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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

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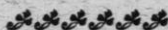
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THE WISCONSIN



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.

For a frontispiece for October Mr. R. J. Coe promised over six weeks ago to have a cut of the Columbian Red raspberry, together with a history of the origin and progress made by this fine berry, ready for this issue; but not wishing to be as late as we were with the September number, we will have to omit it and hope he will prepare it for a future issue of the Horticulturist. The delay in September was caused by absence at state fair and failure of printers to send proof to North Greenfield instead of West Salem, but I find the average reader has so much of politics to digest that he cares little for other reading. One subscriber wrote asking me a question that was fully answered in our August monthly. I referred him to that. In reply he asked to be excused and said he had been so busy he had not looked at the August monthly. He raises fruit, too, on quite a scale.

A. J. Philips, Sec'y.



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.

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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.

OCTOBER, 1896.

NO. 8.

HORTICULTURE AT THE WISCONSIN STATE FAIR, 1896.

A. J. Philips, Superintendent.

As was previously anticipated the fruit show, especially apples, was unusually large, not only in quantity, but also in size. The writer has often noticed and has many times stated that apples of the same size grown on clay limestone soil would always out-weight those grown on sandy or prairie soil, and this exhibit further convinced him of the fact, when he made his appearance among the large number of exhibitors with a Wolf River and a McMahan that beat the crowd in weight, the former tipping the scale strong at twenty ounces and the latter fully as strong at eighteen ounces, while at our county fair a week later we showed four (4) Wolf Rivers that weighed exactly five pounds. Through the kindness of the state fair officers we previously arranged all the available space for the exhibit. We were obliged to crowd the exhibitors in as small a space as possible and to use a modern phrase, some kicked a little at first, but when they looked around and saw their neighbors fully as much crowded, they accepted the situation and a better natured lot of exhibitors it would be hard to find. In order to make room quite a quantity of apples had to be placed on the opposite side of the hall. It was a little unhandy for the judges, but the apples interspersed among the vegetables, made Old's potatoes and Jeffrey's cabbages look nicer than ever before. From the old-time exhibitor Hirschinger, who ordered four hundred plates and filled them, along to Kellogg, Chappell, Fox, Jeffrey and the veteran exhibitor, A. G. Tuttle, who filled from two to three hundred plates each—and all had plenty under their shelves and in their boxes to fill nearly as many more—then along down to the hundred, the fifty—and the exhibitor with only five plates—all had something fine to show, proving be-

yond the shadow of a doubt that this was a great fruit season. Apples were unusually free from blemishes, as the veteran judge, Uncle Harris, will testify. Nearly three thousand plates were used, making it necessary to buy as many more as we had previously owned. As has been his usual custom for years, Mr. A. G. Tuttle carried off first honors on his grand display of Russian apples and it looked good to see him placing that large collection on the shelves and naming them with apparently the same energy of twenty years ago, though now he is over four score years of age. He is a life member of both the Wisconsin and the Minnesota state societies.

Many excellent seedling apples were shown, including a splendid lot grown by Joseph Zettel, of Sturgeon Bay, which nearly all claim the Duchess for a parent. The show of grapes was good, one exhibitor alone showing over sixty varieties in the sweepstakes display. Only about a half dozen exhibitors showed pears and the show of plums was hardly up to some former years. One thing works great disadvantage to exhibitors: that is to send their fruit for some one else to arrange. No man can exhibit fruit as well as the one who has grown it and knows where every apple belongs. And another fault that exhibitors have fallen into, which is very annoying to the superintendent and which makes increased work in the office, is to take the premium list and check for entry every thing in it, then find all they can to fill with, and let the judge and superintendent hunt for the vacant plates among two or three thousand; no easy task, I assure you. Every exhibitor should enter just what he has and no more. Another mistake some exhibitors make, instead of counting out and placing in paper sacks the varieties for each exhibit, and placing them quickly on the shelves, they pack in all they can find and pay freight on, and bring them along; then spend a day picking out and looking them over, causing trouble for themselves and delaying the judging. Those who come well prepared always make the most satisfactory exhibit.

The florists did not have as large a display as usual, but the quality was very fine. It is evident that if our horticultural exhibits continue to increase as they have in recent years that the quarters assigned us by the Agricultural society will soon

be too small, and an addition will have to be built on the north end of our hall. This shows that Wisconsin horticulture is on the up grade, and when we arrive so near the top that we can give three dollars for single plate premiums, as Minnesota does, we may look for many more small exhibitors.

The premiums as awarded on fruits and flowers have been published in all the leading state papers, so that it is hardly worth while to take the space, and therefore I will give only a synopsis of it:

On twenty varieties adapted to Wisconsin professional, Wm. Fox, of Baraboo, was awarded first, and F. H. Chappell, of Oregon, second; on display of ten varieties adapted to Wisconsin, Charles Hirschinger, of Baraboo, was awarded first and A. G. Tuttle, of Baraboo, second; on display of five varieties adapted to the northwest, which is a still harder test, the first was awarded to A. G. Tuttle on Duchess, McMahan, Wealthy, Fameuse and Hibernial and second on same varieties was given to F. H. Chappell. The best five varieties of winter apples for Wisconsin, the first was awarded to F. H. Chappell on Northwestern Greening, Tallman Sweet, Walbridge, Willow-Twigg and Ben Davis, and second on same varieties was awarded to August Acker of Butler.

Charles Hirschinger showed a fine lot of seedlings, some thirty in all, and secured first, while the second went to some choice ones that are owned or controlled by F. H. Chappell. On seedling winter apples A. D. Barnes of Waupaca, who has a lot of seedlings on trial, secured first, and I regret the name of variety was not given. Second was given to Jacob Korn of Prospect, on the seedlings grown by George Jeffrey of Milwaukee and put on the market by J. V. Cotta of Nursery, Illinois, and named by them the Milwaukee. The first premium on seedling fall apple was awarded to A. G. Tuttle on a beautiful red apple of fine quality that shows evidence of being a seedling of the Fameuse. The second was given Mr. Hirschinger on the seedling he has sold under the name of Hoadley. On show of ten Russians A. G. Tuttle captured first and Charles Hirschinger the second; for the largest apple, G. J. Kellogg, of Janesville, was first, and Charles Hirschinger took second. But when Beauty was taken into consideration, Jacob Korn

was awarded first on a nice-shaped Alexander, and A. D. Barnes took second on a beautiful Wealthy.

When it came to the one hundred and twenty entries for the twenty-four single plate premiums F. H. Chappell showed that the excellent care he gives his orchard is not labor in vain, for he captured twelve of the premiums, either firsts or seconds. Charles Hirschinger was awarded first and Geo. J. Kellogg second on a show of crab apples. Show of pears Geo. J. Kellogg was awarded first, though years ago he stated that the pears grown in Wisconsin had cost five dollars apiece. Hirschinger was first and F. H. Chappell second on plates of Flemish Beauty.

Best three varieties of plums Wm. Parks was awarded first and F. H. Chappell second, and on best show of native plums, Geo. J. Kellogg was awarded first premium. In the non-professional class the competition was hard, and the exhibitors out-numbered the professionals more than two to one, and it was soon discovered that to secure premiums the very best of fruit was needed. It taxed Uncle Harris to place them where they belonged, but when he was through the exhibitors seemed well satisfied with his unbiased judgment. The first on twenty varieties adapted to Wisconsin was awarded to Robert Ramsay, of Baraboo, whose apples showed plainly that he lives in a good neighborhood to grow apples to show. L. L. Olds, of Clinton, secured second. On best ten varieties adapted Mr. Ramsay was again the winner, with G. A. Perry, of Lodi, a close second; on five varieties adapted to the northwest Mr. G. A. Perry was awarded first and Geo. Jeffrey was second; on best five winter apples J. W. Porter, of Jefferson county, was awarded first and Henry Tarrant, of Rock county, took second; on display of seedling apples the first was an easy one to determine, as all who had examined Mr. Zettel's fine exhibit had conceded the premium to him. L. L. Olds was well satisfied with second on his good display. On seedling winter apple the first was awarded to Mrs. W. E. Kellogg, of Prospect. This may be a mistake, for I have no recollection of any lady exhibitor from Prospect, except Mrs. Schaffer.) The second was awarded to Edwin Nye, of Appleton, on an apple named by them years ago the Pioneer. I recollect Mrs. Nye showing the

same apple at Milwaukee some ten years ago. It seemed so firm and good and she gave so good an account of the tree that I stopped off at Appleton after that to see the tree and learn of its history, but the day was raw and cold and the tree ten miles away so I did not go to see it, but have promised myself in the near future to visit it and learn more of it. Mr. Nye also captured first on seedling fall apple, the tree of which is worth looking after. L. L. Olds secured second on seedling fall apple; on ten varieties new Russians, Uncle Zettel was again an easy winner, with Robert Ramsay very close with his second; on largest apple Henry Tarrant was first with a Wolf River, and for handsomest apple, young Mr. Cotzhausen captured first on a Wealthy that would have made Uncle Peter Gideon smile. When it came to single plates, though the entries were nearly double the professionals. Mr. Ramsay's locality had the same effect that Uncle Chappell's supplying moisture has, for he like Chappell secured twelve first and second premiums—the rest being divided among the other exhibitors. First on show of crab apples was awarded to Henry Tarrant of Janesville and second to Geo. Jeffrey of Milwaukee. On pears Geo. Jeffrey of Milwaukee took first and A. M. Johnson of North Greenfield second; on collection of native plums Henry Tarrant was awarded first and Geo. Jeffrey second; on grapes, in professional class Wm. Fox of Baraboo was an easy winner on twenty varieties. He also was awarded eighteen other premiums, most of them on single plates. His exhibit was fine. Geo. J. Kellogg of Janesville secured second on show and four other premiums on plates. F. H. Chappell showed the exhibitors that his success in horticulture is not confined to growing trees and raising apples, for he captured seven first and second premiums on grapes. On the show of grapes by non-professionals Geo. Jeffrey was awarded first and J. W. Porter second on best ten varieties. A. Von Cotzhausen was awarded first, and right here I wish to commend the exhibit made by Mr. Von Cotzhausen's two sons, and wish that other young men would do likewise. I have noticed the past season political papers poking fun because Mr. Von Cotzhausen called himself a farmer, but I am free to say that a man who can bring up his boys to make and superintend such

a nice exhibit, capturing three premiums on apples and three on grapes, is justly entitled to be called a farmer and we welcome the boys to our horticultural ranks, and I think they will be heard from yet as professionals. Sweepstakes on apples in the professional class was awarded to Hon. Chas. Hirschinger and on fruit of all kinds to Wm. Fox, both of Baraboo. In the non-professionals Geo. Jeffrey of Milwaukee captured first on apples, also first on display of fruit of all kinds, while J. W. Porter of Oakland was second in both cases. In flowers in the professional class the honors were nearly equally divided between Currie Brothers of Milwaukee and J. M. Dunlap of Wauwatosa. In the non-professionals Mrs. C. H. Root of Ripon took the largest share of premiums, some sixteen in all, while Mrs. Kestol of White Water, and Mrs. P. Jeske took the most of the balance—some eight apiece. In conclusion will say I have had several inquiries why my name does not appear as usual among the premiums awarded. As our rules exclude the superintendent from competing, I made no entries, but took a nice display along to show that La Crosse county was still in it. I exhibited some choice new things—to-wit, the Dudleys, winter, from Maine, the Eureka and Avista, very fine, also the largest Wolf River and McMahan that were exhibited; showed the largest Malinda four years from the top graft, as usual the largest Whitney, No. twenty, Martha and Virginia crabs; showed some choice seedlings from the orchard of the late S. I. Freeborn of Ithaca, showed two of the Thompson seedlings of Iowa and the Okabena and Peerless of Minnesota origin. Made a design on the wall over my exhibit, the letters made of apples:

Wisconsin Horticulture

1896

A. J. Philips, Supt.

for which the judge recommended a \$10.00 special premium. This was read by thousands, especially on Children's Day. I take this means to thank the State Fair officials and all the exhibitors for kind and courteous treatment during the entire fair.

HOW STRAWBERRIES DID IN 1896, ON THAYER FRUIT FARMS, SPARTA, WISCONSIN.

By J. L. Herbst, Asst. Superintendent.

The season was an unfavorable one here in this section of the country. The hard winter on small fruits coupled together with the heavy cold rains during the time of blossoming did much to prevent the different varieties from doing what they otherwise would have done. Many varieties failed entirely, but we shall not discard any for their past season, and will try them again.

We don't know how much better those varieties will be next season which did so well this. Those also which showed poorly this season may break the record next.

Kyle (p.)—A fine growing plant. It has fruited but one season with us. Fruit large, smooth, juicy and quite firm. Very promising.

Arrow (p.)—Originated with E. W. Cove of Wisconsin. It resembles the Haviland in some respects. It has more firmness than Haviland. Berries long, brighter in color and of higher flavor. Very productive and a fair shipper.

Gardner (s.)—A strong sturdy plant; not a strong plant-maker. Few plants, but strong and healthy. Very large crowns, similar to Parker Earle. It sets fruit very heavy; berries large and firm and superior in quality. It can hardly be equalled as a pollen bearer.

Herbst No. 2 (s.)—A seedling of Warfield. Low-growing sort, similar to Capt. Jack in habits. Foliage light green, healthy in appearance; berries a rich dark red, very juicy, quite firm, and fairly productive; a good pollinizer.

Wm. Bell (s.)—Originated in Ohio. A very promising variety. It has fruited but one season with us, having just been received on trial. Berries large, long and conical, bright glossy red, of good quality and quite firm. It is a vigorous grower and quite prolific. A probably rival of the Marshall.

Berlin (s.)—Looks very promising; has not fruited with us yet. We have it the first year, and it has made a splendid growth. Plants look strong and healthy.

Oriole—We desire to test another season before passing an opinion upon it.

Badger (s.)—Similar to Tippecanoe in growth of plant and berry. Good only as a fancy sort.

Brandywine (s.)—A very strong grower; foliage a dark rich green, very healthy and no rust; a heavy fertilizer. Fruit large perfect, bright red and quite firm; of good quality.

Cobden King (s.)—Has not fruited with us yet. It has made a fine growth of plants which look strong and healthy; very promising.

Cobden Queen (p.)—A companion for King; a strong grower.

Splendid (s.)—A low growing sort; similar to Capt. Jack, being a deep rooter, quite firm and quite valuable.

Crawford (s.)—A variety which deserves good culture in order to succeed. When given care and proper attention, it is one of the best. Fruit quite large, dark glossy red, and sometimes irregular; good plant maker.

Viola (p.)—Late sort, not very promising. A weak grower and not very productive.

Yale (s.)—Poor plant maker and not productive in fruit; poor.

Beverly (s.)—A choice family berry. Vigorous plant. Quite productive in fruit, which is large, bright red, and of good quality. Somewhat acid.

Ada (p.)—Not promising; too shy. A bearer both in plants and fruit.

Lady Thompson (s.)—Has not fruited with us, this being the first season it has been with us. It has made a good growth of plants, and looks promising.

Oliver (s.)—Not promising.

Middlefield (p.)—Strong grower; low growing type. Fairly productive and of good quality. Berries similar to Great Pacific.

Jay Gould (p.)—Deserves more trial.

Boynton (p.)—Identical with Crescent—must be the same.

Bouquet (s.)—A very promising fancy sort for home market. Plant thrifty; fruit medium size, very uniform, shape conical, color a rich, dark crimson, and of good quality.

Marshall (s.)—A very strong, upright grower; leaves a dark,

rich glossy green; fruit superb in color, large in size, and perfect in shape. One of the best home berries.

Weston (p.)—Resembles Greenville in some respects, but is a much better variety in some points. It is more productive than Greenville with us. Foliage dark green, a good grower, and sets plants rather far apart. Deep rooted, and a drouth resister. Fruit good size, quality good, quite firm and a good shipper. Its size of fruit holds out to the last.

Annie Laurie (s.)—Stocky growing sort; a fair bearer of large and superior quality of berries. A fancy sort; not a shipper.

Timbrell (p.)—We desire to test this variety another season before passing upon its merits.

Bartons (p.)—A fancy sort. Healthy vigorous grower. Very productive of large-size berries. Not firm.

Enhance (s.)—A good pollenizer, good plant maker, and quite productive. Berries rather large, irregular in shape, and of poor quality. Inclined to wrinkle.

Van Deman (s.)—One of the best fertilizers. Fruit smooth, of a peculiar shape, being the shape of a sphere flattened at the calyx and tip. Bright red in color. Fertilizer to plant with Warfield. Resembles it in color, size, shipping quality and growth of plant. Can be shipped with Warfield.

Rio (s.)—A variety that requires more attention than most others. A fine appearing berry when placed in crates. Rich, glossy color. Berries of good quality and quite firm. Fancy sort.

Gandy (s.)—Late: pale red; seeds quite prominent. Good quality for a late variety. A good variety for the late pistillates.

Beder Wood (s.)—An early sort. Good pollenizer. Berries pale red. Too soft for market. Fairly productive.

Warfield (p.)—Our stand-by as a maker of plants, yielder of large dark glossy red berries, shipping berry, fit companion for Sparta and money maker. We have found no variety to equal it as a producer.

Haverland (p.)—Well known as a fancy sort. Looks well on vines and in boxes, but not of good flavor. Large yielder of long pointed fruit light in color. Fruit borne in large

clusters on long stems which can not hold up the fruit, and liable to rot if not picked often.

Parker Earle (s.)—Late, an immense yielder. Berries quite firm and will stand shipment. A good variety to plant as a pollinizer.

Eureka (p.)—Late, a good yielder of fine quality fruit. Inclined to wrinkle. Fair shipper.

Great Pacific (p.)—Well known as a rank grower, setting many plants. Fairly productive of berries that are very seedy and light in color. Season medium.

Dayton (s.)—Season same as Crescent. Similar to Haverland in appearance. A strong grower of large upright plants. Berry not firm and will not stand shipment. A home variety.

Gov. Hoard (s.)—One that can be depended on for home use or market. Good grower. Berries large, dark red and of good quality. Good pollinizer.

Sparta (s.)—One of the best of staminate. Especially noted as a pollen bearer. Seedling of Warfield crossed with Jessie. Foliage resembles Jessie, but a much better plant maker. Berry similar to Warfield. Large, dark glossy red, fine quality and productive. Good shipper.

SECRETARY'S NOTES.

Since the state fair I acknowledge the receipt of two very choice seedling apples, one from W. S. Melcher of Hartford, a sweet apple the shape and color of Ben Davis, very good in quality and bids fair to keep well into winter, at least I am testing one in cellar, the other from C. C. Bishop of Vernon county, who says this fruited for the first time this season in one of my back fields. The cattle for years have tried to kill it by twisting it down and my boys threatened often to dig it out, but it has survived, and now what do you think of the fruit? I replied by saying good size, good quality and fine in appearance. Colored similar to Scott's winter. This tree if productive is worth looking after, as it is a keeper.

I have been much interested lately by reading the following paper. Professor Edward B. Voorhees, director of the New Jer-

sey State Agricultural Experiment Station, New Brunswick, N. J., read a paper on "Manuring Orchards," before the Massachusetts Horticultural Society Saturday morning, March 28, 1896. I would like to give it in full as it contains so many good points, but space will not allow, so I will give a few extracts from it. He says:

"We have numerous suggestions in regard to the particular needs of particular kinds of fruit for plant food, but we have very few results derived from actual experiment. In the first place, farm crops, as a rule, require but one year for the entire processes of vegetation and maturation. For fruit crops the purely vegetative processes continue for at least three years, amounts of plant food constituents. In manuring orchards it must be admitted that the general principles of manuring apply as well to the farm crops as to fruits, i. e., the essential constituents of manures must be the same. That nitrogen encourages leaf growth is a recognized fact, and, since trees grow by both leaf and root, its presence is required in the soil. It is very evident, too, that potash is an essential constituent in the growth of fruits, not only because it forms a large proportion of the ash of the wood, and more than fifty per cent. of the ash of the fruit, but because it forms the base of the well-known fruit acids.

"To nourish a tree properly, as well as to insure proper ripening, phosphoric acid is also very essential. Lime, in the production of stone-fruits particularly, is an important constituent; its function seems to be to strengthen the stems and woody portion of the tree, to shorten the period of growth, and to hasten the time of ripening.

"While we have evidence of the need of manures for orchards I desire to present further evidence derived from experiments and from actual practice. The only completed experiment is reported by the New Jersey Experiment Station, on peaches. The object of this experiment was to study the comparative effect of an annual supply of nitrogen, phosphoric acid and potash, when used singly and in combinations; and of large applications of barnyard manure. The first point observed is in reference to the number of crops secured; after the trees on unmanured land had ceased to bear, the trees on

manured and fertilized land bore crops greater proportionally than those secured previous to that time. In the next place, it is shown that the yield is materially increased by the use of manures and that differences between artificial and natural supplies are very slight. In the third place, (and it is a fact of great importance), it is interesting to observe the effect of an abundance of food in overcoming unfavorable weather and seasonal conditions. The manure strengthened and stimulated the trees and enabled them to successfully resist conditions fatal to the crop on the unmanured land. This point is one that is seldom considered, though it is of extreme value.

"Another experiment, reported by the Cornell Experiment Station, is instructive as indicating the need of manures for fruit trees, for it is shown that twenty crops of apples remove more than twice as much nitrogen, half as much again of phosphoric acid and nearly three times as much potash as twenty crops of wheat."

Prof. Bailey of Cornell Experiment Station says:

"In general, it is better to supply nitrogen by good cultivation and an occasional green-manure crop than by the application of fertilizers.

"A system of manuring for cultivated orchards, based upon the limited data at our disposal, may be outlined as follows: To provide vegetable matter and to improve the physical quality of poor soils, apply yard manure once in four years, in fall or winter, at the rate of five to ten tons per acre. To aid in the decomposition of vegetable matter and to insure a sufficiency of lime as plant food, apply lime at the rate of twenty-five bushels per acre once in five years. To provide, in addition, an abundance of all forms of available plant-food at the time of need for the development of the tree and fruit, apply annually chemical fertilizers in the following proportions: Nitrate of soda, 100 pounds; S. C. rock superphosphate, 100 pounds; ground bone, 200 pounds; muriate of potash, 200 pounds. The amounts to be applied depend on the character of the soils, the kind of fruit, and the age and vigor of the trees; these given perhaps mark the minimum. By the introduction of crimson clover, we have a plant admirably adapted to cheaply supply nitrogenous vegetable matter for

orchards, and its growth is to be recommended wherever the the plant can be successfully grown, instead of the use of barnyard manure."

NEW STRAWBERRIES.

Speaking of the new berry, the Carrie, W. J. Green of Ohio, says:

"It resembles the Haverland, but is an improvement upon that variety in size, color and firmness and seems equal to it in prolificacy. If this judgment is correct, it will prove to be an exceedingly valuable variety and will displace the Haverland, for this variety is too soft and rather too light in color. It has the same fault as the Haverland, of long fruit stems and the berries lie out in the row, and are liable to be trampled on by the pickers. While this is a fault, it must be acknowledged that berries of this class are easily seen and more likely to be picked clean than those having short fruit stems. The price of plants will be almost prohibitive at first, but it will pay growers to keep close watch of Carrie."

THE CHARLAMOFF APPLE.

As the Minnesota society added this to their list of hardy apples last winter making it the Duchess Hibernial and Charlamoff it would be well to notice what Prof. N. E. Hansen of the South Dakota college at Brookings says of it, as it may prevent some planters from being misled by the Minnesota report:

"Prominent among summer apples was a variety known to many in Minnesota as the Wm. Peterson Charlamoff, because he has found it very productive at Wauconia, some twenty odd miles from Minneapolis. This is No. 262, and should be carefully distinguished from another variety known by the same name that is less valuable. At this fair the fact was carefully determined by several of the fruit men present, the writer included, that it was identical with the variety grown in the Iowa agricultural college orchard under the name Champan-

skoe. These trees have been very fruitful for many years. Mr. Wedge says Charlamoff is a better shipper than Duchess, firmer in flesh and much better to eat out of hand. The tree is hardy at Brookings."

Prof. Hansen further says of crabs at the Minnesota state fair in 1896:

"The most showy of the larger crabs on exhibition was probably Gideon's No. 6. It will replace Hyslop as far as color is concerned and is free from blight. Hyslop was generally condemned by a number of the growers present. Transcendent was represented by many plates, but its strong tendency to blight caused its removal from the recommended crab list last winter at the state horticultural meeting at Minneapolis. The Virginia crab will more than fill its place as it is equally hardy and productive and is not subject to blight. The fruit is equal in every respect to Transcendent. The Virginia is perfect at Brookings while Transcendent blights badly. Top working on hardy stocks was discussed by many of the growers. The concensus of opinion was in favor of Hibernial and Virginia crab as stocks. Mr. Wedge has found Malinda, otherwise such a very tardy bearer, an early bearer when top-worked on Hibernial." (The latter is also my experience.—A.J. Philips, Secretary.)

Prof. Hansen has this to say of the Wealthy:

"This variety should be top-worked on Virginia crab with which variety it makes a perfect union. This fact was noted in a recent visit to the large orchard of A. J. Philips of West Salem, Wis. The Virginia crab furnishes the hardy stem and strong crotches which wealthy lacks."

From the reports sent to me for the past two months I can sum up the ideas of fruit growers no better than to give the following from the pen of E. J. Cutts of Howard Lake, Minn. Mr. Cutts is a practical horticulturist and horticultural member of the institute force in his state:

ADVERSITY AND ITS LESSON.

One who is called the wisest of men said: "In the day of adversity, consider." The present season has been a trying one for the northwestern fruit grower. Nearly all varieties of

fruit, except apples, have been a partial or total failure, and heeding the admonition contained in the above quotation, let us consider some of the causes of the failure and see if we can not learn some valuable lessons from it. It will not do to become discouraged, for the same wise man has said: "If thou faint in the day of adversity, thy strength is small."

We have met several during the past few days who, when speaking of the strawberry crop, would say: "I have tried for several years to grow strawberries and the past season is the poorest I ever had. I am now going to quit." We think that is a very unwise decision. The peculiar conditions that occasioned such a total failure may not occur again for a long period. The long protracted drought of last season was the principal cause of the failure, and in consequence, the plants were so weakened in the spring that many did not send out fruits buds at all, and the few plants that did blossom, did not mature their fruit. It was so cold and wet during the time they were in blossom that many of the blossoms blighted and all the pistillate varieties suffered from lack of pollenization; the bees could not work, and there was no pollen distributed, and on most plantations, the only fruit there was, appeared on the staminate rows.

But everything looks very encouraging for another season. We have had considerable rain, the beds set this spring are doing finely, and the last year's beds that have been burned over, cleaned out and cultivated, are looking equally well. Now is the time to make calculations for a nice bed of that most excellent and wholesome fruit next spring. Good rich land on which one has grown potatoes this year, is especially adapted for that purpose. Plow it deep this fall and again in the spring, and at the proper season we would like to tell how we set out a strawberry bed and what varieties do best with us; and just here we would like to put in one word of caution: don't be persuaded into buying plants this fall, and expect to keep them over winter in the cellar as we have occasionally heard of people doing. Plants set September 1st will do fairly well, but the spring is the proper time.

The raspberry crop was fairly good in some localities, but it was so very dry last year that they made very little growth and

there was not much wood upon which to grow fruit. The same is true of blackberries; everything in that line this season has made a good growth and we can reasonably look for a big crop next year.

In many localities currants and gooseberries were almost a total failure, but to those who had any fruit to sell, the high price partly compensated for the loss in quantity. We believe the failure is due to the drouth of previous years and the cold wet weather during the blossoming period.

FRUIT NOTES, MINNESOTA STATE FAIR.

A. W. Latham, Superintendent.

Some fifty exhibitors were present, with J. S. Harris as the leader and largest, he carrying off first prizes in professionals. A display of one hundred and seventy-five Russians were sent by Prof. J. L. Budd, of the Iowa college, in charge of his assistant, Mr. J. Sexton, who gave out valuable information concerning this interesting exhibit. An exhibit of fifty varieties of apples were shown by the Minnesota state experimental farm. The winter seedling apples that were awarded premiums will be shown again at their winter meeting before the final award is made—a good idea for testing their keeping qualities. Their premiums are larger and divided among more exhibitors—for instance, on collection of apples, J. S. Harris first, \$25.00; Wm. Somerville second, \$20.00; Clarence Wedge third, \$15.00; M. Pearce fourth, \$10.00. On seedling winter variety, J. S. Harris first, \$15.00; W. L. Parker second, \$8.00, and H. M. Lyman third, \$4.00.

I notice that three of their leading varieties, to-wit: Duchess, Hibernial and Wealthy, have double plate premiums—\$1.50 first, \$1.00 second and 50 cents third, for both the handsomest and largest plates of those varieties. A very fine late shipping blue seedling plum was shown by W. S. Widmoyer, of Dresbach, Minnesota; tree said to be healthy and hardy.

NOTES FROM IOWA STATE FAIR.

J. B. Mitchell, of Cresco, exhibited 500 plates of fruit, seventy-nine of which were Russians. He showed seven varieties of choice seedlings; the best is a Duchess seedling, named the Mitchell. It is higher in color and better in quality than its parent. Mr. Mitchell says the Hibernial and Lieby are the best of the Recumbent family and will keep until spring if carefully picked and handled. Mr. Mitchell only lives a few miles south of the Minnesota line and his experiments may prove valuable for Wisconsin planters.

C. G. Patten, of Charles City, showed a remarkable display of 200 varieties. Mr. Patten has produced some fine and valuable seedlings—among which Patten's Greening is quite generally planted in Iowa, Minnesota and Wisconsin. It has done well this season, some specimens weighing as high as eighteen ounces. He showed a Fameuse seedling named Brilliant, said to be an improvement over the parent tree and is said to have a future. The Perry Russet No. 4 is also meritorious. Duchess No. 7 is earlier than the Wealthy, and valuable. Duchess No. 8 is a good keeper and late. The Tetofsky is a fine red, high color and valuable. A Grimes and Duchess cross is good fruit, and keeps to January 1st. The Iowa Beauty seedling, Golden Russet and the Frost seedling, Whitney 20, are better than the parent in tree, fruit and in every other way. Mr. Patten is enthusiastic in his seedling work and considers it the most valuable line in which he is engaged. He believes that the results reached by seedlings produced on the ground and in the climate where they are to be planted are better than is obtained from Russian fruits, and is a firm believer in American seedlings. Mr. Patten is a former resident of Wisconsin and we wish him abundant success in his chosen profession.

R. P. Speer, of Cedar Falls, showed fifty plates of fruit in which the Black Oxford apple occupied a prominent position. He pronounces it better than the Grimes Golden; its season is March and is only safe top worked. The Tracy he values nearly as highly. It comes from Malone, N. Y., where only Duchess, Tetofsky and Tracy will stand the climate. He is quite friendly to Russians, because they make no fall growth and have no unripe wood to be damaged in winter.

REPORT OF COMMITTEE ON AWARDS.

AT WINTER MEETING FEB., 1896.

To the officers and members of the Wisconsin State Horticultural society:

Your committee on awards would respectfully submit the following report:

Best collection of apples, Geo. Jeffrey, Milwaukee, first premium,	\$5.00
Best four varieties, Geo. Jeffrey, Milwaukee, first premium,	3.00
Best three varieties, long keepers, Geo. Jeffrey, Milwaukee, first premium,	3.00
Best three varieties Crab apples, Geo. Jeffrey, Milwaukee, first premium,	3.00
Best single plate, Northern Spy, Northwestern Greening, Ben Davis, Walbridge, Pewaukee, Jonathan, Switzer, seven varieties, \$1.00 each, Geo. Jeffrey, Milwaukee, ...	7.00
Three plates pears, Geo. Jeffrey, Milwaukee,	1.00
Three plate Repka Malenka, F. H. Chappell, Oregon,	1.00
Best display potatoes, ten varieties, Geo. J. Kellogg, Janesville, first premium,	3.00
J. L. Herbst, Sparta, second,	1.50
Best half peck early potatoes, Geo. J. Kellogg, Janesville, first premium,	1.00
Best half peck late potatoes, Geo. J. Kellogg, Janesville, first premium,	1.00
Best half peck onions, Geo. J. Kellogg, Janesville, first premium,	1.00

J. C. Plumb,
E. A. Perry,
F. A. Harden,
Committee.

SHALL FARMERS GROW SMALL FRUITS?

A. J. Swizy, Rockford, Ill.

The farmer's home should be the ideal home. It should be the best attainable in all its appointments and environments. Within the farm home are reared the children who will become the men and women that are to fill the important positions in all the departments of industry and usefulness. The foremost men of our country, many of our largest merchants and manufacturers, our best teachers, ministers and editors, and our noblest statesmen were reared upon the farm. Their ranks are continually being recruited from the children of the farm. It is of great importance that the farm children have the best means for development and culture, that they may grow strong, healthy and vigorous in body and in mind, with every good faculty attuned to harmonious and perfect action.

Good food is a necessity for such development. As the plants and trees grow from the soil, so do people grow from the food they eat. This food must be of a proper material from which to construct the delicate and intricate faculties of the human being, in a normal condition of perfection, strength and purity. The importance of eating only the very best kinds of wholesome food has not enlisted the earnest thought and careful attention of our people, that their own vital interest demands. They do not give it as much study as they do other subjects that are of less importance. The intelligent farmer who rears domestic animals studies carefully the properties and the effects of the food he feeds them. If he grows horses for strength and speed; cows for milk, butter and cheese; beeves for their flesh, sheep for their wool, swine for their bacon and lard, or poultry for their eggs, he feeds to each the proper ration of food that will best produce the desired result. But in feeding himself and his family, he gives no thought as to whether the food provided is best adapted to proper human growth and development.

It is not the province of this paper to discuss the merits of the different kinds of food used for human sustenance; but I do want to make more clear and prominent the fact that good fruits are among the best kinds of food, and that they are well

adapted to aid in developing the normal faculties of the human being to a high degree of purity, strength and activity.

Fruits are highly vitalized. In their perfection they possess a vitality or life power sufficient, under proper conditions, to enable them to grow into perfect plants or trees. How much of this innate vitality is imparted to those eating the fruit has never been determined, but it is well known that perfect fruit maturely ripe is much more nutritious and wholesome than that which has lost its vitality and is partially decayed.

Fruit in its perfection is a pure food. It is free from the unwholesome adulterations to which many compound foods are subjected. It does not carry into the system foul parasites or germs of disease; nor does it produce that abnormal condition of the tissues favorable to the lodgment and propagation of microscopic germs of many contagious or malignant diseases. Good fruit of some kind should form a part of the daily food of every family, and especially that of the children during the time of their rapid growth and development.

Small fruits are the fruits for the summer time, the time when fruit is most needed for food, and the time when other fruit in prime condition is more difficult to obtain. While they each have a brief period of perfect maturity, by having different kinds and varieties ripen in succession, their season can be prolonged throughout the entire summer. If grown at home, they can be gathered daily, as wanted, and in the best possible condition of ripeness and perfection—much better than if obtained in the market, perhaps several miles distant. The supply, too, will be more abundant and reliable. Many farmers, who depend on buying their fruit, get very little of it, and that only at convenient times. The housewife who has an abundant supply of good fruit continually at hand is saved the trouble and vexation of having to get something else to supply its place on her table, where there must always be something for her family to eat. It is cheaper to grow fruit than it is to buy it. I would rather grow the fruit for my table than to go to the market and buy it, if the money was furnished me to pay for it. Every farmer can grow his own small fruits if he chooses to do it. There is no greater skill required than to grow successfully the ordinary crops of the farm. A soil that

will produce good crops of corn, potatoes, or wheat will grow strawberries, gooseberries, currants and raspberries. Extra care in the preparation and culture will pay just as well in growing these fruits as in all other farm products. The great problem with the ordinary farmer is to have such a desire to do the work that he will get at it, and do it seasonably and effectively. In the planting season he is usually so much engaged with his farm work; his large fields of grain and corn must be seasonably attended to, and the small fruit garden, considered of less importance, gets neglected. But that small area, if well cared for, will prove to be the most profitable of any part of his farm.

One good way is to let the children, the boys and the girls, have a chance at it. All children are fond of fruits and berries, and with proper encouragement will enjoy seeing them grow and will take an active part in their culture. Prepare a suitable piece of ground and let the children have the care of it. Let them have a portion of time each day, in which they can plant and cultivate the strawberries, raspberries, currants and blackberries. Let them have good books and periodicals to read on horticulture. If nothing better, get some of the illustrated catalogues of our best large fruit growers. An interest will be awakened in fruit growing and a desire to learn how plants grow. As they cultivate the fruit plants and see them grow, their own minds are also growing, and in the right direction, and they are gaining strength and ability for future usefulness.

After furnishing the home table, give the children the benefit of any surplus berries and fruits that they may sell to the neighbors or in the market. The satisfaction of earning some money for their own personal use is a great incentive to the smart boys and girls for good and faithful work. They will soon be trying to produce the best and largest fruits in the vicinity. They will learn that excellence in culture will result in excellence in quality and quantity of the crop. The habits of good work thus formed will obtain benefits in all the business of life. This will have a tendency to make the children love the farm and their farm home. They have helped to increase its comforts and its attractions, and they feel a personal

interest therein. They will not so soon want to leave it for other business. Wherever they may go in after years and whatever may be their occupation, they will fondly cherish the memories of their ancestral farm home as the best spot ever known on earth.

In conclusion: The ideal farm home will have among its surroundings various kinds of fruits, flowers and ornamental trees, to augment the comforts of farm life, and to aid in developing among the industrial farmers and their households a higher and nobler manhood and womanhood.

A vote of thanks was given to Mr. Swizy for his excellent paper.



The Wisconsin Horticulturist.

MRS. VIE H. CAMPBELL, EDITOR.

AUTUMN VOICES.

[SELECTED.]

When I was in the wood to-day
The golden leaves were falling round me,
And I thought I heard soft voices say
Words that with sad enchantment bound me;
"O, dying year! O, flying year!
O, days of dimness, Nights of sorrow!
O, lessening night! O, lengthening night!
O, morn forlorn and hopeless morrow."

No bodies visible had these
Whose voice I heard so sadly calling;
They were the spirits of the trees
Lamenting for the bright leaves falling,
Prisoners in naked trunks they lie,
In leafless boughs have lodging slender;
But soon as spring is in the sky
They deck again the woods with splendor.

The light leaves rustled on the ground
Wind-stirred, and when again I hearkened,
Hushed were those voices, wide around
Night fell and all the ways were darkened.

WINTER CARE OF SUMMER BULBS.

Walter J. Moyle.

During the month of October we will lift our summer flowering bulbs. After several years of experience I have adopted the following rules, which I have found to be the best method to properly bring the bulbs out in nice shape in the spring: All bulbs, with the exception of the canna, gladiolas, tigridia and caladium, should be thoroughly dried by artificial heat (after being dug in the autumn) before they are stored for the winter.

No garden is complete without *Lilium Auratum*, or golden banded lily, but Wisconsin's soil and winters seem to be too much for it and the bulbs soon decay if planted out permanently. I find, however, that the bulbs can be lifted in the fall and packed in dry earth in the cellar, and can be re-set in the spring with grand success.

The *Tigridia*, on account of the difficulty experienced in keeping the bulbs, is but little known in our gardens; this is one of our handsomest summer flowering bulbs. It is a native of tropical South America and the bulb is very susceptible to moisture, but if carefully dried and placed in paper bags in a frost proof cupboard, or closet, no trouble will be experienced in keeping the bulbs.

Cannas and caladiums should be packed in dry sand, or earth, and kept away from the frost. Gladiolas, if properly dried, can be packed in bushel boxes, or nail kegs, in the cellar. I have kept bushels of them in this way. Remember that more depends on the bulbs being properly ripened than anything else, if you would have them come out in nice shape in the spring.

THE APPLE CROP OF 1896.

J. C. Plumb.

Not since 1880 has there been such an abundant crop of apples in our state, and I may say through the northwest, as this year. And as then, the market has now been flat for the best of fall apples, and millions of bushels have gone to waste for want of some mode of utilizing the fruit or its juices in other ways than for hard cider and vinegar. The cider mills have been overstocked at 10 cents per bushel, and many families have, by drying, canning and in apple butter, secured a scant supply of this best of fruits for winter use.

But the main crop, being early and fall varieties, the market has been overstocked at 25 to 40 cents per bushel. The winter varieties are not keeping well, and the new year will find Wisconsin dependent, as usual, on other states for this fruit. This should not be, and when we have enterprise enough to provide cold storage for our surplus Oldenburgs, Wealthy, McMa-

han, Plumb's Cider, and others of that class of fall fruit, that are, and doubtless will be, our best to grow for home use, we will save an enormous sum of hard cash, and have fruit of our own production in plenty the year round. Twenty cents per barrel would be the maximum cost of cold storage for say six months or less, and must come to the apple grower, as it has to dairy and poultry interest.

Why not grow long-keeping apples and done with it? Because, as a rule, those good enough to compete with Michigan and Missouri are not hardy enough to stand our test winters. Of the old varieties of winter apples not one has proved really satisfactory in southern Wisconsin, and but two of the new so far, the Northwestern Greening and Windsor. The Repka M., of the Russian class, while very reliable in tree, has this year for the first been fairly up to grade in size and quality, and we can get no further on this line. With cold storage many of the beautiful early ripening Russians can be saved for winter. The Longfield and Antanovka are all gone with us, the Utter and McMahan the same. The Plumb's Cider is keeping well yet, and has yielded the greatest amount of saleable fruit per tree, of over fifty varieties fruiting here. The excessive heat and moisture of July and August doubtless has caused premature ripening and decay of our apples this year.

Prospects for fruit next year are not good, where trees bore so full this year; but those which ripened early, are now showing a good development of fruit buds for next year. This remarkable apple year brings out some varieties more than ever: Twenty-one barrels of Plumb's Cider from three trees, and thirteen barrels of them put down for winter; several wagon loads of Wolf Rivers from a farm on Rock Prairie; Ben Davis fully up to those of southern Illinois. The first apples sent to market July 10th, Tetofsky, and, now, September 30th, every apple ready for winter storage fully ten days too early.

THE EARLY OHIO GRAPE.

In our northern climate, earliness is a very important quality in the grape. We have several quite early varieties that have been quite generally planted, but none of these possess

qualities that make them as profitable for extensive commercial planting as some of the later sorts, provided the latter are not cut off by early frosts. From a limited trial at our Experiment Station, the Early Ohio promises to be more productive than Moore's Early, of much better quality than Janesville or Champion, and to retain its quality much better than the Green Mountain.

Two vines of this grape were presented to our Station in the spring of 1892 by the C. S. Curtise Co., of Portland, N. Y. Only one of these survived, and this bore its first crop the past season. The growth of the vine has not been vigorous, but the crop was comparatively large, and was scarcely surpassed in earliness by any variety we have fruited. The earlier berries were in fairly edible condition on August 13, and the main crop might have been pronounced ripe about August 22, though a very slight acidity was discernible next the stone on August 29. Green Mountain was pronounced at its best August 19. With us the bunch of the Early Ohio was rather small, being little more than four inches long. It was compact and sometimes shouldered. The berries were about the size of Delaware, the largest ones being one-half inch in diameter. They were round, black when fully ripe, with a rather thin bloom. The flesh was juicy, with a sweet and pleasant flavor, but scarcely equal to that of Moore's Early. The seeds were small, and one to three in number. The berries hang well to the bunch, and evidently keep a considerable time on the vine without deterioration. The last bunches were picked September 9, twenty days after they were pronounced ripe, but the berries had not shrivelled in the least, but had rather improved in quality by hanging on the vine.

This grape is certainly promising for our state, and its further behavior will be watched with much interest. It is said to be a chance seedling and its parentage is not positively known, but supposed to be derived from the native *Vitis Labruska*.

Wisconsin Experiment Station.

E. S. Goff.

NEW FEATURES IN THE SHORT COURSE IN AGRICULTURE FOR THE COMING WINTER TERM.

Thus far, in the history of our "Short Course," every year has shown some marked improvements over the preceding year, and the coming winter term will be no exception.

Realizing that the time has always been too short to give the students all the drill that we desire to give them in the different branches, it has been decided to commence the term the first Monday in December this season, and to close the first week in March. This gives the students two more weeks of instruction than they have had heretofore, and also enables them to return home two weeks earlier at the close of the term. The latter point is important because many students desire to return home some time before the opening of spring, to plan and prepare for the season's work.

The west wing of the Horticultural building is nearly completed, and will be occupied by the department of Agricultural Physics, under Prof. King. Next month, we hope to present readers of the Horticulturist with a half-tone illustration of the Horticultural Physics building in its completed form.

In order to better acquaint the farmers of our state with the work of our Short Course, an exhibition showing samples of students' work, methods of instruction, etc., is being made at several of our county fairs, and one will also be made at our state fair. These exhibits are in charge of Messrs. R. A. Moore and F. Cranefield, and will do much toward popularizing the most valuable work of the Short Course among the people.

E. S. Goff.

University of Wisconsin.

OCTOBER NOTES.

Frederic Cranefield.

From the first to the middle of October should be a busy season with flower growers. This is the time, before Jack Frost nips hard, to put in slips of foliage plants, petunias, geraniums, etc. The plants that have grown in the open ground all summer have outgrown their house quarters, both in root and

branch, and will give but poor satisfaction as window plants during the winter. Geranium and other cuttings taken now will root better than those taken earlier in the season. Place the cuttings in sandy soil, water thoroughly, and keep shaded for several days. Too much water will induce rot. Endeavor to conserve the water applied at first so that no more will be needed until the cuttings are rooted. Chrysanthemums should have been sheltered by September 1st. The buds are all set now and disbudding is in order, if quality is wanted rather than quantity.

October is bulb season. Tulips, hyacinths, crocus, in fact all bulbs for outdoor blooming or the window garden, should be planted before November 1. After clearing the beds of summer blooming plants, dig and thoroughly break up the soil before planting. Plant tulips 4 to 6 inches apart and 4 inches deep. After the ground is frozen to the depth of an inch, cover with a heavy mulch of leaves, straw or coarse manure.

Hyacinths for winter blooming may be grown either in water or soil. By the former method only the base of the bulb is placed in water. For the latter method obtain rich, mellow soil and fill 4-inch pots nearly full, then scoop out earth to make a hole large enough to receive the bulb and a little less in depth than the radial diameter of the bulb. In other words, leave the crown of the bulb above ground. Do not press the bulb into the soil as this compacts the soil beneath it, and the roots, not being able to penetrate the soil readily, will push the bulb out of the pot. After watering, set the pots in a cool place, preferably a cellar, for 5 or 6 weeks, then bring gradually to light and heat. These hints apply also to tulips, narcissus and crocus, except that 3 or 4 tulips or as many narcissus or half a dozen crocus may be planted in a 4-inch pot.

The Bermuda or Easter lily may also be grown in this way. Use six-inch pots and put an inch or more of broken crockery or pebbles in the bottom of each pot and on this a thin covering of sphagnum or "excelsior," then about 2 inches of soil; place the bulb on this and cover lightly, leaving the crown of the bulb uncovered. Treat the same as other bulbs regarding shade, etc., and as the flower stalk pushes up fill the pots with very rich loam. Never use any but thoroughly rotted manure for bulbs.

THE MASQUERADE OF THE LEAVES.

Pearl Campbell.

The Leaves of the great forest were all a-quiver with excitement; they whispered to each other and rustled their garments until the forest was filled with the sound of their voices. For only that very day Dame Nature had said, as she watched them dancing and whirling, "Frolic little Leaf people while you may; 'twill soon be bedtime and your busy little feet will be stilled for a long, long time."

The year had been like a long summer day to the Leaves. The night time of the year, January and February, they had slept in their tiny cradles, gently rocked by the tree. The months of March and April were the early morning hours when they opened their sleepy eyes upon the bright, beautiful world and donned the gay garments of green, so brilliant and so quaintly fashioned that they looked like the queer little elves who live in the hearts of flowers.

Through the bright spring hours they sported with the fickle zephyrs, listened to the birds that made their nests in the great trees, or hushed their merry little voices to hear the stories their mother tree told them.

Through the noonday of June and July they rollicked and made the forest ring with the sound of their many voices. And now autumn, twilight of the year, was almost here; then the long night of winter when their voices and their dancing feet should be stilled in sleep.

"We will have a grand mask," they said. "We will lay aside these garments of sober green and rival the very flowers in brilliancy of coloring."

Then each Leaf chattered to its mother tree of the gay little costume that must be made before autumn. Each Leaf clamored for a robe of a different color from the others. But the trees that had made carnival suits for many years chose the colors they had used always, and on the first autumn day they were ready. There were many thousand Leaves on each tree, but strange as it may seem, no two were dressed exactly alike.

The Maples in scarlet and gold; the Oak in purple; the Pop-

lar in pale lemon yellow, the Ash in golden, flecked with brown, while some had freshened up the green suits with touches of scarlet and yellow. A gay little band of people were they.

Then began the last frolic. The whippoorwills and robins were the orchestra. The Maples opened the masquerade. Faster and faster they flew, till the sound of their flying feet made the forest ring; faster and faster, now ahead of the musicians, faster, purple and gold, scarlet and brown, all in a daze of color, forming a living kaleidoscope; faster and faster, louder and louder the noise of their laughter and of their flying feet. Out came the fairies who lingered over the autumn flowers. Faster and faster, till the little people, who live underground, thrust their queer little heads out and called to each other that, "the Leaves had gone mad and could never leave off dancing."

Faster and faster each little dancer, in his gay costume, whirled like a living bit of flame; faster and faster till they lost their hold on the tree and fell, still dancing, to the ground below, and wearied with play, like tired children, were soon asleep.

CORRESPONDENCE.

Editor Horticulturist:—

The following communication has been referred to me and as the matter is one of general interest to all plant growers, under glass, I concluded to answer through the Horticulturist.

Ripon, Wis., Oct. 12, 1896.

Prof. E. S. Goff. Dear Sir:—What do you recommend to do to kill aphid on lettuce? I have scattered tobacco stems underneath the plants and fumigated three nights in succession, then skipped two nights, and still they are there.

H. L. C.

This only serves to prove the saying that an ounce of prevention is worth several car-loads of cure. Fumigate early and often and do not wait for the appearance of green fly before beginning. If lettuce plants once become badly infested with aphid it is practically impossible to destroy all of them. A light fumigation twice a week from the time the plants are

started will be sufficient to keep green and black fly in check. The tobacco stems or leaves should be dampened so as to burn slowly, as in this way more of the destructive principle is set free than if burned quickly. By no means allow a blaze to start.

There are no tricks in the green-house trade—all are appropriated in other branches of horticulture, but it has been observed that the green fly will leave lettuce as soon as it is cut and will go on a run as soon as it wilts a very little. The plants will revive quickly if placed in cold water or on ice.

Frederic Cranefield.

Editor Wisconsin Horticulturist:

It will soon be time to give winter protection to shrubs, bushes, vines and trees. From long experience I find that where air spaces are left in giving earth protection among bushes, or the roots of trees from nurseries injury, is sure to result before spring by the action of the frost. It is not practical or desirable to bury trees or vines below frost, but it is desirable to fill all spaces among trees or vines, where they are given earth protection, as we do in protecting rose bushes, blackberry and raspberry bushes; also fruit trees obtained in the fall for spring planting.

It is not necessary to have the soil pounded hard, but it should be well sifted and carefully filled in among trees that are buried for winter. Air holes among the roots and trunks will surely cause frost to injure the trees even if the covering is well closed outside. To heel in trees for winter it is always best to untie all bundles containing more than five trees to secure close contact of each tree with the soil. Rose bushes and other shrubs should be thinned before protecting, and after closely covering with fine earth, coarse litter used outside.—
A. L. Hatch.

TIMELY HINTS.

Beware of the tramp tree peddler who comes to sell to you "hardy varieties," grown in eastern nurseries; he will soon call upon you and, with smooth speech and an agent's canvassing

book, filled with highly coored plates, will try to beguile you into buying "just a few dollars worth of stock for the influence you have in the community." Verily, "he that is wise will not be deceived thereby." One of these same "oily-tongued fellows" who has taken a good many thousand dollars out of the farmers of Rock county said, just before leaving for new fields for operation, "the people like to be gulled, and the more you gull them the smarter man they think you are."

The following is a sample of "postal card with paid reply" that some of the eastern nurserymen are sending out: "Dear Sir:—Here is a chance for you to make a little money very easily. Give us the name and address of some good, live, honest man whom you think we can secure to take orders for our nursery stock, and we will pay you \$10.00 cash for each one named by you who sends us \$200.00 worth of good orders, or \$5.00 for \$100.00 worth of good orders. Very truly——"

"Those who know," know by experience, dearly bought, many times, that they do not want to plant eastern grown trees in Wisconsin. There are a great many who do not know, and to those we say, instead of trying to get five dollars or ten dollars by any such transaction, subscribe for the Wisconsin Horticulturist, which is worth each month as much as is asked for it for the remainder of the year, twenty-five cents, and save yourself and your neighbors hundreds of dollars because it tells you the kinds of trees to plant and the reliable dealers in your own state who will furnish them to you at much lower rates, all things considered, than the tramp tree peddler can. "A word to the wise is sufficient."

Turn over the soil with the plow where potatoes grew, if you have not been wise and frugal enough to set celery or sow turnip seed, and get rid of the weeds. It is the weeds that grow now that do most damage to the garden. Gardens are usually neglected at this season of the year and the weeds grow and ripen and scatter their seeds unmolested.

It is a good time now to remove rubbish and decayed fruits and vegetables from where they have grown in the garden and burn them.

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White Wood Fruit Packages,

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