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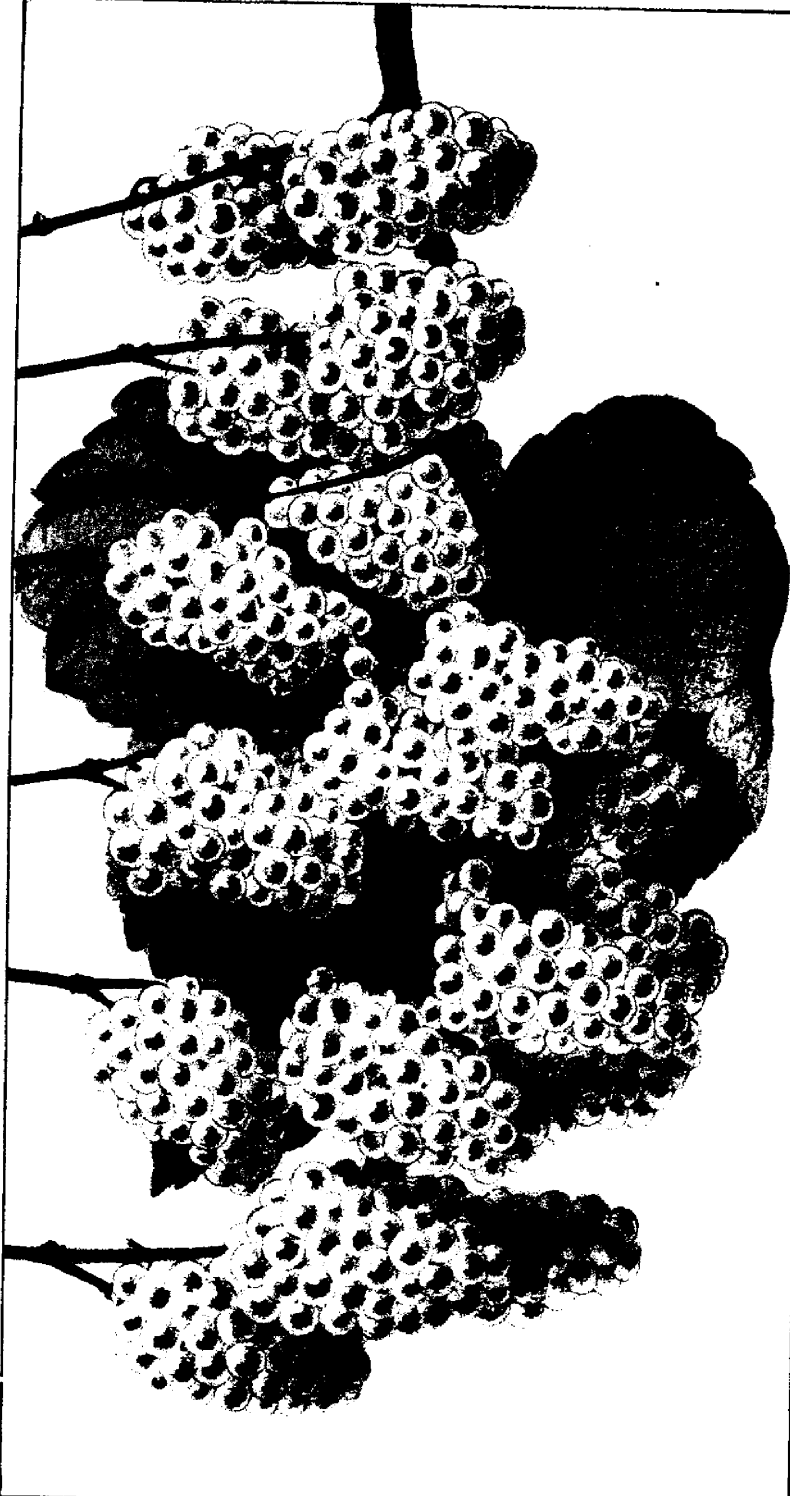
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U.S. & CANADIAN PATENT OFFICE

BRANCHES IN
WEIGHT 7 POUNDS
EXHIBITED AT MEETING OF AM. POM. SOC. Y.
ROCHESTER N. Y. SEPT.
1879.

THE PURCELLS

WHITE, BEST QUALITY, EARLY, GOOD GROWER, VERY PRODUCTIVE, HARDY & HEALTHY, SO EARLY AS
TESTED, BEST KEEPING GRAPE, KNOWN AS A MITTLE, SELLING WITH NO FOREIGN BLOOD, SELLS WHOLESOME IN NEW YORK AT 15¢ TO 18¢.

FROM A
PHOTOGRAPH BY G. W. GODFREY
ROCHESTER N. Y.

The Canadian Horticulturist.

VOL. III.]

OCTOBER, 1880.

[No. 10.

THE PRENTISS GRAPE.

Through the politeness of Mr. T. S. Hubbard, of Fredonia, N. Y., we are enabled to present to our readers a colored plate of this new white grape, a copy of which he has generously donated in this way to each of the members of our Association, and by which this number of the CANADIAN HORTICULTURIST is so handsomely embellished.

The history of this grape is simply this: Mr. J. W. Prentiss, of Pultney, Steuben County, N. Y., sowed a quantity of seed of the Isabella grape something over fifteen years ago, from which there sprang a large number of seedlings, of which this white grape was one. It would seem that either the results did not prove to be very satisfactory to Mr. Prentiss, or that in the multiplicity of matters requiring his attention he lost sight of his seedling grape vines and left them to shift for themselves, for we are informed that when he first noticed the fruit of this vine it was growing in the grass in a neglected condition. At length he was induced to take it up and plant it where he could give it better cultivation. Under improved treatment the vine improved, and manifested such good qualities, that, pleased with its fruitfulness and the flavor of the grape, he increased the number of the vines and planted them out for fruiting until he had some two hundred of them in bearing. About this time Mr. Hubbard, who is always on the lookout for new grapes of good quality, became aware of its existence, and pleased with what he heard and saw, made an arrangement with Mr. Prentiss to propagate and disseminate this grape, to which he gave, in honor of the raiser, the name of PRENTISS. Having grown a sufficient number of the vines, he now offers them to the public, and adopts this very generous method of calling the attention of the members of the Fruit Growers' Association of Ontario to his favorite.

We first saw this grape at the meeting of the American Pomological Society, held at Rochester, September, 1879, where Mr. Hubbard

exhibited the identical branch with its beautiful clusters of fruit, of which the colored plate is a very accurate representation. The appearance of the fruit and the pleasant flavor of the grapes, with which Mr. Hubbard gave us ample opportunity to become acquainted, made a very favorable impression. The berries are not as large as those of most of Rogers' Hybrids, though fully equal to those of the Concord. In color a yellowish green; in flavor very like the Rebecca, sweet, juicy and pleasant; free from what is termed "foxiness," that flavor so common in our hardy native grapes, and which is quite perceptible in the Concord.

Mr. Hubbard stated to the writer that the foliage was thick and healthy, and the vine a good grower and hardy, the buds having endured uninjured severe cold weather, with the thermometer twenty degrees below zero. The fault of the vine was that it was inclined to overbear, and that unless it was closely pruned the clusters should be thinned out by removing the excess. In speaking of its adaptation to a large area of country, he did not claim for it such extensive range as the Concord enjoyed, yet believed that in-as-much as it ripened its fruit at the same time as the Concord, it might be planted where the Concord and Delaware ripen, with confident expectation that it would succeed.

One of the excellencies claimed for this grape is its long keeping quality, it having been exhibited at the meeting of the Western New York Horticultural Society as late as the twenty-second of January in perfect condition. It is also said to bear shipping extremely well, and to bring in the markets of New York City fifteen cents per pound in large quantities, when the Concord was bringing only six cents and the Delaware nine. For these reasons, namely, its long keeping and good shipping qualities, combined with excellent flavor and attractive color, he is of the opinion that it will prove to be a very profitable market grape.

Doubtless many of our readers will be inclined to give this grape a trial. We have no doubt but that it can be grown with success, and that it will be found to ripen its fruit perfectly wherever the peach will thrive and fruit, and perhaps it will be found to do well in some parts of our Province where the climate is too severe for the peach to succeed. These things can only be ascertained by actual experiment, and we trust that such of the members of our association as plant this

new grape will favor our readers with the results of their experience in due time. We do not expect that it will be successfully grown in any locality where the Delaware does not ripen, but we do expect that wherever the Delaware matures its fruit perfectly there the Prentiss will succeed. Of this however there can be no question, that in all localities where it does do well it will be prized as a welcome addition to our list of table grapes.

JAMES DOUGALL'S SEEDLING PLUMS.

We have received from Mr. Dougall, of the Windsor Nurseries, two varieties of seedling plums of great excellence. He has not yet given them names, though in our estimation they well deserve to be named and cultivated. The variety marked "No. 5" is a large plum, roundish oval in form, stem slender, and about half an inch in length, inserted in a small cavity; color greenish yellow, covered with a white bloom. Flesh yellow, parting freely from the stone; sweet and juicy. Mr. Dougall states that the tree is a very strong grower, and very hardy. This is the first season of fruiting.

"No. 2" is about the same size as the one above described, and greatly resembles it in form and general appearance, having however a slight tinge of red on the sunny side, which is not to be found on any of the specimens of "No. 5" received by us. The color is yellow, dashed with stripes of light green, and covered with a white bloom. The flesh is yellow, parts freely from the stone, juicy, sweet and rich. This tree is also stated by Mr. Dougall to be a very strong grower and very hardy, and to have borne this year for the first time. Both of them are chance seedlings.

THE NIAGARA GRAPE.

The following, taken from the *Country Gentleman*, is from the pen of the horticultural Editor, Mr. J. J. Thomas, long known as a distinguished and able pomologist:—

A visit to the vineyards of H. C. Hoag, of Lockport, furnished us an opportunity for examining several hundred vines of the Niagara grape in bearing. As much interest has been felt by the grape-growing public as to the character and value of this new variety, we give briefly the result of our examination. One of its most striking characteristics is the great vigor of its growth. Shoots of the present season half an inch in diameter

and fifteen feet or more long were common. The great productiveness of the vine, and the size and beauty of the bunches and berries, were conspicuous qualities. The leaves are thick, distinctly lobed, and hang long on the vines. The bunches often measure six inches long; they are compact, uniform and handsome, and the berries are three-fourths of an inch in diameter, light greenish-yellow, the fruit ripening about as early as the Hartford, but continuing longer, and they are much superior in quality to the Concord. We had occasion to observe that different judges rated the quality variously, some making it equal to, or better than the Rebecca; but we could not place it so high. It appears to be intermediate between the Hartford and Concord on one hand, and the Croton and Duchess on the other. But the vigor, productiveness and healthiness of the vine, the size and beauty of the fruit, and the facility with which it may be shipped, present an unusual combination of valuable qualities for market. A part of Mr. Hoag's vines were set in 1879, and now, in their second season of growth, were bearing well. Those which were two years older had heavy crops. In the vineyard of B. W. Clark a one-year green-wood plant had been set in 1878, and bore 25 clusters the following year, weighing 19 lbs., and this year we found 57 bunches on it. One of the canes measured nine-sixteenths of an inch in diameter, and was 18 feet long. The Niagara vines are not offered for sale, but the grape belongs to a company, who plant it exclusively for vineyards, and have now twenty acres in different stages of growth. This variety was originated by C. L. Hoag from a cross of the Concord and Cassady, and it is wholly a native.

The Lady grape was in fine bearing at B. W. Clark's; is about as early as the Niagara, and was pronounced by all who tasted the two not quite equal in quality to the Niagara, which it resembles in the external appearance of the berries on smaller bunches.

MOORE'S EARLY.—Mr. Hoag has a large number of vines of Moore's Early, which we found much better in quality than the specimens we had seen at exhibitions. It is superior to the Hartford, and about ten days earlier. This year it ripened about the middle of August.

PLUM CROP AT OWEN SOUND.

Mr. Vice-President Roy writes:—

Our crop this year is simply enormous. No wonder that plum trees are short lived, they do so overbear on clay loam impregnated with lime. I have a fine lot of the Glass Seedling; will send some. I find a great many of all varieties rotting on the tree this year. McLaughlin is laden to the ground. I am told by dealers that upwards of two thousand bushels sometimes arrive at Owen Sound in one day. Our market is Chicago, by boat. Apple crop large. Pears far below an average. Grapes are a very large crop. Raspberries were very fine. Strawberries rather poor. All this northern country has been favored with large crops. Fall wheat all that could be desired in quantity and quality. I was at Toronto lately, and found the crops from Owen Sound to Orangeville better than I ever saw them before.

LAYERING GRAPE VINES.

BY P. E. BUCKE, OTTAWA.

In the present age, when the extension of grape culture is all the rage, and many new varieties at high prices are being introduced, it will be interesting to some of the readers of the HORTICULTURIST to know the best and most rapid method of propagating the vine. It may be thought out of season, to enter upon this subject at this time of the year, but as many prune their vines in the autumn, and all ought to do so, and as my method of proceeding greatly rests on the growing and pruning of the vine, it has occurred to me that the present season would be as suitable as any for my remarks.

In the first place, then, the pruning of the present year should be so conducted that long stout canes, originating as near the base of the parent plant as possible, should be selected. The side shoots must be removed during the summer as they appear, and the canes allowed to run as long as they will. From a strong, healthy vine in good soil, these shoots may frequently be had from twelve to fifteen feet long, and sometimes much longer.

In the spring when the vines are uncovered,—as they are here towards the end of April, or at such a time in the west before the vine begins to start in the spring—a trench should be opened about four inches deep in the shape of a V, the soil where the layers are to be put down having previously been made loose, rich and pliable. Into this trench the vine should be pegged down, but *no earth put in until the vine has made about a foot of growth*, which it will do at each of the eyes, and all these shoots will point straight upwards. At this stage of the proceeding the earth must be carefully replaced in the trench. The hand is perhaps the best to do this operation, as the shoots are very tender at the base. In the autumn or next spring the vine may be cut between the plants with a sharp spade or knife, and the layers should be removed from the soil very carefully with a digging fork, so that the small tender roots may not be stripped or peeled; these plants may then be heeled in for future use. Layers made in this way will bear a full crop during the year they are put down, and if the soil is good in which they are propagated, and they are carefully handled when taken up in the autumn, and heeled in during the winter, so that any fractures in the roots may get a new bark over them, these

layers will produce a small crop during the first season of planting. I have vines propagated in this way from the Burnet during 1879, from which I had to remove a large number of branches this spring to keep them from over-bearing. No layer-cut, wiring, or any other process is required; the main feature is not to cover the layer until the buds have well started some inches above the ground.

THE ENGLISH CARROT, (*Daucus Carota.*)

BY J. FLETCHER, OTTAWA.

Referring to Mr. Claypole's most interesting note on the English Carrot in the September HORTICULTURIST, I may state that this plant is found as an "escape from cultivation" in several localities round this city; as to its being a "weed" depends upon the meaning attached to that word. The whole of this question would be a most interesting one for the botanical society advertised by the Association last year, and which I am in hopes may still be formed in connection with it. There is no doubt that a knowledge of botany would be of great service to horticulturists. They can do without it, it is true, by profiting by the botanical researches of others, but why not investigate and discover for themselves?

There are perhaps no more striking examples of the effects of cultivation of wild plants than are presented by the Carrot and Parsnip. Different as the wild and cultivated forms of both are, they have been proved by experiment to be identical. From the wild, woody root of two or three inches in length and half an inch in diameter, can be produced by the fairy cultivator the fleshy and succulent vegetables we know so well.

I am afraid the Carrot will not prove such an accomodating visitor as Mr. Claypole states the Canadian Thistle (*Carduus arvensis*,) has been in his district. The curious birds'-nest shaped umbels of seeds of the Carrot certainly ripen freely here, and the individual seeds, although not provided with wings of down, as those of the thistle are, have yet received from Dame Nature ample means of dissemination in the shape of a miniature armament of bristles and hooks, by which they attach themselves to cattle and other objects coming in contact with them, and are thus carried in all directions.

The Carrot, (an anglicised form of the specific scientific name, *Carota*, which has its origin in the Celtic word *car*, meaning red, from the color of the root,) was described as being cultivated for its esculent root by Dioscorides, who is supposed to have lived in the time of the Roman Emperor Nero, and since his time it has been in constant use by various nations. But it was not until the reign of Queen Elizabeth that it was generally cultivated in England, when it was introduced by the Flemings into Kent, whence it has gradually spread over the whole kingdom, and is now very common and generally distributed, springing up on dry banks, ridges of fields and in pastures.

Carrots contain a large amount of water, but their most important dietic substance is sugar. They have also small quantities of starch and albumen. In some parts of Europe a spirit is distilled from the roots, the sugar they contain being easily convertible into alcohol. About 160 pounds of crushed roots yield one gallon of spirit. In Germany a substitute for coffee is made by chopping the roots into small pieces and roasting them. Horses are very fond of Carrots, and when mixed with oats they form very good food for them.

Pretty objects for winter decoration may be made by cutting off the crown of a Carrot and placing it in a saucer of water with moss round it. The green feathery leaves soon sprout out, and the whole has the appearance of a lovely and delicate fern.

HORTICULTURAL GOSSIP. XI.

BY L. WOOLVERTON, GRIMSBY.

PEACHES IN 1880.—This season peach growers have had their hands full—of peaches,—not of money. The crop has been unprecedented in the history of Canadian peach culture, notwithstanding that a good crop preceded it in 1879. The heavy crop is not by any means a misfortune, though everybody says it is. Peaches are being introduced to country towns, where they were before unknown. Facilities are being gained by shippers that would not have been thought of in a season of light crops. The Express Company, slow to move in the matter of accommodation to shippers, has been shown its want of proper accomodation. Several times this season they were unable to receive one half the peaches waiting shipment. They encourage the expectation of shelved cars to central points in future.

PACKAGES.—The old fashioned crate has been entirely thrown aside as a package for peaches. Baskets can now be had so cheap that there is no object in using crates in point of economy; and the fruit commands better prices in baskets set off with colored gauze. Indeed, many fruits that were once put up invariably in barrels are now being sold in baskets, as for instance, pears, choice apples and select onions. During the past season select Red Astrachan Apples have sold at sixty cents per basket.

An excellent crate basket for berries has been invented in Grimsby. It is a handle basket, holding twenty-four baskets, in three layers of eight each, with the usual slats dividing them, and a cover. The basket will cost about ten or twelve cents, and may be sold with the fruit; the express charges on the twenty-four quart wooden crate being about as much as the price of the basket. The advantage is that the crate-basket, besides being light to handle, can be reshipped from central towns to points where wooden crates could not be sent for fear of loss or long delayed return.

DESIRABLE VARIETIES OF PEACHES.

The AMSDEN'S JUNE has not proved itself to be a desirable variety, being no earlier than High's Early Canada and not so large.

The ALEXANDER and EARLY CANADA have both been grown in large quantities in the Grimsby section this season, and still the matter of distinction is difficult to solve. One grower says he sees the chief difference in the period of ripening. The Early Canada comes in a little the soonest, and ripens more unevenly than the Alexander, so that it sometimes hangs on the trees a week longer than the latter. This peach has on the whole proved itself well worthy of general cultivation, and may be called the peach of its season. Though on account of the very heavy crop it was this season smaller than usual, yet it was plump and round and finely colored. No peach during the whole season has been more remunerative.

The RIVER'S SEEDLINGS do not all come up to expectation, though it is unfair to judge of them from such an excellent season of superabundance.

The BEATRICE was very small and much too soft for shipping well. The EARLY LOUISE was also small and lacking in flavor.

The EARLY RIVERS was most satisfactory. Notwithstanding the prodigious quantity of fruit with which it was laden down to the ground, it reached a fine size, and a great many specimens attained a reddish cheek, so that with careful picking and shipping it brought the highest price.

The HALF'S EARLY has never done better in this section. It has certainly redeemed its character. No peach has ripened better, and no peach displayed such beautiful colors or reached a fairer size, so that altogether it has proved itself this season a most satisfactory and profitable peach.

The EARLY PURPLE has not done itself justice. It had no color, and was the smallest of the small, so that we were glad to see the last of it.

The market has been glutted with EARLY CRAWFORDS, and the price has been weighed down beyond all precedent. Though it fully deserves to be called "the peach of the season," yet it is easy to have too much of a good thing, at least in fruit culture, and this peach poured into the markets faster than it could be distributed. No sooner were they over than prices took an upward tendency.

The grower now-a-days is fortunate who has a good many OLD MIXON and LATE CRAWFORDS. The latter is accounted a very poor bearer, but this season it has not deserved such opprobrium, for it has been laden to the ground. The Old Mixon is a peach too much neglected. It will hang until the Early Crawford are done, and then come in most opportunely. Those who know it esteem its quality as superior to the Early Crawford. It is a noble old peach, and has not yet found its peer in the peach family.

The LEMON CLING is this year more profitable than the Early Crawford, though so much inferior. The latter have been sold in some orchards here as low as twenty-five cents a basket, while the former is worth double that price, because it has scarce any competition in the market.

The SMOCK completes our list. The trees are as full as it is possible for trees to be, and last year they were the same. The fruit has a beautiful golden red color, and though not yet harvested, (Sept. 18,) it promises as well as any of its predecessors.

OUR NATIVE WOODS.

We thank the *Iowa College Quarterly*, issued by the Agricultural College, for calling attention to the absurd fashion which prevails so largely at the present time of finishing the interior of our dwellings with pine, and then painting it with imitations of our natural woods, when the real article can be had with a delicate graining far more beautiful and enduring than the best work of the painter's brush. We give the article in full, and trust that the readers of the CANADIAN HORTICULTURIST will be benefitted by the perusal.

It is a remarkable fact that, while in many parts of the west the timber belts that are close at hand contain an abundant supply of excellent building material, nearly all our buildings, public and private, are furnished from basement to ridgepole with an inferior wood brought from a distance. For outside work in wooden structures, however, this wood is the best that the country affords. Pine shingles, when properly made and laid, and pine weather-boards well painted, make most effective coverings for roof and wall. But when it comes to the inside finishing, it is certain that the builder would profit by a change of material. Three things are now exclusively used for inside work, namely, pine, paint and plaster. All three are objectionable on the score both of economy and good taste. For stucco, (plaster of paris,) is superior to common mortar; polish is better than paint; and the native woods are certainly superior to pine.

It is true that pine, being a soft wood, is easily worked, and that consequently pine window and door casings, baseboards, etc., can be got out and put up with less expense than those of hard wood. But it is the softness of pine that renders it unfit for inside finishing, since it is so easily defaced by the wear and tear to which it is subjected in living rooms. Moreover, pine casings, doors, etc., must be covered with paint by reason of the fact that when left bare or finished with oil the wood grows dark and dingy. Not so with the hard woods that grow on the borders of our streams. Nearly all of them will take a polish, which, when finished with oil or covered with varnish, presents a bright and beautiful surface that will last for centuries. A sugar maple board, for instance, will, when well seasoned and well worked, show a white, smooth, hard finish, with fine and delicate graining. Oak, (both red and white,) furnishes a surface that no pigment can equal; and the grain of the latter is, as everybody knows, especially rich and varied. So too, white ash, when reduced to smoothness, displays in its graining a variety of patterns which are far more attractive than any color whatever laid on with the brush. Now these bright, close grained woods, which are so imperishable and so susceptible of a beautiful polish, can be got in Iowa at a lower rate per thousand than pine of a like grade. Why then should we go on using a defective wood for inside work, and covering it with spurious imitations of the natural grains, when the genuine originals, thus coarsely imitated, are within the reach of all? The intrinsic value of our native woods for floors may be urged with equal force. It is

true that if the floor is to be perpetually hidden by that uncleanly article, the carpet, then third-class pine is as good as any other lumber; but if a better taste should ever lead us to discard this dust gathering nuisance, then the hard woods will come in play. For the best and most desirable floors, whether plain or ornamental, are made in this country of such woods as maple and oak.

MORE TREES AND SHELTER BELTS.

Few people realize the enormous draft made upon the forests of our country. Where does all the timber come from? From remote timber lands which are growing further off each year. The price of lumber will get higher at a rapid rate, as this vast destruction goes on. What are farmers doing to counteract this depletion, and to provide for the future? Nothing, except in some of the treeless States, where here and there some efforts have been made to provide wind-breaks, and to plant out groves. It must be that farmers do not like long investments, and so they do not lay the foundation for future fuel and building material. When we know what the future will require, it is wise economy to provide for it. Ten years hence not less than 20,000,000 railroad ties alone will be needed annually. Fence posts by the million will be wanted, while the immense consumption of lumber of all kinds will be largely increased. The farmer should provide for this certain demand of the future. When once planted, started, unlike most other things, forest trees take care of themselves. Here is an investment with a sure profit. There are millions of acres of rough land, hillsides and untillible spots, which could be clothed with forest trees growing into money. This is not an ardent tree planter's theory, but a truth which has been often demonstrated.

Locust trees planted at Kirby Homestead fifteen years ago on a steep hillside have furnished ten posts each. In the Legislature of New York State a bill has been introduced to make it obligatory upon every county to spend \$500 yearly in encouraging tree planting. Farmers should do this work for future profit, and there ought to be a universal and systematic interest in it. Seedling forest trees can be had at so cheap a rate that the first cost is but a trifle. They are furnished at a cent apiece, and sent by mail. In twenty years the investment of a cent would be three or five hundred times greater. Unsightly places may be made attractive, and shelter-belts be provided, which will add largely to the value of other lands. Early Spring, before any new growth has begun, is the best time to transplant evergreens, but it may be done successfully in July and August, if plenty of water is used to wet the ground and the roots, and if the roots are not exposed to the hot sun. Water enough should be thrown into the hole where the tree is set to saturate the ground thoroughly, and dry earth be put on top. It would be better if some kind of mulch—leaves or straw—be placed on the surface. All kinds of trees delight in mellow ground, and are far more likely to live when the land is in this condition. Shelter belts may be an idea in advance of Eastern notions, but it is one which should be put in practice without delay.--*N. Y. Tribune.*

THE CHINESE SAND PEAR NOT BLIGHT PROOF.

We copy from one of our exchanges the following, which is credited to P. T. Quinn in "American Garden." There is one element wanting in this experiment to settle the question of the liability of the Chinese Sand Pear to blight, and that is this: Mr. Quinn seems to say that he grafted on healthy pear trees the Japan Pear, seedling of the Chinese Sand Pear. Now may it not be that the Japan Pear thus grafted on the common pear becomes by this union subject to blight, when if grown on its own stock it would be exempt? However the trees that are being offered for sale as blight proof because they are hybrids between the Chinese Sand and the common pear, are doubtless worked upon the common pear, and all claim to immunity from blight seems to be proven to be unfounded by the experience of Mr. Quinn. Have any of our readers planted any of these hybrid sand pear trees? If so, have they blighted? True, the fact that they have not yet blighted does not prove that they will not blight, and considerable time will be needed to ascertain, by introducing them into different sections of the country, and on all varieties of soil, whether they will be any less subject to it than our common pear trees. If they should prove to be less subject it will be some gain, provided the fruit is well flavored.

Some ten or twelve years ago I planted and grafted on healthy trees the Japan pears, seedlings of the Chinese Sand. These sorts have all the traits of their parent, in vigor of growth, rank foliage, which for brilliancy of color in the fall equals the red flowing maple, and besides being prolific bearers. The fruit seemed proof against insects, while the growth and habits of the trees seemed to defy attack from any source. My plan was to propagate these varieties and graft the slower growing sorts on them, and in this way get a more vigorous growth of wood, and possibly larger fruit, of sorts like the Seckel.

Until last year I had no reason to doubt that those Japan pears were blight proof. But now I have good reason to think differently. The fire blight struck these trees early last summer, and what is unusual it destroyed every branch and twig of several large trees, not leaving me a single sprig of wood to propagate from. This wholesale destruction of these kinds is more curious because we had only one more instance in the orchard during the year, and that was a couple of large branches of a Swan's Orange tree in a distant part of the orchard. This experience settles the question in my own mind that it is folly to assert that the Chinese Sand, or seedlings from it, are blight proof, for the instance which I have stated above prove to be the contrary.

THE EARLY GRAPES OF 1880.

Not slowly, indeed, yet surely, is there progress being made in the number of varieties and the quality of our early ripening grapes. It is but a short time ago that we had no early sort. The Isabella and Catawba were all the sorts we had, the latter rarely coming to perfection, save in the most favored locations, on the north shore of Lake Erie, or on some of the islands that have now become famous for their fine grapes; the former hardly coming to perfection beyond the limits of successful peach culture. Now we have many sorts of varied flavors and qualities, extending their period of ripening from the latter part of August until the coming of winter.

For some time the Hartford Prolific was our earliest grape that could make any pretension to good quality. Blood's Black is early indeed, but in point of quality it is simply awful. The King became black early, and so did the Sherman look as though it were ripe, but both of them retained such a keen acidity that no one without making a wry face could eat them before the advent of autumn frosts, which seemed to be necessary to the amelioration of their superabundance of tartaric acid.

The advent of the Eumelan revived the hope of an early grape of better quality, and such was the promise of value, that the Fruit Growers' Association imported a quantity of the vines, and presented one to each member for trial. Beside this there was the Israella, which it was thought would take the place of the Hartford Prolific. The Perkins came in for a share of attention, and the Cassady and the Telegraph. Rogers' Hybrids marked a new era, and of these the Massasoit by its early ripening showed that progress in that direction had not ceased. Then came the Champion, which by the great hardiness and vigor of the vine and early ripening of the fruit, extended the limit of grape culture far to the northward of previous possibility.

And here we seem at present to be standing, having no variety that ripens any earlier than the Champion, none that possesses more vigor of constitution, more able to resist cold, and to ripen its fruit in the short hot weather of northern summers, but waiting and hoping some other will appear having all these very desirable characteristics, and yet better

in quality, in which direction there is, in the writer's opinion, considerable room for improvement. Since the dissemination of the Champion, other varieties have appeared which are certainly better in quality, but whether they will be found to possess as hardy and vigorous a constitution, and consequently can be successfully grown as far to the north, can only be known after some years of trial. The Champion was perhaps the first to ripen this season, but the Moore's Early came so close upon its heels that it was hard to say which of them should be called the earliest. Moore's Early is as good in quality as the Concord, and might be readily mistaken for that variety, both in the flavor and appearance of its fruit. The vine is even more vigorous, and ripens its wood much earlier than the Concord, thereby giving good promise of being able to endure the climate of our northern counties. Both of these varieties ripened before the Hartford Prolific, and both possess much greater power of resisting the effects of severe cold. In fact the northern limit of the profitable culture of the Hartford Prolific is soon reached.

Within a very few years another grape has appeared, which ripens at the same time with the Hartford Prolific and just after Moore's Early and Champion; it is called the Niagara. This is a white grape, and gives promise of being one of the most valuable sorts we yet have. The quality of the fruit is superior to that of either the Champion, Moore's Early or Hartford Prolific. The color of the fruit is very attractive, having that beautiful semi-transparent appearance which is found in our light colored hot-house grapes. The bunches are large and usually well shouldered, berries large, and the vine exceedingly prolific. These four varieties constitute the early grapes of to-day; each has its own qualities and its own excellencies. The Champion is grown profitably as far north as Montreal, where the Hartford Prolific would surely fail to endure the winter. Moore's Early and Niagara are too new to admit of confident assertions of their ability to rival the Champion in their power to endure the climate of Quebec, or of our more northern sections, but they are both of them so far superior to it in excellence of flavor, size of bunch and beauty of appearance that they deserve to be planted and tried in every section of the Province. There is great reason to believe, judging from the appearance of the vines, that they will prove valuable in a great part of Canada.

THE BENEFITS DERIVED FROM THE USE OF ARSENIC WATER.

Two or three weeks since we spent a few hours in the immense orchards of A. R. Whitney, of Lee County, Illinois. He has recently had his orchards scourged with the canker worm. After trying various remedies the pests were wholly eradicated by sprinkling the foliage, by means of a force pump, with water poisoned with London purple. At once on entering the grounds, the unusual health, size, and perfection of each individual leaf attracted our attention. We had recently been over several large orchards in DuPage County, and in the Fox River section, where a perfect leaf was difficult to find. Insect enemies during the past dry season have increased to such extent as to seriously injure the vitality of the trees by injury to the foliage. While Mr. Whitney had aimed mainly to destroy the canker worms, he had evidently about eradicated all the pests injurious to the leaf. This is a subject worthy the attention of our orchardists. Only a day or two prior to this visit to the orchard of Mr. W., at the nurserymen's convention in Chicago, Mr. Woodward, of New York, made the statement that some of his neighbors had destroyed the codling moth by sprinkling the trees with a solution of London Purple at the time when the apples were just forming, and while the embryo fruit was yet in an upright position. It is true that this statement was received by experienced members with many grains of allowance, yet we have since learned that all orchards treated at this time with the poison were not only ridded of the codling moth, but of noxious insects preying on the foliage. We predict that the use of arsenic water and London Purple will become more general for fighting our insect foes in the very near future in agriculture and all divisions of horticulture.

—*Iowa College Quarterly.*

PAMPAS GRASS.

BY JOHN McAINSH, ST. MARYS.

This is a half-hardy plant, not being able unprotected to withstand the severity of our Canadian winters. I have successfully wintered it over the past two winters by covering it with a box one foot high without either top or bottom. I fill the inside with pea straw, and bank up the outside with earth.

This is the finest ornamental grass with which I am acquainted. In the autumn it sends up strong stems eight or ten feet high, on the top of which are borne beautiful plumes of feathery tassels, which when waving in the breeze have a grand effect. After the plumes are cut they can be preserved for a considerable length of time. It is propagated by seed or by division of the roots.

CORRESPONDENCE.

D. B. HOOVER'S APPLE.

Mr. Hoover writes us that he has received a letter from the Canadian nurserymen to whom he wrote stating the treatment he had received at the hands of an agent supposing him to be in their employ, to the effect that they had no agent acting for them at that time. This much Mr. Hoover thinks is due to the Canadian nurserymen.

A VETERAN MEMBER.

Mr. Geo. Winslow, Millbrook, writes that a man who cannot cross the floor without the assistance of a stick ought to give up gardening, but nevertheless he sends his subscription for this year, saying:—

I think your Association has done good to the country, and I hope it may get on well; there is much good information in its publications. I expect the Burnet Grape and Clapp's Favorite Pear to fruit this year. I have at present three kinds of raspberry; the Diadem is much the same as one of those I had. The Isabella Grape does not ripen every year. I cannot get what I call good gooseberries; they are far inferior to those I had in poor Ireland. I got a Yew tree from there last year; it looks delicate, the winter has been too severe for it. I think the Crofton Apple, so well known in the north of Ireland, would do well here; it is a hardy winter fruit.

WHEELING, West Virginia, Sept. 23rd, 1880.

Dear Sir:—With the greatest pleasure I have seen in No. 7, Vol. III of the CANADIAN HORTICULTURIST, that an interest for a flora of Canada has been awakened amongst the members of the Fruit Growers' Association of Ontario. During my stay of five years in Canada I very often have felt the need of such a work. A few years ago I commenced to write a flora of the Province of Ontario, and to illustrate it by drawings made by myself according to nature. It is indeed a difficult enterprise, but having formed the plan once it should not be laid aside unfulfilled. In my hours of leisure I have completed nearly 200 plates, and hope to bring the whole work to an end with the spring of 1881. If an occasion should offer I would not fail to lay before you for examination that part which is done, in order to have your judgment. Having lost different species of the *Cyperaceæ* and *Grammineda*. I wish to ask you to publish this in your next number, and to request at the same time those members who have collected *Cyper. Gram.* to send me their address, so that I can enter into correspondence with them.

Hoping my petition will be granted,

I remain, very respectfully, your obedient servant,

REV. A. SCHAFFRANEK.

Phil. D., and President of the Natural History Society of West Virginia,
Box 424, Wheeling, W. Virginia.