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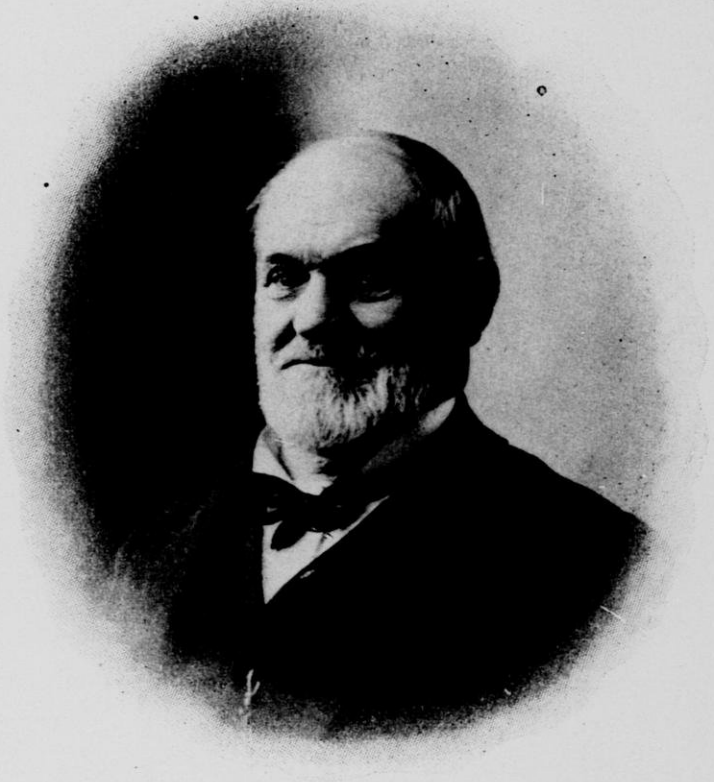
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E. H. S. 'DARTT, Owatonna, Minn.

The Wisconsin Horticulturist.

VOL. VII.

FEBRUARY, 1903.

No. 12.

THE STATE HORTICULTURAL MEETING.

Probably one of the most interesting annual meetings held by the Wisconsin State Horticultural Society, was the session of Feb. 3, 4 and 5, 1903, at Madison. The attendance was the largest for some years past, and the papers and discussion which followed brought out valuable information to the fruit growers of our state.

The exhibit of apples was the largest for some years past, and included over 400 plates. The specimens shown attracted considerable attention for the smoothness and color of surface, and size and quality of fruit.

Mr. Tuttle of Baraboo, had a splendid display of his Russians, and some cranberries,

Jno. A. Gaynor of Grand Rapids, showed 20 varieties of cultivated cranberries, grown in the marshes about Grand Rapids.

The principal exhibitors of apples were Parsons & Loope of Eureka, A. D. Barnes, Waupaca, Edwin Nye, Appleton, Geo. J. Kellogg, Lake Mills, F. H. Chappel, Oregon, A. J. Phillips, West Salem. Several promising new seedlings were shown by Gertrude M. Cairies, of Ellsworth, A. J. Phillips, and F. H. Chappel.

An exhibit of Missouri apples was on the table in charge of Geo. T. Tippin of Nichols, Missouri, and included such varieties as Ben

Davis, Mixonite, Babbitt, Wine Sap, Gano, Willow Twig, York Imperial, Lawver, and Grimes Golden. The apples in this exhibit showed good size and color.

Some of the older members of the society who were in attendance, and whose faces would be missed if they were not, were Geo. J. Kellögg, A. J. Phillips, Wm. Toole, Chas. Hirschinger, A. G. Tuttle, F. H. Chappel, and A. D. Barnes. Those in attendance from out of the state were Geo. T. Tippin of Missouri, who spoke on "Commercial Orchardng," Arthur T. Erwin of Ames, Iowa, who treated the subject of "Plant Breeding," J. R. Reasoner of Urbana, Ill., the originator of the Senator Dunlap strawberry, F. H. Harris, the delegate from the Minnesota State Society, and H. T. Thompson of Marengo, Ill., vice-president of the Northern Illinois State Horticultural Society.

Taken as a whole the meeting was the best held for years. Space will not permit us to publish all the papers read and discussed at the session, and as the magazine will be discontinued with this issue it will be impossible to give them from time to time during the year. The papers and discussions which followed each one will be printed in full in the Annual Report and sent to all members of the society.

If you are not already a member, you should join and receive the benefits. Identify yourself with the State society by joining. We can help you and you can help us. You receive the Annual Report free, are at liberty to receive any information in the culture of fruit, flowers or plants, by simply asking for it. If you are desirous of setting out any fruits and wish a list of adapted varieties, or wish to know the best methods of cultivating and taking care of such, write us and the information is gladly given. Send in your membership to the secretary.

The following awards were made on the fruit exhibited :

Largest and best exhibit of named varieties : Parsons & Loope, first ; A. D. Barnes, second ; F. H. Chappel, third.

Best four varieties : Parsons & Loope, first ; Geo. J. Kellogg, second.

Best three Long-Keepers : Parsons & Loope, first ; Geo. J. Kellogg, second.

Best three Russians : A. G. Tuttle, first ; F. H. Chappel, second.

Best three Crabs : Parsons & Loope, first ; A. D. Barnes, second.

Best single Seedling : A. J. Philips, first ; F. H. Chappel, second.

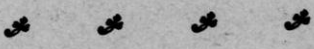
Best collection Seedlings : A. J. Phillips, first ; F. H. Chappel, second.

Geo. J. Kellogg had on exhibition four plates of pears among them a variety named "President Druard," of good size, shape and quality, and if hardy, would be profitable.

There was also on the table a plate of Northwestern Greenings grown in latitude 45, northern part of the state, which were fine specimens, which indicates that this variety will do well further north. A box of seedlings from Mr. Chas. Hirschinger was handed to the committee after the awards were made, in which was found one worthy of trial. Size above medium, sub-acud, nearing to sweet and almost red in color.

Best single plates of Northwestern Greening, Parsons & Loope, first ; A. J. Phillips second. McMahan, F. H. Chappel, first ; A. D. Barnes, second. Wealthy, Parsons & Loope, first ; F. H. Chappel, second. Utter, F. H. Chappel, first ; A. G. Tuttle, second. Wolf River, A. D. Barnes, first ; Parsons & Loope, second. Duchess, Parsons & Loope, first ; A. D. Barnes, second. Ben Davis, A. G. Tuttle, first ; A. D. Barnes, second. Fameuse, Parsons & Loope first ; A. D. Barnes, second. Longfield, F. H. Chappel, first ; Parsons & Loope, second. Walbridge, A. D. Barnes, first ; F. H. Chappel, second. Scotts Winter, Parsons & Loope, first ; Edwin Nye, second.

The best four varieties were Wealthy, Duchess, Northwestern Greening and Utters. The best three Long-Keepers, Northwestern Greening, Ben Davis and Willow Twig. The best three Russians, Romna, Anisim and Boiken.



DISCOURSE ON CHERRIES.

A. L. HATCH, Sturgeon Bay.

During the last thirty years I have grown a great deal of fruit of many kinds, but no fruit has pleased me more than cherries. The cherry seems to be specially adapted to Door county soil and climate. I am pleased to see that a good many cherries are now grown here and the acreage will be considerably increased in the future. Mr. Bingham will plant upwards of five hundred trees this spring and away down the peninsula at Ephraim, H. R. Holand will also plant half a thousand, and near here some others will plant lesser amounts.

Among the reasons why I like the cherry is because it is one of the easiest to sell of all fruits. There is always a brisk demand for car lots and although we have shipped several hundred cases during the last three seasons from this railroad station we could have sold to better advantage if we could have made up more car loads. However the prices have ranged mostly above \$1.25 per case and the outlook is as good for \$1.50 net cash here as for any other fruit. Another reason why the cherry is my favorite is because it is not so exacting a fruit to handle and market as berries. We need not rush the picking as is necessary with berries lest they get too soft for shipment. There is no fruit we have ever grown that pickers like to handle as well as they do cherries, and there is no tree fruit that ripens its fruit so early in the season, and none that is less likely to suffer injury from drouth or bad storms. Nor have I ever found any tree fruit that with reasonable care will bear so regularly and well.

Among the reasons the cherry is adapted to this peninsula is that our climate is specially favorable. The excessive heat in the interior of the state further south and inland at the time the cherry matures makes it far more difficult to handle and more liable to decay in shipping. Nowhere have I seen finer, firmer, better quality shipping cherries than right here in Door county.

From the fact that the cherry pays as a money crop and from my own experience with it here in Door county, I am sure it will be more planted in this vicinity than ever before and that it should be.

GROWING VEGETABLES.

JOHN VAN LOON, La Crosse, Wis.

While the subject of market gardening is one of great moment and the business of growing vegetables is one that engages the attention of a large number of men, women and children through the country, still we believe the subject of home gardening is one that affects more people and can frequently be discussed with profit. It is hardly probable that I can give the members and friends of our society any information in relation to the subject which they do not already possess. Gentle reminders or personal experience sometimes prove a source of information, and it is from this standpoint that this paper has been written, and if some of those present may gain some thoughts or hints worth knowing I shall feel well repaid.

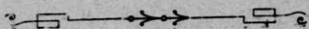
During an experience of thirty-five years in market gardening; a great change has taken place, and the knowledge gained during that time has confirmed us in the belief that to grow vegetables successfully and profitably, we should aim to have a well enriched soil, kept clean by the best known ways, and provided with an abundance of HUMUS. In fact every effort should be made to add constantly what humus we can in order to obtain paying results, and to defy drouths which occur to a greater or less extent almost annually. An additional item, and perhaps the most important of all, is the sowing of the best seeds and plants obtainable. Shun poor or doubtful seeds; burn them or throw them away. It's a waste of time to bother with them. If you are already fortunate enough to deal with a reliable seedsman, stick to him and pay him or them such prices as are asked. The majority of good seedsmen will ask no more than they are worth. I will not name any particular varieties as it will take up too much time to do so, but if you want good results in that line for both home use and market, sow standard varieties for the main crop and try new kinds sparingly.

While gardening is steadily on the increase, yet it is a deplorable fact that many farmers have little or no garden and by the means deprive themselves of a privilege that should be taken advantage of by every one. Nothing is more healthful or more easily produced for the use of the family than a good supply of garden vegetables of

all kinds. Thus it is that nearly the entire living of the family can be secured from such a garden for several months in the year, and that living is the most healthful and palatable of anything that can be furnished, especially when fruits are added. We would not advise farmers who are not within easy reach of a good market or canning establishment to attempt to raise much more than enough for their own use, because, in a great many places the business is overdone and prices are kept at a low figure. This, coupled with the prevailing scarcity of help, materially interferes with the looked for success when carried on a large scale. Another cause that makes the growing of vegetables for market less remunerative than formerly, is the competition with southern products of nearly all kinds, with perhaps the single exception of nutmeg melons when raised under glass in this part of the northwest. When properly attended to, these can be raised so as to have them ready for market from two to three weeks earlier than without glass, and will yield an income of from one to two hundred dollars per acre. Melons raised in this way can be sold off in time to afford a chance for raising a second crop, which, in our case, always consists of turnips which ordinarily pay a handsome additional profit. The ground having been kept clean requires no further cultivation and if your soil is not too poor and the seed is put in at the proper time you can raise a crop that is worth having for feeding purposes, for market or for supplying a large amount of humus. Right here I wish to call your special attention to the crop just named and to one other that is proving to be an unexpected aid in enriching our sandy soils. It is the cowpea, and is a southern product, but through the writings of several of our most noted agricultural writers, such as Prof. Massey, of the Practical Farmer; Collingwood, of the Rural New Yorker, and several of our Experiment Station workers, is gradually working its way northward. Quite a few private individuals are raising some of them every year in our own state with varied success, while my own experience, which extends over a period of twenty years, has led me to the conclusion that as soon as the farmers on light soils will give the proper care to the growing of cowpeas, it need not be long before their mill feed bills can be reduced considerably, and so not only save a part of the outlay of the money that now finds its way to the pockets of those who handle bran, shorts and brewer's grains, but at the same time

enrich their soils. The production of this crop, however, is of so important a nature that it requires a paper by itself to get fully acquainted with its possibilities, and in order to keep within bounds I will confine myself to the growing of turnips for the purpose of enriching the soil. The reasons for advocating the growing of turnips on an unlimited scale are that to our knowledge there is not a crop grown that furnishes so cheaply, abundantly and in so short a time, so large a quantity of humus for succeeding crops. While we sell large quantities of them, they are always sown as a humus crop and often turn out to be a money crop by disposing of them in the market. We find this so satisfactory that on our small farm, consisting of about thirty acres, every available acre in the late summer or fall is sown to turnips of different varieties, and sometimes scarlet clover seed is mixed with it. It sometimes occurs that an unexpectedly large crop is raised where none is looked for, for instance, the past fall owing to an early and very destructive frost which occurred in our vicinity, hundreds of acres of corn were almost entirely destroyed. Other crops, such as late beans, tomatoes, and vines of all descriptions suffered likewise. In our case, ten acres of cowpeas and Soy beans were killed outright. The sowing of this entire field to turnips in time, and long before the killing frost occurred produced a truly wonderful crop. The result we look for next year. This field with its heavy crop of cowpea vines, supplemented with several tons of decayed turnips per acre, will not only make an ideal field for growing vegetables, but will grow a large crop of any kind at a comparatively small outlay for enriching the soil. The course we have pursued in growing something besides weeds on the soil has been a source of a great deal of satisfaction in maintaining soil fertility, and is one of the secrets of raising good vegetables.

In conclusion we would say that in our opinion the best results are obtained by plowing rather deep, subsoiling heavy soils, making the soil rich, not planting a larger crop than you can well care for, planting the best seeds obtainable and supplying the soil with plenty of humus.



APPLES SAFE TO PLANT IN WISCONSIN.

A. CLARK TUTTLE.

By Wisconsin, we mean the good orchard locations in the south half of the state, except the tier of counties bordering on Lake Michigan.

A variety of apple safe to plant in this section, described above, must certainly be hardy. It must not be subject to blight. It must have passed through, without serious injury, one or more of those winters which Providence has placed here occasionally to test our fruits and flowers.

It is not safe to plant an apple whose record shows that it was killed or badly injured during the winters of 1884 and '85. We have had no winter since that would test varieties.

We do not consider the "Northwestern Greening" safe, because the original tree killed in an ordinary winter and a sprout from this tree killed in the winter of '84 and '85. (It has been tested and failed to pass.) Other seedlings that have not passed through a test winter unscathed are unsafe.

The Wealthy is a tested seedling, and although not as hardy as some of the Russians, it may be considered safe for our best locations.

The original tree of the Newell's Winter has been flourishing since the spring of 1844. It has withstood all the test winters of the past sixty-two years. The soil of its location is quite sandy and it does the best on light soils.

Wolf River has been tested and ranks with the Wealthy for hardiness. There may be other seedlings that have stood the test.

The Duchess for three decades has been at the head of the whole list of apples for hardiness. Of the two hundred Russian apples that have withstood the test for hardiness, in this state at least, twelve have proved productive and not subject to blight. The following are the names arranged as to season: Early Champagne, Lowland Raspberry, Tetofski, Autonovka, Duchess, Red Wine, Hibernial, Prolific Sweet, Longfield, Anisim, Boiken, and Pepka Malenka.

The earliest known apple, Early Champagne, heads the list. The

second on the list is Lowland Raspberry; it is bound to be the most popular very early apple in the United States. It is particularly suited to the fancy basket trade, as it is large, handsome, and of exceptionally fine quality.

Red wine is the handsome apple; more beautifully colored than any peach; a vivid carmin overspread with the most delicate white bloom. As it shows through the deep green foliage we doubt if there is anything in fruit that surpasses its exquisite beauty. It is rather tart for eating out of hand but makes a fine pie

Hibernal is very hardy. That is its greatest point. It grows in locations where even crab apples fail.

Prolific Sweet is recommended by Dr. Hoskins as "the most valuable commercial sweet apple." It is very hardy and a superb grower in both orchard and nursery. Never saw any blight on it whatever.

Longfield has twig blighted once or twice but did not shorten its crop and the second year after, no sign of the blight could be seen. It bears enormously every year, and often overbears, which causes the fruit to be small; that is the case with all varieties that overbear, and the crop should be thinned.

The Anisim is another heavy annual bearer; it is one of the very few that promises to take a place near the top as a commercial apple, as it is covered with a dark, rich red color and will not show bruises. The oldest tree of this kind we have, was left to stand in the nursery row, the scion from which it grew, came from Russia in 1868. Since 1874 it has borne every year but one and that was the year in which a late frost killed all fruit blossoms. A beaten road runs along near the tree on the east side and a stiff blue grass sod has fed it for more than twenty-five years. For a term of years it will produce twice as much as the Fameuse and commands as high a price, side by side. They open bright and free from scab. A neighbor of ours shipped several barrels of Anisim to St. Paul, in the Autumn of 1900, which netted him over and above freight and commission, \$3.00 per barrel. At the same time and place his Wealthy netted \$1.59 per barrel. The same neighbor shipped to Duluth this last Fall and the Anisim sold for \$4.00 per barrel. As high as quotations for extra Jonathans at the same time in Chicago

markets. Another neighbor received \$1.00 per barrel more for his Anisims at Duluth, than for his Wealthy.

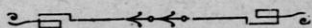
The Boiken is the least known in Wisconsin of any of the twelve. We had not fruited it till this year. It does well in northern Vermont and in the vicinity of Quebec. Prof. Macoum of the Ottawa Experiment Station, Canada, speaks highly of it. It is hardy and productive, and is said will keep till June.

Repka Malenka is the variety that if picked carefully into barrels, in the orchard, left unheaded till moisture passes off, then headed up and placed in a cool cellar till June, will open in perfect order, with color that will dazzle the eye. The tree is a healthy, fine grower in nursery and orchard, and is apt to overbear, but that is a good fault and easily corrected. It beats the shy bearer 75 per cent. No blight. The fruit is medium in size, striped with bright red, and quality good; much better than Ben Davis. It holds its brisk tart flavor till June, and it is no trouble to keep this apple till the Lowland Raspberry is ready to use, without any cold storage.

This list of twelve is succeeding throughout Wisconsin, notwithstanding the great amount of talk against it by our nursery men, and becoming popular wherever the trees are old enough to bear. It is the only lot of apples that has passed through all the hard winters since 1870 and ready with a crop the next year.

The following is a list of the safest of the American apples which are doing passably well, where white oaks will flourish: Plumb's Cider, Tallman Sweet, Utter's Red, McIntosh Red, Haas, St. Lawrence, Bailey Sweet, Seek-no-further, Willow Twig and Blue Pearmain.

To sum this up, let me ask you to take these ideas as coming from one who has spent forty-five years in Wisconsin studying, writing and experimenting to try and ascertain what varieties of apples will grow in our state. He has been styled a "Russian Crank" and is proud to merit the title, but will say in all earnestness that he is after the hardy enduring varieties, be they Russian, American or seedling apples, and is ready to talk and work for any and all those apples which have withstood the test.



THE AMERICAN PLUM IN WISCONSIN.

S. H. MARSHALL, Madison.

Some seven years ago, while attending the short course at our university, Prof. Goff, in the course of one of his lectures on horticulture, said: "I believe there is more money and more improvement to be made to-day in this state with the American plum than with any other fruit."

This statement brought plum culture to my mind and the more I studied it, the more convinced I became that he was right. Consequently when I bought a farm some six years ago, I set out an acre of plums, and have increased it until I now have some eight acres, which is I believe, the largest plum orchard in our state.

Commercial plum growing in Wisconsin is as yet an experiment, there are no bearing orchards of any size. But there are orchardists and nursery men who have enough trees to show us how they will bear and how long they may be made to live. I have marked the fruit in a small way for three years, and this paper is made up of my own experience and a study of theirs.

In considering the planting of a commercial plum orchard, the first thing is the market. Can a satisfactory market be found? For without a market, no matter how fine and plentiful the crop may be the venture will be a failure.

If near enough to a market for strawberries I believe you can sell, at a good profit all the plums you can raise, the demand will increase with the supply.

My home market is a city of some twenty thousand people, and they now use more plums than any other sixty thousand in the state. Their taste has been educated by our experiment station, which has been selling them plums for some years. This past season two of our grocers took all my crop, (some three hundred baskets), as it came, and paid me forty cents a basket, or over two dollars a bushel. These same merchants would have been glad to have had as many more. This has been an exceptional season, not because other fruit was scarce, but because times are good.

The price, however, can be cut in two and still leave a handsome profit. It has always been my intention to put my plums up in neat

baskets, and in each basket to have a printed booklet of receipts for using plums, but as yet I have not found this booklet necessary.

There are many varieties and they vary so under different environments, that it is impossible to say which are the best for any given locality.

As an example Mr. O. M. Lord, of Minnesota, told me that the Rolling Stone was one of the finest plums he grew and showed me samples that were very choice, and I have seen them grown in other places since where they were large and of fine quality, but in my orchard they are small and poor.

I got my trees direct from Mr. Lord himself, but I understand the soil of his orchard is more or less sandy, while mine is a clay loam.

The following are a few of the varieties that do well with us, and some of their good and bad traits:

Aitken: Season very early, first to fifteenth of August. Fruit large, of fair quality and very thin skinned, but so soft it is difficult to market when the curculio leave any salable fruit on the trees. Tree is fairly good shape and productive.

Cheney: A week or ten days later than the Aitken and no way superior to it. A poor bearer and very subject to the curculio.

Diana: Later than Cheney. Fruit large and good. Tree is a vigorous grower, but spreads too much. Fruit is badly infected with the curculio.

Forest Garden: Ripens August 25th. Fruit of medium size and good quality. A fair shipper. Tree a vigorous grower and heavy bearer, but too spreading.

Rockford: About the same as Forest Garden and a good plum to grow and market with it.

Quaker: Season August 25th. Fruit of the best, large, good flavor and color and a good shipper. Tree a vigorous grower, of good shape and a productive bearer.

Nellie Blanch: August 25th. Fruit large size, fair quality, a good color, stone large and skin thick. Tree thrifty and shapely.

De Soto: Season September 1st. Fruit fair in quality, but small in size and a bad color, and skin thick. Tree is a good grower and a heavy bearer, but subject to ripe rot.

Hawkeye: Season September 1st. Fruit very large. Ships well, but is of poor quality and rather off in color. Tree vigorous and of good shape, but subject to ripe rot.

Wyant: Season September 1st. Fruit medium large of very good flavor, good shipper, but rather poor as to color. Tree a compact grower and heavy bearer, but branches inclined to curve towards the ground.

Surprise: That word expresses my sensation when in the fall of 1898 Prof. Greene showed me an eight year old tree of this variety in fruit. Season September 1st. Fruit of the largest, best quality, finest flavor, color fine, skin medium and stone small. Tree the most vigorous and shapely of all the varieties in my orchard.

Brittlewood No. 2, or United States: Season September 1st. Fruit of the largest and best flavor, but a trifle coarse. Color very good. Tree is a good bearer and vigorous grower of fair shape. I consider this and Surprise to be of the very best.

Hammer: Season September 5th. Fruit large, very good quality and firm. Color good. One of the best shippers. Tree very vigorous and shapely, but a rather light bearer, (not so expensive to thin out the fruit as with some of the other varieties.

Ocheeda: Season September 5th. Fruit fair quality, size and color. Tree a good bearer, but not very vigorous or shapely.

Maquekota: September 15th. Fruit and tree fair, but principally valuable for its lateness in fruiting.

In describing the above varieties, I have tried to confine myself to points only, that will be of value to the commercial grower, and give the descriptions from my own knowledge, as I have seen the fruit and trees. That they do not coincide with some of the best authorities I am well aware.

While I do not expect to go into detail of the planting and care of the orchard, a few ideas and methods that we practice may open a discussion that will prove of value.

In setting out the orchard put the trees 18 feet apart each way, as 12 or even 15 feet apart brings them too close for convenience in cultivating and spraying. Twenty or twenty-five feet would be better were it not for the fact that this would take up too much room.

It is better to plant but few varieties, for fifteen or twenty baskets of the same kind show up better than that number composed of several sizes and shades. Do not set the trees in blocks, each variety by itself, but mix them so that one kind may pollinate another. Begin cultivation as soon as the trees are set out and keep at it, as a good gardener would with his garden. Do not go deep, and never plow in the spring, unless it is positively necessary, as this either throws the earth up on the roots of the tree or away from them.

I find a disk harrow an acme orchard harrow and one of the numerous weeders very useful tools. Clean cultivation does more to destroy insects than spraying or catching them and is not half so expensive. It makes the plant food available and conserves moisture, as could be seen in the dry summer of 1901, when good cultivation gave better results than mulching or irrigation.

I cannot speak forcibly enough on this subject. It does not cost much to keep a dust blanket on your orchard in an ordinary season and the expense will be paid several times over in the thrift of your trees and the quality of your crop. Whether or no spraying kills the curculio is a question, but I am positive clean cultivation does. Along about the 20th of August we find it necessary to plant a cover crop, and for this I would recommend either oats or rape. I prefer the oats as it is easier to disk under in the spring.

The curculio is the worst insect pest the plum grower has to deal with and the only one I intend to mention. Spray for it with an arsenite (such as Bowker's Disperene) for perhaps it feeds before depositing its young, but I doubt it. Jarring the trees and catching the insects is the most effective way of destroying them, and is nearly as good one time of the day as another, except, perhaps, during the noon hours.

It seems the dropping from the tree or playing possum is the beetle's means of defense, and it will do it whenever frightened. A better remedy than spraying or jarring is the planting of medium and late varieties.

From the various fungus diseases that attack the plum, we suffer most from ripe rot or *Morrilia*. This can be partly if not entirely overcome by using Bordeaux mixture. More than half the battle is won by spraying early in the spring, while the trees are dormant,

with a very strong solution, say six pounds each of blue vitrol and lime to fifty gallons of water. This method is recommended by Waugh and I have practiced it for two years with good results. This year the rot appeared on the fruit buds and twigs of the plums of my neighbors and destroyed nearly all their crop, while my orchard was not affected to any extent.

It is quite important to thin out the fruit for it keeps the trees from overbearing and improves the size at least twenty-five per cent. For this purpose I prefer young girls to do the work, and they are instructed where practicable to take off those plums that are stung and to destroy the fruit when picked. It cost me this past season about five cents a tree.

The most serious problem that confronts the plum grower of Wisconsin to-day is pruning. How and when to prune? I hope to have these questions answered at this meeting, for I have some several hundred young trees to shape this coming spring. I head them low and the next season there are these three or four main branches, with a growth of from four to eight feet, and each variety with a different shaped head. If the branches are let go they will be loaded with fruit the following season, just ready to bend and break with the first hard wind. Take such varieties as the Rockford, Forest Garden and Aitken and one-fifth of the trees will be lost.

On the other hand cut the branches back and the next season there will be from two to four branches, of nearly the same length, where the one would have been had it been left alone.

Now, what we are after is to get the fruit closer to the trunk, where it will not have so much leverage. Next season I propose to cut my young trees back to make a proper shaped head, and pinch the new growth during the summer from time to time. This is an experiment and if any one here has tried it, I would like very much to hear his experience.

Since writing the above, Mr. Hale, the great peach and plum grower of Connecticut and Georgia, has visited my orchard and proposed the following remedy which he practices successfully in his orchard: Instead of pinching back in the summer, he allows the shoots to grow until the rapid growth has ceased, probably about the 1st of August. Then cut the branches back to a double shoot, being

careful to go close enough so that no dormant bud is left above the shoots remaining. This will force the rest of the growth of that branch into the short fruit stems and start new ones below where pruned.

Prof. Goff marketed his plums in ten pound grape baskets, and I have followed his example. They are convenient to handle, both for the orchardist and the consumer. Young girls do the picking and they gather from fifteen to thirty baskets a day, and I pay them fifty cents a day for their work.

Our society has lost in the past year a man whom we all esteemed and honored, and one who will be better known and appreciated by the works he left behind him, even than he was during his life time. One of the many monuments to Prof. Goff's memory is the young plum orchards that have been planted in the past few years in Wisconsin through his efforts and influence.

CRANBERRIES.

J. A. GAYNOR, Grand Rapids.

At the request of your secretary, I will speak of conditions favorable to the growing of cranberries.

Cranberries are found in a state of nature in nearly all countries in the Northern Hemisphere, lying between the Arctic circle and the fortieth degree of North Latitude. The conditions that favor the growth of Tamarack, Swamp Spruce and Sphagnum moss. Wherever you set your foot on a wild cranberry vine, you can look around and see, not far in the distance. Sphagnum moss, a Tamarack or a Spruce, and the soil upon which it is found growing is almost invariably a black muck or peat that is the product of vegetation that decayed under water. The vegetable species that contributes most to make the soil on which the cranberry grows is Sphagnum moss—the same moss that furnishes winter food for reinderr along the line of the Arctic circle.

In the southern half of the belt above indicated, the cranberry vine, sphagnum moss, tamarack and spruce, are found growing only on low, flat swampy or marsh land, while along the Arctic circle

these forms of vegetation, especially near the sea coast, may be found growing on the hill tops. The reason for this difference need not be given to those who have studied, "The Battle of the Forests," or who understand the fierce warfare that is waged by every form of vegetable life for possession of the earth.

The Tamarack tree lives in the cold swamp and is able to maintain there a precarious existence against the encroaching accumulation of moss that excludes from its roots the warmth of the hottest summer sun, not because it thrives best under those conditions, but because there are very few trees that are able to compete with it under such undesirable conditions. The Tamarack would thrive well on the hill side if its competitors for that place could be kept away, and if its great enemy, the forest fire could be excluded; but on account of its thin, gummy bark, it perishes before a light forest fire that could be successfully resisted by the thick, corky bark of the white pine.

The same is probably true of the cranberry vine. It is found in a state of nature only where its roots and lowest runners are protected by water, during that part of the year when fires most prevail. If not so protected, a single fire would cause its destruction. Cranberries have been grown with great success in Massachusetts, New Jersey and Wisconsin upon clean, white sand. This is a great change of soil from black muck, about as great as one could well conceive, and it leads one to suspect that the origin or chemical composition of the soil upon which cranberries may be grown has very little to do with the successful growing of this plant, and that it is probable that the mechanical structure of the soil is of the first importance.

On our Wisconsin cranberry marshes the black muck exists on the surface to a depth of from a few inches to ten or twelve feet. The lower layers of the deep muck or peat is of a close wavy texture, and might be properly called "Gumbo." A cranberry vine planted in this gumbo, is unable to take root, although chemically it is the same material as the porous, half decayed, vegetable material at the surface in which the vines take root and grow luxuriantly. So it is extremely probable that the mechanical structure of the soil that allows the heat and moisture to penetrate to the root, is far more important than the chemical composition of the soil.

Notwithstanding these facts, it will be best for a novice to be guided in his efforts by what nature indicates, and if he departs from her teachings it is only an experiment, and to save expense should be on a small scale.

The three great enemies of the cranberry vine are insects, fire and frosts. The insects that are most damaging to this fruit are the so called fire worm, which destroys the vine by eating the chlorophyl on the under side of the leaf, causing the leaves to look as if they had been singed by fire; and the fruit worm which looks very much like the apple worm, and attacks this fruit in much the same way. The ravages of these two insects have been quite severe in Massachusetts and New Jersey, and although both exist in Wisconsin, the damage done by them has been much less than in the east.

Fires have been the great destroyers of wild cranberry marshes. The history of cranberry growing from Massachusetts to Wisconsin has been nearly the same. The fruit was at first found growing wild in great quantities. The fires incident to the clearing of the land and drainage of the marshes brought about the almost total destruction of the wild vines. When these destructive fires occurred before the people began to cultivate this fruit, the cranberry passed out of existence and was soon forgotten. In Wisconsin the forest fires of 1894 and 1895 destroyed more than 95 per cent. of the wild vines then existing, and as a rule the cranberry is to be found to-day in this state only in localities in which people had begun to plant it before these destructive fires occurred. Other native fruits are in the same way fast disappearing.

The cranberry vine like the raspberry and blackberry is not able to endure long the drying effects of a cold winter wind with the thermometer at 20 degrees below zero, hence it must be protected from such exposure either by flooding or by snow.

The vines start to grow in the spring about the 15th of May and the young shoots are very tender and are destroyed by a frost that would kill cucumber vines. If exposed to a frost during the last of May or the month of June, the entire crop for that season is liable to be destroyed. A frost occurring in the fall of the year, between the 20th of August and 10th of September, while not so destructive to the fruit as the spring frost, is liable to take a large part of the

crop, and if earlier than August 20th, is liable to destroy the crop for the season following.

Now these three enemies, insects, frost and fire, can be readily overcome by the use of water. By judicious flooding insect pests can be destroyed, the danger of fire can be overcome and frost can be guarded against. If the vines are not covered with snow during the winter and early spring they should be flooded and buried under the ice, and the light late spring and early fall frosts can be guarded against by filling the ditches with water or raising it a little above the surface of the ground when the frost is severe.

It will be seen that from this, successful cranberry growing imperatively demands an abundant supply of water to be at the command of the grower, and unless this is assured no one should be tempted to embark in the business. I would advise every person who thinks he can furnish the conditions required and feels tempted to engage in the cultivation of this fruit to start slow. Want of experience, skill and intelligence in this industry, as in many others, has been the cause of many failures. I know of no kind of fruit growing that requires as much scientific skill, and yet has so little brought to its aid. There is very little literature on the subject and very little has been done for it by our institutions of learning. Our growers have been left to grope their way blindly, in ignorance approaching closely to superstition. But when the era of Alchemy and Astrology in this industry has passed and a true scientific basis has been reached, the cranberry is destined to rival the apple in its importance and the time is not far distant when it can be produced for three cents a quart and leave the grower a margin of profit. The Wisconsin Cranberry Growers' Association has saved the cranberry to Wisconsin, it encouraged men to plant out vines after the marshes had been destroyed by fire. Twice a year its members meet and discuss the best methods of cultivation, harvesting and marketing. There are many varieties of this fruit found growing wild and the society has established an experiment station at which it tests the merits of every variety it can find, and it has in cultivation more than one hundred of these varieties, most of which are now in bearing. I have brought with me, and here submit for your inspection, twenty-four of the varieties grown at the station this year. These fruits are inspected and tested by the Association annually, and the

best are marked for propagation, and as soon as we have any approved variety in sufficient quantity we expect to distribute the vines to Wisconsin growers for further propagation.

We hope to do for the wild cranberry what the late Prof. Goff, and others, have done for the native wild plum.

THE STRAWBERRY.

J. R. REASONER, Urbana, Illinois.

As civilization advances, our wants multiply; and although not usually very remunerative financially, still we need a few men who are willing to devote their time to experiments on the various lines of human action, to devise or discover something that will meet the wants of a progressive age.

We are in a world of great possibilities—anything which ought to be done can be done. There are resources in Nature's store house to supply the wants of every living creature.

I am willing to stake everything on these propositions: We do not have Alladin's lamp, neither is there any available magic to create for us the luxuries and necessities of life, but we have that which is far better.

All power resides in thought, the ocean steamer, the locomotive, and the great Krupp gun, are materialized and crystalized thought. When the Spanish fleet was sent to the bottom of the sea it was done by an expression of American thought. Many ambitious persons walked over, and slept upon the grounds of the present mining camp of Cripple Creek, but a Stratton was needed to make a scientific study of the geological formations before the Independence mine should be opened. There are mines of untold and undreamed of richness, beneath and around us, the wealth of Wisconsin and contiguous states is largely in the soil.

We want better application, facilities and adaptations with which to procure the necessities and luxuries of life. We believe that all these things are available. We see the results of the stock breeder's efforts. Study the history of the thoroughbred roadster, which measures off his ten miles per hour with as much ease as the ordinary horse can travel his five or six miles. When an explanation is

called for the answer comes, "Select Breeding for Generations." The same may be said of other animals. We have the "Corn Breeder's Association," which is working on scientific lines with promising results. But where can we secure the pedigree of an apple, strawberry or any other kind of fruit dating back five generations, such as some of the stock breeders are able to exhibit?

We assume that all living things, animal and vegetable, have their individualities, diseases and heredities which may be transmitted; and that nature makes a constant effort to throw off the abnormal and to develop the normal, but if we select the plant or animal of low vitality, it may not have force to overcome the impediments. Is there not danger that the continual cutting of grafts from the nursery rows, from trees which have never fruited nor their ancestors for untold generations before them, must have a tendency to induce disease and sterility.

Our business at the present time is to study the character and so far as we are able, to make an estimate of the possibilities of the strawberry.

I do not believe that we have a strawberry which has been on the market twenty years, that has not deteriorated and become unreliable. I can see no reason why there should be any deterioration if we handle and propagate it as carefully as the stock breeder does his cattle. I can see no reason why it should not, with proper selection, be held up to its highest normal standard of quality. But owing to the diverse individualities of plants of the same variety, it is doubtful whether the exact original type can be preserved for any great length of time.

Within the last three or four years we have been "cussing" and discussing, in a way somewhat amusing, the claims and proposals which have been made in regard to breeding up and improving the strawberry by selection. It is certainly not too much to predict that the horticultural experiments on that line will be watched with great interest. For improving the strawberry we have relied mainly on raising new varieties from the seed.

Out of every fifty millions of children born there may not be more than one Clay, Webster or Lincoln, but with careful selection of parentage, environment and culture, the number would probably be greatly increased.

Probably not one seedling strawberry in a million has been an improvement on a half dozen standard varieties. Although at the same time, it is believed that many plants of extraordinary merit have been lost for want of recognition.

"Full many a gem of purest ray serene,
The dark unfathomed caves of ocean bear;
Full many a flower is born to blush unseen,
And waste its sweetness on the desert air."

The very small number of seedlings which have shown decided merit, has led most persons to conclude that raising new varieties from the seed is a very uncertain kind of business.

The observations of a lifetime and an experience of nearly twenty years on this line (under great disadvantages) convince your humble servant, that there is no open field where we may secure more definite and certain results, if we work in harmony with the laws governing plant life and reproduction when we know more of these laws we shall have better success.

The demands of to-day are for very prolific, early, medium and late varieties of good size and color; the gardener wants something which will fill his empty boxes and his purse. The average consumer is not yet educated up to first-class quality, with many, sight is the ruling sense.

When we get a berry, as we probably shall, very hardy and prolific, of great size, good color, less juicy, more fibrous, and tough skin, which will bear handling as you would a peck of potatoes; there will be a demand for it; it will sell, but it is most likely that it will be a Ben Davis kind of concern. Nevertheless there is a growing demand for berries of better quality, and I believe that our American horticulturists will be equal to every reasonable demand.

I suppose that I may be pardoned if I pass over the planting and cultivating, as our horticultural journals are full of such instruction. For the insignificant sum of ten cents, M. Crawford, of Cuyahoga Falls, O., will send a booklet containing about all the information necessary for the strawberry grower. However it is always proper to advise that plants be procured from a reliable grower, and never from old beds, the roots should not be exposed to sun nor wind, plant carefully, cultivate frequently and thoroughly with a narrow toothed cultivator, which will not throw the dirt but will leave the ground level. Much work needs to be done with the hand hoe.

For the commercial grower we come now to the harvesting of the berries. Much work, such as securing pickers, making crates, boxes, etc. can be done previously, as there is little time for that kind of work when the rush comes. To secure a small army of pickers who will do the work well, is not the easiest thing about the business. Some of our best pickers were boys, but the average town boy is not to be depended upon. Girls and women are usually the best pickers.

To insure good work each picker is numbered and wears a badge with the number stamped on it. Each box in his carrier is stamped with the same number. If any bad work is done it is easily located. The best work is usually done where there is the least talking. Remember that you have extraordinary opportunities for training the youth to correct business habits. Allow each one to pick a box to carry home.

The most difficult thing is to market the berries to advantage. There are merchants who will sell your berries to the best advantage and will make proper returns, but we are sorry to know that some of them are tricky and would bear watching. The best way is to sell to them outright for the cash. Usually the most satisfactory plan is to sell and deliver to the families. Put your best boys or young men on the delivery wagons, with instructions not to allow anything to upset their good humor. The best families and most profitable customers prefer to buy their fruit fresh and direct from the producer. By honest dealing we may gain their confidence and they are not apt to desert us. If we happen to put a few of the largest and best berries in the middle and bottom of the box they are almost certain to find them, they rather like to be imposed upon in that way.

AN IDEAL CITIZENSHIP.

Mrs. S. G. FLOYD, Eureka.

In order to have an ideal citizenship we must have ideal citizens. They should be honest, unselfish, selfreliant, should possess a regard for the welfare, rights and opinions of others; should have a thorough education in regard to the laws of life, a love of country and a willingness and ability to serve in time of need.

Good citizenship is manifested in many ways; as influencing for the right public sentiment, in having the courage of ones convictions, to stand firm for truth and justice, to sacrifice personal ambition for the public good.

How near do we come to-day to having this condition? With all our facilities for education and ease of living, we have not the right motive power back of it all to make an ideal citizenship. With the greed of trusts and big corporations, which create in man a selfish nature and a love of money and consequent power causing strikes and bitter feelings of enmity between capital and labor; the saloon power with all its train of associated, legalized evils to educate and make our morals; the ignorant foreign population combined with the liquor habit, to produce anarchists; and our mormon population with its demoralizing sentiments on polygamy, it is no wonder we have reached a state of affairs that makes the wise man tremble for the future of his country, and ask the question, "What are we to do to turn the downward course which we are pursuing?"

Many influences are at work in various ways to open the eyes of the people to their danger. Chief among these is the society of women called the Womens Christian Temperance Union, which with its forty departments of work, has carried on an unmitigated warfare with the liquor trafic, and that of opium and other narcotics; and all forms of legalized vice, for thirty years. Its work, though slow, has not been done in vain. The dawn of a better time is breaking. Men are coming to realize that employes can not be depended upon for good, faithful work, when their brains are addled and their nerves unstrung. The railroad corporations will no longer allow drinking among their employes, and many firms employing help are following their example. Athletics, prize fighters, and even wine testers must be total abstainers if they would be successful.

When we have done away with this awful drink habit and not until then, will we be able to free this land of its haunts of shame where 46,000 unwilling girls are every year sold into a slavery worse than death; and from which only a small per cent. are ever rescued. It is hard to understand why our voters are so slow to cast their votes for the uplift of humanity, and the downfall of all these evils, which could so easily be accomplished, when they are

ready and willing to risk their lives in warfare for some weak downtrodden nation.

It is to the coming generation that we must look for an ideal citizenship. With the present advantages for education, mental, moral and spiritual, we have a right to expect a long stride in that direction. With Scientific Temperance taught in our public schools, the Loyal Temperance Legion, an organization of children for the purpose of educating them in regard to the effects of alcohol and narcotics, purity of life, right living, etc., and the temperance teaching in our Sunday schools; it seems as though some or all of these advantages should be available to every boy and girl in the land, and this lay the foundation for a good and useful life. Every child has the right to be well born, which means healthily born and with good moral tendencies. "Good health is at the bottom of all things good." If good health does not always make good morals, poor health often conduces to bad morals; and as example is better even than precept, parents should endeavor to be what they desire in their children and teach them to consider it their duty to be good citizens.

When this is done by a majority of the people, then will we have the right conditions for an ideal citizenship.

"The world wants men—large-hearted manly men;
Men who shall join in chorus and prolong
The psalm of labor and of love.
The age wants heroes—heroes who shall dare
To struggle in the solid ranks of truth;
To clutch the monster error by the throat;
To bear opinion to a loftier seat;
To blot the error of oppression out,
And lead a universal freedom in."

TRIAL ORCHARD REPORTS.

A visit to the two trial orchards located at Wausau and Eagle River the first week in November found them in as good a condition as could be expected.

At Wausau the orchard did remarkably well in growth and to all appearances the trees looked healthy and strong with the exception of a very few. The ground has been kept clean the past season and

was gone over several times with a drag to keep the soil in a loose condition. The soil was worked over around each tree and where it had been thrown up by a plow and cultivator was leveled off. In the commercial orchard several of the varieties fruited a little the past season, including Longfield, Wealthy, Duchess, McMahan and occasionally some fruit was found on some of the other sorts. The plums and cherries all blossomed out full but the snow and cold rain at this time seems to have destroyed them as very few fruited to any extent. The trees in general throughout the orchard appear to be in a strong healthy condition. In the experimental part of the orchard several varieties are inclined to show some signs of weakness. Such varieties as Bryan, Hoteling, Kaump and Redcheck are among these while aside of these the standard sorts seem to be in a thriving condition. Most of the top worked trees are doing remarkably well but occasionally one is found that will have to be gone over in the spring and regrafted and trimmed up some. But very little signs of blight were found throughout the orchard. All cherries are in a strong healthy condition and making a rapid growth.

At Eagle River I was somewhat surprised at the appearance of the trees. Here a goodly number of trees were found dead which a year ago seemed to be in the best condition. Those trees that were set out first and made such wonderful growth the first season seemed to be the ones most effected. Most of the trees set out last spring started and made a good growth. Out of 432 trees set out the two years at this orchard I found 64 trees either dead or too feeble to remain. Among these I found 5 Early Richmond, 1 Surprise Plum, 3 Tetofsky, 1 Sweet Russett, 16 Duchess, 4 Wealthy, 1 Longfield, 2 Transcendants, 2 Hyslop, 4 McMahan, 5 Faineuse, 5 McIntosh, 1 Talman Sweet, 9 Seek-no-further, 1 Northwestern Greening, 2 Summer Early, 1 Willow Twig and 1 Fridd's Winter. This orchard has good care, hoed crops were planted between the rows and ground kept clean. Last fall each tree was heavily mulch to guard against root killing.

The new trial orchard located at Medford seems to have done very well as can be seen from Mr. S. F. Harris' report, sent to me some time ago. Mr. Harris reports out of 120 trees planted only two are dead this fall which are Montmorency cherry. The follow-

ing varieties were planted at this station: Wealthy, Northwestern Greening, Wolf River, Willow Twig, Snow, Eureka, Newell, Talman Sweet, Duchess, Yellow Transparent, Whitney, the Wyant and Wolf plum, and Montmorency and Early Richmond Cherry. Trees were planted 20 feet each way and mulched at the time of setting. Mr. Harris will lease from three to five acres of land, plant and care for the trees upon the same under the direction of the State Horticultural Society, without charge, provided the said Society furnish all trees without charge and pay the freight and express charges thereon. Mr. Harris has taken great interest in the orchard the past season and we feel as if we could not have placed this orchard in better hands.

J. L. HERBST.

L. G. KELLOGG.

HARDY PERENNIALS.

W. J. MOYLE, Yorkville.

Nothing will make more show or give more satisfaction throughout the summer than a bed or border of hardy perennials on your lawn, provided the bed is properly located, put in the proper condition and planted with the varieties adapted to your locality.

In the first place a bed of hardy plants should always occupy a place on the back side of the lawn, as a rule, of course there are exceptions to this, for instance, some of the very dwarf varieties may be planted in very narrow beds along the edge of a walk with good effect. The early blooming dwarf Iris, (*Iris Nudicaule*), or the Golden Wave, (*Corcopsis Lanceolata*) may be mentioned as examples. Thus planted they make a very pretty effect while in bloom and as soon as this period is over they can be cut back so as to appear not unsightly.

But, as previously stated, must be the hardy perennials, and of a more or less tall or sprawling growth, and thus are best planted against a back ground of shrubbery, a fence or something of that nature. I recall to mind an instance of the improper planting just mentioned; it was a bed of the tall, rank growing Golden Glow, which had been planted in a most prominent place on the front of a

lawn. There it grew, flaunting its great weed like growth in the face of every passer by and giving the entire lawn, which had many desirable and beautiful features, a course vulgar appearance.

Having decided where you will have your bed, the next thing is to properly prepare it, a thorough spading and goodly amount of well rotted manure should be used in the preparation. The bed or border being ready the next thing is what shall we plant and in what manner? The Germans, who are very successful with hardy perennials I notice, set out the plants in a very systematic manner and give thorough cultivation the entire season.

In order to have the border look nice all the season great care should be taken in setting the plants so that some will be in bloom the entire summer, this is not a difficult matter provided you are familiar with the blooming period of your flowers.

Here is my selection for a bed or border for Wisconsin, and the manner in which I should plant it. About three feet in width is amply wide enough for your border. Along the front edge of this I would plant a row of Scotch Pinks, these should be set about six inches apart so as to form a matted row the first season. Back of these as close as you can set them, set a row of *Nasturtia Virginica*, a very early blooming native plant that should be better known. Then should come a mixed row of the following, setting them alternately in the row: Phlox in colors, *Aquehga* in colors, Lemon Lily, German Iris in colors, *Coleopsis Lanceolata* and *Pyrethrum Rosia Grandiflora*. Now for the back side of your bed or border set in your more robust, tall growing varieties, such as Paeonies in colors, Japan Iris, Larkspur, Yucca, Tiger Lilies, Japan Lilies, of the *Speciosa* variety, viz. S. Albu, S. Rubia, S. Rosea, a few Hollyhocks and an occasional clump of Golden Glow.

All the above mentioned plants will thrive, and grow more beautiful every year. About every fourth or fifth year, however, to have the best results, the plants should be taken up divided and reset.



E. H. S. DARTT GOES TO HIS REWARD.

Edward Harvey Schuyler Dartt died early Saturday morning at his residence on east Broadway in Owatonna, Minnesota.

The deceased was born at Weathersfield, Vermont, on the twenty-fourth day of November in the year 1824, and was the son of Josiah Dartt. He remained under the parental roof until 1844 when he went to Wisconsin. He taught school at Fox Lake in Wisconsin and spent several years pursuing a course of study in Ripon College. Later he removed to Kingston and shortly after the opening of the civil war started a general mercantile establishment in that town. He was appointed postmaster in that place and also held the office of justice of the peace.

In 1869 Mr. Dartt went to Minnesota and took up his home in Owatonna where he has since resided. He engaged in the nursery business and after he had lived here a few years became recognized as an authority on horticultural matters. He was honored with the appointment of superintendent of the state experimental tree station west of Owatonna and his researches in horticulture have made him prominent throughout the northwest.

He experienced an accident when 16 years of age while skating and suffered severe injury to one knee. The result was that the joint stiffened and he has been crippled since that time.

Mr. Dartt was twice married. In 1856 he was united with Miss Lucretia Brooks of Kansas. The union was blessed with six children, three of whom are living. These are Dr. W. S. Dartt of Palouse, Washington, Mrs. Charles M. Kirk of Santa Barbara, California, and Harvey S. Dartt of this city. His first wife died in 1876 and a year later Mr. Dartt was married to Miss Carrie Wookey at Kingston, Wisconsin. One son, Roland M. Dartt was born as a result of this marriage.

Mr. Dartt was truly a philanthropist and a public hearted citizen. He was one of Owatonna's greatest benefactors. People of this locality are well familiar with his good works. His park, one of the prettiest and most picturesque spots in southern Minnesota, has done much to advertise this beautiful city and is one of the nicest picnic and recreation grounds to be found in this part of the state. Mr

Dartt was liberal in his ideas of public improvements. Among other things he agitated a drive between his park and the Mineral Springs Park and it is probable that this improvement will be made at some time in the near-future. Mr. Dartt owned considerable real estate in the vicinity of Owatonna and his additions to the city are among the nicest residence portions. When he planned an addition and after the tract was surveyed he at once laid out broad streets and planted shade trees to beautify it. "Dartt's Paradise" was his most public spirited work and the public hope that the kind-hearted old gentleman who passed from earth's labors saw fit in his last testament to bequeath this beauty spot to his fellow citizens.

JONATHAN T. GRIMES.

Jonathan T. Grimes, another pioneer in horticulture, has passed away. He was one of the leading and oldest members of the Minnesota State Horticultural Society. He was president of the Minnesota society from 1879 to 1880. No man was more esteemed for his honesty and zeal for the right. He was a man of large experience in horticulture, and though advanced in years, will be missed by his co-workers in horticulture.

SPECIAL ANNOUNCEMENT TO SUBSCRIBERS AND MEMBERS OF THE WISCONSIN STATE HORTICULTURAL SOCIETY.

With this issue the magazine will be discontinued. All those in arrears on subscription should be prompt in making their remittances on receipt of notices sent. After debating the question for some length, the executive committee of the society decided that the money expended in issuing the HORTICULTURIST, could be used to better advantage to the horticulturists of the state by the locating of more experimental orchards, and by the issuing of a bulletin and other material to better further the interest of horticulture in the state.

The object of the Wisconsin State Horticultural Society is to aid in the formation and maintenance of county and local horticultural

societies. to promote the horticultural interests of the state by the holding of meetings for discussions, by the collection and dissemination of valuable information in regard to the cultivation of fruits, flowers and trees adapted to our soil and climate, and in every proper way to advance the fruit and tree growing interests of the state.

Those who are in the fruit growing business in our state, or who are interested and intend taking up any horticultural lines of work, should by all means become members of the State Horticultural Society. We believe we can do you much good and believe you will be an aid to us in your locality.

The membership fee to the state society is \$1.00, or if you are a member in good standing of a local society, may become a member of the state society by the 50 cent fee. In those sections of the state where the fruit growing interests are carried on to any extent, those interested should organize a local society. It will be a mutual benefit to all. These societies should hold monthly, quarterly or semi-annual meetings, where the various lines of horticultural work can be discussed. In those sections of the state where you contemplate going into some horticultural line of work, by all means organize. You can help each other in the work. The state society is willing at all times to aid you in the work. They invite you to join and identify your selves with them. They can aid you in your work. Advise you the best varieties of fruit, flowers or plants to plant in your locality, and best methods of cultivation and harvesting the various crops. The annual report contains all papers and discussions at both summer and winter meetings, a list of varieties adapted to our state, and much valuable information which will be a guide and help in your work, is given to each member, as well as all bulletins issued throughout the year.

If you are not as yet a member send in your fee to the secretary, J. L. Herbst, Sparta, Wis. The Report for 1902 is now being sent out and all members who have not received a copy should notify the secretary immediately, as the supply may be exhausted. All local societies not receiving their quota will confer a favor on the secretary by notifying him, and same will be sent.

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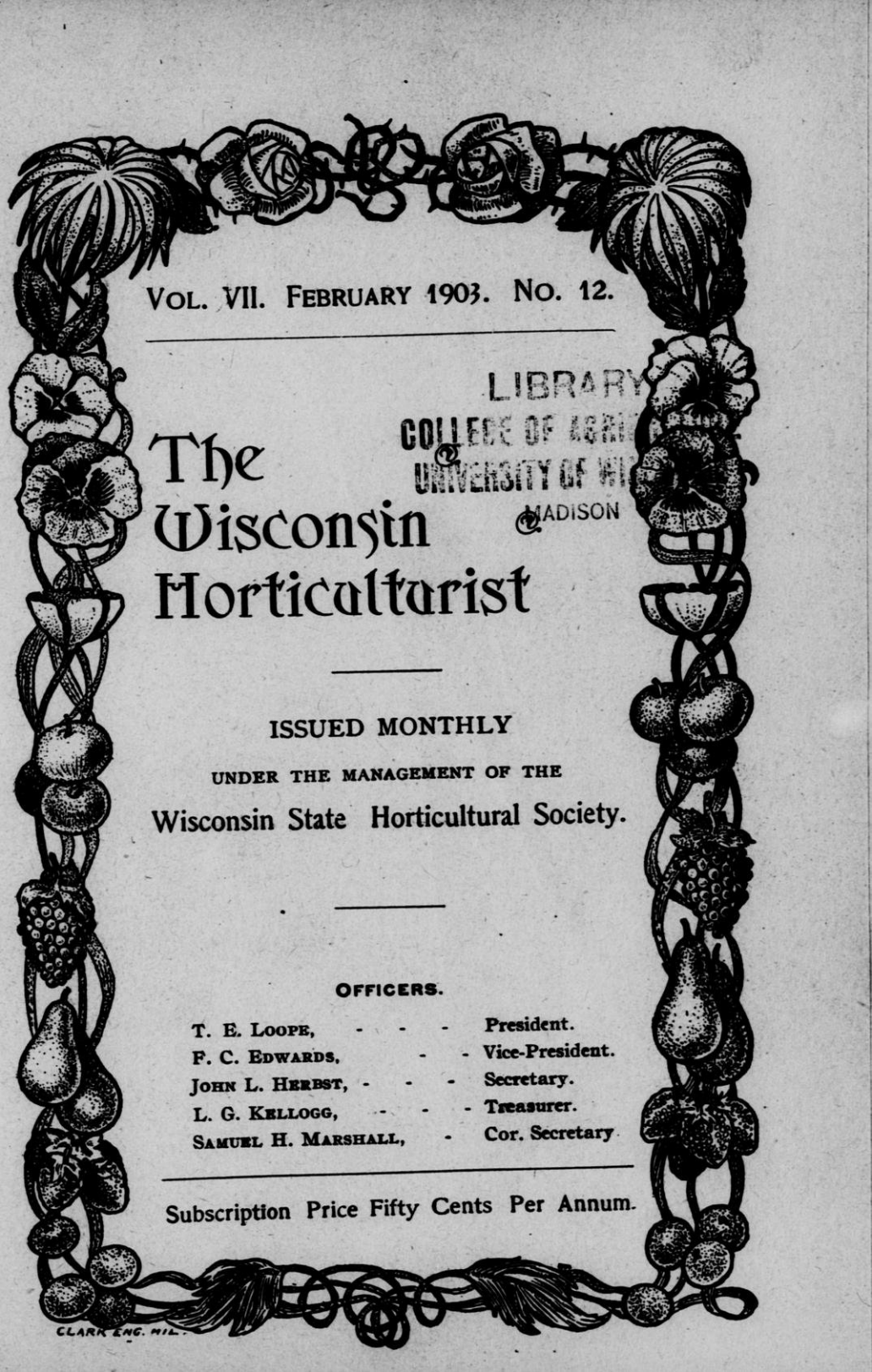
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The Wisconsin Horticulturist

ISSUED MONTHLY

UNDER THE MANAGEMENT OF THE
Wisconsin State Horticultural Society.

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