrence*. They are scarcely fair samples, as the fruit averages larger, but it was all I had left. I have no trouble to get \$3.50 per barrel for *Winter St. Lawrence*, and I have shipped several cases to England this season. Yours truly,

R. W. SHEPHERD, Jr.

FRUITS TESTED IN LAMBTON

Mandaumin, Oct. 17, 1887.

SIR,—The first plant I received from the Association was the *Eumelan Grape*, which was hardy, easily propagated, and produced plenty of grapes good to eat, but for three years in succession, beginning with 1882, the fruit mildewed and the leaves rusted and dropped prematurely, as did also those of the *Salem*: some of the plants nearly dying out. My other vines, of which I have a number of kinds, were not affected in that way. Last year both these kinds bore some good fruit, and this year there was a full crop of excellent fruit and no sign of mildew. The *Prentiss* had grown well, and had some beautiful light green fruit that tasted to me much like the *Delaware*, but was much more showy. The *Niagara* received this spring has grown 44 inches. The *Flemish Beauty* is healthy, and has been much slower to bear than Clapp's Favourite, Anjou,

and other kinds. I have *Souvenir de Congress*, that has borne four times as much in the third of the time. *The Ontario* and *Grimes Golden* are both what I call good apples. We have found *Saunders' Raspberry* much more prolific than the Cuthbert, and other famous kinds, and does not run all over the garden like them. We do not reckon the *Gregg* any improvement on Mammoth Cluster, but the reverse. We have not many kinds of strawberries, but the *Arnold* seems to me as good as the best we have, and just as good a cropper. The *Fay* is a good currant, and the bushes do not break down with storms like the Versailles.

Yours respectfully,
DAVID NISBET.

FRUITS AT THE NORTH.

Brantford, Ont., Nov. 3rd, 1887.

SIR,—I have lately returned from an extended trip to the south shore of Lake Superior, and I found the Duchess of Oldenburg thriving the best of any apple in that region. I gathered one from a tree grown by Mr. Gattis, an old friend, as fine as I ever saw, at Eagle River, Canton Mines, where you can see across the lake on a clear day to Thunder Bay on the north shore. Cherries also do well, although I was too late to see them. Mr. G. told me he had a good crop of pears also, but could not find the names. I also saw the same apples at different points. The Siberian crabs are the most grown. I saw the question, What are the best and most likely sorts to stand the climate of Manitoba?—a very pertinent question for that northern clime. I have no doubt but the kinds grown in northern Russia, or some of them, would stand the test. The black knot in my plums and cherries was very bad this season; have cut it all off, not knowing any other remedy. There

has been a complete absence of the black aphid so bad last year on black currant and cherry trees, and which killed one of the latter for me, a fine young tree, with cherries half grown. I discovered say forty borers in a large English cherry tree, which very nearly girdled it just below the surface. This is singular, as I never saw one before in a cherry tree, nor ever heard of it.

Yours truly, C. JARVIS.

THE VIRGINIA CREEPER

USEFUL AS WELL AS ORNAMENTAL.

*A Letter from Mr. Cockburn, since the
Gravenhurst Fire.*

Gravenhurst, Ont., Oct. 15, 1887.

DEAR SIR,—I write to compliment you on what I call your "Muskoka" number of the *Horticulturist*, and thank you for your kindly mention of my name. Of course I have lost every flower and plant I had gathered by fifteen years' very close collecting of what I thought the best to be had for money; all went to smoke in less than five minutes. It was simply indescribable. The Virginia Creeper on my old wood shed saved the office in which I am now writing. The thick mat of vine and foliage on the roof held the water, and prevented the roof from igniting. All my back volumes of the *Horticulturist* are burned, and I wish you would let me know how many years' bound volumes you have, so that I can send to you for them, as I do not like to be without them.

Yours respectfully,
J. P. COCKBURN.

GRIMES GOLDEN.

Trenton, Oct. 17, 1887.

SIR,—Respecting Grimes Golden as a dessert apple, it is one of the best trees, a good grower and hardy. The fruit is not sufficiently attractive for market, and often spots badly.

I am, very truly yours,
P. C. DEMPSEY.

Lindsay, Oct. 18, 1887.

SIR,—Grimes Golden Apple grew well with me for several years. It bore fruit early, and continued to produce a moderate crop every year. In addition to its good bearing qualities, I was much pleased with the excellent quality of its fruit, especially about Christmas, when it seemed to be at its best. The colors, too, at that time, is very beautiful.

Two years ago the tree commenced to fail. Last year it gave symptoms of early death. This year will be its last. But little fruit this year.

I have made enquiries of other growers in this vicinity. Their experience is about the same as mine. All agree that the tree is not suitable for this climate.

Yours very truly,
THOMAS BEALL.

FLOWERING OF TUBEROSE BULBS.

SIR,—I have noticed at different times in Horticultural and Agricultural publications, Florists Catalogues included, a statement concerning the flowering of tuberose, that after they have flowered once, the old bulb may be thrown away, as they will never flower again, but if desired the offshoots may be planted, and may make flowering bulbs in two or three years. Being a little skeptical about the matter, and wondering who had given them a trial, I purposed to test the question for myself. So last fall I had a few bulbs that flowered, and when taking them up I allowed a little piece of the old flower stem to remain attached to each bulb, as a mark to guard against mistake. I planted them in a bed by themselves, and labeled them. The old stem by this time was crowded to one side just like that of most lilies, or even that of an onion after going to seed, and a new centre is

formed. I removed the offshoots before planting, several of which flowered the present year. My old bulbs flowered beautifully, continuing in bloom for about six weeks, until the frost cut them down the other night. In fact, neither myself nor my friends could see any difference between the old bed and the new one, growing but a little way off. Such has been my experience with old tuberose bulbs, and I intend still further trying them another year.

SAMUEL HUNTER,
Hartly, D.C., U.S.A., Oct. 19, 1887.

Question Drawer.

This department is intended as an open one to every reader of the "Horticulturist" to send in either questions or answers. Often a reader will be able to answer a question which has been left unanswered, or only partially answered by us. For convenience of reference the questions are numbered, and any one replying or referring to any question will please mention the number of it.

80. The Quince.—*Can the Quince be successfully budded on apple seedlings?*

F. G. H.

We have never tried the experiment, and know of no one who has. The Quince is propagated so readily either by making cuttings this fall, and burying them until spring planting time, or by planting the suckers, that we see no reason for budding it upon the apple.

81. Gooseberries.—*What is the matter with my Gooseberries? The leaves on the tips of the branches are curled up into tight little bunches. It affects the Houghton most.*

A. J. WRIGHT,
Lakefield, Ont.

We cannot answer without seeing samples of the leaves. Probably an insect is at the bottom of the trouble. If you observe the same thing again, please enclose us some samples.

QUESTIONS ANSWERED BY MR. F. NASON.

Mrs. B., Stratford, asks how to treat

Wallflowers so that they will bloom this winter.

What is the Easter Lily? Is it the Calla?

In answer to the first I would say that wallflower plants grown from seed last spring, planted out during the summer and taken in in the fall, should flower without fail in February. The most simple treatment is all that is necessary to ensure flowers; they require no pinching back, in fact only to be left alone all summer, with the exception of giving water.

The Calla is not what is called the Easter Lily, but *Lilium Harrisii* and *Lilium Candidum* are both known by that name. The Calla is not, properly speaking, a lily at all.

Review.

We will gladly give our candid opinion of any books, magazines or catalogues received, especially if they are likely to interest or benefit Canadian fruit growers, but will not insert cut and dried reading notices in favor of any publication whatever.

REPORT OF THE OHIO STATE FORESTRY BUREAU 1886.

We have received through the politeness of Mr. Adolph Leue, Secretary to the Ohio State Forestry Bureau, the second Annual Report to the Governor of Ohio. It is an octavo volume of 222 pages treating largely of the forest trees growing in that State, shewing their distribution, usual size, and the purposes to which the wood is applied. It contains also many valuable papers relating to different matters pertaining to the subject, such as Profits of Forest Culture, Joint Stock Forestry Associations, Raising Forest Trees from Seeds, Groupings in Forest Plantations, Preservation of Woodlands, Roadside Planting, Arbor Day, Forests and Floods, The Relation of Forests to Agriculture, &c. &c.

It is a most valuable Report, full of

practical matter to us as well as to the citizens of the State of Ohio and Mr. Leue will please to accept our most sincere thanks for his kind remembrance.

From this report we learn that the State of Ohio has a State Forestry Bureau, composed of three commissioners, who hold office for six years, their terms so arranged that one expires every two years. This Bureau is charged with the duty, among others, of making an annual report to the Governor of the State, which shall contain the results of such investigations as they have made, and such other information as the Board may deem necessary for the promotion of forestry in the State. The Bureau has commenced an investigation into the subject of forest fires in the State, the results thereof are promised in the next report.

When will sufficient regard be had to the preservation of our forests by our legislators to take similar steps to preserve our valuable forests from destruction? Forest fires are of annual occurrence in Canada, laying waste large quantities of valuable timber land. It is high time energetic measures were taken to stay this loss.

TRANSACTIONS OF THE WISCONSIN STATE HORTICULTURAL SOCIETY includes addresses and papers presented, and proceedings at the Summer and Winter Meetings for year 1886-7. H. C. Adams, Madison, Wis., Secretary.

This Seventeenth Annual Report is a fine volume of 279 pages, bound in cloth, uniformly with its predecessors. It contains interesting papers and discussions upon such subjects as the following:—History of some of our Cultivated Fruits, the Maple Bark Louse, Ornamental Trees, Beautifying our Homes, Injurious Insects, Teaching Horticulture, Forestry, Life of Women on Farms, Handling and Marketing our Fruit, etc.

The Summer meeting was held at Janesville, where an interesting diversion was made in a visit to the fruit of farm of Mr. F. W. Loudon, the home of the Jessie Strawberry. Mr. Loudon gave an interesting account of his method of raising seedling strawberries, and reaffirmed his statement that the Jessie had yielded at the rate of four hundred bushels per acre.

The report contains a great deal that is attractive to the popular reader, as well as to the professional horticulturist, and the meetings appear to partake more of that character than do our own.

It is an unfortunate feature of the book that so many typographical errors should have crept into the text uncorrected.

BIENNIAL REPORT OF THE STATE BOARD OF HORTICULTURE of the State of California, for 1885 and 1886. B. M. Lelong, Secretary, 220 Sutter St., San Francisco.

A closely printed volume, bound in cloth, containing 583 pages. It is full of matter of the greatest interest to fruit growers on the Pacific coast, treating in a scientific as well as a practical manner of the cultivation, marketing, insect enemies, and diseases of the orange, fig, olive in particular, and also to some extent the peach, grape, pear and other fruits grown by us.

The benefits of organization are clearly shown in the successful efforts of the California Fruit Union in securing favorable contracts for special fruit trains to deliver their fruit in eastern cities. These trains run on passenger time, and the rate is \$300 per car.

WISCONSIN FARMERS INSTITUTES, 1887. Bulletin No. 1. W. H. Morrison, Supt., 11 Capitol, Madison, Wis. Cloth, 230 pages.

The wisdom and energy with which the Farmers' Institutes in the State of Wisconsin are conducted, is well evidenced by the production of such a

volume as this, containing the cream of the papers that were read at the meetings during winter of 1886-1887, with some of the discussions thereon. The culture of fruits is one of the topics of discussion, and some fourteen pages are given to it. All the discussions are purely of a scientific and practically useful character, and nothing in the way of political discussions are allowed, which we consider a commendable feature.

CIRCULAR AND PROGRAMME of the Joint Annual meeting of the Michigan Horticultural Society, and the Michigan Beekeepers' Association, at East Saginaw, December, 6, 7, 8, 9, and 10, 1887. C. W. Garfield, Grand Rapids, Mich., Sec. of the Michigan Horticultural Society.

PRIZE LIST MASSACHUSETTS HORTICULTURAL SOCIETY. Spring Flowering Bulbs and Forced Vegetables, Jan., Feb. and March 1886. Boston.

T. TAKENAKA & Co.'s PRICE LIST of the Japanese Vegetable, Flower, Fruit, and Tree Seeds, and Plants, Flowering Bulbs &c. The Mita Seed Raising establishment, No. 1 Shikokumachi, Mita, Tokio, Japan.

CIRCULAR WARFIELD No. 2 STRAWBERRY. B. C. Warfield, Sandoval. Illinois.

Humorous.

A gardener who recently received a sound rating from his master, a landowner of Normandy, turned indignantly upon him with the remark, "You need not treat me like a common fellow. I'd have you to know I am the nephew of Louvel, who assassinated the Duc de Berry."

The strawberry does its work on business principles. It sends out runners this year to work up business for next.—*Western Plowman*.

She: Have you seen the Chimpanzees up at the Park? *He*: No, are they in bloom now? *She*: Are what in bloom? *He*: Why the Jim Pansies.

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