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The Wisconsin horticulturist: issued monthly, under the management of the Wisconsin State Horticultural Society for the purpose of disseminating the horticultural information collected through the age...

Wisconsin State Horticultural Society

Madison, Wisconsin: Democrat Printing Company, February 1897

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THE WISCONSIN



HORTICULTURIST

ISSUED MONTHLY,
UNDER THE MANAGEMENT OF THE

WISCONSIN STATE HORTICULTURAL SOCIETY

For the purpose of Disseminating the Horticultural Information
Collected through the Agency of the Society.



A. J. PHILIPS,
Editor and Manager,
West Salem.

VIE H. CAMPBELL,
Associate Editor,
Evansville.

DEMOCRAT PRINTING COMPANY,
MADISON, WIS.

The Gano apple is from Missouri. The original tree is a seedling, or is supposed to be such, on the farm of a prominent fruit grower. It is now widely planted and is known as the improved Ben Davis. It is a good commercial apple. The tree and fruit are very nearly a re-duplication of the Ben Davis, but in some points there is improvement on that well-known variety. The fruit is a solid red. The tree opens its leaves and starts growth from three to five days earlier than the Ben Davis, but otherwise, so far as we have observed, it is the same. We would like to hear from others as to whether they have noticed any other difference between the two. The solid red is a decided advantage in selling the fruit, and this is certainly a point gained.



WISCONSIN'S RESOURCES are attracting general attention, and its railroads furnish the means to develop them. The limitless iron ore deposits of the Penokee and Gogebic Iron Ranges provide abundant opportunity for the establishment of Iron Furnaces and general iron working industries. Hardwood timber in great quantities attracts manufacturers of all wood articles, including Furniture, Woodenware, Staves, Headings, Hoops and Veneering; the Granite and Lime Stone quarries are attracting attention, as their quality is unsurpassed for fine building work and strong lime. Numerous Clay, Kaolin and Marl beds furnish the best material for Tile, Brick and Pottery.

All of these materials are located along the line of the **Wisconsin Central**, and any one who desires to locate a manufactory is requested to write us, as we desire to confer with everyone who wants a good location with facilities for reaching markets everywhere.

W. H. KILLEN,
Industrial Commis'r.

C. L. WELLINGTON,
Traffic Manager.

H. F. WHITCOMB,
General Manager.

MILWAUKEE, WISCONSIN.

A GREAT RAILWAY.

The **Chicago, Milwaukee & St. Paul Railway Company** owns and operates 6,169 miles of road.

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Its General Passenger Agent asks every man, woman and child to buy tickets over the Chicago, Milwaukee & St. Paul Railway—for it is A Great Railway.

GEO. H. HEAFFORD,
Gen. Pass. and Ticket Agent.

"ANNOUNCEMENT."

With this number of our magazine my connection with it as manager and editor cease. My work as secretary has been outlined for the coming year by our executive board, to superintend the management and planting of the new trial orchard and do the work of the society in holding annual meetings and printing and distributing our annual transactions as was done before the magazine was published. No special appropriation was made to look up new fruits, and the plant distribution to children has been suspended for a year or more. I feel sorry for this last move, for it has been for years the only especial thing we have done to interest the boys and girls who will be our future horticulturists. Though they did not all report progress, we do not realize the amount of good we have done. Last year to interest them in a new line I offered six root grafts of three kinds, to boys and girls for five cents in stamps. I distributed them to nearly three hundred applicants and I have not heard from all of them, still I have received many very interesting letters from them and nearly all reporting have had good luck in making their grafts grow.

I look on this as seed sown in the very best ground we have in the state, to-wit, among the boys and girls, and I renew my offer to them for the coming spring of six root-grafts of three varieties, labeled, for ten cents in stamps, or for twenty cents in stamps I will send the foregoing postpaid with the addition of one good Loudon raspberry plant. This would start a boy or girl, so that in five years they could have a nice raspberry garden, of the best red raspberry grown of the sucker variety. I print as a frontispiece the cut of the Columbian raspberry, a very promising new Tip variety; this was omitted by mistake in the December magazine.

I hope that the plan I have inaugurated of placing in our transactions and in the magazine the pictures, and a short sketch of our old members and veterans in horticultural work, may by the new manager be continued, as it is a source of pleasure to them and their families to realize that their life work has been appreciated. In the January monthly the name of the writer, John L. Herbst of Sparta, was omitted at the head of a very good article on Fall Work in the Fruit Garden. As it did appear it looked as if I, as editor, had written it, and as I have no desire to steal John's thunder I wish to make the correction. In retiring from the management of the magazine I wish to return my thanks to those who have been pleased with my earnest efforts to make it useful and interesting, and to those who have sent to me many words in its praise, also to those who have sent me their communications when solicited or otherwise to help make its columns interesting, I return my sincere heartfelt thanks. The criticisms received I will try to erase from memory. It is no secret that there are in our society opposing factions, and the man or woman does not live that can please all, and I hope this change may prove that it has increased our membership and that the magazine may increase in circulation and be more useful to all who read it. I make the foregoing announcements so that those who have business with the magazine can write to the editor and manager, and all who wish information pertaining to the secretary's office may write to me. When the place of publication is fixed and the new editor and manager accept their positions the same will be announced. Our people were unanimous in continuing the publication and to have it original matter.

Yours truly,
A. J. Philips.

PROF. F. M. WEBSTER ON SAN JOSE SCALE.

The following able, instructive and useful article on the San Jose scale was written by Prof. F. M. Webster of Wooster, Ohio, and I deem it of so much importance that I publish it in full.

Of all scale insects at present known in America this is the most to be feared on account of its deadly effect on the trees, the rapidity with which it increases, and the difficulty in killing it. Even with applications of mixtures that would prove fatal to any other of our scale insects though used at one-half or one-third the strength. It is not overdrawing the seriousness of the matter in the least to say that it is the worst and most to be feared insect pest that this country has ever witnessed. I say this from personal acquaintance. With its effects as shown in Ohio orchards where this pest has been introduced I am satisfied that a tree starting with half a dozen young females ready to give birth to young if nothing is done to stay their ravages, or prevent unrestricted increase, will be killed within four or five years, no matter what the soil may be or how vigorous the tree may have been at the commencement of that period. From records kept at the department of agriculture at Washington of isolated females it is estimated that the progeny of a single female during a single season may amount to the enormous number of 3,216,080,400 individuals. Of course it is not supposed that all of the young of various broods will survive, but even were half of them destroyed through natural causes my estimate is a long way within bounds.

When we come to consider the fact that the pest has few natural enemies with us at least and so far as my own experience has shown, these few are not sufficiently numerous in individuals to have any appreciable effect, I think you will see for yourselves that the enemy is the most serious one that has ever menaced the fruit interests of the United States. The young when scattered singly over the limbs and twigs of trees are very inconspicuous objects, and infested orchards where I knew the pest was present, knew just where to look for it, I have not been able to discover them readily, and usually the

longer I have searched the more numerous I have found them. I would not go over the tree with any amount of caution, and, having finished the examination, state positively that no scale were present, but could only say I could not find them. Besides this difficulty of detecting the insect when exposed, it is very minute and is thus enabled to ensconce itself in the crevices of the bark where it is not easy to reach them, and their great tenacity of life seems to increase with the coldness of the climate as is witnessed by the fact, that measures which have proven effective in California have been shown to be almost useless here in the cooler climate of the east. In a recent bulletin issued by the department of agriculture, Mr. Howard has pointed out the fact that while 90 per cent. of the scales may be killed without any serious trouble, the other 10 per cent. are extremely difficult to destroy. I call attention to all these points, because people have been hearing so much about this pest during the last year or two, and familiarity breeds contempt, or, in other words, carelessness, and I wish to impress on your minds the necessity and importance of extreme vigilance against getting the pest on your premises, and prompt action in case you are unfortunate enough to do so. As you all know, this pest has been scattered over the country in nursery stock, and in no other way. If promptly taken in hand, soon after transplanting and while the trees are very young, the expense of extermination will not be very great, even though this requires the sacrifice of a few trees. This scale occurs on all parts of the plant except the roots, and as the plant becomes more and more seriously affected the scales crowd and overlap each other, the young filling the interstices, that covers the bark with a gray deposit that can be rubbed off with the thumb nail. The female scale is circular with the center slightly elevated, the outer portion of a gray color, while the center portion varies from a pale to a reddish yellow. I do not know that a more technical description would assist the ordinary observer in distinguishing it. The young are produced by birth and no eggs are deposited.

The young of both sexes are at first very active, but soon settle down, the female to remain stationary, never leaving

her scale, the male to develop and fly where he pleases. A female continues to give birth to young for about six weeks, according to the studies of Mr. Howard, and produces in that time about 400 young, at the rate of nine or ten every twenty-four hours. But the first born females will themselves become mothers in about forty days, so that the breeds become interminably mixed, the newly born and the grandmother occurring indiscriminately, together whenever they can find a bit of unoccupied bark in which to thrust their diminutive beaks and extract the sap therefrom. A badly affected tree appears a short distance away as though it had been first coated with some sticky substance and then dusted with a fine gray powder like ashes, while the effect on the growth gives it a stunted appearance, so that a badly affected tree can be distinguished at a considerable distance. The scales pass the winter in all stages of development, and in fact what amounts to only a suspension of operations to be resumed again the following spring. In the matter of spreading as the male only possesses wings, of course the insect can spread but slowly of its own volition, but it may be, while very young, carried from tree to tree by the winds, or crawl on the feet of birds that alight upon the trees and thus transported long distances, and also it may attach itself to the bodies of insect visitants and in a like manner be carried about. Mr. Schwarz has found that a very small, black lady beetle that devours the scale, and is looked upon as a benefactor, gets the young on its body, and as it goes about, carries the pests to new localities in an orchard. Now while all of this may and probably does, occur, I have found it to spread very slowly, and with but one exception, to adjoining trees from such as were clearly infested when brought from the nursery. My own observations have shown that for the first few years it spreads from tree to tree in very young orchards slowly—about the only good feature that its whole history possesses. In the matter of prevention I have given you the key-note in calling attention to the fact that this pest is distributed in nursery stock. Now I do not wish to be understood as casting any undue reflections upon nurserymen nor shall I attempt to indicate where you shall purchase your trees or where not.

Buy wherever you choose but be cautious in any case. I do not believe there is a nursery in Ohio or Indiana that is infested with this pest but wherever you buy keep a close watch of your trees for a few years. If a nurseryman runs short of stock at any time, it is a legitimate part of his business to purchase elsewhere to accommodate his customers and hold his trade. If he is a reputable man he will exercise as much caution as you possibly could in securing trees free from scale, and while the final seller should be held responsible the chances are that you will run no more risk than if you undertook to do your own selecting though both will run a certain amount of risk. For this reason I throw out the suggestion in regard to looking well to your trees for a few years. A nurseryman who has spent a lifetime in building up a reputation has a thousand times more at stake than any one of his patrons, however heavy a purchaser he may have been, and he will not be likely to wreck that reputation by distributing San Jose scale. So also with the energetic fruit grower, who will be very cautious of whom he purchases trees and will watch every one of them carefully after he has planted them out in his orchard, and if by chance a tree is found infested with this scale, it will go promptly into the fire and the whole orchard be disinfected. We have little to fear from either of these but very much to fear from the disreputable nurseryman with no reputation to lose and perhaps no nursery of his own, buying his stock where he can get the greatest amount for the least money, and selling where he can get the highest price, filling orders for a dozen varieties from one, and you will pardon me for adding that he sells as a rule to country people, and to those who are ever ready to attempt to accomplish that difficult feat of getting something for nothing, and who, four times out of five, will turn their young orchard into a pasture and expect the stock to raise the fruit. It is from this class of nurserymen and from this class of country purchasers that we have most to fear. The admonition to watch your neighbor as well as yourself will apply to both nurserymen and fruit growers. In Ohio we now have a law making the sale or offering for sale or allowing this pest continue on

any premises a misdemeanor, punishable by a fine of not less than \$10.00 nor more than \$100.00. Now in regard to the mode of procedure in case of the occurrence of this pest in either nursery or orchard. For the nursery although the whale oil soap mixture will be found effective, fumigation with hydrocyanic acid gas will be found most practical as many thousands of trees of a marketable size can be brought together and heeled in so as to include them within a small space. The fumigation is done by first making a tent of eight ounce duck, or ordinary blue or brown drilling will answer, sewed carefully together and painted or oiled to render it air tight. This is placed over the trees to be treated, and under it is placed a vessel of glazed earthenware of one or two gallons capacity. Place the vessel on the ground, and put in for every 150 cubic feet of space covered by the tent three fluid ounces of water, slightly more than one fluid ounce of commercial sulphuric acid and one ounce by weight of fused potassium cyanide 58 per cent. pure in lumps. Allow the trees to remain in the fumes half an hour, if large, and one-fourth of an hour if small, using if possible on cloudy days or at night. The whale oil soap mixture is made by dissolving two pounds of whale oil soap in a gallon of hot water, though cold water may be used. This mixture can be used as a spray or painted on with a brush. In an orchard in southern Ohio we have been trying several experiments in destroying this scale. If applied during mid winter ordinary commercial kerosene has been used in place of the soap mixture with excellent results, as to destroying the scale and without so far injuring the trees. I am however disinclined to recommend undiluted kerosene, at least until after further experiments, though so far no injury has been done even to peach trees. In some of our experiments we cut the tree off 18 or 20 inches above the ground in winter and thoroughly cover the surface of the stump with kerosene, using a brush and getting it into every crevice or cavity of the bark. Later and at the proper season these stumps were grafted upon as with large limbs. We killed the scale and did not injure the trunk, and the grafts grew finely—too finely in fact, as they soon became so rank

growing and so brittle that the winds in many cases broke them off, and for this reason the experiment was not considered a success. We tried another with better results. We simply cut away the top and burned it, leaving only enough of the larger limbs to graft upon and tried only to form a new top. The trunk was treated with kerosene as with the other experiment. This was done in the spring of 1895 and examinations of the trees this year have shown them to be in a thrifty condition, some with a better top than the original had been, and the most severe searching failed to reveal a single living scale on them anywhere. Where the trunk is not severely attacked I feel quite sure there is much to be gained by this management. But if the trunk is badly covered with scale it will be far cheaper and more satisfactory to root out the tree and burn it as soon as discovered. The question of extermination is less a question of what can be done than what will be done—less a question of what insects will do than what men will do or can be made to do. We can manage the pest in Ohio if other states will do their duty as they ought.

HORTICULTURE.

Mrs. S. G. Floyd, Eureka.

What is horticulture?

Webster tells us that the Latin word *hortus* means garden, and *cultura*, means culture, so that the word horticulture as rendered in the English language simply means the art of cultivating a garden. Shakespeare says it is an art that "doth mend nature."

A garden can be large or small, can be planted with trees, fruit, vegetables and flowers. "A Horticultural Improvement Society" is an association where all can see that some improvement is needed and take measures to secure the same. Improvement is our watchword. Each one of us knows a little, but no one knows it all, and each can see some needed improvement for the good of all.

Who will say that such a society is not needed for the in-

formation of each and every one of us, and for the inspiration that it will give us to practice the things we know; and who can say that the "Horticultural Improvement Society of Rushford" has not been of incalculable benefit to us all. There is always inspiration in members, two or three enthusiastic persons will enthuse a whole society; all will gain something by it, and no one will lose anything. The work that we have already done is just a beginning of what we shall do in the future. Who can measure the influence of the flower shows in the different horticultural societies. It may not speedily be seen, but will ultimately be seen and felt throughout the whole country in improved orchards, gardens and flowers in and around our homes thereby improving the appearance of the town or village in which societies are held. It will also attract the attention of people who visit the town or village and lead them to think more highly of its inhabitants as well as a desirable place for residence, and in this way increase the value of real estate.

A valuable lesson taught by the practice of horticulture is that of unselfishness. Who is there among the lovers of flowers and fruit that takes the greatest pleasure in growing them for himself or herself alone.

Why is it that we generally grow flowers in the most conspicuous places in our grounds if not because we want the public to share their loveliness?

The beautiful flower mission owes its origin to the unselfishness of a young lady teacher in the suburbs of Boston years ago, her gifts of flowers were anticipated by the ragged children by the roadside, and eager dirty little hands were open and ready to receive them.

It is a well known fact that much good has been done by the distribution of flowers in hospitals and among the sick everywhere. We can all do such simple acts of charity and kindness. Were we to gather up the many interesting incidents of the flower mission, and publish the grateful letters, we could fill volumes with touching stories stranger than fiction. Did you ever observe that a grower and lover of fruits and flowers is kinder and more sympathetic and a truer friend?

Beauty is not always expensive. The decoration of cemeteries and school grounds are an outgrowth of the work of the horticulturist. These can be made very attractive by individual effort and should be. The influence of beautiful school grounds will abide with our children, and like good leaven will work through life. Horticulturists have great opportunities for doing good; it is mainly through our influence and efforts that people will be induced to beautify their homes and increase their happiness by planting and caring for ornamental and fruit trees, the health giving grapes and berries.

The flower garden is an endless enjoyment and perpetual beauty, and think of its possibilities for happiness. Flowers for your homes, your table, your friends, flowers for wedding gifts, flowers to strew about the dead, the more dearly loved by those who cultivate them.

Let no one say that they have no time to care for them, for it is a truth not to be denied that we all find time more or less to devote to the things we love. As to the question do they pay? Put that thought away, it cannot be settled in figures. Did it ever occur to any of you that there is a pleasure in giving slips and seeds to those who would gladly cultivate them if they could be procured? Our floral treasures will be doubly precious to us if shared with others. There are always those to whom a plant or cutting given will bring pleasure.

Horticulture has a refining influence upon all who come within its embrace. A tasteful country home attracts the city eye immediately since it bespeaks a certain degree of refinement in the possessors. The homes once bleak and bare, with not a tree, shrub or flower near will be surrounded by beauty when once people become interested in this noble work of ours.

He who works to establish and sustain Horticultural Improvement societies is both a patriot and a philanthropist.

Normal School, Ottawa, Dec. 14, 1896.

A. J. Philips, Sec'y Wisconsin State Horticultural Society.

My Dear Sir:—I beg leave to acknowledge the receipt of your acceptable report, also copy of your monthly magazine. I must say I have read some very superior articles and have learned many valuable lessons in fruit growing. I am quite surprised to learn that so many of our well known apples had their origin in your state, notably McMahan and Pewaukee, also the Louden raspberry which is well known here. I feel an interest in your country as two brothers and my parents have been citizens of the United States for many years. Pardon me if I make a suggestion: that is, would it not prove very convenient to have a simple map of the state showing experiment stations, line of railroad, shipping facilities, etc. Should you think well of it I shall esteem it an honor to make a drawing of such a map within easy compass of your report. Should all the stations not be mentioned in your report you might state where they are.

I send you under separate cover the latest Dominion Report of experiment farms. Thanking you for your kindness and courtesy, I am sir,

Yours very gratefully,

T. H. McGuirl.

Hanover, Wis., Feb. 2, 1897.

Friend Philips:—

I herewith hand you \$1.00 for membership in State Society for the ensuing year, and regret very much that circumstances are such that I cannot well meet you all at the annual round up.

I did some institute work in the "horticultural line" this winter, and got a nut at an institute in western Richland county that I am unable to crack. And that is this: There is an insect that has recently made its appearance in western Richland and Vernon counties that eats the buds of the apple tree, at the time the bud is ready to open or just before. They eat both leaf and blossom bud. This insect has done

much damage in that vicinity. As near as I can learn the insect is a bug about three times the size of the chinch bug". I visited a small apple orchard in Viola, Richland county, that had been attacked with this insect last spring. The trees looked anything but thrifty, and had not made over one inch of growth the past season, except an occasional bud that had escaped the insect, which had made a growth of not less than 12 inches on the same tree. This was a young orchard, about two or three years planted. On making inquiry of the farmers present I found the complaint quite general. And last spring was its first appearance, as no one present had seen this insect or its work prior to last spring. I heard nothing in regard to it at an institute in Crawford county, not over 20 miles distant, neither have I seen or heard anything about it in this part of the state or elsewhere. Have seen no signs of it in either one of my orchards. Perhaps some of our apple men may be acquainted with this enemy and can give the remedy. Possibly Prof. Goff may have got track of the interloper.

Yours very truly,

E. J. Schofield.

Will some one please answer Brother Schofield in next month's magazine?

Editor.

The following resolutions were reported by the committee and adopted by the annual meeting:

Resolved, that we continue the publication of the monthly magazine, on such terms as the executive board may make with the printers.

Resolved, that Mrs. Franklin Johnson be the editor of our monthly, at a salary which shall be fixed by the executive board.

Resolved, that the thanks of this society are hereby tendered to the chief clerk of the assembly, Mr. Nowell, and to Chairman Latta of Antigo for placing a room in the capitol at our disposal for this meeting.

Resolved, that we, as a Horticultural Society, recognize the placing upon the program at each "farmers' institute" the

fruit and vegetable question presented by some successful grower as one of the best means of furthering the interests of horticulture in Wisconsin.

Resolved, that the thanks of this society be extended to the farm committee and Supt. McKerrow, for giving the fruit interests of the state so prominent a place in the farmers' institutes.

BEST EVERGREENS FOR WISCONSIN.

By W. D. Boynton, Shiocton, Wis.

These should be divided into two classes, for we have two main or general purposes to serve: First, we plant for shelter and protection for our grounds, buildings and our fields. Second, we plant for the ornamentation of our home grounds. While both purposes are more or less served by the planting of any and all evergreens, we can best consider this general topic of evergreen planting by giving it the broad division above outlined.

The question is frequently asked: Which are the best three or four evergreens for general planting? It is a hard question to answer, unless we divide the question something after the manner just indicated. Now, that we have divided our question so that it shall be, first, the best evergreens for shelter and protection, and second, the best for ornamentation of our grounds, we will next divide our leading hardy varieties of evergreens into two classes, which shall best serve these two purposes.

For Shelter and Protection.

In this class we must, of course, list the rank, quick growing evergreens such as Scotch, Austrian and White pines, and the Norway spruce. If asked to name the two best in this list, I would say the Scotch pine and Norway spruce; and if asked to give the best *one* evergreen for this purpose, I would make it the Norway spruce, on account of its adaptability to all soils and conditions, its heavy root and consequent certainty of growth after transplanting, and its comparatively low price

at the nurseries. If there is such a thing as a general purpose evergreen for the northwest, it certainly must be the Norway spruce. Nothing can be finer than a row of these trees around the farm, or about the stock yards and in belts and clumps about the grounds.

The Scotch pine is the most rapid growing of all the evergreens during the first 12 or 15 years of its life. After that age, I think, the White pine would hold its own with the Scotch pine in respect to rapidity of growth, and in the end the White pine would be the most desirable of the two. But for those who are seeking immediate effect, or the earliest possible service from the planting of the shelter belt, nothing can be better than the Scotch pine. Both this and the White pine will thrive on light, sandy soils and in dry locations where the Norway spruce would sometimes fail. The pines hold their color perfectly in winter, which makes them very pleasing companions during our long, bleak winters.

For Ornamentation.

While the same evergreens that we have just listed, may also be used for ornamental planting, especially on extensive grounds, they are, as a rule, rather coarse growing varieties for the planting of lawns and grounds of quite limited area.

We will now give a few of the perfectly hardy and most desirable evergreens for lawn planting in Wisconsin.

The Am. Arbor Vitae fills a wide field here, as it makes a fine single specimen, besides its well known value for low-clipped hedges and freer growth in the tall screen. Its only fault is that peculiar to all the Arbor Vitae and cedars—that of excessive browning in winter. The more compact growing spruces, such as the White, Blue and the Rocky Mountain spruces, among which is found the *Picea Pungens*, the finest and bluest of all spruces. All of these make very fine symmetrical single specimens, and are also good for grouping, as indeed all evergreens are when there is sufficient room for such work. The spruces hold their color very well in winter.

The Red cedar has its merits, but is not perfectly hardy in all portions of the state. The Balsam fir and common Euro-

pean Silver fir are very fine symmetrical growers and perfectly hardy, but of rather large growth for small grounds.

Very many varieties might be added to this list, but let us not confuse ourselves with too many varieties. Let us first make good use of our hardiest and best. Let us remember, too, that while we frequently run across beautiful specimens of varieties that are not listed here, in our ramblings through Wisconsin, it is usually because of a favored location, natural or otherwise, and that it would not be good policy to push them forward for *all* locations.

SELECTED.

Of American fruits the apple is king. It is not only our highest prized luxury, but has come to be regarded as one of the staple foods. Where it originated we know not, but the United States is its happiest home. We raise not only more but better apples than any other country. The winter crop of 1896 is estimated at 65,000,000 bushels. November last they were quoted in Chicago by Orange Judd Farmer at an average price of \$1.50 per barrel. This would give \$97,500,000 as the value of the winter crop. If the summer crop was one-third of this, we have the snug sum of \$130,000,000 for this one crop.

American apples, when the crop is good and the various kinds are of perfect growth, are the finest fruit in the world. There is no fruit of the tropic or subtropic regions as good for all purposes as apples. Apples are superior to oranges, bananas, lemons, tamarinds and all other fruits in their taste for the palate and their wholesome effects as food. Their flavor is as various as human tastes. From the sweetness of honey they range to the sharpest acidity. They fill every need of the stomach for the vegetable juices which promote health. There has not been in a generation as prolific a harvest of apples as that of the present year. All the branches of all the trees in all the orchards have been over-burdened with their wealth of fruit. If the product of this year could have been

distributed over five years of partial production or of famine the average would have been sufficient for the entire period. In recent years the choicest varieties of apples have been scarce in quantity and of inferior quality. They have lacked form and flavor. They have been deteriorated by various causes—from attacks of insects, by drouths, late or early frosts and seasonal influences for which there was no apparent origin. This year all the soil and climatic influences have been favorable. In the fruit belts of the east and west the apple crop is prodigious. The quality is of the best. The very culls and refuse this year are superior to the choice fruit of some previous years. The shipments of American apples to Europe have begun and are likely to be enormous in extent. The great crop this year will cause the fruit to be distributed at a lower price in Europe than ever before. In the past American apples have been a rare and expensive luxury to European consumers. This year they will have an abundance at low cost of the most delicious fruit that the soil produces.

THE FARMER'S GARDEN.

Plan the berry garden as carefully as you would any farm building. Start right, and you save time in preparing the soil, in setting the plants, in cultivation and in all the details of the work.

Make a complete drawing or plan of the new garden and work to this plan in a regular systematic way.

Take a piece of heavy paper or a clean smooth board and draw ten straight lines, one inch apart and twenty-five inches long. These lines to represent ten rows of plants seven feet apart. Now draw cross lines one-half inch apart the entire length of plat, making just fifty cross lines.

The intersection of each cross line with the long lines represents the exact point where plants should be set.

This requires just fifty plants to the row, the plants 3 1-2 apart in the row and rows 175 feet long.

Set strawberry plants just half this distance each way, twenty-one inches apart in the row and rows 3 1-2 feet apart.

Make a selection of the varieties you want, the number of each variety and the rows they are to occupy.

Write name of berry and number of plants on the line selected. This plan requires one quarter acre of ground and will furnish a liberal supply of berries throughout the season for a large family. Every farmer should have such a garden.

Long straight rows are easily and closely cultivated by horse or hand cultivator.

Fifty plants to the row may be purchased, at 100 rates, thus saving in price of plants. Uniform and exact setting adds to beauty of garden and interest of grower.

The varieties to be selected depend much on soil, location, manner of cultivation, taste of grower and other surroundings.

Select varieties known to do well in your locality if tested there, otherwise standard varieties that have done well over a large extent of country.

Order direct from responsible growers, thus being sure of good plants at moderate prices. High priced novelties are generally disappointing.

The following varieties are recommended as doing well in most localities. The kinds and number for each row, will give you early and late varieties, coming in succession during the season:

- 1st row. 50 blackberries—25 Briton, 25 Snyder.
- 2d row. 50 black raspberries—25 Ohio or Older, 25 Nehama or Gregg.
- 3d row. 50 raspberries—25 Palmer, 25 Shaffer (purple).
- 4th row. 50 red raspberries—25 Marlboro, 25 Cuthbert.

5th row. 50 currants—25 Red Dutch, 25 Victoria.

6th row. 25 White Grape currants, 25 gooseberries—Downing and Houghton.

7th row. 100 Warfield strawberries.

7 1-2 row. 100 Michels Early strawberries.

8th row. 100 Haverland strawberries.

8 1-2 row. 100 Bederwood strawberries.

9th row. 100 Crescent strawberries.

9 1-2 row. 100 Parker Earl or Gandy strawberries.

10th row. 18 grapes—Mores Early, Worden, Delaware, Brighton and Concord.

As soon as ground is free from frost prepare it thoroughly. Extra care in preparing ground is essential.

Stake off the rows and set plants, by line, following the plan exactly. You will then have plants true to name, and on your plat a complete record for future reference.

M. A. THAYER,
Sparta, Wisconsin.

BEST TWO BLACKBERRIES.

By A. J. Edwards, Fort Atkinson.

The best variety of blackberry would be the one that would stand any amount of cold and dry weather and still produce a good crop of fruit, and until we get such a one I believe that the blackberry will be the most uncertain of our small fruits. For ripening as it does the latest of all it is pretty sure at some time during the season before its ripening to have to withstand a severe drouth. With us this is the only serious obstacle in its cultivation. Fortunate, indeed, is the man who is so situated that he can irrigate. We can protect from the cold by covering, and to be at all sure of a crop of any variety we must do this. Of course we can to a certain extent counteract the effects of drouth by thorough cultivation and mulching. The best mulch we have ever used is coarse manure put on early in the season, as it adds fertility to the soil as well as retains moisture.

For the last five years blackberry culture in our vicinity has been on a steady decline. The summer of 1895 and the winter of '95-'96 left our blackberry patch in such a weak condition that we determined to plow them under and start anew. This we did and the plants we set were no better than those we plowed under, as not one in 50 lived, although the season was very favorable. I do not believe that there has been any kind of fruit planted by the farmers of Wisconsin during the past five years that has given so little returns in proportion to the money expended, as the blackberry. They read in our reports and the agricultural and horticultural papers how to successfully grow large crops of this fruit. But when they plant and care for them year after year and get very few, if any, berries, while their raspberries, currants, etc., are producing fruit, they think something is wrong with the ones who are doing this writing, and I think it no more than right that we let them know through the same source that they got their information that there are plenty of fruit growers (and by this I mean men who make a business of growing fruit), that are in the same boat as themselves, and the reason for it.

You may think I am presenting the dark side of this subject and I own I have, but these are facts nevertheless. We are not discouraged, however, but shall start in again next spring and expect to succeed once more in growing blackberries. It is a long road that has no end. As the past season has been favorable to plant growth and the soil is well filled with moisture, we hope the end of excessive drouths has come for a few years at least. We must do our part if we are to succeed. As to the best two varieties of blackberries my choice would be Snyder and Ancient Briton. I do not claim that both will do equally well on all soils and in all locations. The Snyder has always done the best in our locality. Our soil is sandy, with a clay subsoil. I know of others on different soils who like the Briton best. The only way we can determine which is best for our individual location is by trial. Let us plant only what we can give the best of care and cultivation and with an ordinary amount of rain we can be reasonably sure of a crop of fruit.

REPORT OF WEYAUWEGA TRIAL ORCHARD.

By Fred A. Harden.

I submit the following report of the Trial Station at Weyauwega for 1896:

As the spring opened the trees looked fine and gave promise of a good crop, although we had had a hard winter for fruit trees, as the previous season we had a severe drouth, and all trees and plants went into winter quarters very dry, but nearly all four-year-olds and older ones seemed to be but little injured, if any, while all nursery and newly set trees were all root killed.

About one-third of all the trees blossomed, but when they were in full bloom we had a heavy wind and sand storm which destroyed more than one-half the blossoms and the trees appeared as though blighted, but nearly all put forth new foliage again. All the trees matured their fruit early, about the last of August, or dropped their fruit before ripe. Hard winds caused many apples to fall. The Windsor Chief and Longfield were later varieties and stayed on tree well and matured all the fruit the trees ought to.

The following is a list of trees that matured one-half dozen or more apples: Borloff, Duchess, Duchess No. 2, or Rose, Duchess No. 4, Duchess No. 6, Gideon, Glass Green, Long Arcade, Longfield, McMahan, Morris, Newels Winter, Nobles Winter, N. W. Greening, Patten's Greening, Raspberry, Scott's Winter, Wealthy and Yellow Transparent. There were a few plums on the Marrianna and Wild Goose. The Wild Goose is quite large and of good quality,—much better than the Marrianna.

The cherry trees blossomed full, but set no fruit, for they, like the apple blossoms, were destroyed by the wind. The trees have made a medium growth the past season and are well filled with fruit buds. They went into winter quarters in good condition, having ripened up well and with plenty of moisture in the ground. The prospects are now that we will have a fine crop another year if the season is a favorable one.

OBSERVATIONS AT NORWALK, MONROE COUNTY, WIS.

By J. J. Menn.

The winter of 1895-'96 was characterized by very dry freezing weather. The southeast half of this county did not get any snow to speak of, while the northwest part, taking in Sparta, had snow enough to protect the ground. Spring opened up early with very favorable growing weather and from spring to fall we could not have wished for a better season. We did not get a frost from the last week in April to the end of September to do any damage.

The prospects of the bushberry crop in the spring were not very bright. The canes were badly winter killed, even where they were well protected. Those that were left bore a good crop, both of blackberries and raspberries. The woods were full of wild berries and more were picked than during the last five years. The strawberries wintered better than any of the others, and when they were in bloom we were almost sure of a big crop, but when picking time arrived, we were badly disappointed. It seemed they were not properly fertilized, and a very light crop was picked. Some did not even get a berry.

Not nearly as many new plants were set in '96 as in '95, and many a grower of small fruits feels discouraged. One man plowed up 2 acres of bushberries. Small fruit made its growth during the summer and in the fall seemed to be in good shape to stand the winter, with plenty of moisture in the soil. The drought of '95 and dry winter of '96 was very severe on the orchard at blooming time. It seemed as if but little damage had been done, but four weeks later finds trees dried up, from the smallest to the largest, in the orchard.

Many were root killed and some that survived will be dug out in 1897. The Plum Cider has stood it best in all orchards that I saw. Of all the young trees planted in the spring one-half failed to grow. The blame was all put on the nursery-men, and I do not think they knew in what condition their trees were, and they sent them out in good faith, but very few trees were sold during the summer and fall. The apple crop was very good and every tree of bearing size bore fruit. The

price started at 75 cents per bushel for early apples, and they soon sold down to 15 cents. The better keeping apples sold from 30 to 50 cents, and crabs were so plenty that many rotted and it was hard work to sell at 15 cents per bushel. Blight was quite bad in many orchards, but insects did not do as much damage as in '95. Plums and cherries bore a heavy crop, also all nut-bearing trees.

In the spring of '95 I bought a few small apple trees from A. J. Philips of West Salem, and they stood the dry season so well that I have said they are as tough as the woodchuck, and I was anxious to see Mr. Philips's place where they were raised, also to learn if he really practised in top working what he preaches at the institutes and through the papers. So I went to his place last fall about the time when Duchess apples are ripe. His orchard is about 6 miles north of West Salem, on top of one of the highest bluffs, 12 miles east of the Mississippi river. I met one of his sons coming to town driving three horses abreast, drawing a load of 20 barrels to be shipped to Minneapolis. I found Mr. Philips in the orchard superintending the picking of apples. He had one horse drawing a stone boat on which were 3 or 4 barrels of apples. It was a novel way to get them to the packing house without bruising. Two of his sons were busy in the cellar storing away Duchess apples, as nice a lot of 400 or 500 bushels as any one would wish to see. He was holding them for better prices.

His orchard and nursery must contain about 20 acres. His soil is clay with a flint gravel subsoil and not very rich, but well adapted to apple growing. The wind can strike his orchard from every side and air always circulates, and this accounts for his orchard being so free from blight and insects. Some of his older trees showed the effects of the drought, but none of his younger ones.

His crop must have been from 1,200 to 1,500 bushels. In top work he is doing more than I had the faintest idea of, and doing a grand good work for the apple growers of Wisconsin. He had so many kinds that he experiments on with good success. He had one large top-worked tree that bore three varieties, the Utter, Wolf River and McMahan, which was a sight

to see. It was all propped up and must have had 12 bushels on it. Along the road and division fences he has Whitney No. 20 for fence posts that were all heavily loaded with fruit. His trees do not grow fast; this accounts for their hardiness. He has an experimental orchard that he can feel proud of. He may not live to reap the benefits of his work but his bright boys will.

I will long remember the pleasant afternoon I spent with him in his orchard.

The Wisconsin Horticulturist.

MRS. VIE H. CAMPBELL, EDITOR.

SHALL I GROW STRAWBERRIES IN HILLS, OR ROWS?

J. F. Case.

The above is a question that is often asked, but not so often answered. If your soil is wet or heavy, and frost and sun or quick changes cause the plants to heave badly, then grow in matted rows. If your soil is light and the ground is covered with snow in the winter, or if the surface is kept heavily mulched, and the plants are covered from frost in the fall and the covering kept on until spring, then grow in hills with ordinary cultivation.

If you are living in town, or near a town where extra fruit will bring an extra price, grow in hills, keep off all runners and mulch heavily with straw or hay, in the fall when the ground begins to freeze, so as to nearly cover them from sight. In the spring, when the ground is done freezing, rake off the covering.

The Lida, Jewel, Jucunda, Timbrel, Earle, and Bubach No. 5 will all do better grown in hills than in matted rows. Most of the other sorts will grow well in matted rows. Those which I have mentioned are best grown in hills because they make few runners. For matted rows we want those kinds that will make plenty of runners to cover the ground well, for that serves to protect them in place of mulch. It is not the extreme cold weather that damages the strawberries; it is the freezing and thawing in the fall and spring, and by keeping the ground covered so as to shade it from the sun you will prevent its thawing, and keep the plants frozen, and they will take no hurt.

Sometimes in the spring we get some cold, blighting east winds that damage the strawberries very much. I have had winds they have been nearly all destroyed.

Having given you my plan for cultivating, I will give the relative cost of cultivation. In the hill method the plants may be set nearer than in the matted row system, or just as near as you can drive through with a cultivator; the rows need not be more than two, or two and one-half feet apart and the plants twelve to sixteen inches apart in the row, which will require 18,000 or 20,000 plants per acre. So far you have a difference against you in the cost of plants. In the matted row system the rows should be four feet apart, and plants in the row (long jointed, rampant runners), two feet apart. Some of the short jointed, not very rampant runners, twelve to eighteen inches apart in the rows, will take about 10,000 plants to the acre.

As to the expense of cultivation and work: if clean cultivation is given there will be but little difference, if the soil is not foul and weedy, but if it is, more hard work will have to be done to keep them clean than will be necessary with the matted rows. If slipshod cultivation is carried on and the plants in hills are free from runners, then the most work will be put on the hill bed.

When a person has but little land and is after the largest and finest fruit, and the most of it, to supply a market that appreciates the best fruit and will pay the best prices for it, my advice is for hill culture. But if he has a market where there is but little difference, if any, made between first and second class fruit, if he has plenty of land and horse help, and the winters are severe, with little snow, then grow in matted rows. Extra care must be taken to winter plants in the hill because there is not so much foliage to cover the ground and protect from freezing and thawing, while a good, heavy matted row will protect itself to a great extent.

I believe that if the largest and best fruit, as well as the largest crop, of either strawberries or red raspberries is wanted from a given space of ground, they must be grown in hills. And I believe the time will come when they will be grown in hills almost entirely. One of the worst things the strawberry has to contend with is drouth, and where material for mulching is not easily obtained, because of scarcity and ex-

pense, the next best thing is very shallow working of the surface, while the plants are in blossom and the fruit is forming, with a liberal supply of plaster scattered over the soil with a trifling proportion of salt, about one quart to one bushel of the plaster. It is a benefit to the soil because it aids in retaining the moisture.

CAN FRUIT BE PROFITABLY GROWN IN DOOR COUNTY?

George Tong.

Let us ask our nurserymen, and they will tell you there is more money in raising fruit than in any other branch of agriculture. Ask our business men who always know just what our farmers should do. "Yes," they will say, "why don't you raise fruit? There is lots of money in fruit." Ask those people who paid me \$3.20 per bushel for strawberries and \$4.00 per bushel for raspberries. They will say, "there ought to be." Ask some of our growers who sold apples for 20 cents per bushel, cherries for 5 cents per quart and plums for 50 cents and \$1.00 per bushel, and they will say, "Well, there may be, but we can't see it." But all of these replies do not answer the question, "Will it pay to raise fruit for market?" Now, what I know about it can be answered in two little words, "not much," but fruit growing is my hobby and as I am interested in it very much, I have studied the subject a great deal. Not as much as I expect to, for I am a young student and an amateur grower, but all my observations and all the information I can get seem to point to me, at least, that there is money in growing fruit even in Door county. But some of you will say: "What money is there in 20 cent apples, plums at even \$1.00?" And some of our strawberry growers are saying, "Now, strawberries will not be worth anything next year because everybody is going to grow them." There are two different parts to consider in the business: First, can we raise fruit here and raise good crops, and second, can we sell the fruit after it is raised? We will begin with

the first: "Can we raise fruit here?" Any one who has seen Mr. Zettle's apple orchard, or even those who have a few apple trees in the garden, have the answer as to apples, I think. They say, "What has been done can be done again." Those who have seen Mr. Moulten's orchard of Green Gages and Lombard plums will hardly say that we can not raise plums. Ask Mr. John Marshall if his cherry trees do not bear good crops, and then you can not say that we can not raise cherries. Among the small fruit, we have tried strawberries and know we can raise good, average crops at least. Mr. Larson of Nasewaupee planted 500 plants in the spring of '95 on less than 1-10 of an acre and, as I sold his berries for him, I know just how many he had, which was 15 1-2 bushels that brought \$50.33. Messrs. Hatch, Bingham and Goff have realized over \$300 per acre for the last two years, besides taking out many plants. At Green Bay, on land which I do not consider as good soil as ours for strawberries, J. M. Smith's sons raised 299 bushels on one acre which sold for \$1,000. As to red raspberries, I handled as nice ones as were ever put on the market, for John Marshall and Mr. Moulten, and their plantations were as pretty a sight as I ever beheld. We have had black raspberry bushes that were not half taken care of that yielded large crops. Blackberries are as natural to Door county as the pine trees, and there is no reason why large crops of cultivated blackberries can not be raised here. Currants and gooseberries can be raised almost any where, where they are taken care of. Now it seems to me that there is no question as to whether we can raise fruit in Door county, not peaches or pears for market perhaps, but red cheeked apples, strawberries,—the best fruit God ever made—plums, and better varieties than can be raised in many other places; sour, and even perhaps some of the more hardy sweet, cherries, blackberries, raspberries, currants, and gooseberries. Isn't the list long enough? It is for me. But now let us turn and see if a market that will pay a profit can be found, and after finding such a market find cheap rates of transportation so that the crop will not be swallowed up by expenses. As for apples I probably looked up the market more than any other person in Door county.

One thing I found which applies to every fruit on the list, there is no room in the market for poor stock, so that those who are thinking of planting any kind for market, must be very careful and grow and try to sell only good, sound stock. I corresponded with parties in a number of cities and found that there were times when even in this year of unparalleled low prices, carefully selected stock would have brought a fair price. While in Chicago last spring I visited a number of dealers, and I will never forget what one old, grey-headed dealer, who has been in the business over 30 years, said: "If you folks up there can raise apples, for pity's sake don't raise any thing else."

Plums were quoted very low this year, probably never so low before but we must not get discouraged on account of one year's low prices. Farm products in general have been down below living prices and it is with fruit as with potatoes, this year's crop will not affect next year's prices. Cherries brought fair prices at times this year. In this fruit I have great faith. The market was overstocked this year in the latter part of the season but it has not been so for many years and may not be again for a good while.

As to the strawberry market a great many are somewhat anxious about it as there will be, if we get even a small crop, more berries here than any other small fruit. We have a large range for a market for the simple reason that our berries are among the last and do not have to compete with the berries from other sections. I have heard some people say that our market is unlimited and sometimes I think they are right, but the market will have to be opened, rates established and then I think Door county will have to raise some berries to glut the market. Raspberries and blackberries will not have as good a market as strawberries for the reason that they will have to compete with so much other fruit, and they are not used as much as strawberries, but the market will get better as wild berries play out. Some years they will not pay as well, but in the long run I think they will pay far better than common farm crops. Currants always seem to be in demand and growers of them seem to think they make as much

off their plantations of currants as from any fruit. Gooseberries are hardly as profitable, in my estimation, although good prices rule some years. Now I have not said one-half what I would like to say and time will not permit me to say much more, but some of you will say I do not know enough about fruit culture to spend time and money in trying to set out and run a fruit farm.

When a man admits that he is ignorant of a subject and willing to learn, that is the time he will learn something. Right here let me say, "Don't try to raise fruit if you have not a liking for it," for if you do you will fail every time.

I met a man the other day and I asked him if he would not attend the meeting of our horticultural society. He said "What good will it do me? What good do these farmers' institutes do telling about their high fangled farming and such?" That man has a wrong idea; if he is willing to stay in the ruts of common farming why let him, but there are plenty who are not, and to those I will say that we can learn from each other, that the meetings of our society will help each and every one of us that want to be helped. Attend all the meetings, take an interest in them, take an active part and if you feel as if you knew nothing about the subject, ask questions, and perhaps some one will be able to give you the information you want. While engaged in teaching I always noticed the boy or girl who asked the most earnest questions and talked the most got ahead the fastest. What an enormous amount to learn. Let us just take the apple for instance and let these be some of the things to think about. How large an orchard will I be able to take care of? What is the best site for my orchard? What is the best soil? How shall I prepare my land? What varieties shall I set to get the most money out of? What shall I plant among them? How shall I cultivate? How shall I feed them? How and when shall I prune them? How and for what and when shall I spray my trees? How can I protect them from both heat and cold? How shall I pick and pack, and to whom shall I sell them? Are not these subjects enough for thought, discussion, and can we not learn something about every one of them?

And it is so with all the different kinds of fruit. There is a great amount to learn about strawberries and the more I learn the more I find to learn.

THE FOREST APPLE.

The following letter gives the history of the Forest apple. A. L. Hatch recommended this apple very highly as the result of his Trial Station test, and our Station made favorable mention of it in our last report. Mr. Thos. Taylor read our notes regarding it, and has kindly furnished the history which I send. Mr. Downing did not succeed in finding the correct history of it, and I suspect that this will be the first time the history of this apple has ever been published. Mr. Downing's note as to the origin of the Forest apple is as follows: "This variety we received from J. S. Foster, New Hartford, N. Y., who does not claim it as original, but that it is probably a foreigner. We have not been able to identify it with any known sort." Fruits and Fruit Trees of America, second revised edition, P. 180.

E. S. Goff.

Berlin, Wis., Feb. 3, 1897.

Prof. W. A. Henry, Madison, Wis.

Dear Sir:—The late Joshua Taylor, of La Grange, Walworth Co., Wis., while on a visit to his friend M. M. Neal, of Chadwicks, Oneida Co., N. Y., some twenty-five years ago, cut a few cions from Mr. Neal's Forest apple trees and brought them to his home in La Grange, Wis., and grafted them in a bearing Talman Sweet tree. Within three years from the time the cions were grafted in the tree, they began to bear, and have continued to bear abundantly ever since. This year the old tree bore a heavy crop of apples. F. K. Phoenix of Delaware procured cions of Joshua Taylor and propagated the Forest apple in his nursery. I see by a recent report from the Wisconsin University Experiment Station that the Forest apple has fruited on the Experimental Station grounds the past season. I wrote to father's old friend, Mr. M. M. Neal, for a history

of the Forest apple and this is what he writes: "The original Forest apple tree grew in the forest on the farm of a Mr. Scott, in the town of Frankfort, Herkimer Co., N. Y. The late Geo. W. Wadsworth discovered its merits and grafted it into his orchard, and, for a number of years, sold the fruit in the Utica market as the Scott apple. John Cunningham, who was then running a nursery in Utica, being a great friend of Mr. Wadsworth, while on a visit to his farm, also appreciated, and was so pleased with it that he grafted it into his nursery stock, and named it the Forest apple. Since that time it has been known and highly prized in that section.

Mr. Scott, of the town of Frankfort, Herkimer Co., N. Y., and Mr. Wadsworth, of the town of New Hartford, Oneida Co., N. Y., were neighbors who lived not far apart.

Hoping this history of the Forest apple by Mr. M. M. Neal, my father's old friend, will be of interest to you, I am

Yours truly,

Thomas Taylor.

ANNOUNCEMENT.

With this number of *The Wisconsin Horticulturist*, my connection as associate editor will cease, and to the many kind friends who have aided in the past year I regretfully say, "good bye."

I have received many commendatory words from the editorial fraternity, and complimentary notices through the press regarding the magazine. From contributors and subscribers there have come words of appreciation, and some criticism. I have been as glad of the one as the other; criticism is helpful because it shows us our mistakes, it helps us to "see ourselves as others see us" and enables us to "hew closely to the line."

It is not an easy matter to conduct a publication in the interests of an association. No one can do it and still be free to give the impress of his, or her, individuality. What pleases one will not meet the approval of another, and the attempt to please both usually results in a dissatisfaction

with one's own efforts. There are those who are aesthetic in their tastes for reading, who like poetry and articles of literary merit, and there are others of a more prosaic nature who think everything should be eliminated that does not treat wholly on practical horticultural topics. In the small space allotted me I have tried to keep the "happy medium" and give each month something that would please and meet the requirements of all.

I have been highly favored with articles written expressly for The Horticulturist by such poets as Eben Rexford, Wm. Haughton, Marion Lisle and Mary F. Tucker, people whose articles are eagerly sought for by leading publishers, and are above criticism.

To all who have contributed to the magazine I give my sincere thanks, and ask that the same kindly spirit of helpfulness be extended to my successor, Mrs. Johnson of Baraboo, who was elected editor for the ensuing year. Mrs. Johnson is a woman of ability and I hope to see The Wisconsin Horticulturist take front rank among the leading publications of the day under her able management.

Cordially,

Vie H. Campbell,

Associate Editor.

L. G. KELLOGG,

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