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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, December 1896

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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.

## ANNOUNCEMENT.

Our readers will notice that this number of our magazine is made up of original matter entirely for the reason that the matter that goes into our annual report is now in the printer's hands for publication. Judging from the list of subjects that the associate editor has sent to me that will appear in her department this month, the December magazine ought to be of value to the horticulturists of this and other states, and I wish it had more readers. The article in this number from the veteran horticulturist of Minnesota, J. S. Harris, should be perused carefully, as it contains thought for the coming and now amateur horticulturist. Top-grafting, with cuts of trees, will be discussed next month more fully, and we hope for a contribution on forestry and grape growing



**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.**

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

## The Wisconsin Horticulturist.

VOL. 1.

DECEMBER, 1896.

NO. 10.

## THE COLUMBIAN RASPBERRY.

By R. J. Coe, of Fort Atkinson, Wis.

So many inquiries have been made regarding the Columbian that Secretary Philips has asked me to give a brief history and description of it. It originated with Mr. J. T. Thompson, of Oneida, New York, and is supposed to be a cross between the Gregg and Cuthbert, as these were the only varieties Mr. Thompson had on his grounds. It was raised from seed of the Cuthbert, but propagates from the tip like a black-cap. The illustration in this number is from a photograph of the original bush, taken July 31st, 1894. I stood beside the bush and reached as high as I could, but could not reach the top berries by more than a foot, and the new canes were at least three feet higher than I could reach. I then went from the garden to the field. The first field visited had been allowed to grow without pinching back, and the canes stood about ten feet high and every bush seemed to be a perfect mass of fruit. From there I went into a field of fifteen acres where the canes had been cut back to seven feet, and it was a sight worth going a long distance to see. The fruit is quite dark in color, resembling the Shaffer in this respect, but with smaller seeds, and is much more firm than that variety. Its color would seem to be somewhat against it for market, but on the fruit stands of the town where it originated it was outselling anything they had in competition with it.

We fruited it last year, and I certainly never saw so good a crop on one-year plants of any kind, and that, too, after one of the hardest winters I have ever known on all cane fruits. They received no winter protection whatever and still came



through in fairly good condition, much better than either Gregg, Palmer or Shaffer, in the same field. Secretary Philips reports a very satisfactory crop on the few plants he had, and says Mrs. Philips calls them fine in quality. We sent plants to Minnesota and other states, and every report we have had from them is very favorable indeed. We now have about an acre and a half of them, and shall leave them unprotected again this winter, and will then make a report as to how they stand our Wisconsin winters compared with other varieties.

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H. R. Cotta, of Freeport, Ills., writes of the *Columbian*, Nov. 25, 1896:

A. J. Philips:

Dear Sir:—Yours at hand. I am very much pleased with the *Columbian* raspberry. I set 65 plants in the spring of 1895. They made a larger growth than any other variety I ever had, and wintered perfectly while Turner and Cuthbert were badly killed. The *Columbian* produced a large crop of berries; much firmer and far better than Shaffer's *Colossal* as a market berry, averaging much the same in size but not so tart as Shaffer.

*Columbian* Raspberry.—We have fruited this raspberry at our Burlington fruit experiment station, during the present season. The writer visited the plantation there on the 15th of July, and found the Shaffer and *Columbian* fruiting side by side. The chief note made was that *Columbian* was the most heavily laden with fruit; otherwise they were very similar.—*Canadian Horticulturist*.

Mr. B. F. Adams of Madison, writes Dec. 12, 1896: I have not tried the *Columbian* yet at my place, but during the summer of 1895, I visited the plantation of Mr. Thompson at Oneida, N. Y. The soil there is a sandy loam. It was the largest, cleanest and most thrifty field of raspberries I had ever seen. The bushes were from 7 to 10 feet in height, well branched almost from the ground up to the tops and all loaded with unripe fruit June 30th (the day I

was there). The fruit is larger than the Colossal, the canes of the previous year's wood lying in piles on the borders of the field, some measuring an inch and more in diameter. I had doubts as to the hardiness of these tall plants in our severe climate and planted the Loudon instead after having visited the same season Mr. Loudon's plantation at Janesville. The Columbian is of the Colossal type but a larger berry. The color I can not speak of from observation, as at my visit a few berries were only slightly tinged. Others told me it was similar to Colossal when ripe. I must say that the show of fruit per acre on the aforesaid plantation greatly excelled anything of the kind I had ever seen.

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## THE FUTURE OF POMOLOGY IN THE NORTHWEST.

By J. S. Harris, of Minnesota.

I have often expressed the opinion that the region of country embracing Wisconsin, Minnesota, northern Iowa and eastern Dakotas is destined to become a good apple producing country, as it already has proved to be, and will in the near future produce all of the hardy fruits needed for home consumption and a surplus of such superior quality and beautiful appearance that it will enjoy an enviable notoriety and become a profitable article of commerce. This opinion is based upon a study and practice of horticulture extending over a period of more than 60 years and 45 years of that time in this region where I have had ample facilities for noting the results of experiments and the progress being made.

There is no part of North America where the culture of tree fruits at the start met with greater difficulty or was confronted with such a combination of causes for discouragement, as here,—and no people ever so persistently met the difficulties and obstinately strove to overcome them as have a number of the pioneer settlers of Wisconsin and Minnesota. They cast their lot here with a full determi-

nation to carve out homes worthy of the name, with orchards, gardens, and beautiful surroundings, rivaling those they had left in the older and in some respects the more favored states, and in doing it they proved themselves heroes whose names will be remembered with veneration by coming generations as they read the story of the toil, privations and disappointments they endured when carving out the pathway that leads to final triumph. The names of Peffer, Giddeon, Wilcox, Tuttle and a score of other battle-scarred veterans of horticulture are so deeply engraved in the annals of our pomology that their lives and works will be a mark for emulation for all coming generations.

One of the greatest difficulties that met these hardy pioneers was that the pomology of the country had no past as a lesson for the present or from which to shape the future. True, in many parts of this region native wild fruits were found growing in abundance. Such was the case with the strawberry, raspberry (both red and black), gooseberry, black currant, native plum, crab apple and many others about equal in number to those found in any other part of the country and often producing fruit superior in quality to that of the same varieties in other localities. So excellent are many of these native fruits that there remains no room for doubt but that they are capable of being improved by skillful cultivation, careful selection of seedlings and crossing or hybridizing, that their offspring may in the near future become valuable additions to our pomology to fill the place of more southern species too tender to be produced here. Already our native plum is receiving careful attention in the hands of such men as Lord, Knudson and Penning of Minnesota; Williams of Nebraska, Dennis, Watrous and others of Iowa, and many others, and varieties are likely soon to be introduced that will fill the place of the peach, prune and apricot. It was a natural inference with the early pioneers that where the native fruits were abundant and of such superior quality the domestic fruits would certainly flourish as well or better than in their former homes.

The apple is the fruit most prized, most miserably used, and most seriously missed by the people, and hence the greatest effort has been put forth to produce it here. The first trials were with the favorite varieties of the old homes, Baldwins, Greenings, Pippins, Rambows, etc., and were a failure and would have been to a great extent even with the most hardy varieties, because the trees were brought from long distances away, by slow transportation and had been produced under very different environments. They reached the planter with vitality much impaired and were planted in new, imperfectly prepared soil. Such as showed any life made but a feeble growth, failed to ripen their wood and perished in the following winter and at best rarely survived long enough to show blossoms and fruit. Then followed the planting of trees from nurseries nearer by and the trial of other varieties with but very little better success, and the consequence was that the croakers got in their cry that this was not and never would be a fruit country, and that it was useless to plant apple trees for they would not survive long enough to pay a tithe of the cost. Happily there were still a few "cranks" that would not listen to the cry and continued to give everything that was offered a trial, and learned that some varieties were more hardy than others. Home nurseries were started and there was in almost every neighborhood one or more "cranks," who would not take advice, men of an observing turn of mind who believed that varieties could be found or originated that would endure the climate, and determined to find them and the methods of management that would lead to success.

A. G. Tuttle sought to work out the problem by importing scions of hardy varieties from Russia, and was followed later by J. L. Burtel of Iowa and the late Charles Gilb of Canada. The late Geo. P. Pepper wrought on the line of crossing and hybridizing. E. Wilcox worked on the line of hardy roots, hardy trunks with the Siberian blood flowing through them and working the hardiest good varieties he could find upon the tops of them. The venerable Peter M.

Giddeon of Minnesota originated the "Wealthy," and although it brought no wealth to him it has proved a boon of providence to the whole country. He at once cried "Eureka," and believing that he held the "key" to the situation as one other "Peter" does the keys to the Kingdom of Heaven, he at once set about growing seedlings by the thousands, depending upon the same providence who gave him the Wealthy to manipulate and intermix the pollen of apple and crab, American and foreign, to make a race of apples that will become perfectly suited to the needs of this region. At or about the same period state horticultural societies were organized and local societies and clubs sprang into existence, and through these means the leading spirits have been brought together and have laid the foundations deep and broad, and thousands of intelligent men are annually planting seeds and working along some of those lines, and it seems to me that it needs no prophetic vision to foretell what the final result will be, namely, that in the very near future the northwest will have a pomology of her own embracing ample varieties for every purpose, of the most desirable sizes, beautiful form and colorings and exquisite flavorings, hardy and reliable under the most extreme conditions of our climate.

The interest taken in pomology is increasing. State experiment stations are working along the right line. Local society stations and individual experimental workers are numbered by hundreds and there is no longer need for any one to plant blindly. Better than all almost every neighborhood is convenient to a local nursery where only the best and hardiest varieties are propagated, and when the people all learn wisdom and no longer listen to the Siren voice of the agent of the swindling order and tree sharks, but either raise their own trees or procure them of the home nursery men, success will have been achieved and millions of dollars will be saved at home instead of being spent to enrich "sharpers" and "swindlers," who deal only in the refuse and surplus stock of large commercial nurseries located in climates very different from ours.



Evidence of the progress being made and promise of the future is very plainly to be seen in the grand exhibitions of apples that were made at the Wisconsin and Minnesota state fairs in 1895 and 1896 where new seedlings were shown by hundreds, many of them rivaling any thing ever before seen, and many of them produced far north of what has heretofore been supposed to be the extreme northern limit of the apple, proving the "glad tidings of great joy" to all who love fruit.

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## HORTICULTURE IN DOOR COUNTY.

By D. E. Bingham, of Sturgeon Bay, Wis.

Door county is destined to become one of the leading fruit regions of Wisconsin.

There are many varieties of apples, such as King of Tompkins Co., R. I. Greenings, Newton Pippin, Baldwin and others which were thought to be too tender for this climate, that have been fruited successfully here.

We have the modifications of climate that naturally arise from the influence of large bodies of water. This influence of water in a marked way holds off late frosts in spring and early frosts in fall, which is of great advantage, especially in fruit culture.

There is, near Sawyer, Wis., an orchard of 16 trees of Kings which bore over 40 barrels of nice apples this year. The soil here is unlike anything I ever saw in southern Wisconsin.

It is pine land and was thought a few years ago to be worthless for agriculture.

The soil varies in depth; some places there is barely a foot of soil over solid lime rock, and yet it is farmed every year and produces good crops.

The greater part of our farm has about 4 feet of soil. The surface soil appears quite sandy in some places but all is underlined with clay, gravel and shell rock. Plenty of surface lime stone can be found anywhere.



Strawberries seem to do well on this soil. We have fruited one acre two years and each year harvested about 100 bushels of fine berries which sold for the top market price in Green Bay and Menominee. We fruited twelve varieties and only had three varieties that did yield anything like a crop. The varieties that did the best with us both years were Warfield, Parker Earle, Haverland. We fertilized with Michel's Early but it is no good for anything else except to make plants.

We also used Van Deman for a fertilizer but it did not yield at all like it should to make it profitable. Had we planted only Warfield, Parker Earle, Haverland, and had some good bearer for a fertilizer, we would have doubled the yield both years.

Three years ago strawberries were not grown enough to supply home demand. Now there are over forty acres in the immediate vicinity of Sturgeon Bay for next year's fruiting. Our shipping facilities are equal to any locality in the state.

Plums and cherries do very well here from all appearances. This year we had some fine specimens of fruit from the Abundance and Burbank plums, two of the *Japanese* varieties.

We also fruited several varieties of the European plums, Lombard, Yellow Egg, Hudson River, Purple Egg, Monarch, Prince of Wales.

Nearly all of the *sweet* varieties of cherries are proving *hardy* enough for *general* planting. I have seen them in fruiting two seasons now and the trees appear *perfectly* hardy in *every* respect.

We have the following list planted in orchard: Rockport, Schmidt's Beggareau, Black Tartareau, Yellow Spanish, Gov. Wood, etc. So in selecting varieties of the apple, plum, pear and cherry, for general planting in Door county one has quite a list to choose from outside of the list generally recommended to Wisconsin planters. Our seasons are considerably later than in almost any other portion of the state, thus making all varieties of fruit mature later

and keep longer. There can be found here Duchess apples in good condition now. Our strawberries almost always come into market after the bulk of the crop from other localities is disposed of, thus insuring to us good prices if we have a good article.

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## TOP WORKING THE APPLE, PEAR AND PEACH.

By George J. Kellogg, Janesville, Wis.

Editor Wisconsin Horticulturist:

The question of top grafting on hardy and vigorous stocks is a subject of very great importance. Twenty years ago, just for pastime and a novelty, I grafted 50 varieties on the small cherry crab, all these kinds on one tree, and in a few years I picked 26 kinds of apples and exhibited them from this tree. Everything took its individual characteristics except Hyslop crab on cherry crab, was a failure. The stock seemed to hasten the maturity of the fruit generally. This same fact seems to follow the grafting of winter varieties on Transcendent crab; they mature the fruit about a month earlier than on later stock, Pewaukee, Peerless and Lying Bill seem more congenial to Transcendent than other kinds.

Grime's Golden, Jonathan, Salome and Longfield are doing well on Tetofski. Yellow Transcendent on McMahan, as it came to full bearing, has nearly blighted itself to death, while Early Joe, 20 feet away on the same stock, is bearing very full and no blight. We have another of the Transparent family in full bearing on a Hyslop entirely free from blight. While our "Variety tree" of 50 kinds did root and branch in a few years, either from too much grafting or some other cause, we have during the last two years been grafting some more old cherry crab trees. Best trees to be successfully grafted should be worked before the body or limbs are an inch in diameter, and then not to graft more than half the top in one year, unless the tree is trans-

planted the same spring, then you can cut off the whole top and frequently get a perfect balance the season of transplanting.

I know of no stock so vigorous as Virginia crab for the orchard work, and so free of blights. While I like Shield crab better for nursery work, it makes a straighter grower and one cion put on at the right time is sufficient to form a head. The great beauty and utility of the Virginia crab is its vigor and strength of its arms; they seem riveted stronger than steel, and if not crowded too close will bear any weights without breaking; like everything else, the close crotches must be pruned out. Varieties with blighting tendencies will do better if put on Virginia stock usually, though not always.

The great benefit of top grafting is, we can grow choice half hardy varieties that will not do on their own roots such as Grime's Golden, Jonathan, Ben Davis, etc. Don't think I class Ben Davis as choice, it should not be mentioned the same day with the others. It is productive, handsome and keeps, but it is never fit to eat unless cooked. Protection of the bodies and crotches of the trees will pay always, even with the hardy varieties. Besides the Virginia and Shields crabs, we are using Duchess, Arabian, Hibernial, Whitney and some others for the apple. I have no doubt it will pay to top work many of the hardy kinds, especially those that are tardy in coming to bearing, such as Malinda, Bell Pippin, and anything else that does not come to the front in 5 years from planting. The only hindrance is 25 cents a tree in place of 15 cents, only let the demand be understood.

The pear will readily take to the Mt. Ash and the native White Thorne, but they do not seem to get to bearing—the union is deficient; our best success is with pear on pear seedlings. We let a lot of pear seedlings get up ten feet before grafting; some of them took the knife gracefully and some of them got mad and blighted to death; better work them while young and budding is probably safer than grafting.

We were very much pleased with the result of grafting 22 Shields crab last May with Peffer's pear, 20 of them made a nice union of growth. If we could get an old time winter it would check our tendency to be fooling with so many half hardy kinds. The demand for Red Astrachan, Sops of Wine, Baily Sweet, Ben Davis, etc., is increasing only to produce disappointment and loss later on;—better stick to the best ironclads unless you are on the lake shore or the favored orchard sites of southern Wisconsin.

Peach blossoms stand 18 degrees below zero, and if you will grow peaches, all it needs is to train low, set the roots between two boards so to bend the tree to the ground and cover with marsh hay, evergreens or corn stalks, don't use earth as it will rot the buds. We saw the peach successfully budded on the Sand cherry which will have a tendency to dwarf it and the roots are much more pliable.

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## REPORT ON THE NEW TRIAL ORCHARD AT WAUSAU IN MARATHON COUNTY, WISCONSIN.

By A. J. Philips, Secretary.

I have decided to appropriate sufficient space in this No. of our monthly magazine for the foregoing report, for the following reasons: First, if left until our annual meeting it will not appear in our transactions until the summer or fall of 1897. Second, as the legislature of our state appropriated the sum of five hundred dollars in the winter of 1895—to locate, plant and maintain said orchard, it is a duty we owe the members of said legislature and to the tax payers of Wisconsin to publish for their perusal the manner and objects for which said money has been expended, before we ask for appropriations to further maintain the same or to locate other similar orchards, one of which in my opinion should be in Taylor or Clark counties and another in Langlade or the next county to the east. It might be well here to mention the fact that for many years the farmers of Wisconsin, at least those who had a

desire to raise apples, have been continually swindled — and large amounts of money have each year been taken from the state through the purchase and planting of southeastern and southern grown trees that were not adapted to the severe climate of the northwest. The State Horticultural Society having abundant evidence of these facts asked for the above appropriation in order to locate and maintain the aforesaid trial orchard where the so-called Hardy varieties of apples and plums could be tested and those that were found sufficiently hardy to live and bear fruit could be recommended to all of the state south of said orchard — and for a short distance north of the same, and the only question of its value will be the manner in which it is conducted — and whether the farmers will communicate with the officers of the state society or read the monthly magazine and the reports of said Horticultural society and learn — before they expend money for apple trees — whether the same are sufficiently hardy for their several locations and productive enough to be profitable for planting and caring for by them. After the bill making the appropriation was passed. Prof. Goff and the writer were appointed a committee to select and lease a site for the same, on or about the latitude of Antigo, Merrill and Medford and sufficiently far from the eastern boundary of the state to be away from the influence of bodies of water. Accordingly the latter part of April, 1895, we went to Langlade county and made a very thorough examination in the vicinity of Antigo but found the best sites too far from the railroad to be available; we then went to Lincoln county and examined the country near Merrill, the best site we found was on the farm of Hon. David Finn seven miles from Merrill, but by this time we found that warm weather was coming so rapidly (some two weeks ahead of ordinary years) that it would be impossible to make a proper selection of site and trees and do the planting that season, so we postponed the work until later in the season. At the time we set for our next trip Prof. Goff's du-



ties at the station called him to Colorado, so the writer went alone.

Made examinations at Phillips, in Price county, Medford, in Taylor county, Marshfield, in Wood county, and Wausau, in Marathon county. The first point I found new and rather too far north; at the second I did not succeed in finding a good site that was obtainable near enough to the city, though here I found a young man, a Mr. Ramm, well suited to the work of caring for the orchard; at the last place I found good sites both east and west of the city, near enough to be practicable. October 15th was the time next set for this work and President Kellogg invited to go along. Prof. Goff being again called away on other business, Mr. Kellogg and myself visited the city of Wausau and after considerable examination made choice of the present site, subject, of course, to the approval of Prof. Goff. In November I closed the contract for ten acres of land for an annual rental of \$5.00 per acre for the land we used. Prof. Goff was not present, but the lease and specifications were submitted to, and with some changes approved by, him. The expenses up to this time were about \$157.00. At the annual meeting of the society in 1896 three plans were submitted and approved for the planting, which will be explained later on, and the writer selected to order the trees and attend to planting the same. Accordingly the last week in April I went to Wausau and commenced operations, having previously ordered the trees to be all shipped about the same time. The first plan submitted was the same that I have used in my orchard for years, to-wit, to first set a tree on its own roots. Sixteen feet from that set three to five root grafts of same variety, expecting to leave the best one to grow and bear fruit, and next set a Virginia crab or other good stock to graft on, the same to be top worked at the suitable time with the same variety as the first two, then repeat, so that there are six trees of each variety, to-wit, two trees, two root grafts and two top worked trees. In this way I set fifty-four trees or nine varieties, to-wit, Wealthy, Newell, Okabena, Windsor, Utter, N. W. Green-



ing, McMahan, Longfield, and Patton's Greening, the intention being to have this mode of planting repeated for three to four years, so that at the end of that time there will be practical object lessons, as to which plan is best to pursue with those different varieties. Duchess, Hibernial and Tetofski were not included, as we know they are hardy enough on their own roots.

The next plan proposed by a committee and adopted by the society was to plant two or more varieties of our known hardiest trees, about twenty of each kind for a commercial orchard to test whether that would pay in that locality. In dividing the plat I found that thirty-six of each kind would make seven rows so I adopted that number. I also adopted the plan of buying those thirty-six trees of four different men grown at four different places on four different soils, to show which trees were best on that class of soil of which there is so much in northern Wisconsin, on which was formerly heavy timber. For instance, after the first row on the west which were set with Virginia crab to be top worked, the next two rows were set with Hibernial. The first nine were bought of the Jewell Nursery Co., of Lake City, Minn., the second nine of Charles Hirschinger of Baraboo; the third nine of Messrs. Hatch & Co., of Sturgeon Bay, and the fourth nine of Geo. J. Kellogg & Sons of Janesville, so on through the list excepting Repka Malenka, they all came from Mr. Hirschinger, as he was the only nurseryman that could furnish them of suitable age. I will not take space for all these varieties which consisted of Hibernial, Duchess, N.W. Greening, Longfield, McMahan, Wealthy, Repka, Newell, Wolf River, Peerless, Okabena, Hoadley, Avista, and Patten's Greening. Of the latter six varieties only parts of rows were planted. To show I patronized several different nurseries I bought Longfield of Kellogg & Sons, A. D. Barnes, J. M. Edwards & Son, and Hatch & Co. The third plan was proposed by the committee and was to set for trial one or two trees of a kind for experimental purposes to be donated by those wishing the tests to be

made. Of these six rows of eighteen trees were set furnished by the Lake City Nursery Co., A. D. Barnes, Prof. E. S. Goff, Geo. J. Kellogg, A. J. Philips, J. P. Andrews, G. C. Patton and Prof. J. L. Budd. In all 595 trees were set, securely staked, tied and mulched, and since that time lath protectors have been put on all. After setting I went over the entire lot and pruned them as I supposed, sufficient, but after the various reports of feeble trees and plants caused by previous years' drouth came to me, and after spending a day at Ripon with Mr. Winans, who planted and pruned 780 acres of apple trees in Missouri last spring, and examining how he pruned the sixty set by him at Ripon, I concluded I had not pruned severe enough, so in the latter part of June I went to Wausau and went over the entire lot again. The results, after an examination made by myself in November of this year, are, I find only twenty vacant places. Still there may be more next spring. I find about fifty grafts can be put in next spring, but the bulk of grafting will be done in 1898. The trees look well and many made a very good growth for the first season. A number of practical men of that county have visited the orchard and are pleased with its appearance. A. D. Barnes of Waupaca, is the only one of our members who has visited and examined it, and I will ask him to give a short report of it at our annual meeting. The expenses so far foot up about as follows: Locating, \$157.00, expense of trees, express, freight, planting, hired help up to May 15, \$146.23; of this latter bill, fifteen dollars was paid in advertising in our magazine,—care of trees, cultivating—protectors, and putting them on up to December 1st, 1896, \$107.09. There will be due for rent April 1st, 1897, \$30.00, making a total up to that time of about \$440.00. These figures may vary a little, but they are about correct. Now as the matter of appropriations to keep this work going, to decide who will do it and any new plans or details for future planting will all come up for discussion at our next annual meeting, I thought it best to publish this report at this time so that the members and all concerned will have

ample time to think it over and give their views concerning it. It is not an easy matter to decide when such an orchard is best located in a state like Wisconsin where there are so many orchard sites as there are in the northern part of the state, and in locating it I was guided only by my own judgment and the advice of Prof. Henry who said, do your duty for the best good of your society and future tree planters, regardless of whom you may disappoint or displease. Therefore, all the foregoing is respectfully submitted.

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### THAYER'S BERRY BULLETIN.

Who should grow berries? First of all, farmers everywhere, for family use. Farmers must grow berries or do without. No one can grow them so cheaply as he.

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They may be produced ready for picking, at two cents per quart.

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The farmer saves cost of picking, packing, boxing, crating, freight, express and profits of growers.

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He gets them at first cost, fresh from the vines, and to the extent of his own family, has the best market in the world—a home market.

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He can select the best land and location on his own farm, and is sure of a profit with half a crop.

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Farmers can never have ideal homes without the fruit garden. It teaches the lessons of intensified farming, and results in better tillage, larger crops, better stock and improved methods in every way.

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Good gardens and poor farms never keep company long.

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The growing of berries for family use is easily done. The growing of berries largely, and selling them in good market, requires considerable skill and a special business tact.

Only those who have good location, good market and a taste for the business should attempt it. Many small farmers so situated are making a success by commencing moderately and increasing acreage from season to season as experience warrants.

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Berries should be grown by owners of all village homes, and acreage property in city and village may be profitably used for that purpose.

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The market gardener selling his own products can often make an acre or two of berries very profitable.

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They are suitable companions for their vegetable friends, and sell well together.

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The business or professional man, almost broken with care, may recover health and strength in the pleasant walk of horticulture. It is restful to both mind and body.

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Many women dependent on their own efforts are securing substantial aid from their garden; berries and flowers thrive best under the gentle touch of women.

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Many a bright boy may receive his first incentive to business and earn his first money by growing berries or vegetables. Give them a patch of ground and encourage them in this work.

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The amateur growing berries for pleasure, also gets close to the heart of nature and in common with every worker of the soil may receive her smile.

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## REPORT OF THIRTIETH ANNUAL MEETING MINNESOTA STATE HORTICULTURAL SOCIETY.

By D. C. Converse, Delegate from Wisconsin.

The session opened very favorably Dec. 1, in the new court house, Minneapolis, with a large attendance.

It is worthy of mention that the authorities seem to

recognize the value of this society to the extent that proper and ample room is furnished for the exhibits and for the deliberations of the body.

In this case three rooms were at the disposal of the society—two used for exhibits of apples, grapes and honey and the other for the meetings proper.

The exhibit was thought, by some, to be the finest ever made at the winter meeting.

A very interesting show of Russian apples was from the Ames, Iowa, experiment station and consisted of 75 varieties. The same had been exhibited at the state fair with some 50 varieties more and then placed in cold storage for the winter meeting. The apples, had, however, lost in quality.

Among those from outside the state who made exhibits were C. G. Patten of Iowa, Chas. Hirschinger and A. J. Philips of Wisconsin. These, however, were not allowed to compete for premiums. Other visitors were C. F. Gardner and Mr. Sherman of Iowa, Mr. Dunlap of Illinois and Geo. J. Kellogg of Wisconsin.

The floral display made in the convention room and consisting of designs, carnations, roses, callas, fuchsias, chrysanthemums, etc., was especially interesting, and added much to the pleasure of the meetings.

All the sessions were well attended, quite a large number of ladies being present and taking a great interest in the proceedings.

In a paper by C. F. Gardner, Osage, Iowa, some new ideas were advanced. He discussed the subject "Berry Bushes—Success or Failure in Growing Heavy Crops." He urged the importance of using good corn or potato ground, plowing early and shallow in fall, cleaning ground of all rubbish, and then plowing deep and late so as to dislodge grubs and insects.

As soon as dry in spring pulverize thoroughly and plant in rows 10x12 ft. for raspberries and blackberries and planting two rows of strawberries in between. This distance was urged so as to allow the use of the pulverizer,



thus keeping the ground clean both of weeds and suckers. Strong stress was laid upon using a liberal application of wood ashes and giving annual application of same. Emphasized frequent and shallow cultivation not over two inches deep believing that the best mulch is a dust bed.

The subject of strawberries was handled in a novel way, being divided into twelve five minute papers, each treating of some phase such as "Best Varieties for Market," "Best Varieties for Home Use," "Soils," "Preparation," etc. Each was followed by discussion. Perhaps less time would have been taken, had the papers all been read first and then followed by discussion.

In a paper read by C. W. Sampson of Eureka on "Gathering and Selling the Crop," he gave a few "Don'ts" that will apply to growers in other places as well as in Minnesota. One was "Don't put bad, soft, or over-ripe berries at the bottom of the box and good ones on top. Let the quality be as good at the bottom as at the top." He had seen this charged against the fruit growers and wished to caution them against deserving the charge.

On account of the losses incurred from drouth Pres. Underwood, in his annual address, urged the society to instruct its committee on legislation to secure the passage of a law at the coming session of the legislature promoting irrigation. He also called attention to the useless waste of land in the roads and cited one county in Minnesota of 18 townships, in which there are 8,000 acres of land wasted, and not only wasted but grown up to weeds and brush.

He stated that this land is worth \$24,000, and at the same rate, the land wasted in Minnesota is worth over \$78,000,000.

Much discussion followed a paper on "Medicine for Tree Sharks," but the final decision seemed to be that the people like to be humbugged and no remedy could be applied.

The subject of apples was treated in much the same way as strawberries, there being fourteen five-minute papers on the program, covering such points as "Varieties," "Seedlings," "Russians," "Planting," "Pruning," etc.

From trial station reports, plum planting appears to receive



much attention, one grower, Dewain Cook, having planted out this fall 800 trees. He finds De Soto, Rockford, Wolf, Rollingsstone still good, considers Forest Garden too weak where the limb joins the tree and thinks Mankato and Itaska promising varieties. At present he considers the outlook for profit in plum growing better than that of apple growing.

Mr. Gregg, in a paper on the "Farmers' Plum Grove," recommended using a heavy, rotten, straw mulch for the trees and keeping the young shoots down. Considers this an ideal place for poultry.

Clarence Wedge of Albert Lea, urged the importance of shaking De Soto to thin when plums are about the size of peas, in this way promoting the growing of better fruit and annual crops.

Considerable time was given to the subject of blight, causes, treatment, methods of treatment, etc. The general opinion seemed to prevail that the best way to treat a blighted tree is to dig it out and replant with some other variety. A veteran apple tree grower, Mr. Somerville, stated that he had no blight to speak of as he mulched heavily, keeping the ground moist and cool.

The subject of wind breaks was a prominent one in the discussion, a large part of Minnesota requiring these for protection.

In evergreens, the concensus of opinion seemed to be that the best varieties for general planting are the white pine, Scotch pine, red cedar and white spruce.

The question of wind breaks for orchards showed a great variety of opinions, some strongly favoring and others equally decided against their use.

At the Wednesday evening session a paper on "Flower Culture Among the Children" was read by Mrs. Barnard, of the Minneapolis Improvement League. It should have been heard by every lover of horticulture and mankind, inasmuch as it showed the wonderful opportunity of reaching the parents through the distribution of flower seeds and plants to the children of the schools.

Examples were cited where homes were made brighter, lives happier and careless, indifferent parents were brought to clean up and beautify about the home as a direct result of this work.

All honor to the noble women who devote their time and efforts in directing these lives into channels of beauty, brightness, hope and a desire for higher things. Who can tell the far-reaching results of their efforts?

A comparatively new idea was advanced by Mr. Dartt, another veteran in horticultural work, in advocating girdling as a means of hastening the fruitfulness of trees. Others opposed the idea as being contrary to nature.

The third and last evening of the convention was, in a large measure, given over to papers by the students of the agricultural school. Among them was one on "Gardening in the Jersey Islands" which proved of great interest. Great surprise was manifested when it was stated that land rents for from \$75 to \$100 per annum and is worth \$2000 per acre. The average farm is only 5 or 6 acres and yet, it was stated, the farming is so intensive that potatoes average 500 bu. per acre while a good yield is 600 to 700 bu. Fuchsias grow to a height of 15 feet and *good* cabbage stumps are used for fence posts. Wages run from 20 to 23 cts. per day and abundant help is secured from France only some 15 to 18 miles away.

Reference was made to this being the home of the Jersey cow and yet the most important matter for the farmer is to secure a good crop of potatoes, there being millions of dollars worth exported.

A novel part of the program was styled "Prof. Green's Picture Gallery," which consisted of a fine exhibit of stereopticon views. This was enjoyed by all present.

Have been obliged to omit reference to several valuable papers as the space allotted me will not allow. The sessions were so enjoyable that I can only wish that all readers of the Wisconsin Horticulturist, might have been there.

Such meetings are so inspiring and elevating that every

patriot must feel that, notwithstanding the work of agitators, so long as the horticultural and kindred societies do their work faithfully and well so long our country is safe.

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A. J. Philips, Sec'y Wis. Horticultural Society.

My Dear Sir:—In response to the very cordial invitation of President Morrill, I attended the annual meeting of the Michigan State Horticultural Society at Grand Rapids, December 1, 2 and 3.

Wisconsin fruit growers should be interested in knowing what our horticultural friends are doing in adjoining states, and especially so in Michigan, from whom we receive our sharpest and most dangerous competition.

The attendance was large, among which may be mentioned, J. H. Hale, of Connecticut, the largest peach grower in the world, Prof. Craig, of Canada, Prof. Slingerland, of Cornell University, Prof. Taft, of Michigan, Mr. Kiehl, of Illinois, and many other horticulturists of national reputation.

Our reception was most cordial, and Wisconsin may well be proud of the reputation she has among her Michigan competitors.

A noticeable feature of the meeting was the entire absence of petty jealousies and ill feeling so often shown among horticulturists.

This was one of the most harmonious, pleasant and interesting meetings I ever attended. They are broad gauge, level headed business men and we would do well to imitate them in many ways.

The larger fruits received most attention, varieties, propagation, cultivation, pruning, picking, packing, transportation and sale being freely and fully discussed.

By aid of the stereopticon Prof. Craig introduced us to the principal Canadian orchards and their methods of management from the scion to the final marketing of fruit.

President Morrill and J. H. Hale by same method gave

us most instructive method of pruning, extending from the setting of the tree to full maturity, showing side by side full size trees before and after pruning.

The stereopticon was also used with great effect in presenting our insect enemies, fungus diseases, etc., together with effects, remedies and preventives.

This method of teaching horticulture is very fascinating, and its introduction by our state society would be of great advantage.

I am surprised at the magnitude of the fruit interest in Michigan and the character of those engaged in the work.

Wisconsin must look to her laurels and her markets. Superior business management, in both product and distribution, is the watchward of our Michigan friends. They can grow the best fruit on earth, and want our markets.

Time will not permit me to give in detail, even a part of the valuable papers presented.

I was strongly impressed with the large attendance and the apparent friendliness of all.

I was also impressed with the importance of a thorough organization of all horticulturists.

We have at least five hundred good practical fruit growers in Wisconsin that ought to become members of the state society.

This would give new life, new blood, new inspiration and an ideal society.

Give us practical, ambitious, progressive horticulturists well organized, and working harmoniously together, and Wisconsin will hold her own.

Yours truly,

M. A. Thayer.

# The Wisconsin Horticulturist.

MRS. VIE H. CAMPBELL, EDITOR.

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## THE PUMPKIN.

John G. Whittier.

O fruit, loved of boyhood!—the old days recalling,  
When wood grapes were purpling and brown nuts were falling;  
When wild, ugly faces we carved in its skin,  
Glaring out through the dark with a candle within!  
When we laughed round the corn-heap with hearts all in tune,  
Our chair a broad pumpkin, our lantern the moon,  
Telling tales of the fairy who traveled like steam  
In a pumpkin-shell coach, with two rats for her team!

Then thanks for thy present! None sweeter or better  
E'er smoked from an oven or circled a platter!  
Fairer hands never wrought at a pastry more fine;  
Brighter eyes never watched o'er its baking than thine!  
And the prayer which my mouth is too full to express  
Swells my heart, that thy shadow may never grow less,  
That the days of thy lot may be lengthened below  
And the fame of thy worth like a pumpkin-vine grow,  
And thy life be as sweet, and its last sunset sky  
Golden-tinted and fair as thy own pumpkin pie.

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## APPLES FOR THE FAMILY.

By Mrs. D. Huntley.

The abundant crop of apples the past season has given all growers of that most excellent fruit, ample opportunity to select the very best kinds for home use.

Beginning with the Tetofski, which ripens first in this locality, its handsome fruit, more beautiful than the wax-apple that ever was made, is enjoyed by everyone, especially the children. We have sometimes thought it a sin for any parent who has an acre of land or even a garden, to neg-



lect to plant this fine apple. Children look with such longing eyes upon this first early apple, health and happiness demands that they should be gratified. We have a young boy who is often besieged by his playfellows when eating apples, with the cry, "Willie, you know me, give me the core."

The Duchess we have all learned to prize for its excellent cooking qualities, and later in its season it is very good for eating. The crop of this well known apple was so large, with no market whatever in many towns, there is no excuse for being without fruit for the table. We have so many ways for canning, pickling and preserving, and the old fashioned way of drying, we can have Duchess the year round if we preserve it in its season.

The Yellow Transparent and the Longfield are both very desirable apples, the latter much like Tetofski, but a longer keeper.

McMahan is a beautiful apple, better for market than for family use if one has the other varieties. We have some specimens of these now in good condition.

The Fameuse and Wealthy are so popular they have become a necessity in every orchard. The latter the more hardy with us, and a very abundant bearer, and with good handling will keep through December.

But of all the varieties mentioned from the time of its ripening till January we prefer the Utter. The tree is hardy and bears well, the apple is large and handsome, excellent for eating and excellent for cooking; when stewed with sugar for sauce, it has a peculiar pear-like flavor, and the pieces retain their shape, much like that choice fruit.

Sweet apples have not the place in most orchards which they deserve. They are usually preferred by the children for eating, they are healthful and economical for the table, easily prepared, by baking or steaming, and delicious when eaten with cream or without. They are uniformly scarce in the market and usually bring a higher price than sour apples.

The best sweet apples we have are Talman Sweet and



Sweet Pear, the latter are just out of season and the Tal-mans are just ready for use. The Eureka is a fine, large sweet apple which we shall plant the coming season.

The best sweet apple we have ever seen is the Bailey Sweet. Many years ago we had it in full bearing but it was too tender for our Wisconsin climate and it perished with more than a thousand other trees that succumbed to the frost.

We believe apple growing in Wisconsin will, in the future, become a grand success; we have some indefatigable workers who will never cease their efforts until we have apples as beautiful and excellent as any that are grown in our sister states.

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## GREEN HOUSES AND CONSERVATORY STRUCTURES.

B. S. Hoxie.

A few days since I saw the statement that Lord & Burnham, architects and builders of green houses, never were driven and so overcrowded with work as during the past year. In view of the fact that there has been such a falling off in many other branches of structural work for the past two years this is quite significant when we consider the use of the green house for its primary object is for the growing of plants and flowers which require a temperature always under the control of the gardener or florist. But while this branch of artificial production of plants and flowers under glass for the trade has so largely increased during the past few years, large hot houses are now used in all the northern cities for growing some of the more choice vegetables for winter market at satisfactory prices for their production. The work of this firm, mentioned, is not so much in the common kind of green house as those requiring more skill and costly designs for private grounds which are now considered as a necessary adjunct for every estate in suburban towns.

In many instances green houses are now owned and managed by women, who find the employment not only congenial but profitable. Two or three weeks ago I visited a green house in the city of Janesville, owned and managed by two ladies, and I never was in a green house where a better system prevailed or where plants were in a more healthy condition. At the time of our visit one of the houses (as there were three) was devoted entirely to chrysanthemums, and the show of plants was as fine as any seen at the World's Fair, except possibly the great show at the close. Single specimens of these flowers measured from six to twelve, and in one instance fourteen inches in diameter. These two ladies do all the work of the three houses, even to tending their own fire (and it takes fifteen tons of coal to carry them through the winter), except the filling of the benches once a year and taking away the old soil. The ladies say they are often asked by visitors if it pays, and their answer is "if it did not we should quit the business." Now while the building of green houses is so much on the increase, and the sale of their products largely augmented, there is a no less desire among our ladies to grow plants in the house, and a modern house now will be considered incomplete without a conservatory, or at least a bay window for plants, and in planning the house this should be on the southeast, south or southwest for best exposure for the greatest variety of plants.

This conservatory should be in connection with the dining or sitting room, and sliding doors either of glass in place of panels, or doors made of light material, so that when necessary the plant room can be shut in by itself, for this will be found convenient when plants need spraying or fumigating. The floor of this room should be made of good cement, and the cost will only be a trifle more than of boards and painted. This floor must incline a little to one side or end with a small opening to carry off the water and sweepings which will accumulate in every plant room. The opening need only be two inches by six for all practical purposes and must be provided with a tight fitting slide,

or latch to raise up or shut down. This room must be constructed so as to give all the light possible on the three sides, and for this reason the casings between windows should be as narrow as can be and hold the windows secure. It will not be necessary for any of these sashes to move up and down but instead provide transoms which can be easily operated by ordinary transom rods. The casings and wood work should be as light as possible for proper strength and all thoroughly painted, not finished in oil as our modern wood work now is, because this is so soon spoiled where much water is to be used.

The windows should extend nearly to the floor and made for double sashes in the winter. The space from the window sill to the floor must be protected with tin bedded in the cement closely nailed all round to the woodwork and thoroughly painted so as to prevent moisture and decay, which is sure to follow unless this is properly attended to.

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## ORNAMENTAL SHRUBS AND ROSES.

Geo. J. Kellogg.

The question of ornamental shrubs is sadly neglected in the home plantings; perhaps from a lack of dollars and cents, and often from a lack of *sense*. There are many very common shrubs that are hardy and inexpensive, while there are many that are choice and yet need but a very slight protection, and some of these are just as well if killed to the ground, for they take on more vigorous growth and seem brighter than ever. Set them in groups.

The barberries, both Red Fruiting and Purple Leaf, are very hardy and are covered with fruit nearly all winter.

The Dogwood (Red), American and European, is very hardy and desirable, *Wigelia Rosea* needs light protection and is very fine. Flowering Almond also needs light protection and is beautiful. Flowering Currant, nothing so fragrant and early and nothing more hardy.

The *Euonymus* is perfectly hardy and is a mass of showy

seed pods in October. The Syringas are all hardy and are free bloomers.

Hydrangea Paniculata Grandiflora is hardy; if the top is killed back it will throw up thrifty bearing shoots from the ground, and it will be grand for late summer bloom.

Of the Spireas, the Golden Leaf, white flowers, bloom in June. Spirea Van Houtii, perhaps the finest white, also blossoms in June. Spirea Ash Leaf is very showy for a back ground, but sprouts and suckers so badly that it is a nuisance in a small garden. There are many other varieties, and all are more or less desirable.

Golden Elder, in contrast with other shrubbery, is one of the indispensables.

Red Fruited Elder makes a very fine background. Cut Leaf Sumach is probably the best of the Rhus family.

The lilac is of the Syringa family and is too well known to need commendation to those who like it, and those who do not like it condemn it. The white is in great demand for Decoration Day.

The Highbush cranberry is a thing of beauty and a joy when full of bright, red berries.

Tamarix kills down, but it only improves its vigor and beauty.

The Snowball is too well known to need mention; of late years it has been troubled with a leaf louse which injures the bloom badly. It may be prevented if sprayed with kerosene or dipped in tobacco tea.

Rosa Rugosa, from Japan, although from Siberia, where it obtained its constitution, is a connecting link between ornamental shrubs and roses; it is vigorous, showy in flower and leaf, a free bloomer, single roses, pretty buds, almost entirely free from insect depredations, so rugged and thorny it looks more like a shrub than a rose bush.

Of roses I hardly dare write. There are so many classes and so many choice varieties of June, Moss, Climbers, Hybrid Perpetual and Ramontant, besides the tender Teas, Hybrid Monthlies and Perpetual Climbers. It will be useless to name but few for this short paper, and those

the most hardy outdoor varieties. Of the June roses there are the Cinnamon, the Scotch, white and yellow, the Hundred Leaf, George the Fourth, the Cabbage. Many of these are worthy of a place in all collections. The Madam Plantier we consider nothing but a June rose, as it never repeats; even though the foliage is cut clear to the ground there will be no after bloom. All the above, except the yellow and the Plantier, can be bought for ten or fifteen cents each, while some of the mosses are equally cheap. Princess Aidelaide is a very fine Moss, but a very poor bloomer, and suckers so abundantly that it is hardly worth giving away. Henri Martin is one of the best red and is hardy, giving a good stem and a beautiful bud, while Glory of Mosses (not Moses, as some have printed it) is so short stemmed that it is only on the bushes it shows best. We have many other choice Moss roses.

Of climbing roses the earliest is the Maheca or Multiflora. This is only semi-double and not very lofty in its aspirations. It is a nice pillar rose, climbing about ten feet. The next in bloom is the Seven Sisters, which is a variegated rose, pink with light-colored stripes, with scarcely two roses alike. Then comes the Queen of the Prairie, which is perhaps the most vigorous of all, and if given proper winter protection will get up twenty feet. It has no fragrance, but its peculiar cupped shape and free blooming makes it one of the best.

Gem of the Prairie is also a good climber, a little deeper color than the Queen, and is a very fine variety. With the Baltimore Belle family we have three varieties, very nearly alike, all late, and bloom in clusters of from ten to twenty-five on a spray. They are very showy and fine. They require a little better care in winter than any of the others. Latest of all, the Single Michigan, revamped under a new name, Rosa Setigera, and sold for one dollar each, can be furnished at ten to twenty-five cents each.

Of the Ramontants, usually sold as Hybrid Perpetuals, the most popular is General Jacqueminot, and of that color there are about six kinds that are very much alike, and the



finest of the dark roses. General Washington is larger and very double; if it had as much vigor as the Jacque family it would have more friends.

Of the pink varieties, Paul Neyron and Antoine Mouton are majestic, the finest large roses that are to be found.

In ordering roses parties would do well to name the colors wanted and leave the selection of kinds to the grower

Perpetual climbers are either feeble or difficult to winter, and do not give satisfaction.

The "Crimson Cluster" has failed to give us a blossom for two years, and though a dozen plants were set in the best of soil and protected for winter, every one winter killed. It is such a grand bloomer (?) it will be a great loss to our expectations if it can not be wintered out of doors. The budded roses are equally desirable as those on their own roots. Only the more feeble growers are budded; this is done to give them more vigor whereby we get more bloom. It requires more care in planting, the bud must be set deeper and slanted the way it is wanted to lay it down. If the root sprouts below the bud, the sprout must be rubbed off for if it is not the strength will all go into the sprout and the bud will be ruined. If in laying down the bud is broken off the root will be worthless except to re-bud. Many people will pet a rose bush after it is ruined and worthless and then lay the blame on the grower.

Nearly all hardy roses need bending below the surface of the ground, in November, and a sod laid on them to keep the sun off, leaves boxed about the bush, a mat wrapped about an upright bush if it is mounded with earth, anything to keep them cool and keep the sun off. Some growers prune the Ramontant and June roses in November and mound them with dirt and leaves, and do not bend them down. We prefer to lay them over and cut back one-half the growth in the spring.

## REPORT OF CHRYSANTHEMUM SHOW OF THE OMRO HORTICULTURAL SOCIETY.

By the Secretary, Mrs. Jos. D. Trelevin.

The third annual Chrysanthemum Show, under the auspices of the Omro Horticultural Society, was held at Omro, Wis., Nov. 11, 12 and 13.

Although the weather was cold the show proved to be the most successful one yet held. The display was the largest and finest we have ever had, especially the display of Chrysanthemums. It was surprising to note the advancement which had been made in growing the Queen of Autumn flowers — the Chrysanthemum — since our first show held three years ago. We had on exhibition flowers which compared well with those grown in the greenhouses. Some of the children were so interested that the best single stem Chrysanthemum on exhibition was grown by a boy under 15 years of age.

The display of begonias, geraniums and roses was fine. We branched out a little this fall and took in needle-work and fine arts, grains, vegetables and fruits; also gave prizes to children, and it was very gratifying to see the interest they took in this work; many times through the interest manifested by the children, the parents become interested also, and are led to take an interest in this work, when they could not be reached in any other way. In holding these shows it gives our society an object to work for and gives to the outsider an insight into some of the work of, and benefit derived from, the society. It encourages the growing of plants and flowers which better our natures, and beautify our homes.

It affords an opportunity to see what each one can do, and to profit by each other's failures and successes. Such being the result, are not these shows worthy of our best efforts?

## L. G. KELLOGG,

RIPON, WIS.,

—General Agent for the celebrated—

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Address,

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For Shelter Belts, Hedges, and Lawn Planting. Ornamental trees and Shrubs in variety. STRAWBERRY, BLACKBERRY, RASPBERRY, and other Fruit Plants, and Trees at growers' prices. Price list free.

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The choicest of the old and new Strawberry Plants, viz.: Eureka, Van Deman, Great Pacific, Warfield, Parker Earle, Bubach, Greenville, Badger State, and Princess. Cuthbert, Brandywine, Marlborough, Golden Queen, Nemaha and Ohio Raspberries, Erie and Stones Hardy Blackberries. Grape Vines, Lucretia Dew Berries. Well packed, good count, and low prices. Send for catalogue.

## POTATOES Cheap for No. 1 Stock. Only \$1.25 per barrel.

WE HAVE FIFTY VARIETIES.

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