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THE
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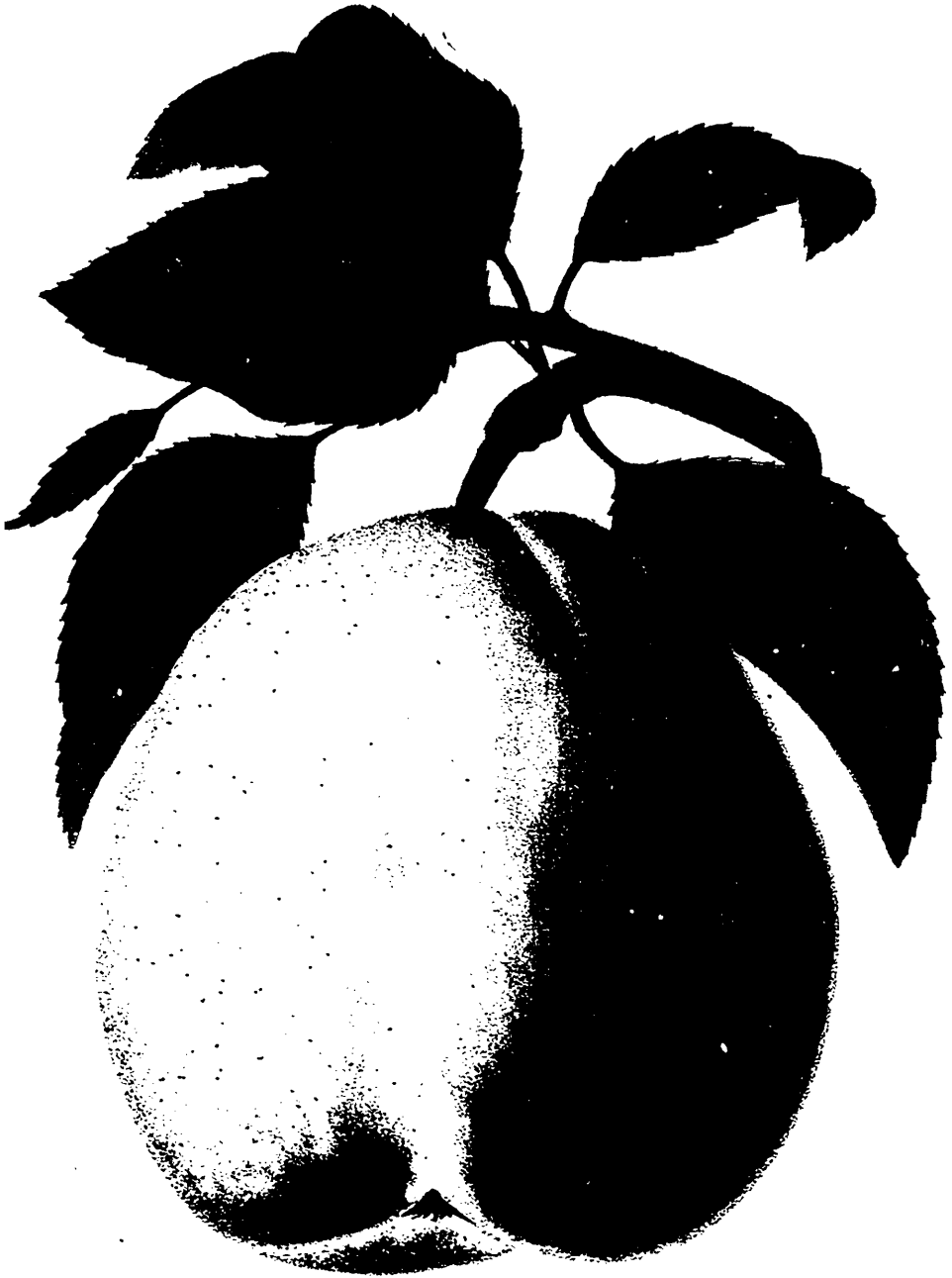
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IDAHO.

FOR CANADIAN HORTICULTURIST.

THE
Canadian Horticulturist

VOL. XII.

JANUARY, 1889.

NO. I.

For THE CANADIAN HORTICULTURIST.

== 1889 ==

ANOTHER year! ah me!
Has cycled into Eternity.
Anon, as we its requiem sing,
We hear the shout, "God bless the King,"
The new born infant, Eighty-nine—
The old hath fled in the mist of time.

Now let us happy be, in the dear old way,
Revelling in affection's voice to-day;
Oblivious of our heritage of sorrow,
Leave life's dark combat till to-morrow,
Give withering care into the hands divine
(A happy, trusting heart, has fadeless prime.)

Tho' snowflakes gather high and cold,
We'll joyous be, as in days of old.
While seated round our well piled fire,
Let faith see our Eternal Sire,
As gushing up from Memory's spring,
We trace His bounteous hand, and softly sing

The oft-repeated, oft-forgotten chant,
"The Lord's my Shepherd, I shall not want."
Let sunshine fill our souls anew,
And bid each thankless sigh adieu,
Pray God for peace of mind and spirit clear,
And with that boon, He'll grant a smiling year.

GRANDMA GOWAN.

MONT ROYAL VALE, *December*, 1888.

THE IDAHO PEAR.

DURING the past year we have seen a great many notices of this pear. Most of our horticultural exchanges have given it great prominence, and many of them engravings of it; and since there is such a universal chorus of laudation from all sides, our readers will soon be accusing us of ignorance if we do not join. We have, therefore, had a colored plate of

illustrations; and it is further described as follows:—"Cavity very irregular; basin shallow and plaited; calyx very small and closed; core very small; skin golden yellow, with many russety dots; flesh melting, juicy, with a sprightly, vinous, delicious flavor; season, September and October." The season of ripening is about a month later than the Bartlett; it is a much better keeper.

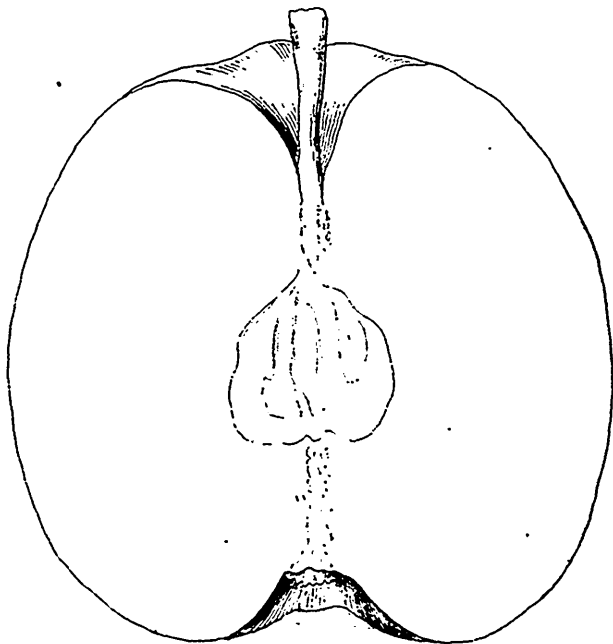


FIG. 1.—THE IDAHO PEAR. CROSS SECTION.

the Idaho pear printed for our January number.

The Idaho pear originated in the northern part of the Territory of Idaho, whence its name. It was first noticed as the Mulkey pear, after a Mrs. Mulkey, of Lewiston, to whom belongs the credit of raising it from a seed sown some twenty years ago. The general form and coloring of the fruit is well shown in our

In fig. 1. we show an outline of a cross section of the Idaho pear, showing the small size of the core, which is almost seedless. Although the exterior is somewhat coarse in appearance, like the Duchess, the flesh is fine, smooth, and free from granulations.

The tree is a good grower, we are told, but inclined to overbear; yet even without thinning, the pears grow to average

from ten to fifteen ounces in weight, and specimens have been grown weighing over twenty ounces. It has not yet been fruited outside of Idaho, and therefore

its suitability for Canada is only conjectural. We may, however, safely infer that it is hardy when we consider that Lewiston is in latitude 46° north.

DUCHESSÉ D'ANGOULÈME.

THIS magnificent French pear is too well known among our leading fruit growers to need any introduction here. For years past

the best condition, both as to appearance and quality. Some of us attempted one season to keep the Duchesse for marketing at Christmas



FIG. 2.—A BUSH PEAR TREE (DUCHESSÉ D'ANGOULEME).

this and the Louise Bonne de Jersey have been planted as the two leading varieties of fall pears, and have been crowded into our city markets in October and November. One thing at least has been learned of late concerning the marketing of fruit, viz., that, as a rule, the best time for the sale of fruit is just when it is in

time; it was beyond their proper season a long way, and though with care they were preserved fairly well, the demand was scarcely as good as in October. Generally speaking, this pear should be marketed before the middle of November if in baskets, and in October if in barrels.

Pears weigh one-third heavier than apples for the same bulk, and therefore, especially for such large kinds as the Duchesse, the half-barrel or keg is much preferable to the barrel; it is so much more easily handled, and will command a better price in proportion.

Grown on standards the Duchesse is somewhat uncertain, both in size and quality; but grown on dwarf trees it is most delicious and of the best quality, and certainly an honor to the Duchesse d'Angoulême of France, even if it was a seedling found in a hedge near Angers. Probably no pear will better respond to liberal culture than it does; and a liberal cutting back of a portion of the new growth often results in the production of samples over one pound in weight. Indeed, we have found that in the case of dwarf trees of some age, which were bearing small and knotty fruit, a wholesale cutting

back of the old wood was most beneficial, resulting in a vigorous young growth, and consequently in fruit of much improved form.

We reproduce from *The Garden* an engraving of a new style of training dwarf pear trees, which is now being adopted in England with considerable success. It is bush form of training, the trees branching at the ground and not being allowed to form any trunk. In this way they may be planted at a distance of six feet apart, and kept so low that no ladders are required in gathering the fruit. Trees thus grown have produced a prodigious crop in the Royal Horticultural Society's garden at Chiswick, near London. Another advantage of this mode of culture was observed in this, that very little damage was done these trees by storms, while standards were half-stripped of their fruit by high winds.

SOME PROMINENT CANADIAN HORTICULTURISTS.—VI.

REV. ROBERT BURNET.

THOSE of us who were in attendance at the meetings of our Association during the years from 1869 to 1879 will recognise in the accompanying steel engraving the genial face of one who, during those years, filled the presidential chair with distinguished ability, characterized by geniality of manner; his warm greetings were always appreciated by us as he welcomed us to the meetings; and his vivacity gave great liveliness to the discussions, while his manner of eliciting information from each one present was eminently successful.

Regarding the life of the Rev. Robert Burnet, we have only a few bare facts at our command from which to compile this sketch. His father, James Burnet, and his progenitors for five generations, were natives of Ladykirk, Berwickshire, Scotland; he was a lineal descendant of the Burnet family, who, for five hundred years, were millers in Neustead Mill, and afterwards in Tweed Mill, as published by Dr. Chalmers in a volume of his "Miscellany." His mother was Elizabeth Blair, daughter of David Blair, once tacksman of the Home Farm, Floors Castle, Roxburghshire.



Robert Burnet

Robert was licensed to preach the Gospel, and ordained by the Presbytery of Fordown, and immediately afterwards volunteered as a missionary to Upper Canada, as Ontario was then called; although strongly urged by the Rev. Dr. McFarlane, then Moderator of the General Assembly, to go to India as headmaster of the Assembly's school there, and to act as chaplain of the forces.

For twenty-six years the Rev. R. Burnet was minister of St. Andrew's Church, Hamilton, during which time he took a special interest in horticultural and agricultural pursuits. In 1869 he was elected President of the Fruit Growers' Association of Ontario at the annual meeting held in London, Ont., on the 22nd September, in which office he succeeded W. H. Mills, Esq., of Hamilton. His able conduct of the

meetings during his ten years of office have already been alluded to, and his valuable annual addresses form an important feature in the reports of the Government of those years.

In 1880 Mr. Burnet removed to Pictou, Nova Scotia, where he ministered for four years in St. Andrew's Church, and then returned to Ontario.

In addition to the above we may remark that the subject of our sketch was a life member of the American Pomological Society, of which he was for a time one of the Vice-Presidents; and honorary member of the Massachusetts Horticultural Society.

From his quick perceptions in the identification of fruits, and of their comparative excellences, he is frequently employed as judge in the horticultural department at fairs, and these duties he creditably discharges.

A FEW HINTS ON LANDSCAPE GARDENING.

WE make no attempt at the treatment of this interesting subject from a professional standpoint. We only propose giving, in a simple manner, a few important points concerning that department of landscape gardening which deals with the laying out of lawns and of ornamental grounds, hoping our remarks may be useful to those of our readers who may be planning improvements in the surroundings of their homes, to be carried out when spring again comes round.

We want to cultivate a taste for the beautiful, in the arrangement of the grounds around our country homes; a taste that is sadly deficient in many quarters, as is evidenced by the untidy and unkempt appearance of many of the door-

yards belonging even to some of our prosperous farmers.

Generally speaking, we find two sacred enclosures in front of the house, each surrounded by a picket fence, one of which is the door-yard and the other the garden; and, on either side of the house, barns, corn-cribs, pig-pens, etc., reign supreme. The door-yard, as it is indeed aptly called, is sometimes planted regularly, like an orchard, with maples or spruces, and has a front walk directly across the middle, just wherever the course of human feet have worn it clear of grass.

What is to be done in such a case? Why, begin *de novo*, to be sure; tear away these ugly division fences; group all out-houses as much as possible about the barn in the

rear, concealing them with groups of ornamental trees, and then proceed to lay out walks, and drives and to plant trees according to some definite plan. The winter is the best time for drawing out such a plan on paper, and therefore the following remarks.

To illustrate our subject we present our readers with a series of engravings, representing Ashton, the country seat of H. Maunsell Shieffelin, of Yonkers, N.Y. The plain Italian style of the house sets off to the better advantage the great importance of well-planned surroundings for producing elegance of effect. No division fences are observable, unless far back in the rear; the groups of

trees are a beautiful setting to the picture, while the closely-shaven lawn in front is an adornment too little valued by those who spade up a portion

of the front grounds for the growing of annual flowers.

The pathway, which too often cuts the front lawn in halves, is here made to skirt along the border, under a pleasant shade, and to approach the front door by a graceful curve.

The absence of shrubbery about the verandah and sides of the house is also observable, in contrast with the vulgar custom of planting beds of shrubs and perennial flowers to grow along the sides of the house. Instead of this, the closely-shaven lawn up to the very walls is in much better taste, the shrubs being grouped in some more appropriate places.

The climbers about the posts of the verandah are also worthy of our attention, for they lend a grace and charm which no architectural ornament could impart. There are a

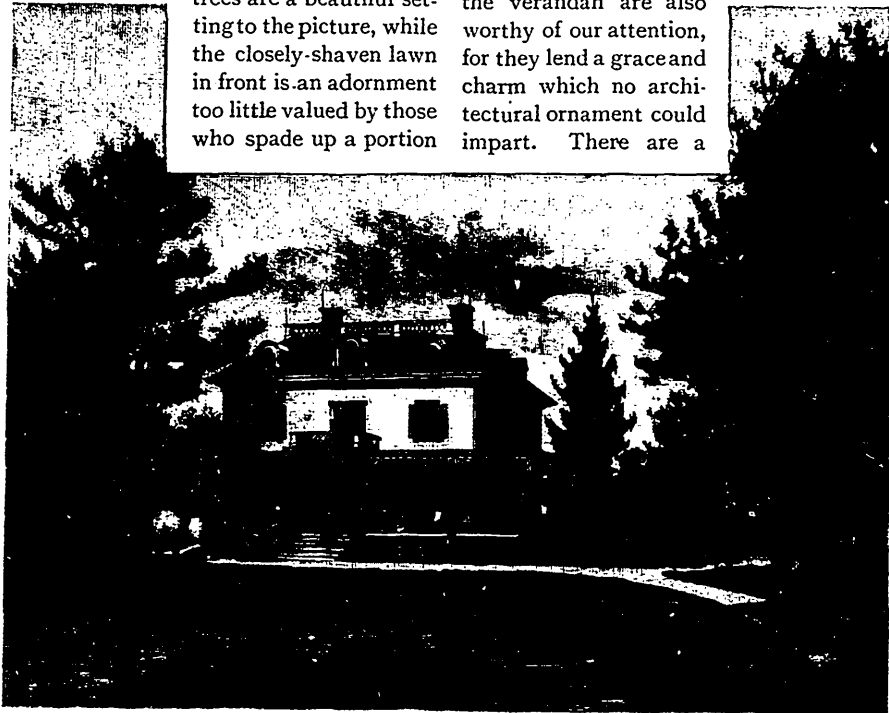


FIG. 3.—ASHTON; THE RESIDENCE OF H. MAUNSELL SHIEFFELIN, YONKERS, N.Y.

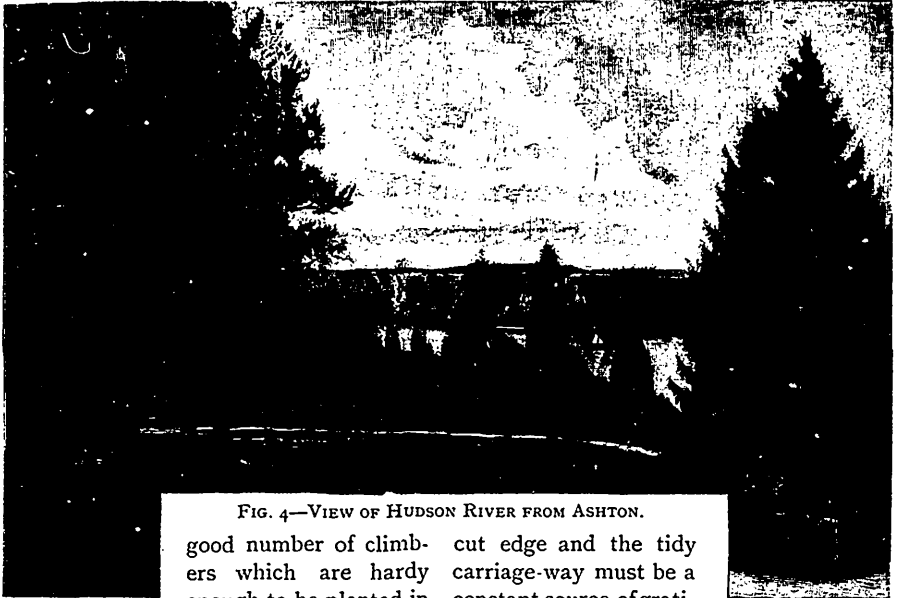


FIG. 4.—VIEW OF HUDSON RIVER FROM ASHTON.

good number of climbers which are hardy enough to be planted in Ontario, among which may be mentioned, for the benefit of amateurs, the Virginia Creeper, and many varieties of the Clematis, Honey-suckle and Climbing Rose. These trained to twine about the pillars of the porch, or to cover the bare walls of the house, make a most appropriate ornament. The Japan Ivy (*Ampelopsis Veitchii*) is unequalled for covering a stone or brick wall, for it needs no support, and it takes on the most splendid tints in autumn; but we have not included it in the above list because, although it succeeds south of Toronto, we have not as yet had it thoroughly tested north of that city.

A delightful feature in this country seat is the grand avenue shown in fig. 5. The grass borders here do not need to be so closely-shaven as upon the front lawn, but the evenly

cut edge and the tidy carriage-way must be a constant source of gratification to the owner, as well as a great attraction to every visitor. The common fault in planting ornamental trees along a roadway is in placing them too near to the walk or drive, forgetting the spreading branches of future years. In the engraving this fault is avoided, and the trees are kept at a respectful distance from the drive-way.

We wish to call the attention of our readers to another important point in the grounds at Ashton. Too often in laying out the plans for our ornamental grounds we forget the charm of a distant prospect, and thoughtlessly hide from view by dense maples or spruces, some beautiful view of mountain, river or lake; or, perhaps, the spires of a town nestled away in a picturesque valley. This has been carefully guarded against at Ashton, where

that side of the grounds which faces the majestic Hudson has been sparingly planted with just enough of trees and shrubs to set off the magnificent view by partial concealment.

Frequently, too, we see rustic

rather with the irregularity of nature; consequently they are only in place in some retired nook of shrubbery. In our illustration they add very much to the interest of the scene.

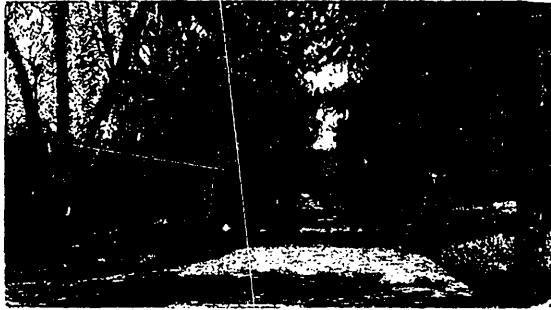


FIG. 5.—GRAND AVENUE.

seats in variety disposed upon the verandah, or in proximity to the house. This, too, is in bad taste, for they do not accord with the correct lines of architecture which characterize the carpenter's art, but

In a future number we will give some further hints which may be useful to those of our readers who wish to improve their homesteads without calling in the services of a landscape gardener.

THE APPLE MAGGOT.

THE Report of the Maine State Pom. Society for 1887 reports that this insect is on the increase in that State. The varieties mostly affected are the early varieties, and of these chiefly the sweet and sub-acid ones.

The scientific name of this maggot is *Trypeta Pomonella*, and it is wholly distinct from the Codling Moth, of which the life-history has been frequently illustrated. The former is, if anything, the more destructive, because it eats through

the skin of the apple and feeds upon the pulp, tunneling it in every direction, avoiding the core, thus rendering the fruit wholly unfit for use; and because as yet no ready means of destroying them have yet been discovered.

Fig. 6 represents the adult insect, a small black fly, here considerably magnified, of which the head and legs are of a rust-red color, the wings have peculiarly-shaped black bands, and the abdomen has white bands. The length of the body of the male

is 1.5 inch. The fly appears in the latter part of summer, and deposits its eggs, which soon hatch out into a small footless larva, from .19 to .27 inches in length, of yellowish white

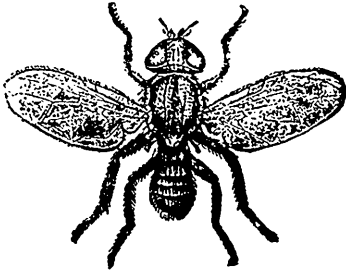


FIG. 6.

or greenish tinge. At that time of the year the application of Paris green would be unsafe, as the apples are about mature; and hence the only means of checking them which suggests itself is by pasturing with sheep or pigs, which would eat up the infested fruit. When this larva is full grown it leaves the apple,

hides just under the surface of the earth, transforming into a cocoon as shown in fig. 7.

The Apple Maggot is a native of America, and its natural food is the haws of our thorn trees and the crab-apples; and, just as the Potato Beetle left its natural food to prey upon a cultivated species of the same family, so this maggot seems of late



FIG. 7.

to be threatening a wholesale invasion of the apple orchards.

We have not so far met with this insect in Canada, but in Maine its ravages are somewhat alarming; it is also becoming a serious pest in Indiana, according to the Transactions of the Indiana State Horticultural Society for the year 1885, and is also reported from Massachusetts, Connecticut and New York.

FRUIT CULTURE IN BRITISH COLUMBIA.

A LETTER FROM THE PRESIDENT.

THIS Province is very far behind in fruit-growing. The markets are filled with California fruits which, in pears, are inferior quality to home-grown. They get apples from two adjoining States, which are down low in quality. Spies are quite ripe for the table, and won't keep long from present appearance. It is annoying to a fruit-grower to observe the apathy of the people to their own interests. Even where they plant orchards the trees are neglected so that their life is short and miser-

able, almost every tree being covered with moss and unhealthy in appearance. In trimming they evidently chop off branches without regard to symmetry or the future life of the tree. Indeed, it needs a practised eye and hand to do the work here in this respect, as, when trees bear, the load is so heavy that trees are twisted and bent in all shapes. My good friend Dempsey would thin out the fruit. An Association like ours would help to spur up the people, I should think. They

have fine valley stretches where fruits could be grown to perfection if properly attended to, and the soil is easily cultivated, and a climate most favorable. I have no opportunity to find anything on the subject of grape syrups here, as that fruit is not cultivated to any extent, many people thinking they cannot succeed, and besides they rest satisfied with those from California, which are certainly fine, though not high flavored. My time will be so occupied that I cannot go to California this trip, as desired. I leave here this week for Vancouver, and from thence eastward. All through, this "Canada of Ours" is a wonderful country both in extent as well as richness. For scenery I never even dreamed of

anything like that passing through the mountains. There appears to be more desire among the people on the prairies for progress in forestry and fruit-growing than I find here, and certainly they are a much more energetic and "go-ahead" population, although struggling through hard winters and fighting with the many uncertainties of so large an extent of prairie. But I look for great results yet there, and I believe forest planting will play the most important part in bringing about such results. The men of the prairies are all heroes, possessing that determination of purpose and energy that is sure of reward, and we should give a helping hand.—
Yours very truly, ALEX. McD. ALLAN.

SOME FOREIGN APPLES AND PEARS.

SEVERAL of my dwarf apples and pears have fruited this fall. I have sent by this mail three apples, the Queen, Lane's Prince Albert and Cornish Gilliflower (true); two pears, Fertility and Therese. You will find the names in P. & E. Transon Bros.' Orleans, France, catalogue. I have about 40 imported varieties of apples, and 15 to 20 of pears; some are equal to our best, if not superior. One fine pear that grew on a tree 18 inches high, the flavor of a rich musk melon, ripened with the Bartlett—by name, Beurre de Mortillet.—]No. D. ROBERTS, Cobourg, 16th Oct., 1888.

MR. ROBERTS certainly deserves credit for his enterprise in testing and introducing to the notice of our Association so many varieties of foreign fruits. Last fall he sent us quite a large collection of samples of English apples, which he had grown from imported stock; see Report 1887, p. 172. Of these, the Cellini was a most attractive and showy variety; an English cooking apple of very good quality, and

which has been found to succeed in Prince Edward County by Mr. P. C. Dempsey. Of these now before us, the most showy, by all odds, is the Queen. It is enormous in size, measuring 13 inches in circumference; oblate in form, with stem deep set in a deep, funnel-shaped green russeted basin. In color it somewhat resembles a King, but the red is more in stripes and blotches. Quality very good, especially for cooking. Such a showy apple as this, if it proves a good bearer, would be most profitable, and we shall be pleased to hear from Mr. Roberts upon this point. *The Garden* (Eng.) speaks of it as a fine cropper in England, and ripening in October. We have prepared an engraving of the Queen apple from the sample sent us by Mr. Roberts, which will

give our readers a very correct idea of its size and form.

None of the other varieties seem to commend themselves to our notice as superior to those we have already in cultivation, either of those received now or last fall. Lane's Prince Albert is large, green, with deep red spread over the calyx end,

firm, of good quality for cooking. The pears both impress us favorably, so far as one may judge from single specimens; and, by the way, this remark must qualify all that has been said above. The Fertility resembles in size and shape the Louise, but in color and markings is more like the Duchess, which it also

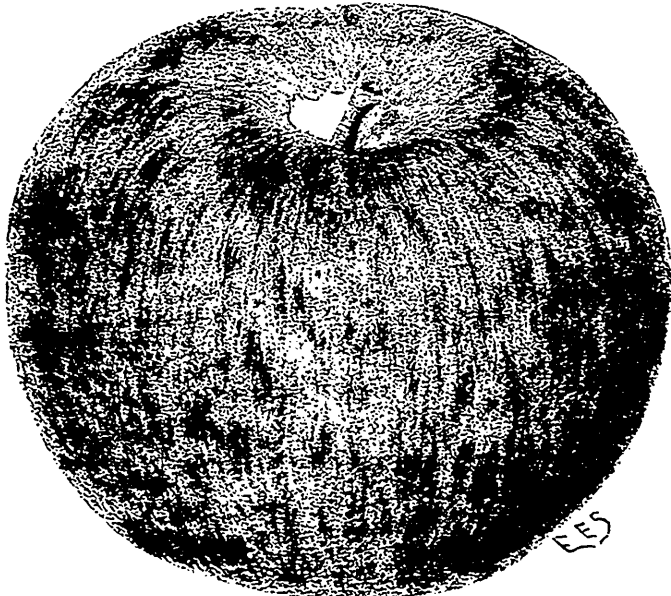


FIG. 8.—THE QUEEN. DRAWN AND ENGRAVED FOR THE "CANADIAN HORTICULTURIST."

sprinkled with numerous green dots, but of very ordinary quality. The Cornish Gilliflower is of good quality, medium size, ovate, suitable for desert purposes were it more attractive in appearance, but its red is too much obscured by ugly green and russet patches. King of the Pippins is medium, roundish, ovate, yellow, tinged and splashed with red, flesh

resembles in flavor. The There is a russet pear, somewhat resembling in form a small-sized Sheldon; the flesh is fine grained, melting, buttery, juicy, and of a very rich and excellent flavor. We should be inclined to call it very good. Commendable for dessert purposes. Both the above are ripe at this date, viz., Oct. 18.

A COTTAGE HOME.

BY REV. GEO. BELL, LL.D., OF QUEEN'S COLLEGE, KINGSTON.

THE desire for the acquisition of property, money, or that which money will procure, seems to be universal in human nature. Add to this man's social and domestic instincts, and the result will be an intense longing for a *home*, a place which he and his family may call their own. With the possession of even the most rudimentary elements of æsthetic taste, the wish will arise to have a cosy cottage home, with some surroundings of trees, shrubs and flowers. Oh, how the toilers in cities dream of some such paradise in the country, and long for the hope of attaining it! If a man has inherited capital, or has early in life gained it, the question of obtaining a home, whether a cottage or a mansion, is easily solved. But the great majority are not in this case. In a new country like this the lot of most is to toil for daily bread, by work of hand or of brain, with no immediate expectation of accumulated means to invest in real estate. With the majority the only hope of a home of one's own is in a future, many years hence. When the amount which can be saved from income is very small, the prospect is discouraging, and many give up trying to save what seems an insignificant trifle. And so many men pass their lives in wretched houses, hardly fit to be called *homes*, paying to landlords what should in a few years have procured a comfortable home of their own. The inspiring hope of a home some day in the future is crushed out; the man becomes discouraged, and perhaps falls into dissipation, and his

noble wife sinks under her toils and dies of a broken heart. Surely any efficient means of saving leakages from income, and accumulating them in view of a future home, should be encouraged. Building societies do not seem to have got down to the stage of meeting the requirements of the case; and I would ask business men who have the capacity for dealing with such a problem, if it is not possible to do more than has yet been done to aid the industrious and economical in this line.

I would also earnestly urge on all whose income is small to consider the importance of saving trifling sums, which are often needlessly spent, because being so small they are regarded as of no importance. One very wide-spread practice may be noted, respecting which a dialogue once took place, somewhat as follows:—

A.—“ Mr. Blank has had a homestead burned up, worth \$2,000.”

B.—“ How unfortunate! How did the fire occur?”

A.—“ He lighted it himself.”

B.—“ Could he not put it out?”

A.—“ He liked so much to see the smoke curling up before him, that he did not wish to have it put out.”

B.—“ Very strange; where was the fire kindled?”

A.—“ At the end of a cigar, the other end being in his mouth; and at the end of twenty years the cost of the supply of fuel amounted to \$2,000.”

“ Nonsense!” some reader will exclaim, “ a man never could use \$2,000 worth of cigars in twenty years.”

Well, let us see. Many men of small incomes spend five, ten or twenty cents a day in tobacco or cigars. Some far more. Five cents a day saved, and at the end of each year put to interest at five per cent., would at the end of ten years amount to \$202.50, twenty years \$560, twenty-five years, \$815. Ten cents a day so treated would in the same periods respectively amount to \$405, \$1,120, and \$1,630. Twenty cents a day would amount to \$910, \$2,240, and \$3,260. Now I do not wish to raise the question whether the use of tobacco is good or bad—what moral or immoral qualities may attach to

the practice of filling the mouth with smoke for the purpose of blowing it out again; but suppose all said in its favor to be true (which may be questioned), is it worth as much as the home which the sums named might procure, or is its value a sufficient reason why a man should deprive himself and his family of a home of their own for all the succeeding years of their life? The possession of a cottage home with pleasant surroundings in the suburbs of a city or in a village, would confer on a family many benefits besides the mere value of it, on which I need not dwell.

TWO NEW SEEDLING APPLES.

TO THE SECRETARY OF THE F.G.A.
OF ONTARIO:

SIR,—I send you herewith descriptions of two seedling apples which have been grown in a district far north in Ontario, at Minden, a locality where it is commonly supposed that apples cannot be successfully grown. These have been sent me through the kindness of Mr. J. A. Barron, M.P., who has taken much interest in fruit culture in his constituency. As I think it is most important that the good seedling apples we have in Canada, especially those hardy enough to grow in the colder sections of our country, should be better known, and the production of the new seedlings be encouraged, I beg that you will give space in the columns of THE HORTICULTURIST for the descriptions sent. Should any of your readers have promising seedling fruits, especially late keeping apples, which they would like to have examined and reported on, I shall be glad to receive specimens from them. It is my desire that we should have at the experimental farms all the promising seedling fruits

which are to be had, so that they may be tested side by side and their relative merits ascertained.

SEEDLING APPLE,

*Grown by Mr. T. C. Robson, Minden,
Ontario.*

SIZE above medium; form, oblate; color, greenish yellow, streaked and splashed with red; stem, slight and short, with a deep smooth cavity; calyx, open; basin, rather deep and slightly ribbed; flesh, yellowish white, fine-grained and moderately juicy, with a faint aroma and a mild pleasant flavor; core, rather large. A fair dessert apple and a good cooker. Its size and appearance would make it a desirable apple for the north. From its form, color and flavor, it is probably a seedling of Duchess of Oldenburg. Season, October and November.

SEEDLING APPLE,

*Grown by Mr. J. M. Robertson, Minden,
Ont.*

MEDIUM size, 2½ in. by 2¼ in.; form, oblate conic; colour, greenish yellow,

more or less splashed and dotted with dull red; stalk, short and slight; cavity, rather shallow; calyx, small, closed and shallow, with the basin strongly ribbed; flesh, nearly white, firm, grained, juicy and crisp: sub-acid, not high-flavored,

but a pleasant eating apple and a good cooker; core, medium size. Is the type of Duchess of Oldenburg, but smaller in size and later in season. Ripe in November.—Yours truly, WM. SAUNDERS, *Director Experimental Farm, Ottawa.*

STRAWBERRY GROWING THAT PAYS.

By JOHN LITTLE, GRANTON, ONT.

VERY few people grow strawberries for pleasure, for no fruit that grows requires such diligent attention as the strawberry, and if this care is not given, vexation will take the place of pleasure every time. There are few, however, who cannot take pleasure in helping themselves to the fruit when once brought to perfection. It is this difficulty in cultivating the strawberry that deters so many of the energetic and enterprising farmers of this country from supplying their families with an abundance of this health-imparting and most wholesome fruit. But "where there is a will there is a way," and most farmers would find it to be a benefit to the family if they would in the coming spring plant a bed. They would the following season have fruit, if the plants were cared for, that would be to them a pleasure they little thought of. I will name a few that none need be disap-

pointed in. The Crescent is a very popular berry because it is a great bearer, but there are other three new varieties which are said to excel the Crescent every time, that is, Burt, Warfield and Claude. The claims of BURT are—it has the brightest foliage of any yet sent out, is a vigorous grower, and has a perfect blossom. Its season is late; it is very profitable, of large size and the best shipper ever grown. Many growers prefer it to either the Crescent or Wilson. The WARFIELD'S claims are that it is more productive than the Crescent; of a larger size, finer-looking and better quality, and the most valuable variety yet introduced. The CLAUDE is earlier than the Crystal City, more productive and larger than the Crescent. If spared, I will tell the readers of THE HORTICULTURIST the value of these and other varieties after fruiting, in July, 1889.

HORTICULTURAL.

The Shaffer's Strawberry.

THE Editor of the *Country Gentleman* says:—This large, very productive and valuable raspberry, introduced by Charles A. Green, of Rochester, without puffing or parade, has exceeded any other of the new varieties for the short period it has required for a general approval, east and west throughout the country. It exceeds

any other variety we have tested in its invariably heavy crops. The berries are large, and uniformly free from distortion or any defect in form. It ripens after most of the great throng of varieties have passed away. Although the tips of its canes are often nipped by the cold of winter, it has the reputation of being fairly hardy. Cultivators find that the

most valuable fruits are not always those which are most highly lauded when introduced. This was strikingly the case with the Wilson strawberry, which its originator offered for sale when first introduced at one dollar a hundred plants, nearly at the same time that other strawberries were advertised at five dollars a dozen, and which were forgotten long before the Wilson was the most popular berry in nearly every State in the Union. On the whole, it is better for planters to make their selections according to proved merit, rather than from high advertising praise.

Two Excellent Pears.

THERE are two late pears, both remarkable for their excellence, which we place as high on the list as any, that are quite unlike in appearance and character. They are the Sheldon and Anjou; the first a native, the other a foreigner. The Sheldon originated in Wayne County, N.Y.; the Anjou is of French origin. Well grown specimens of the Sheldon, when exactly at the right degree of ripening, we have been inclined to place above all others for delicious quality. It is strictly a melting pear, very little pulp remaining after it once passes the lips, and the flavor is exquisite. The Anjou, on the other hand, is both buttery and melting. While the Sheldon is sweet, the Anjou has a slight and agreeable acidity. The Sheldon must be taken just at the right time to be at its best, or as an amateur remarked, "it must be

eaten by the chronometer." It is variable in quality and sometimes poor. The Anjou has the remarkable quality of keeping for some time after it has become mellow and fit for eating, which gives it a great advantage. It has long been a famous market variety and twenty years ago sold in some eastern markets for twenty dollars a barrel; now it brings about one quarter that sum. The Sheldon, less attractive in appearance to most observers, and not as reliable a bearer, has had but little place in markets until within a few years, and even now it is not widely known. President Wilder said that if he could have but one pear it would be the Anjou, and he had the satisfaction of knowing that he first introduced it in this country.—*The Country Gentleman*.

Excluding Rabbits from Trees.

A NEWLY proposed remedy for the exclusion of rabbits from fruit trees in winter, is to mix tincture of assafœtida with liquid mud and apply it thinly with a brush to the stems of the trees, or to every portion which the rabbits are in the way of attacking. A spoonful of the assafœtida to a couple of gallons of the mud is sufficient, but it may be well to vary the quantity and observe the effect. There must be enough to convince these animals that to get at the bark they must take in so disagreeable a dose of the medicine as to prefer leaving it untouched. It may be necessary to repeat the application as may be required.—*Ex.*



FLOWERS

THE ROSES OFFERED TO MEMBERS FOR 1889.

By F. MITCHELL, INNERKIP, ONT.

A FEW notes on the roses offered in the plant distribution list for the coming year would perhaps be of interest to some of the readers of THE HORTICULTURIST. It will be noticed that three varieties are offered from which a selection can be made.

PAUL NEYRON is now perhaps as well known as any hybrid perpetual, but it is in so many particulars such a thoroughly good rose that the knowledge of it should be disseminated still farther. The only weak points this rose has is that it is slightly coarse in its coloring and form, and the wood if exposed is liable to winter kill. But to offset this, there is, in the first place, its enormous size—and despite all the lauding which newer varieties are receiving, and though many votaries have turned from it to newer idols, which they seem to see through magnifying eyes, it really holds its place to-day as the largest rose ever produced. In addition to this it is moderately fragrant, a rank grower, an autumnal bloomer, and in addition to its being a good all-round rose for the open ground, it is a first-class rose as a pot plant in the conservatory. The color is deep rose.

BARON DE BONSTETTEN is a magnificent rose. The color is maroon, blazed with crimson. It is of good size, fragrant, and of fine form. It is the hardiest and is the most easily managed of all of the very dark roses. It is not a good autumnal bloomer, but at its best, in June, it is often the grandest sight in the whole rose garden.

GABRIEL TOURNIER, the other variety offered, is a rather later arrival than either

of the others. It is not so conspicuous or noticeable an object in a garden of roses as either of the other varieties, not being of unusual size or extreme in color, but at the same time it has so many good points that it is valued very highly by experienced rose growers. The color is deep rose (not red, as some catalogues have it); it is very fragrant, of fine form, a very prolific bloomer in the early summer, and also blooms freely in the autumn. Its only weak point (and what rose, or human being either, has not one at least) is, that in rare, particular states of the atmosphere, the buds will not open fully. The plant is of a strong, long and willowy growth.

All the three varieties which have been placed upon the distribution list are good free growers, and require less coaxing and petting than many other varieties demand, and yet rank quite as high in the scale of general merit and value as these more capricious and exacting sisters.

A WHITE GLOXINIA.

Out of a batch of seedling Gloxinias this past summer, I had one which bore blooms of the finest white. Although I had never before seen a white Gloxinia, I did not know the rarity of such a flower until I happened to read an article in the *American Florist* by an experienced grower (William Falconer), in which the writer says he never saw a white Gloxinia, though at the same time he says that an English firm claim to have produced such a flower. Mine is of the finest, most snowy white. It is of the erect form, and bears the blooms well above the foliage on long and strong stems.

SOME HINTS IN REFERENCE TO THE BULB DISTRIBUTION FOR SPRING OF 1889.

By HERMANN SIMMERS, TORONTO.

HAVING been requested to give a few points in reference to the above subject, in order to facilitate the cultivation of the bulbs, I will endeavor as explicitly as possible to give a few practical hints, so that it may be easier for the cultivator to care for the bulbs.

Not much reference need be made to the *Gladiolus*, except the variety *Hortense*, which is a beautiful rose, on white ground, flamed carmine. A description of the cultivation has already been given in one of the previous numbers of THE HORTICULTURIST. It is an exceedingly pretty flower, and one that will be much admired.

Tigridia Conchiflora, sometimes called Tiger Flower, color fine yellow spotted crimson, is a genus of Mexican bulbs growing about one and a half feet high, and producing flowers of exquisite beauty. The flowers are large, about four inches across, of singular curious shape, and the color gorgeous and purely contrasted. It blooms from July first until October; the bulbs may be planted in May about two inches deep in any garden soil, and require no particular care. It is sometimes called the "Day Lily," as the flowers open in the morning and have closed and entirely finished their bloom the same day; other buds make their appearance every few days and flower in a similar manner. In autumn after the tops are killed by the frost, the bulbs may be taken up and

kept in a dry place away from the frost until the time of planting in the spring. They are one of the easiest bulbs to cultivate, and will flower abundantly in any situation.

Apios Tuberosa, sometimes called tuberous-rooted *Wisteria*, closely resembles the common *Wisteria* in vine and foliage, and has clusters of rich, deep purple flowers, which have a strong violet fragrance. This plant, which is a native of Virginia, has for a century been cultivated in botanic gardens in Europe, and has only lately been brought to prominence, through a French traveller during his travels in North America, who believed that the tubers could be made of value as an article of food, for which they are used to some extent. Various attempts have been made to cultivate them like the potato, but this is found



FIG. 9.—TIGER FLOWER.

difficult, on account of the length and weakness of the turning shoots and the length of the roots. The tubers cooked in steam are free from all acidity and bitterness, and very much resemble potatoes. Dressed in the same way, they contain more nitrogen, also more starchy farina than potatoes.

Their care and cultivation is very simple; plant the tubers near a trellis, about three inches deep, in well prepared ground. They are perfectly hardy, and do not require to be taken up in winter, which is a great advantage.

The bulbs have a hard, woody covering, and should not be kept out of the ground for any length of time. Sometimes after transplanting in the spring they might not make their appearance until midsummer, or perhaps not at all, but the bulbs being hardy will not hurt by remaining in the ground, and will, most likely, make their appearance the following spring. This may seem a rather long time to wait, but I do not say this will occur every year. It is only on rare

occasions this happens; but for an exceedingly pretty and rapid climber this should take a prominent place in the future.

I trust any person trying the foregoing bulbs may have the success I anticipate, as they frequently find an obscure place, on account of not having been valued sufficiently. Every one should succeed even with ordinary care, so if extra care is bestowed there should be no complaints heard of.

FORESTRY

TO-DAY FOR FORESTRY.

BY FORESTER.

THERE is no time more suitable for the tree-planter than the present in Ontario.

Prof. Fernow, Director of the American Department, says in a late paper the man who plants to-day will have timber just when it is valuable, and in this Province when the natural supply is not yet exhausted; but so many countries which once supplied themselves both with fuel and manufactured wood are now seeking it a little further from home, it may well be that we can anticipate the profit of our plantation, if available when the forests of this wooded country are at last extinct.

I never heard of logs brought to a saw-mill by railway until last year, and now a factory near by using a lot of hardwood finds it cheaper to import the logs than to search for the few scattering trees in this country still depending on the native forest.

If we can even to-day induce owners to care for and preserve the wood lots and encourage the product, it is not too late for scientific forestry to be a useful as well as interesting study for both the land owner and the manufacturer, and if we

can lay out plantations on a scale and of a kind to continue the supply to which we are accustomed, our study will be practical as well.

The economic value of forest products is really under-valued too often. I hear men say that plantations are only for futurity. It is true that the climatic and protective influences of a plantation increase for a long period, and that large trees are of more value in the arts than small ones; but it is not necessary for a plantation to grow into a forest before it is profitable.

A factory near me offers to buy more trees than our plantation will ever raise, and take them all as soon as they are six inches in diameter—ash, locust, hickory, oak, elm.

Of course we have no data in this country to show what the real growth of a plantation would be, but if there is any truth in the reports of our American neighbors, the ash, locust and elm ought to average six inches at less than ten years of age from seed, much less if from nursery seedlings.

If any manufacturing neighbor knows now the difficulty of getting his supply, is

it not more than likely that in ten or twenty years he will be able to pay a handsome price for just such trees as a planter would like to raise ?

It is not necessary to my argument to go over all the intermediate profits of a plantation of ash or other trees, but all the authorities who speak from actual growth say that the thinnings of a lot will pay all expenses—extra trees for transplanting, small trees for hoops and turnings, and many items of profit to the owner. I assume this is agreed to and that the encouragement of scientific forestry is desired by all, and that we are all waiting for some one to begin.

The decline and gradual removal northward of the manufacture of lumber for export are well known. The introduction of coal for fuel in many townships is often referred to, and calculations of the loss to the importers have been attempted.

The preservation of the lumber producing forests is rather more of a problem than Canadian forestry students are prepared to attempt.

The question of how much thinning either general or in blocks, will keep the forest still growing and still producing, is one that I do not hear debated in Canada. A lumber man tells me that a grove of pine trees will grow and do well for sixty years longer inclosed in a forest than if left in an isolated block ; that the pine trees on the margin of the forest left in the burnt districts on Lake Huron are gradually giving way, first near the burnt strips and then further in up to half a mile or more of what looks like a perfectly vigorous forest, the drying out, or the wind, or some other effect of the open space working an injury we cannot see.

Many of the remaining wood lots of Ontario are now being searched for a few saleable trees, and a few groves of valuable trees are still held by the owners. It is not necessary to introduce the study of forestry while these can still be found. The very scientific American writer above referred to gives a system of forestry some thing like this :

A. *Scientific:*

I. Forest Biology.

Consideration of growing crop.

II. Timber Physics.

Consideration of the grown crop.

III. Social Physics and Chemistry,
Conditions for growing.

B. *Economic:*

I. Statistics. Areas and products.

II. Technology. Lumbering.

III. Forest Policy.

C. *Practical:*

I. Origination. Artificial plantations.

II. Management of Crop.

III. Harvest.

Are not the interests of this country directly involved to-day in every item of this scheme?

The Woods in Winter.

THERE are many who never take a ramble in the woods in the winter season. They appear to think that because the trees, save the pines, hemlocks, etc., are bare, and because the birds have left for a warmer climate, there is nothing to be seen in the woods in winter. Those who have learned properly to use their eyes, will find that the woods possess enough of interest at all seasons to make a visit to them profitable at any season. Lumbermen, who work at felling trees, do so in the winter only, and can distinguish trees with great accuracy, and tell one kind of tree from another as far off as they can see them. They do this from the peculiar way in which the tree branches, and the color and markings of the bark. We have found that these same lumbermen, if shown the leaves and flowers of the trees with which they are so familiar in winter, fail to recognize them ; indeed many are surprised to learn that forest trees have flowers. To be able to recognize trees at all seasons, and to name them accurately, whether they have leaves or not, is a very useful sort of knowledge, which every farmer should acquire. The carpenter, the cabinet-maker, and all other workers in wood, while they may not be able to recognize

the trees, can tell at once, from a mere chip, the kind of wood they are handling.—*American Agriculturist* for December.

"It is strange," remarked a Boston belle, as she observed the shimmering silver birches, "that people will go and whitewash trees that are almost in the woods."—*Puck*.

Forestry Notes.

BY FORESTER.

CENTENNIAL OF THE OHIO VALLEY.—An interesting feature of this exhibition at Cincinnati was the Forestry Exhibit of Prof. Adolfs Leue, including Forest Zoology, Entomology, Forest Technology. The

professor's collection of tree seeds and 200 varieties of woods are among the best in the Union. He also issues yearly a very valuable forestry report for the Ohio State Forestry Bureau.

On a farm in the county of Norfolk the boys went out with a wagon in the noon hour lately and got in the box full (about thirty bushels) of walnuts. They are fairly fit to eat if kept over winter, though of a strong, oily taste. In the fall grocers in the vicinity buy them at fifty cents a bushel for this purpose. On this farm they always pick up enough chestnuts to pay the taxes, and some years they get \$150 worth.





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

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

The New Year.

WE wish a "Happy and Prosperous New Year" to the many readers of THE CANADIAN HORTICULTURIST, hoping that in its new dress and other improvements it will prove to be a still more welcome visitor than the complimentary remarks of its readers lead us to believe it has been in the past.

The increased demand upon its pages, and the growing membership of our Association, led the Directors, at the last meeting, to place the enlargement of our journal from twenty-four to thirty-two pages, at the discretion of the Executive Committee. At the present writing the prospects of support are sufficiently encouraging to warrant our printing an enlarged edition of the January number, the continuance of which is dependant upon the proportionate increase of membership. Our friends will therefore prove their appreciation of our exertions by showing the January number to their acquaintances, and seeking to send in long lists of new subscribers.

The Fruit Growers' Association of Ontario.

Will hold a combined annual and winter meeting at the Court-House, in the

CITY OF HAMILTON, beginning on Tuesday evening, the 19th, and continuing during the 20th and 21st of February, 1889.

A show of choice samples of fruits from each agricultural division is desirable for comparison. New fruits, improved horticultural implements or machinery, plants, flowers, etc., on exhibition, will receive due notice in the report of the Fruit Committee. If sent by express they may be addressed to the care of the Secretary, at Hamilton.

Certificates for reduced railway fares will be mailed to anyone applying for them to the Secretary, at Grimsby.

Questions intended for the *Question Drawer* may be sent in advance to the Secretary, at Grimsby, or handed in at the meeting.

The following is an outline of the programme, with some questions for discussion added to each subject, from which however, it may be necessary to deviate in some details:—

PROGRAMME.

Tuesday, 8 p.m., Welcome address by the Mayor—reply by President; the President's annual address; reports; election of officers.

Wednesday, 10 a.m., APPLES AT THE COLD NORTH: *Thomas Beall, Lindsay.* What varieties of apple trees are most

subject to black heart? How can it be prevented?

HORTICULTURAL SPECIALTIES FOR FARMERS: the *Secretary*. Is apple growing profitable? Does it pay to export our apples? What are the drawbacks of exportation? Transportation of fruits to home and foreign markets: What complaints have we to make against the railway, express and steamboat companies?

Paper by *A. M. Smith, St. Catharines*. 2.30 p.m., QUESTION DRAWER.

Paper by *S. P. Morse, Milton*.

PLUMS; VARIETIES FOR HOME USE AND MARKET; INFLUENCE OF THE SCION ON THE GROWTH AND LONGEVITY OF THE TREE, ETC., ETC.: *Geo. Cline, Winona*. Spraying for Curculio. *Prunus Simoni*.

HOW BEST TO SECURE UNIFORMITY AND FAIRNESS IN THE AWARDS OF PRIZES TO FRUITS AT FAIRS: *Thomas Beall, Lindsay*. Discussion of subject. Is it best to advocate the one judge system in the horticultural department at our Fairs? Should a scale of points be given by the judge in fruits, as is done in the poultry department? What is the best manner of labeling varieties of fruits for benefit of the public?

FORESTRY. Address by *R. W. Phipps*, Commissioner of Forestry, Toronto. What distance apart should walnuts be planted? How many per acre? What is the present value of walnut lumber?

8 p.m. Paper by *D. W. Beadle, St. Catharines, Ont.*

CHRYSANTHEMUM GROWING: *Messrs. Webster Brothers, Hamilton*. Discussion of subject. In growing such plants as Geraniums, Fuchsias, Cinerarias, Primulas, Begonias, Callas, Oxalis, Tulips, Hyacinths, Heliotropes, Coleuses, etc., in house, or in small greenhouse attached to dwellings, what temperature is required, and how much water? Should plants exhibited at fairs be given prizes when shown without labels of variety, both common and technical?

WHAT CAN BE DONE WITH A CITY GARDEN OF, SAY, 20 FEET SQUARE IN PRODUCING SUPPLIES FOR A FAMILY: *Dr. W. C.*

Adams, Toronto. What is the best way to destroy the cabbage worm (*Pieris rapae*)? What varieties of tomatoes are least subject to rot?

Addresses by the *Hon. C. Drury, Minister of Agriculture, Rev. R. Burnet, of Milton, and Mr. A. Alexander, F.S.Sc. Hamilton*.

Thursday, 10 a.m. Paper by *A. M. Smith, St. Catharines*. Discussion.

MY EXPERIENCE IN A FRUIT GARDEN FOR HOME USE: *T. H. Race*, editor *Mitchell Recorder*. Discussion of subject. What varieties of strawberries, currants, raspberries, blackberries, should be planted for home use?

FERTILIZATION OF PLANTS: *Prof. Panton*. Discussion.

BIRDS USEFUL AND INJURIOUS IN HORTICULTURE: *T. McIlraith*. Should a law be enacted favoring the extermination of the house sparrow.

Thursday, 2.30 p.m. GRAPES: VARIETIES TO GROW, SHIPPING, DISTRIBUTING, MARKETING, ETC., by *E. D. Smith, Winona*. Discussion of subject. What is the best method of preserving grapes or winter use? What varieties are best or keeping? Should grapes that are grown to an abnormal size by ringing compete at our fairs with those grown in the ordinary way? In judging fruits at our fairs, should size or quality have the highest value? Should the Fruit Growers' Association be represented at Farmers' Institutes?

Is it not time for the F. G. A. of Ontario, to take up the question of marketing our fruits? Would it be wise to have a fruit inspector appointed; or what means could be adopted to induce growers to put up good, straight, honest packages of fruit? Could not this Association act unitedly in marketing fruit through its own agents, instead of dealing with commission men, who often make more than the growers? Is it true that forests influence rainfall? Is the Ontario Government likely to take any step to preserve our forests in the districts at the head waters of the Muskoka and Ottawa rivers? What kinds of forest trees are most pro-

fitable to grow on waste places? Should any steps be taken to discourage the slaughter of birds for ornament?

British Columbia as a Fruit Country.

WE notice some lengthy and interesting articles on the above subject in the *Weekly News Advertiser*, of Vancouver, B.C. It seems that a representative of this prominent paper met with our President, Mr. A. McD. Allan, and gives a very extended report of his interview.

He compliments the Province upon its adaptability to fruit culture, and encourages the people to engage in fruit culture, giving them many details of planting, management of an orchard, and winds up with a description of the Fruit Growers' Association of Ontario as an example of the kind of organization which should be had in British Columbia.

Delaware Red Winter.

AT the Horticultural Exhibition held in Wilmington, Delaware, last fall, exhibits were made from unquestionable sources of the above apple, and of an older variety, the Lawyer. It was unanimously agreed by the committee that these were but two names for one apple, for no distinction could be observed either in tree or fruit.

Using the Bordeaux Mixture.

ACCORDING to a writer in the *Philadelphia Weekly Press*, the cost of treating an acre of grape vines to this copper sulphate solution, both for material and labor, need not exceed \$10. This mixture has been described in these columns, and since it is so economical, as well as effective in the destruction of black knot and mildew, its use should become general, whenever these fungi are troublesome.

The Eureka Strawberry.

MR. JOHN LITTLE, of Granton, Ont., speaks very highly of the Eureka strawberry, a variety originated by Mr. Geo.

Townsend, of Darke, Ohio. He says it is very prolific, that the berries are large and of good quality, firm, and of good shape, medium to late in ripening, pis-

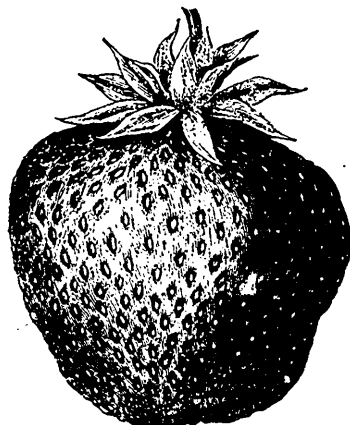


FIG. 10.—THE EUREKA.

tillate. He encloses a testimonial from Pres. Lyon, of Michigan, who says he has nothing, among perhaps one hundred varieties, which excels it in the qualities which go to make up a good market berry, unless it be Bubach, which approaches it very nearly.

The Farmers' Institutes.

A PLAN is being considered for the cooperation of our Association in the work of Farmers' Institutes. One of the objects we have in view is the general diffusion of knowledge among the farmers concerning the best methods of fruit culture, and the best varieties to cultivate. We also seek to encourage the planting of forest trees, the preservation of our native woods, and the adornment of our rural homes with the most suitable varieties of trees and shrubs. The meetings of Farmers' Institutes throughout our country in January next gives us an opening for usefulness in this direction, and the most of our Directors, some of whom are specialists in one line or another, have agreed to attend two or three meetings of the Farmers' Institutes in

January next, in their respective agricultural divisions, to assist the professors of the Agricultural College in their arduous duties. This will add increased import-

ance to the office of Director, and it remains with our Association at the annual meeting to see to it that the best men hold the positions.

QUESTION DRAWER

Hardy Crabs.

1 A LIST of best Hardy Crabs of good size, would much oblige, DANIEL DUNN, Jocelyn, St. Joseph's Island.

Try Van Wyck Sweet, Bailey's Crimson, Lady Elgin, Gibb, and Gideon's Martha, and report.

The Oyster-shell Bark Louse.

2. LOOKING over my fruit trees now that the leaves have fallen, I made the unpleasant discovery that a fine healthy five-year-old pear tree (Flemish Beauty) was thickly infested with the Coccus or scale insect. The stem, which is $3\frac{1}{2}$ to 4 in. in diameter, and the larger branches, were covered by myriads of these noxious insects. Of course I did not leave the spot until I had scraped off every one I could see, and I hope I have rid this tree of this pest.

My object in writing you is to ask if it is at all a common experience for pears to be thus infested. I have not had much to do with pears, but was under the impression that whatever insect pest they were liable to the Coccus was not one of them.

The apple, I know, is very subject to the Coccus—mine were the past year—but, following your advice, I am glad to be able to say they are now almost free from them, and I trust another year's treatment will exterminate them.

Another question I would like to have answered is this—Has the Coccus, which, on the tree, appears to be absolutely inert, any power of locomotion? For in destroying them I simply scraped them off the bark, scattering them on the ground. Is there, then, any possibility, or even likelihood, of their ascending the tree and resuming their destructive operations.

Our correspondent no doubt refers to that species of Coccidæ, commonly known as the Oyster-shell Bark Louse. We have frequently drawn the attention of the readers of this journal to the great mischief done to many of our finest apple orchards in Canada by this pernicious pest. Many trees are stunted

in growth, and in a dying condition through it, and yet the tiny insect escapes notice, though careful observation would reveal its presence in countless numbers.

In reply to the question we may remark that, although the pear tree is not nearly as subject to it as the apple tree, yet it is by no means free from danger, and they should be carefully inspected in those sections where the scale insect abounds.

Our correspondent's plan of scraping off the scales at this season is a proper one, and should be followed out by every orchardist who discovers that his trees are affected. To assist amateurs in recognizing this foe we give an engraving of a portion of an affected branch as it appears in the winter season. It should be understood that these are now simply shells, covering and protecting perhaps one hundred eggs each. They are the remains of the body of the mother insect, whose person is thus wholly devoted to her young. The eggs when scraped off upon the ground will no doubt lose their

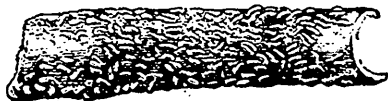


FIG. 11.

vitality; but, lest any eggs should still remain, the tree should be thoroughly washed, about the first of June, with a strong solution of washing soda and soft soap. At this time the eggs hatch out, and the tiny insects, scarcely discernible without a magnifying glass, run about quite lively for a few days, until they fasten their beaks into some tender portion of

the bark, and there soon become fixed for the rest of their days.

The Hardiness of the Quince.

2. CAN the Quince be grown successfully in this latitude? And would it do well in an old pasture that has a deep rich soil, and was never ploughed? I propose planting an apple orchard, and I thought of setting a row of quince trees between the apple trees.—W. C. CARVER, South Livermore, Maine.

We would be pleased to have reports from our members regarding the hardiness of the quince in our northern sections, but as we find that it occasionally suffers from the cold in the latitude of Hamilton, we judge it would not succeed well without protection in Maine.

We do not advise planting rows of quince trees in an apple orchard. The mode of treatment required is different, and besides the latter will require the whole ground before the quince trees are past serviceable age. It would be better to plant a quince orchard by itself; trees about twelve feet apart each way, so that cultivation may easily be given in two ways.

Seedling Apple from Hampton.

3. I ENCLOSE you by this day's mail two seedling apples. Will you please examine and try them, and let me know what you think about them? They are the medium size. Some on the tree would be much larger and some smaller. We find them to be excellent for cooking from the time they get large enough, and think good for eating. They have never been grafted yet. Do you think grafting would improve them? And, what kind would you advise to graft on? Shall be glad to hear from you.—H. ELLIOT, Hampton, Nov. 19th, 1888.

The apple is of fair quality and rather above average size; skin yellowish, with dots and splashes of red about the stem and is just now (Nov. 22) in prime condition for use. It has, however, no specific character which commends it in any way superior to varieties already introduced; indeed, when compared with such excellent varieties as the Fall Pippin, Gravenstein, Hubbardston, Ribston, etc., etc., it would not be considered worthy of a place. As horticulturists, we need to guard against the multiplica-

tion of varieties, and discourage the introduction to public notice of any variety, no matter how good it may be, if it is not superior to kinds already distributed.

Grafting would not be likely to improve it, as it is simply a means of increasing the number of trees bearing fruit of the same characteristic.

Hedge in Shaded Location.

THE following question and answer is from the *Garden and Forest*:—

4. SIR,—Can you kindly advise me what to plant to make a hedge against a fence about four and a half feet high, which is shaded, but not at all densely, by a few tall cherry and ailanthus trees, and which faces the north-east? Would Red Cedar do in such a situation? I should prefer an evergreen hedge, but do not like the Spruce for this purpose.—V., New Brunswick, N.J.

The Red Cedar, the Hemlock, the Abor-Vitæ and the White Pine can all be used to make a hedge in New Jersey. All these trees grow rapidly and bear cutting. Deciduous shrubs, however, as a rule, make better hedges in this country than Conifers, as they can better support the unnatural conditions to which hedge-plants must be subjected if they are to be kept to formal lines. The common Privet is one of the hardiest and most easily-raised plants which can be used for a hedge. The Barberry makes a beautiful hedge, and so do Lilacs, Syringas, Tartarian Honeysuckles and other hardy garden shrubs. A hedge is a formal thing, which is beautiful only when it is uniform and regular and perfect; a hedge in which there are gaps or in which some plants are feeble and sickly, is not an attractive object, and had better be cleared away and a new one planted, as it is almost impossible to repair an old hedge by inserting new plants. This is the reason why it is important to use only very hardy and carefully-selected plants in making a hedge. It would be impossible, probably, to make a really good hedge under the conditions given by our correspondent. The overhanging trees will inevit-

ably stunt the growth of the plants under them; and the hedge will present, therefore, a broken and unsatisfactory appearance, which cannot fail to be disappointing. An irregularly-planned border of hardy shrubs in front of a fence is always better than a stiff, clipped hedge; and when, as in this case, the fence is overshadowed by large trees, an informal plantation is the only one which can be safely used. The common Barberry and some of our native Viburnums and Dogwoods will be found excellent plants to use in this way.

—Ed.

Apples for Alberta

5. PLEASE let me know through your valuable paper what varieties of apples and crab apples you think would be most suitable for this climate. Would you consider trees raised in a nursery in Minnesota, U.S., more suitable for this latitude than trees raised in Ontario? There are three apple trees, Russian varieties, growing in Edmonton; for three years they have made good growth, and have not been injured by frost at all, but I do not know what varieties they are. If you can kindly recommend a few

varieties for trial in this country you will confer a favor on a subscriber.—I. H. LONG, Edmonton, Alberta.

We will gladly give you a list of varieties found comparatively hardy in Canada and Vermont; and shall be pleased to have you report their success in Alberta.

For summer—Yellow Transparent; autumn—Alexander, Oldenburg, Astrachan and Red Bütingheimer, Golden White; winter—Wealthy, Scott's Winter and Longfield.

Of crabs, Whitney's No. 20 is worthy of your trial; besides this, we would commend Hyslop, Transcendent and Van Wyck.

Not all trees sold for Minnesota grown, by agents, are really grown there; indeed, much of the stock so handled is grown at Rochester, N.Y. By all means buy your nursery stock from the nearest reliable nursery, but be careful to deal with some firm of good reputation. There would otherwise be little chance for hardiness between trees grown in Ontario and those in Minnesota.

OPEN LETTERS

Plants Tested at Toronto.

SIR,—In enclosing my subscription for 1889 I select the four strawberry plants, and if I have as good success with them as I have had with all the other plants I have received from the Association, I will be perfectly satisfied.

In 1885 I received FAY'S PROLIFIC CURRANT. This fruited in 1887 and 1888. I am now propagating from it, and will discard all my old stock as soon as I can.

In 1886 I received an EARLY VICTOR GRAPE. This fruited last summer, and bore eight branches of excellent fruit; compact clusters, rather small, very dark, and of pleasant flavor.

In 1887 I chose the NIAGARA GRAPE. The vine is now in the two-cane period, and is in a vigorous and healthy condition; it will, if all be well, fruit next year.

In 1888 I received two GOLDEN QUEEN raspberry plants. These have grown to be good healthy plants, and if they stand the

winter I shall expect a crop of yellow beauties from them next July. So, you see, I have reason to be satisfied.—J. L. THOMPSON, Toronto.

Fruit in Stormont Co.

SIR,—I had only 500 barrels of apples, and thought it a big thing for me. I consider I was fortunate in selling them all at home, even although it was at low prices, as with a double crop all round we could not expect it to be otherwise. My No. 1 Fameuse, Golden Russet, Seek-no-Further, and St. Lawrence netted me, excepting barrel and freight, \$2 per barrel; barrel cost 35c. and freight about 27c.—62c.; leaving me clear \$1.38 per barrel.

I sold a large lot of windfalls besides at 25c. per bushel. Many of my neighbors are holding on for prices I fear they never will realize, and whether they do or not they are running up expenses of storing and probably repacking, etc.

One thing sure, I have made more this year from my orchard than I have in at least the last ten years together, and I needed it.

Oh, what rains we have had; it rains all day, all night and most of the rest of the time. I have been proposing to some of my friends to buy in the "Great Eastern" (if she is not destroyed) as a place of refuge; if worse comes, I know you'll take some stock in the speculation. If she's not as fine in her lines as some of the ocean racers, I think she would compare well with Captain Noah's craft. I got my garden ploughed, grape vines pruned and covered, and am as much in readiness for winter as usual. We're never ready for its arrival any more than we are for its leaving us. Not that we're such shiftless beings, but we have to contend with short seasons, and much to do in them, so much so that much of our work is but half done.—JOHN CROIL, Aultsville, 12th Nov., 1888.

Fruit in Perth Co.

SIR,—I have been carefully watching your fruit crop reports from various sections of the Province, and from what I have gathered from THE HORTICULTURIST and other sources I am fully persuaded that in the one item of apples, this county has been more productive, and has sent more to foreign ports, than any other county in Ontario. The general complaint in the early fall was that the sample was unusually small on account of the drought, but after the rainy season set in the weather continued mild well on to the middle of November, and the result was a considerable growth in the size of all the later varieties. The sample, when gathered, was consequently a fair average, while the yield was abundant beyond that known for many years. Many car loads were shipped from this point, St. Mary's, Stratford and Shakspeare, to Manitoba, as well as several to the British markets, at an average price of \$1.10 per barrel.

Plums were altogether a failure; cherries very small, and pears below the average in both size and yield. I have lost faith in the iron-filings theory in pear culture.

Strawberries were a very short crop. The largest yield and the finest berries that I had was from a matted patch of three years standing, on which I applied a heavy coat of ashes the fall before. There is, in my opinion, no fertilizer equal to ashes for old matted beds when properly applied.

Raspberries (red) were an abundant crop, but blacks were scarcer. My bushes—especially the Gregg—blighted badly and died away shortly after the blossoming season; and I have not yet learned the cause. Gooseberries were a partial failure, everybody complaining more or less of mildew. I picked from my garden about twelve pails full, comprising Downings, Smith's Improved, Industry and an excellent variety, and there was not a specimen

affected with mildew in the whole lot. I attribute this to plenty of air and sunlight, and a plentiful application of ashes.

Currants were an abundant crop, though few, as yet, have gone into growing them in this locality, and although I have done so purely for the love of the thing, my family disposed of about four hundred quarts at 10 cents per quart. Of the varieties I prize Fay's, when its growth is confined to one or two years' old wood. On older wood it is disappointing. Moore's Ruby has one special merit, and only one over other varieties. It is sweeter than any other variety, and more pleasant to eat off the bush or with cream and sugar.

The grape crop has been a fair average. With me the Brighton and Rodgers' 9 and 15 did well, but the Moore's Early will not grow enough wood, and is a poor bearer. I threw out the Prentiss and the Pocklington as worthless after a four years' trial. The Empire State, Niagara, Amber Queen and Moore's Diamond have not fruited in this section yet.

I am looking forward with much pleasure to meeting with the fruit growers of Ontario at the City of Hamilton in February next.—T. H. RACE, Mitchell.

The Idaho Pear.

SIR,—We have a pear that we think is destined to succeed over a wide range of latitude. We are further north than your place, and yet the Idaho, so far as tested in the far south, gives great promise of success. Our correspondent in Texas writes that buds set last May made a growth of 7 feet, and that the growth seems perfectly healthy. We have the same report from New Orleans and Arkansas, while Prof. Budd writes very encouragingly from Iowa. Some parties to whom we have sent specimens of the Idaho, report it fully equal to the Bartlett or Seckel, which they regard as the best. Others do not give it quite so high a rank. Of course those receiving the sample specimens compare them with those grown in their immediate community, which is a pretty trying test to the Idaho, after having probably made a trip of 2,000 miles in a mail sack. It will probably fruit next season in Penn., N.Y. and N.J., when it will speak for itself, and we have no fear of the result.

With an apology for having intruded upon your time and attention at such length.—THE IDAHO PEAR CO., per J. H. EVANS, Lewiston, I.T., 11th Dec., 1888.

Longfield and Blushed Calville.

SIR,—You ask if I think it would be well to distribute Longfield and Blushed Calville to members of the Ontario Fruit Growers' Association.

Longfield is a young and abundant bearer, a good grower, but straggling and pendulous and bothersome if you feed sheep. Color,

bright red and yellowish white; flesh, tender and good quality, or perhaps fine quality. Size of Fameusc. Season, Oct. 1 to 15, and not much longer, and shows bruises, etc., a good deal, and in these ways not satisfactory.

I said season not much longer than Oct. 15, but pick carefully and put into cellar before too ripe, and it might keep a long time.

Blushed Calville has only borne with me two little specimens in nursery, and did not strike me.

Arabka (of Ellwanger & Barry) is young and abundant bearer, vigorous grower and rather upright, and fruit large—in fact very large, and deep purplish red with lovely bloom, and keeps longer than Longfield. My five trees were a perfect sight, but quality acid and thin.

Vargul fruited in nursery by my neighbor, John M. Fisk, is the Russian apple of finest quality we have grown here.

Furstlicher Tafelafiel (Royal Table) hails from Schroedn, of Moscow, and though marked tender by him, is quite hardy, so far with me. It is a young and abundant bearer, good size, good quality, good both in texture and flavor, and seems likely to keep some time. I have but two little trees of it, and it is very promising. It and Repka of Dep of Agr., would seem to be my best keepers.

I cannot yet recommend. I have given you my facts so far.

I could send you some scions of some, but not in quantity.—C. GIBB, Abbotsford, P.O., 4th Nov., 1888.

Our Fruit Markets.

The Apple Glut.

NEVER before in the history of the apple trade was such a glut of supplies flung upon the market on both sides of the Atlantic as at present, and it is thought that several weeks must elapse before a clearance can be effected. Cable advices from Liverpool on Wednesday reported sales of good Baldwins and Spies at 9s. to 11s., with the market sick and declining. One of our large shippers informed us that about 18,000 bbls of frosted apples were on the way to Liverpool from Portland alone, and that a large quantity shipped from Boston was in the same condition. Shippers, therefore, dread the result of these damaged lots going on the English market, and more unfavorable returns are looked for. A London buyer advanced \$1 per barrel on a large lot of apples booked on a through bill of lading from the west by the S.S. Pomeranian, but the apples could not be put on board, and were frozen as hard as cannon balls on the wharf. It is estimated that the stocks in store in this city are about 75,000 barrels, although some believe there are more. One of our oldest and richest apple dealers made the following remark a few days ago:—"This is a most extraordinary apple year, and we have all got bitten through paying too high prices."

Regarding the English market, a large Liverpool firm writes:—"The arrival of two large cargoes yesterday from Boston proved too much for our market, and prices had at length to give way. Boston Baldwins sold freely at 8s. 9d., 9s. 6d., 10s. and 10s. 6d. for really good fruit, and with the prospect of 60,000 to 70,000 due next week, we do not see much chance of any immediate recovery. New York fruit participated in the decline.

Baldwins made 10s. 6d. to 11s. 6d. A great deal of poor and wasty stuff is also coming forward, and this does more damage to prices than anything else. Buyers are afraid to buy when they see such quantities of wasty apples, and will not bid for any but choice lots."—Trade Bulletin, Dec., 1888.

The Export Apple Trade.

RECENT mail advices from Liverpool, dated December 8th, state that "the continued heavy arrivals have at length had such an effect upon our market, that buyers have positively to have the fruit thrust upon them, and that at their own prices. Good New England fruit continues to sell at 8s. 9d. up to 8s. 6d., while New Yorks are neglected at 9s. to 10s., a very few parcels of choice fruit making 11s. to 12s. Canadian arrivals are exceptionally heavy, the last three steamers from Montreal docking within a few hours of each other 36,000 barrels. Very many of these were small and of poor quality, and sold at 9s. to 10s. 6d., while the rejections of 'slack packed' and wet have been exceptionally heavy, having evidently suffered from long passage in severe weather. In London, they have had two steamers direct with 35,000 barrels, the prices obtained meeting about the same as Liverpool, while a lot of Nova Scotians sold for 7s. 6d. to 13s. 6d. It will take until after Christmas to clear off the accumulated stocks, when we should see better prices."

Montreal.

APPLES.—The market is as dull and unsatisfactory as it can be imagined, sales of frozen fruit having been made at 42c. up to \$1 per barrel, which shows a big loss to

shippers. Good to choice sound fruit is quoted at \$1.35 to \$1.50, although some holders will not offer at these figures, preferring to hold for better rates later on. Jobbing lots of sound fruit are quoted at \$1.50 to \$2.

EVAPORATED APPLES.—The market is quiet at 8c. to 8½c.

DRIED APPLES.—The supply is fair, and we quote 5c. to 5½c.

GRAPES.—The market is steady, with sales at \$4 to \$5.50 per keg as to quality. Fancy large kegs bring higher figures.

CRANBERRIES.—The market is quiet at \$3 to \$6 per barrel.

PECANS.—The market for pecan nuts in New York has advanced 3c. per lb., and is quite excited.

ORANGES.—The market is quiet, Jamaica being quoted at \$4.50 to \$5, and Florida at \$3.50 in boxes.

ONIONS.—Red and yellow Canada onions

are quoted at \$1.35 to \$2 per barrel, Spanish onions are steady at 75c. per crate.

POTATOES.—Car. lots, 55c. per bag, and small jobbing lots, at 65c. to 75c.—Trade Bulletin, Dec., 1888.

New York vs. Montreal Shipping.

SIR.—You will remember our mutual friend, Mr. A. McD. Allan, when in Montreal last summer stated that the American rail lines handled fruit better than the Canadian roads. I did not at the time dispute the statement; now I wish to do so most decidedly. My experience this fall has convinced me that we do those things better—very much—in Canada. I have not the time to go into the whys and hows just now, but when I next meet you I will be prepared to uphold Montreal against all-comers. —JAMES THOM, New York, 4 Dec., 1888.

OUR BOOK TABLE.

REPORT on the Forest Conditions of the Rocky Mountains, and other papers, with a map showing the location of forest areas on the Rocky Mountain range. With the compliments of Norman J. Coleman, Commissioner of Agriculture, Washington, U.S., 1888.

Black Rot, by F. L. Scribner, Chief of the Section of Vegetable Pathology; being Bulletin No. 7 of the Botanical Division of the Department of Agriculture, Washington, U.S.

Journal and Proceedings of the Hamilton Association, 1887 and 1888. Part 4. A. Alexander, Recording Secretary, Hamilton, Ont.

Price List of Trees, Vines and Plants, for sale in spring of 1889 at the Winona Nursery, by Messrs. Smith & Vanduser, Winona, Ont.

Price List of Trees and Plants for sale at Niagara Falls Nurseries; E. Morden, proprietor, Niagara Falls South, Ont.

The Farmer's Advocate and Home Magazine is published by Wm. Weld, London, Ontario. It is a monthly magazine of a large circulation among Canadian farmers, and contains articles by the leading Canadian farmers upon agricultural subjects. It has just completed volume xxiii., and a glance at the index will satisfy any farmer of the valuable nature of its contents. It is still published at \$1.00 per annum.

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THE CANADIAN HORTICULTURIST

PROSPECTUS FOR 1889.

A journal for Fruit Growers, published monthly at Toronto and Grimsby by the Fruit Growers' Association of Ontario. Twenty-four pages choice reading on Fruits, Flowers and Forestry, well illustrated both with beautiful Colored Plates and other Engravings of Fruits, Flowers, Trees or Shrubs. It is proposed to still further enlarge and improve the Journal for the year 1889, and still to give it for the usual sum of \$1 per annum.

This Journal is published wholly in the interests of Fruit Growers and Farmers, and contains the fullest information upon this subject, both for professionals and amateurs.

The annual report of the Fruit Growers' Association of Ontario also goes Free to every Subscriber and contains a careful verbatim report of the discussions on Fruit Culture which took place at the various meetings of the year, with all the papers read at such meetings.

PLANT DISTRIBUTION.

In addition to the above, every Subscriber may make one selection from the following list of Plants, etc. to be distributed in the spring of 1889:

1. **The Vergennes Grape.**
2. **Winter St. Lawrence Apple.**
3. **The Princess Louise.**
4. **A Hardy Rose Bush.**
Either Gabriel Tournier, Baron Bon Stetten or Paul Neyron.
5. **A package of Summer Flowering Bulbs (viz.: Tiger Flower Tuberos-rooted Wisteria and Gladiolus).**
6. **Two Chinese Primroses.**
7. **Package containing Japanese Ivy and Geranium.**
8. **Four Strawberry Plants.**

WHAT OUR FRIENDS SAY OF US :

A knowledge of the habits, care, etc., of the different fruit trees, plants, shrubs, flowers, etc., is not possessed by most of our garden managers, and as a consequence great losses and failures in many different ways occur. Now to help this the "Canadian Horticulturist," a monthly magazine at \$1 00 a year is considered invaluable. In it, just at the right time of the year, appear remedies for the many new garden pests, descriptions of choice and new fruits, with colored plates, and in fact we couldn't begin to enumerate its varying and always interesting contents.—*Bradford Witness.*

The "Canadian Horticulturist" for January is just to hand, in a new and beautifully designed cover. It contains a colored plate of the lovely iris that is a treasure of art. It is now recognized as the leading Canadian journal of Horticulture.—*Canadian Agriculturist.*

No. 7 of Vol. 11 of the "Canadian Horticulturist" is before us, and a very nice number it is, on fine paper, fine print, and filled with interesting matter, with a fine tinted lithograph of the winter St. Lawrence apple for a frontispiece. It also has, among other cuts, one of a wheelbarrow ladder, which strikes us as a very good idea.—*Ex.*

We are in receipt of the "Canadian Horticulturist" for July, published by the Fruit Growers' Association of Ontario, Grimsby, and it is, as usual, brim full of matter on Horticulture. Its visits every month are looked forward to with pleasure. It is worth double the money that is paid for it, and is invaluable to those devoted to Fruits, Flowers and Forestry.—*The Advance, Stouffville.*

The "Canadian Horticulturist" for May is one of the best numbers of that really excellent journal yet published. The colored plate represents a life picture of the German Prune, a plum that has gained great favor with fruit growers, and was highly spoken of at the Association meeting at Collingwood last year. The "Horticulturist" is worth more than the subscription price to any person engaged in fruit culture or in gardening.—*Neaford Mirror.*

There is scarcely anything relative to the flower garden, the vegetable garden, the small fruit garden or the fruit orchard that the "Horticulturist" does not deal with, either by its competent editor, L. Woolverton, M.A., or by some of its staff of able contributors.—*Ex.*

The "Canadian Horticulturist" appears to improve with each number, and is winning for itself a place long filled by American publications, which it is superior to in every way for the Canadian fruit grower, as it deals largely with Canadian subjects, and the fruits most suitable to our climate.—*Fleisherton Advance.*

SAMPLE COPIES, Envelopes, Blank Forms, etc., sent free to any one who will use them in the interests of the Association. Address

"THE CANADIAN HORTICULTURIST," Grimsby, Ont.