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WISCONSIN HORTICULTURE

OFFICIAL ORGAN OF THE WISCONSIN STATE HORTICULTURAL SOCIETY

Vol. II. Madison, Wisconsin, September 1911 No. 1

THE SUMMER MEETING

The features of the Oshkosh meeting were about as follows: The excursion Thursday afternoon; the good program, especially the evening lectures; the attendance; the picnic supper at the Rasmussen farm; the excellent exhibits and the afternoon out at Rasmussen's.

This may seem a little like repetition but perhaps it is because we feel like repeating both the day and the story.

With all due respect to the people

of other cities where we have met in the past it really seems now, in the retrospect, that it remained for Oshkosh to set the pace in hospitality.

We were well cared for from start to finish. We were strangers and the Oshkosh Society took us in, not only to their hearts, but their homes. We will not recite in platitudinous detail all the events of the meeting, only the bright spots.

The papers followed the usual course, interesting and instructive,

but read to an audience of fifty where there should have been five hundred. It leads one to ask again, what's the use?

These papers at the Winter Meeting would add one full and satisfying day to our main convention at one-tenth the expense.

The local members at Oshkosh, as at other places, work their hands and heads off to care for us, to make everything pleasant, and succeed, but when it comes to local (city) attendance, it is always lacking.



Just a few of the picnic crowd at the Home of Brother Rasmussen, the others were raiding the muskmelon field and orchard. The picture was taken just before lunch which accounts for the hungry and expectant looks. The plan was wise for the crowd could never have been gotten together so compactly after eating.

The evening lecture on Thursday was provided especially for Oshkosh people and we had about a dozen of them in the audience.

Our friends and co-workers of the Agricultural College were on hand, Profs. Jones, Sanders and Moore, and each outlined in talks the work of his department.

Wednesday night was hot, but Dr. Kutchin was there, and held his audience to the last blistering, boiling moment with an original and charming talk on birds.

Mr. Sidney Teller of the Chicago playgrounds association talked about

acres of everything, was a new experience for most of our members. After supper on the beautiful lawn we returned, regretfully, to Oshkosh.

Many thanks, more than any of us can express, are due to all of the members of the Oshkosh Society for the pleasant day.

The exhibits of vegetables were far ahead of those at any other previous Summer Meeting, for many years at least. Twenty-six competitors staged over four hundred entries, all of high quality.

The flowers were also of high quality. The display of apples was

Best display Petunias: First, J. P. Roe; second, Mrs. D. D. Howlett.

Best display Phlox (annual): First, L. E. Davis; second, C. Phillipson.

Best display Phlox (perennial): First, C. Phillipson; second, Robt. Mehlmann.

Best display Roses: First, J. P. Roe; second, Christensen & Davis.

Best display Snapdragon: First, C. Phillipson; second, Robt. Mehlmann.

Best display Sunflowers: First, J. P. Roe; second, C. Phillipson.

Best display Sweetpeas: First, Christensen & Davis; second, C. Phillipson.

Best display Stocks: First, J. P. Roe; second, C. Phillipson.

Best display Verbenas: First, J. P. Roe.

Best display Herbaceous Perennials: First, J. P. Roe.

Best display Annual Garden Flowers, not enumerated in above list, (collection): First, C. Phillipson; second, J. P. Roe.

Best bouquet Garden Flowers in vase not over six inches in diameter: First, J. P. Roe; second, Mrs. D. D. Howlett.

POTTED PLANTS.

Best Tuberos Begonia: First, Christensen & Davis.

Best Sword Fern: First, C. Phillipson.

Best Asparagus Plumosus: First, C. Phillipson.

Best Asparagus Sprengeri: First, C. Phillipson; second, L. E. Davis.

Best display Coleus: First, C. Phillipson.

WILD FLOWERS.

Best display Golden Rod: First, N. A. Rasmussen; second, Mrs. D. D. Howlett.

Best display Asters (native): First, Mrs. D. D. Howlett; second, Mrs. Marcia Howlett.

Best display Lobelias (native): First, Mrs. D. D. Howlett; second, Mrs. Marcia Howlett.

Best display Native Ferns: First, Mrs. Marcia Howlett; second, Mrs. D. D. Howlett.

Best, most artistically arranged bouquet of Wild Flowers: First, Mrs. D. D. Howlett; second, J. P. Roe.



Browsing through the Orchard at the Rasmussen Farm

Summer Convention, Oshkosh, August 17th. A 35 year old Plumb Cider Tree in the background, crop estimated by the Secretary at 3000 bushels.

play and playgrounds for an hour or two and when the audience was most interested he quit. We were anxious to stay hours and hours longer.

Nothing exciting or excitable about Mr. Teller, but a way and a manner of speech that is wonderfully effective. This question of play and playgrounds is a very serious one, and is one of the problems that may not be lightly treated. Our society has set itself the task of solving the problem so far as it relates to the rural school. Shall we succeed?

On Thursday afternoon at 1:30 we met at the interurban depot and took chartered cars for a trip into the country where we were the guests of Mr. and Mrs. N. A. Rasmussen and the Oshkosh and Algoma societies.

To see a real market garden, acres of cantaloupes, acres of tomatoes,

somewhat disappointing, considering the earliness of the apple season. A list of the prize winners follows:

FLOWERS.

Best display Asters: First, Mrs. M. L. Christensen; second, J. P. Roe.

Best display Cosmos: First, Miss Rose Fenrich; second, Mrs. D. D. Howlett.

Best display Coxcomb: First, C. Phillipson; second, J. P. Roe.

Best display Double or Show Dahlias: First, Robt. Mehlmann; second, N. A. Rasmussen.

Best display Delphiniums: First, J. P. Roe; second, Robt. Mehlmann.

Best display Gaillardia: First, Robt. Mehlmann; second, J. P. Roe.

Best display Gladioli: First, Robt. Mehlmann; second, C. Phillipson.

Best display Pansies: First, N. A. Rasmussen; second, Christensen &

Best display Ornamental Wild Fruits: First, Mrs. D. D. Howlett; second, Mrs. Marcia Howlett.

Best display Native Fungi: First, Mrs. Marcia Howlett.

Best collection Wild Flowers in arrangement and variety: First, Mrs. Marcia Howlett; second, Mrs. D. D. Howlett.

Sweepstakes awarded to exhibitor receiving largest number first premiums on flowers and potted plants: First, C. Phillipson; second, J. P. Roe; third, Mrs. D. D. Howlett.

Professional Growers.

FLOWERS.

Display ornamental potted plants: First, John Nelson Co.

Display cut flowers: First, John Nelson Co.

Fruit.

APPLES.

Best plate Astrachan: First, Wm. Turnbull.

Best plate Duchess: First, M. V. Sperbeck; second, Christenson & Davis.

Best plate Fameuse: First, F. A. Spink; second, M. V. Sperbeck.

Best plate Longfield: First, Dr. T. E. Loope; second, E. W. Sullivan.

Best plate McMahan: First, H. C. Melcher; second, Dr. T. E. Loope.

Best plate McIntosh: First, M. V. Sperbeck; second, J. P. Roe.

Best plate Patten Greening: First, E. W. Sullivan.

Best plate Plumb Cider: First, N. A. Rasmussen; second, Christenson & Davis.

Best plate Switzer: First, J. P. Roe.

Best plate Tetofski: First, M. V. Sperbeck; second, H. C. Melcher.

Best plate Utter: First, J. P. Roe; second, H. C. Melcher.

Best plate Wealthy: First, E. W. Sullivan; second, M. V. Sperbeck.

Best plate Seek-no-Further: First, H. C. Melcher; second, Wm. Toole & Sons.

Best plate Wolf River: First, E. W. Sullia; second, H. C. Melcher.

Best plate Yellow Transparent: First, A. Lohberger; second, H. C. Melcher.

Best display Crabs: First, M. V. Sperbeck; second, N. A. Rasmussen.

Best display Pears: First, Fred Lang; second, N. A. Rasmussen.

Best display Japanese Plums: First, J. P. Roe.

Best display European Plums: First, J. P. Roe; second, J. B. Noyes.

Best display Native plums: First, E. W. Sullivan; second, J. P. Roe.

BUSH FRUITS.

Best Red Raspberries: First, N. A. Rasmussen.

Best Blackberries: First, Wm. Turnbull; second, N. A. Rasmussen.

VEGETABLES.

Best quart Snap Beans: First, Christensen & Davis; second, N. A. Rasmussen.

Best quart Bush Lima Beans: First, L. E. Davis; second, C. Phillipson.

Best six Turnip Beets: First, N. A. Rasmussen; second, Mrs. Marcia Howlett.

Best three heads Drumhead Cabbage: First, H. H. Lippold; second, Christensen & Davis.

Best three heads Cabbage any other variety: First, E. W. Sullivan; second, N. A. Rasmussen.

Best three heads Cauliflower: First, C. Phillipson; second, N. A. Rasmussen.

Best Celery, six heads: First, C. Phillipson.

Best twelve ears Sweet Corn: First, Lewis A. Davis; second, N. A. Rasmussen.

Best six cucumbers: First, N. A. Rasmussen; second, J. B. Noyes.

Best Head Lettuce, three heads: First, Christensen & Davis.

Best three Musk Melons: First, N. A. Rasmussen; second, F. A. Spink.

Best three Watermelons: First, N. A. Rasmussen; second, F. A. Spink.

Best six Parsnips: First, N. A. Rasmussen.

Best twelve Tomatoes: First, L. E. Davis; second, N. A. Rasmussen.

Best Turnips, $\frac{1}{2}$ peck: First, N. A. Rasmussen; second, C. Phillipson.

Best White Onions, $\frac{1}{2}$ peck: First, N. A. Rasmussen; second, C. Phillipson.

Best Yellow Onions, $\frac{1}{2}$ peck: First, N. A. Rasmussen; second, Christensen & Davis.

Best twelve Carrots: First, N. A. Rasmussen; second, H. H. Lippold.

Best three Egg Plant: First, N. A. Rasmussen; second, Christensen & Davis.

Best six Peppers: First, C. Phillipson; second, N. A. Rasmussen.

Best three Summer Squash: First, N. A. Rasmussen; second, L. E. Davis.

Best three Winter Squash: First, N. A. Rasmussen.

Best display Radishes: First, N. A. Rasmussen; second, C. Phillipson.

Best display Novelties: First, N. A. Rasmussen; second, C. Phillipson.

Sweepstakes for largest number first premiums for vegetables: First, N. A. Rasmussen; second, C. Phillipson; third, Christensen & Davis.

OUR STATE FAIR EXHIBIT

Members are again urged to contribute something to the State Fair Exhibit.

This will reach members in time to bring or send something. Select the best you have in your own orchard or vineyard for this exhibit. Cards will be provided on which will be written the variety, name of grower and county.

When possible, send a dozen apples, pears or plums of a kind and five or six bunches of grapes. Exhibits from counties will be grouped, if desired, and a "county" sign provided.

Showy, sound fruit, well packed, every specimen wrapped in paper and packed in a wooden box may be sent by express collect.

Mark packages, F. Cranefield, State Fair Park, Milwaukee, Wis. We need more fruit, all the good fruit we can get. Send something. No premiums are offered in this department.

THE ANNUAL REPORT

Under the provisions of the new printing law, the annual report is mailed by the Superintendent of Public Property, State Capitol, Madison.

The report and mailing lists were delivered to the superintendent August 29. Members who fail to receive the report within a reasonable time should notify the Superintendent of Public Property. We hope a great many members will do this,—if the report is slow in coming.

WISCONSIN ORCHIDS

ALETTA F. DEAN.

(Continued from August Issue)

The Putty Root (*Aplectrum*) is a plant more curious than handsome. Its one oval ribbed or plaited leaf persists throughout the winter, arising from a corm (or solid bulb) which lasts two or three years before it shrivels, so that three or four are always found attached horizontally. Their sticky nature has given this plant the name. Others have called it Adam-and-Eve. The vigorous flower-stem is a foot or more tall and bears a loose raceme of rather large dingy greenish or brownish flowers, the lip sprinkled with purple dots. It is found in rich shady woods of maple and beech.

The most vigorous and progressive group as we know them in Wisconsin, is the *Habenaria* or Rein-Orchis family. Many of them are hardly conspicuous enough to have gained common names, but, widely distributed, they are present everywhere in the moister woodlands in our state. It remains for someone with a genius in that line to give us characteristic names for these humble cousins of the distinguished *Calypso*, *Lady's Slipper* and *Orchis*. The *Habenarias* nevertheless possess all the characteristics of the group, and although less attractive in color are none the less interesting to the true lover of flowers. Like poor relations, proverbially, the family is a large one and while *Twayblade*, *Orchid* and *Coral-Root* have but few members, the *Habenaria* are a numerous progeny, there being no less than 13 children of this family of the orchids in our state. The most common here is the bracted *Habenaria* (*H. bracteata*) which bears its loose spike of small greenish-white flowers each with its long bracts, about the middle of May.

Habenaria orbiculata has two great glistening fluted leaves, sometimes as large as a dinner plate, spreading flat upon the mould, surmounted by the slender leafless stalk with its terminal loose raceme of greenish-white bloom.

There are some *Habenarias* that are really beautiful—and noticeable enough to have won common names. They belong to the group of Fringed Orchids, which have the lip and

often some other parts of the flower variously fringed and cut. This is well shown in the *White Prairie Orchis* (*H. leucophæa*). It is the largest of all this family, sometimes four feet tall. The blossom is large and one of the most delicately and deliciously scented of all our wild flowers. The blossoms are greenish-white in a long loose spike. The fan-shaped lip is many-cleft to the middle into a copious thread-like fringe. It is one of the few orchids that grow in our open prairies.

We ought to have in Wisconsin the one that is called the handsomest of the fringed ones—the *Yellow Fringed Orchis* (*H. ciliaris*). So far it has seemed to stay its westward course in Michigan, but we may be able to claim it yet.

The *Purple Fringed Orchis* (*H. psychodes*) has a dense round spike of small, handsome, pink-purple fragrant blossoms. Its broad wedge-shaped lip is cleft into many short divisions.

A *Habenaria* that is well named is the *Ragged Fringed Orchis* (*H. lacera*). It is quite unnoticeable in its moist thickets. The greenish flowers with their narrow lip deeply parted into a long, ragged, hair-like fringe, are always objects of interest if not of beauty.

The beautiful *White Fringed Orchis* (*H. blephariglotis*) is a plant of the peat-bogs and borders of ponds, and is not often found. It is about a foot high, the flowers white and very beautiful, with the lip irregularly fringed.

A beautiful little plant, too dainty for its low boggy surroundings, is the *Arethusa*. It has no common name. It needs none. It does not belong to the common world. It is always a surprise to see its large fragrant rose-purple blossom airily perched on the top of its short stem, without a leaf at first, standing up from the black, boggy earth. Its lip is re-curved and beautifully crested, and with its rosy, outspreading wings it seems, indeed, a being from fairyland.

The closely allied *Calopogon*—*Grass Pink*, some call it—differs from the *Arethusa* in its taller growth and brighter colors. It is about a foot high, 2 to 6 flowered, often three or

four of the deep pink, almost purple flowers, opening at once. The dilated lip is bearded beautifully towards the summit with white, yellow, and purple, club-shaped hairs. The lip has a kind of hinge near its base, by means of which it easily moves up and down, or falls forward on the column. We are apt to think of orchids as inhabitants of deep, dark woods, but this, one of our most beautiful and representative members of the group, has a habitat widely different from the most that we have so far noted. You dwellers by our beautiful Wisconsin lakes, take a morning walk some day in June down where the sedges grow thinly on the sandy beach, and there you will find this delicate, slender, purple, water-loving orchid with its long grass-like leaves, growing in such profusion as to tint the view, and even to tempt the gatherer of bouquets.

The *Pogonia* is of similar habits but is less common. One of its Wisconsin children has been called *Three-Birds* from the shape of its dainty little fruit. It is a smaller plant than the *Calopogon* and on its one-leaved stem carries but a single small purple blossom with a crested lip.

Of *Spiranthes*, or *Ladies' Tresses*, we have in our herbarium specimens of three kinds, and one yet coming to us. It begins to blossom about the first of July and is one of the last flowers of autumn. I used to find the little, waxy, sweet-scented, white blossoms in a little meadow adjoining our garden in Massachusetts, when I was a child, and I persisted in calling them "lilies-of-the-valley" long after I knew better. It is a pretty plant with its spike of white flowers winding spirally around the slender stem. It grows in open, moist land and sometimes persists in the meadows even after they have been cultivated. More adaptable than some of its aristocratic relatives, you see.

Of all our native orchids, the *Cypripedium*, *Lady's Slipper*, or *Moccasin Flower*, is perhaps the general favorite, and the most widely known. This is probably because it is more frequently found and more conspicuous than the other families. Gray's *Manual* mentions six species and Wisconsin has them all.

The leafy stem of the *Cypripedium* called Ram's Head, bears an extremely odd blossom, whose small, reddish, veiny lip, prolonged into a short, blunt point, surmounted by curling petals which might suggest horns, seems to have proved the power of orchids to wake at the same time the imagination of the scientific and of the common mind, for the the Latin name of this flower is *arietinum*, which also means a ram.



PYRETHRUM ULIGINOSUM

Grown by Mrs. D. D. Howlett, Oshkosh

The two yellow Lady's Slippers—the large (*C. pubescens*), and the small (*C. parviflorum*), bloom about the same time. They are the most common of the large orchids in this region. The children gather them in great quantities. The two are much alike. The larger is a more robust plant, sometimes two feet or more high. The lips of the two are nearly alike, though that of the larger seems more inclined to be flattened laterally. It is sometimes two inches long and nearly an inch broad. Its sepals are greenish while those of the smaller one are brown-purple. The smaller flower is quite fragrant, while the larger one is nearly odorless, and more solitary in its habits. The small one often grows in groups.

Our small white Lady's Slipper (*Cypripedium candidum*) is one of the shyest, daintiest, and most fragrant of its kind. It is only from three to ten inches high and grows in open boggy, or wet grassy land, and sometimes in quite dry meadows

among the violets. The foliage is light green. The lip is less than an inch long, white, striped with dark red inside which shows through giving the lip a faint rosy tinge. The base of the lip is stained with yellow, and its opening is bordered with a row of red dots. The rest of the flower is greenish, spotted with purple, the parts twisted and wavy, and the two petals long and ribbon-like.

The Stemless Lady's Slipper (*C. acaule*) begins to blossom about the middle of May. It often grows in clusters in quite dry, shady woods, preferably pine, often where there is no other undergrowth, and there it stands up stately and beautiful, making a fine showing. It has two large, plaited, downy, oblong leaves, ascending from the root. From between the leaves rises the flower stalk, 8 to 12 inches high, with a green bract at the top, arching over the one beautiful flower. The sepals and petals are greenish, veined and tinged with red. The lip is about two inches long, of a deep rose-purple, veined with lines of a deeper color. It is sac-like, and is cleft down its whole face, but with its edges turned inward and meeting. William Hamilton Gibson told in a very funny way of his experiment with a bumble-bee. He caught the bee by the wings and thrust it into the sac through this front fissure. The bee could not get out again the way he went in, and after a time solaced himself with nectar which he found there. Then he started towards the two little openings which he saw at the top, under the stigma. He crowded through but his back, at last, came in contact with the sticky pollen. "A strange etiquette, this of the *Cypripedium*, which speeds its parting guest with a sticky plaster smeared all over its back." In the next blossom as the bee tried to leave, the stigma caught some of the sticky pollen, and thus the cross-pollination was accomplished.

The handsomest of this family, the Showy Lady's Slipper (*C. spectabile*) is the latest to bloom. The first time that I ever found it was July 11, in Aroostook county, Maine, growing in great abundance in a border of wet

woods beside a well-traveled road. Here in southern Wisconsin I have found it as early as June 23. It is well worthy of its name. Its stem wrapped in pale green, downy leaves is two feet high or more. The sepals and petals are snowy white, and overhang the lip. The lip is wide in proportion to its length and of a waxy, much firmer texture than the other *Cypripediums*, and keeps fresh much longer when picked. It is of a beautiful rosy pink with broad pink stripes inside. There are on each stem two or three flowers, which have a most delightful fragrance.

The list is not exhausted, but I will tell the story of only one more orchid—the one I call the best of all.

I was out in the pine woods of Bayfield county one spring, near where a young woodsman was staying who, when he came into the woods, knew nothing whatever about flowers, scarcely knowing a milk-weed from a butter-cup, though later he grew so learned that he talked much about the "pectinately pinnatifid petals" of the Bishop's Cap, rolling the words "like a sweet morsel under his tongue" with an unction most moving. But one day in the early spring he tried to describe to me a flower which had attracted even his attention in the woods a mile or so away. I couldn't make out what it was from his description, so he went with me over logs, and through bushes and bogs, until we came upon a group of the dearest little flowers I thought I had ever seen. There they were growing under the trees where the peat-moss was not very deep. Each had one little ovate green leaf standing up from the damp moss. The flower stem was three or four inches high, and bore on its top a single beautiful flower. The sepals and petals were a beautiful pale purple. The lip was about three-fourths of an inch long, dark purple, veined, with its apex forming two little horns.

The opening of the lip, towards the tip rolled outward, and was a rich yellow covered with short yellow hairs and having a few large purple dots. The inside of the lip showed a beautiful netted veining of purple lines on a lighter background. I hurried home and got out my bot-

any. There it was—*Calypso borealis*. And the botany said "A beautiful and interesting plant in cold, mossy bogs, but *very rare*." And I was happy.

I have kept but one blossom, and I have with that neither leaf nor bulb. Our University herbarium has no specimen of it at all.

I am afraid I have given you but little idea, if you do not already know them, of the beauty, the daintiness and the charm of these blossoms "on tiptoe for a flight." I can bid you only go seek them for yourselves, and then you will know.

"With memories of dainty things

That fluttered back and forth on wings,

And all that goes to swell the band

Of followers in fairyland;

A seedling thou, from fairy's bower,

Not quite content to be a flower."

AS OTHERS SEE US

The following from the report of the Illinois delegate to our 1910 convention will help us to see ourselves as others see us and incidentally afford a hint to our delegates. The reports rendered by our delegates to other state societies have not always been in the kindly spirit shown by Mr. Bryant.

"Leaving Illinois on a dreary, drizzly evening, with the streets of Chicago all slush and the atmosphere almost black with smoke, it seemed good on looking out the car window when about half way to Madison to see the rain had turned to snow. When Madison was reached, every twig and branch of the trees was covered with a light, feathery snow, which looked very beautiful in the sunlight of the following morning.

The meeting of the Wisconsin Society was well attended at nearly every session, and the members were enthusiastic and some of the discussions spirited. There seems to be considerable rivalry between certain fruit-growing sections, but apparently all was good natured and the meeting very harmonious.

The sum of \$500 has been set apart for improving school grounds, as object lessons. Four schools have been selected and the grounds of these will

be under the control of the Society for ten years. It is possible that some movement in Illinois along similar lines might be productive of good results. Certainly there is a large field for missionary work in our country school grounds.

The executive board of the Society consists of its officers and of one member from each of the eleven congressional districts, making fifteen members in all. While this has the merit of giving all sections of the state representation, it would seem to be a somewhat unwieldy and cumbersome body, and, I would judge, result in placing a great share of the business in the hands of the secretary.

The program was made up very differently from what has been the practice in our Society. Some of the sessions were devoted to only one topic, but with a number of speakers. One advantage of this plan is that the discussions can come all at one time and take a wider range, and the papers being mostly short, there is an opportunity for a more general expression of views, and none are tedious, while there are the objections that it is desirable to treat certain subjects at length and justice cannot be done them in a very short paper, and then having so many on the program and deferring discussions until the end, often leaves very little time for this very important part of the meeting.

Wisconsin orchardists are some of them very optimistic regarding the product of their apple orchards, especially the manager of one of the trial orchards, who expressed the belief that the time was near when they can compete with any part of the country, including the Pacific coast, in fine box fruit and get top prices for Wisconsin grown fruit. To the stranger within the gates, it seemed that it would take more than one or two successful years to justify this prediction.

The fruit judging was all done by one person, L. G. Kellogg. This would seem rather an onerous duty to put on one individual, but he is evidently an expert, having judged for the Society and at state and county fairs for a number of years. No score card is used.

It is evident that the Wisconsin orchardist must confine himself mainly to the fall and early winter varieties, and the secretary so stated in his report. There were certainly fine specimens of McMahan, Northwestern Greening, and Wolf River exhibited and the Duchess and Wealthy surpass in color those grown farther south. I was much impressed with the appearance of the Dudley, said to have originated in Maine and to be of Wealthy parentage, but later and much better in quality than that variety.

The annual banquet held on the evening of the last day was a very pleasant event and a fitting close to a profitable and interesting meeting. About one hundred were in attendance. A Wisconsin banquet or meeting without that trio of veteran horticulturists, George J. Kellogg, A. J. Phillips and Dr. Loope, with their stories, jokes, jests and experiences, would seem tame by contrast.

Your delegate would gratefully acknowledge the many favors and courtesies which he received from the officers and members of the Wisconsin State Horticultural Society."

AN UNBELIEVER

I have read much regarding Northern Wisconsin as a fruit country.

I want to ask a few questions and believe I can get the *truth* from you. Is it a reliable fruit section? Are the trees not winter killed and do not late frosts nip the fruit in the bud? Are apples, pears, cherries and grapes a sure crop? Here in southern Wisconsin fruit is out of the question—a crop once in five years.

Walworth Co. M. B. R.

Certain sections in northern Wisconsin are very well adapted to fruit raising. Of these I would name all of Door county and the Lake Superior shore line from Washburn north and west to the east line of Douglas county. I think the fruit belt in Douglas County will be confined to a narrow strip along the shore, perhaps three or four miles in width. There and in Door county may be grown the very finest of small fruits which ripen late enough to se-

cure a better market than similar fruits grown farther south.

One of the reasons for the success of fruit growing in these two sections is the influence of large bodies of water which prevent late spring and early autumn frosts.

Replying to your question of winter killing will say that I have never seen a single case of this in northern Wisconsin; by that I mean trees killed by low temperatures. Northern Wisconsin has one other advantage and that is the early and heavy snowfall. The ground rarely or never freezes.

As to kinds of fruit which may be grown will say that the cherry has succeeded well in these sections and certain varieties of apples. In planting an apple orchard in the Bayfield regions no variety which ripens later than Wealthy should be selected. In addition to these such kinds as Duchess, Dudley, Longfield, and Patten Greening may be safely planted. I would *not* advise grapes for these northern sections.

In addition to these two localities there are many others in northern Wisconsin splendidly adapted to the raising of apples, for instance a very extensive region in the vicinity of Chippewa Falls both west and north of the city.

The trial orchard at Wausau, Wis., planted by this Society in 1897, has given splendid returns, yielding in 1909 2,100 bushels from less than seven acres and even last year, a season of disaster over the state, we marketed over 600 bushels from the same orchard. This year the prospects are for a very large crop. I could name other sections which have given good returns.

I take emphatic exception to your statement that the raising of fruit in southern Wisconsin is out of the question, "A crop once in five years." I can show you where orchards in your own county have yielded a profitable crop three and four years out of five. This Society has an orchard about four miles southeast of Lake Geneva planted two years ago which is one of the most promising in the state. We hope that in three or four years more we can disprove utterly the statement you have made regard-

ing fruit raising in southern Wisconsin. There are thousands of apple trees in your county that are over fifty years of age and still bearing profitable crops. You see I am trying to show you that you really need not move if you want to go into fruit raising, but if you do insist on leaving Walworth county, northern Wisconsin will welcome you with open arms and will also make good. "C."

PROPPING THE TREE

It is very necessary in orchards which are carrying heavy crops, to support the branches with props to keep them from being broken down by the weight of the ripening fruit. There are several ways in which this can be done. The one which will be described here, is the most economical of any method in use at the present time.

The materials needed for one tree consists of (1) one strong, solid pole; (2) a quantity of 16-gauge galvanized wire; (3) limb-preservers; (4) one 18-penny nail; (5) one piece of a 2x8, or a flat rock.

The pole to be used must be strong and solid, at least so long as two-thirds the height of the tree, and with a diameter of not less than three inches. The pole must be of strong wood, and good throughout its entire length, as it must bear the weight of the entire load, and for this reason the cheapest kind of poles are not the best.

The limb preservers consist of either leather or galvanized sheet iron, or of leather and wooden blocks. They can be made of scrap leather from the harness shop, or from old boots, shoes or even tin cans. Their purpose is to prevent the wire from cutting into the limb.

The 2x8 or flat rock is to serve as the foundation for the pole and prevent its sinking into the ground, and the nail is put into the top of the pole and serves in supporting the wires.

SETTING UP THE POLE.

The board or flat rock is placed on the ground about two feet from the trunk of the tree and on the leeward side. From the nail in the top

of the pole four wires are suspended, and the pole allowed to lean towards the windward side. Stretch each of the wires down to solid limbs, in such a manner as will best serve as braces for the pole, and hold it in position.

When the limb preservers are put on, be sure not to tie them around the limbs, but thread the wire through both holes and place them under the limbs; fasten the ends of the wire about five or six inches above the limb, making a tie that will not slip, and yet support the limb, just as a child is supported by the board in a swing. As many additional wires can be put on as may be necessary, although two or more limbs can frequently be fastened to the same wire.

The cost of this method of propping trees will depend on the material used, and the size of the tree. On the average I believe forty cents per tree will be plenty to establish and keep in proper form for ten years. This makes the annual expense only four cents per year.

Blackman Brothers of Wenatchee, Washington, put in such a system as this on their thirty acre orchard some four years ago, and it has worked very satisfactorily. Last year from this orchard was sold an average of 1,000 boxes and without a single breakdown in any of the trees.

This outfit stands winter and summer, the only changes that are needed from time to time, being to change the wires where necessary, and to put in more wires where they are needed. This method will not eliminate the necessity for proper pruning, but it will prevent serious breakdowns and save a whole lot of the crop and many a fruit tree from total destruction.

The active, thinking, progressive fruit grower will always watch his fruit trees closely, and try to work systematically. The summer pruning can be combined with the inspection of propping, the inspection for insects and diseases; and in this way three operations are done at the same time and the expense of production is consequently reduced.

Peter Hovland in *Fruit Grower*.

Wisconsin Horticulture

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Remit to Secretary W. S. H. S.
Madison, Wis.

State Fair next; Milwaukee, Sep-
tember 12-16.

How do you like our new head?
If you don't like it we will take it
off.

Look for the exhibit of the State
Horticultural Society in a large tent
near the Horticultural building.

Sturgeon Bay shipped a car load
of cherries to Frankfort, Michigan.
This beats sending "Coals to New-
castle."

The Wisconsin cranberry crop is
estimated at 35,000 barrels. The
1910 crop amounted to 16,000 barrels.

The little city of Tomah is an ap-
ple center of no mean importance. A
local paper mentions 100 barrels a
day as a commonplace event and the
first three days of August 720 bar-
rels were shipped.

The fair does not open until Tues-
day and continues through Saturday.
This gives exhibitors an opportunity
to stage their exhibit on Monday in-
stead of being obliged to leave home
on Saturday and work all day Sun-
day.

A CORRECTION

On page 15 of the August number
we credited Mr. E. W. Sullivan as
manager of the Merrilan Fruit
Growers' Association. Mr. Sullivan
requests us to correct this statement,
and to say that Mr. Harry Comstock
is the manager.

THE M'INTOSH APPLE

Look for the McIntosh at the State
Fair.

It is one of the very best we have
where fully hardy. It excels its par-
ent Fameuse in every way; size,
color, annual bearing, and keeping
qualities.

AN OCONTO COUNTY ORCHARD

Our fellow member, H. L. Reeves,
of Oconto, has a twelve acre apple
orchard five miles out of town, trees
averaging twenty years. Varieties:
N. W. Greening, Wealthy, Fameuse,
Yellow Transparent and Lowland
Raspberry. In 1903, trees twelve
years old; the orchard yielded 3,000
bushels.

HAS ANYONE SEEN THE FOOL KILLER?

We have it on good authority that
there is a man in this state that ac-
tually paid \$2,200 for two thousand
cherry trees; not only promised to
pay but paid that sum and some of
the trees actually lived. He is not a
member of the State Horticultural
Society.

IT IS TO LAUGH

If it was not so funny it would be
serious.

A nursery shark, selling cher-
ry trees at one dollar and ten each,
and agents of the Spaulding, the
Home Nursery and other fake com-
panies who have received complimen-
tary notices in these columns in the
past, tell their poor victims that the
reason Cranfield opposes the above
named parties is because he is get-
ting a "rake off" from Wisconsin
nurserymen! It is too funny for
anything. Will Coe, Lake, Ferguson,
Foley, Kellogg and some of the others
please testify?

SUCH IS FAME

The following is from the Oshkosh
Northwestern. We are not advised
as to the identity of the particular
representative who saw so much and
yet so little of our Trial Orchard,
but we would like to bump his wood-
en noodle a few times against the
6x12 foot sign board on the highway,
which states so plainly that even he
who runs may read that "This orch-
ard is maintained by the State Hor-
ticultural Society for the purpose of
demonstrating, etc."

Some people are born stupid and
others seem to acquire stupidity as
they go along. We are unable to
say to which class this Northwestern
sight-seer belongs.

RICH RED APPLES.

"Surrounding Wausau is some of
the finest farming land in the state.
A ride by automobile took us
through a region of dairy farm-
showing prosperity on every side.
But what was most astounding than
the dairies was the experimental fruit
farm conducted by the *Agricultural
Department of the state university*.
Several years ago, the state leased
ten acres of land for a term of years
at \$5.00 an acre and planted it to
fruit trees. At the end of the lease
the bearing trees are to revert to the
owner. Now the apple and plum
trees are loaded with fruit. This is
said to be a poor year for fruit but
the estimated yield on these apple
trees is 1,400 bushels. Last year
they produced 2,800 bushels. To look
at the long rows of apple trees cov-

ered with red apples is enough to make one believe either that this is a good fruit region or else the university teachers have the secret of proper cultivation.

THE STATE FAIR

Every one of our readers should visit the state fair if for no other reason than to see the Apple Show.

The tent will be close to the Agriculture-Horticulture building, either alongside or directly in front.

Signs will be displayed so that it will be impossible to miss it.

The tent will be headquarters for members. Small parcels, coats and umbrellas will be checked free for members. Unfortunately our space will be too limited to provide a rest room or lunch room or we would do that, too.

Two registers will be provided, one for the general public and one for members. Come, and bring your friends.

Come, and bring some fruit for the exhibit.

A YEARLING

We are one year old today, and by way of celebrating the anniversary we come out with a new "Head." Readers will remember that we advertised for designs for a head. This is the only one received. The design is by our fellow member, Robt. Kerr of Chicago, and presented with his compliments to the society to show his appreciation of WISCONSIN HORTICULTURE. Mr. Kerr is at present tickling the soil on Sand Island, out in Lake Superior. If you like the head it will stay,—if not, it goes in the dump; it's up to you.

PROFITS FROM A CITY GARDEN

"I have not had many years' experience in horticulture and all I know has been learned from the Horticultural Society.

"My garden has been very successful so far. I have sold \$45.00 of fruit and garden truck, surplus from lot 50x120 feet."

Mr. Abbott is a poultryman but horticulture seems to be a profitable side line.

CREDIT LIST FOR AUGUST

Being a record of members who have secured additions to our membership roll the past month:

B. Hahn, 3; J. P. Arnold, 1; E. S. Wigdale, 1; Fred Beck, 1; Jas. P. Kegel, 2; E. W. Colton, 2; C. N. O'Hare, 1; Mrs. M. E. Brand, 1; Henry Hastings, 1; F. Holz, 1; Geo. L. Tift, 1; C. Jos. Mueller, 1; G. H. Townsend, 2; F. Worthington, 1; R. Baumgartner, 1; E. W. Sullivan, 1; Irving Smith, 1; C. B. Thomas, 1; A. W. Lawrence, 1; Geo. B. Smith, 1; E. J. Delchambre, 1.

WASHBURN BERRIES

That there is big money in growing strawberries in the Washburn District has been demonstrated more clearly than ever by the crop which has just been marketed, and while the yield was only a fair one, yet the growers will realize between \$300 and \$556 an acre from the land planted to the fruit. Returns from the crop are just now being received and the results are most satisfactory to the growers.

During the season just closed nearly 3,000 crates of berries were taken from the land near here and there was not one crate but what brought good prices. The Washburn Fruit Growers' Association handled 1,965 crates and the returns on these will average \$1.55 a crate. Those sold locally will bring equally as much and taking the above figure as a basis it can be figured out just what the land produced. H. P. Larson undoubtedly had as heavy a yield as anyone, marketing 270 crates off three-fourths of an acre, or his patch would average \$556 to the acre. E. C. Stevens took 386 crates from his patch of 1¾ acres and W. H. Irish marketed 381 crates from the same amount of ground, besides the amount furnished pickers and used at home. The Oscar farm picked 201 crates from ¾ of an acre and others did equally as well.

So well satisfied are the growers with the returns that they will set out much more land to the fruit next year.—Washburn Times.

Mention this paper when writing to advertisers.

Hardy Nursery Stock Adapted for the NORTHWEST

We offer a complete line of Fruit,
Shade and Ornamental stock.
Varieties that will suit
your needs.

*Berry Plants, Rhubarb,
Grape Vines, Asparagus
in the Leading Sorts.*

Garden and Commercial Orchard
Planters will do well to write to us.
Prices consistent with Quality.

"Send for our new 1911 catalog entitled,
HARDY NURSERY STOCK."

McKay Nursery Co.,
Pardeeville, Wis.
Nurseries at Waterloo, Wis.

FORTY - TWO YEARS
The Jewell Nursery Co.
Hardy Fruit and Ornamental
Trees, Shrubs and Plants
Lake City, - Minnesota
FIFTEEN HUNDRED ACRES

Vincennes Nurseries

Vincennes, Indiana

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PROPRIETOR

**Cherry Trees by the
100 or 100000**

The Growing of Cherry Trees has been our Specialty for Years. Our soil and method of growing produces a Tree that is not excelled by any one. Splendid blocks of two-year 5 to 7 foot trees and one-year 4 to 5 foot trees. Early Richmond, Montmorency and other leading varieties by the 100 or car load. We also grow a general line of other Nursery stock. Personal inspection invited. Correspondence solicited

Questions and Answers

Q. Which is the hardiest blue plum?

A. Moore's Arctic.

Q. Of which, McMahan or Duchess, would you set most of?

A. McMahan.

Q. What can be done to diminish rabbits?

A. Ask the committee on Fish and Game or any member of the legislature.

Q. Why should we of north Wisconsin provide fruit trees on which to develop rabbits and deer for city sports to shoot at and kill men?

A. Why?

Q. Is the Wolf River hardy and a good bearer?

A. Fully hardy, but does not bear as heavily as Wealthy, McMahan, etc. Is generally considered a shy bearer.

Q. Do the twigs of a peach tree bear more than once in the same place?

A. Peaches are borne laterally on wood of the past season, so the same twig does not bear twice in the same place.

J. G. MOORE.

Q. If the ground freezes as deeply as tree roots penetrate, will they probably be killed?

A. Not necessarily; in fact, if they were killed, some other factor not indicated by correspondent would have to be associated with the freezing.

J. G. M.

Q. Will an orchard be benefitted or injured by seeding the land to alfalfa. This means trees, not soil.

A. Every time the writer has seen alfalfa growing in an orchard the trees were apparently being injured. This is especially so in dry seasons. The clean culture cover crop method is much more satisfactory and less injurious.

J. G. M.

Q. Is there any difference in the yield and size of the Early Richmond and Montmorency cherry?

A. There is practically no difference in the yield of the Early Richmond and Montmorency. In size the Montmorency is a little larger. Both are equally good commercially.

D. E. BINGHAM.

Q. Is alfalfa beneficial to fruit ground? If so, how can it best be started in Wisconsin?

A. We can not recommend alfalfa on fruit ground. In the orchard it requires so much moisture that both trees and fruit suffer. As a cover crop it is too expensive to get started and does not make as good a growth as several of the other crops used as covers. Hairy vetch would be much preferable.

J. G. M.

Q. Is the soil where pine has grown more desirable than hardwood soil for cherry trees, elevation and climatic conditions being equal?

A. Cannot say that pine is any more desirable than hardwood. We know this, that pine sand is very productive of fruit buds early and less productive of wood growth and for early bearing I would prefer pine land, and later on and through a long period of years the hardwood would no doubt produce as good crops.

D. E. B.

Q. Wild grapevines are sometimes found, that although vigorous, never bear any grapes. Why is this?

A. If true, this is probably due to the fact that the species is very nearly self sterile. Or it may be that for a series of years unfavorable climatic conditions have existed during the flowering period. To establish the fact stated by your correspondent observations should be made for a series of years and the conditions of the weather at flowering time noted.

J. G. M.

Q. Is there any reason why fall planting cannot be done?

A. The only reason spring planting is recommended for Wisconsin over fall planting is because in fall planting the trees do not have suffi-

FIRST CLASS NURSERY STOCK IN GREAT VARIETY

Consisting of

FRUIT, SHADE AND ORNAMENTAL TREES

Strawberries, Raspberries, Blackberries, Currants, Gooseberries, Grape Vines, Asparagus, Rhubarb, etc.

Ornamental and Flowering Shrubs, Vines and Perennials. Roses Evergreens etc.

If you would like to see a *really good Catalogue* we would be glad to send you ours. It has more than fifty pages and describes everything in the plainest language without any extravagant or overdrawn descriptions.

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FORT ATKINSON, WISCONSIN
Wisconsin's Largest Nursery

JEWELL MINNESOTA GROWN Nursery Stock

Complete assortment of Fruit and Ornamental stock in all varieties suited to northern culture. A specialty of Hardy Shade Trees, Windbreak Stock, Evergreens (Coniferous), Deciduous Shrubs, Apples and Native Plums.

THE JEWELL NURSERY CO.
LAKE CITY, MINN.

1500 Acres

Established 1868

cient time as a rule to become sufficiently well established so that the roots are able to supply an adequate amount of water during our dry winters, the results being that the tops are severely injured and frequently killed. In regions with moist atmosphere during the winter, fall planting is successfully practiced. J. G. M.

Q. On some of my young apple trees I find some of the leaves curled backward, and on the under side are green aphids; also a lot of black ants. Which insect does the harm and what is the purpose of the others? also please tell me what remedy to apply. G. F.

A. Both lice and ants are harmful, one directly and the other indirectly. The lice suck the juices from the leaves, the ants feed on the exudation or excreta of the lice, and encourage their distribution and good health in every way. This is not a scientific explanation but may cover the case. C.

Q. What can we do with alfalfa on the fruit farm?

A. On a farm devoted exclusively to fruit alfalfa would be of minor importance. It is not suitable for a cover crop and of course should not be grown permanently in the orchard. It might be found valuable as a crop to produce forage for the teams as its yield on a small area would be larger than any other forage crop suitable for this purpose. It also might be used as a nitrogen gatherer. For this purpose it would be allowed to grow for a period of years and the last crop plowed under in the fall as a green manure crop, the area being devoted to some small fruit afterwards. J. G. M.

Q. How far will autumn crops influence late growing trees and aid in maturing the season's growth?

A. It will depend very largely on soil moisture conditions and the cover crop grown. If the season is a very wet one the crop will have less apparent effect upon maturing of the trees than if it is dry. Nevertheless, although there is less apparent benefit the actual benefit will be

nearly if not quite as great. A crop which produces a large amount of succulent growth will be more efficient, especially in a wet season, than one which makes a comparatively slow growth. As a moisture user the thing that is desired in a wet season, oats is the peer of any of them. J. G. M.

Q. Will plums do well on a south slope?

A. There is no reason why in a majority of reasons plums should not do well on a south slope. The greatest drawback to planting any early flowering fruit on a south slope is the increased danger from late spring frosts. Fruits on a south slope bloom earlier than the same kinds on a northern exposure and therefore the danger of losing the crop is increased. If a north slope is available, use it, but if only a south slope is to be had, select the later flowering sorts and at least partial success will be had.

J. G. M.

Q. Is there such a thing as acclimatization of trees?

A. If we are to draw upon other plants for evidences of acclimatization, then most certainly we would be compelled to acquiesce to this belief. Whether or not there is such a thing seems to be very largely a matter of definition. We are sure of this, however, plants are capable of adapting themselves to changed climatic conditions, and whether through a change in the length of time required to mature or a change in the physical condition of the plants makes no difference from a practical standpoint. That there are limits beyond which acclimatization cannot go must be admitted, but within more or less narrow confines the writer believes it to be an important factor in the growing of fruit in this state.

J. G. M.

In mixing Bordeaux mixture why do we get better results by adding arsenate of lead to milk of lime before adding the solution of blue stone?

If better results are obtained as implied in the above question, in the

WISCONSIN NURSERIES

Grow and handle all kinds of nursery stock. We employ no agents but sell direct. If in the market you can save money by buying of us. Get our prices.

WISCONSIN NURSERIES,
Union Grove, Wis. W. S. Moyle, Prop.

KNOX NURSERIES

(Established in 1851)

Make a specialty of **Cherry Trees**. They strongly recommend **One Year Cherry Trees** because they are stocky, well headed, well rooted, thrifty and vigorous. Plenty of **Two Year** for those who prefer the larger trees. They also have a nice lot of Apple in northern sorts.

A trial order will convince any one of their quality.

H. M. SIMPSON & SONS
Vincennes, Indiana.

NOT THE BIGGEST NURSERY PERHAPS

**BUT WE ARE DOING THE
BIGGEST BUSINESS**

We offer the finest line of Native Shrub and Ornamental Trees in the State. You can have your choice in Fruit Trees, Wisconsin grown or from Western New York.

Attractive prices will be made to Market Gardeners and other large buyers of Nursery Stock.

Our Catalog is an A B C Book

in its simplicity and plain handling of Planting, Fruit Growing and kindred Subjects.

THE HAWKS NURSERY COMPANY
Wauwatosa, Wisconsin

state of our present knowlodge it is impossible to assign a reason for them. It is not known what takes place when arsenate of lead is added to Bordeaux mixture either directly or as indicated in the question.

What causes cherry trees to bleed a gum?

Growing trees in heavy, retentive, poorly-drained soils, excessive fertilization, especially with nitrogenous manures, any form of injury under certain conditions of growth. Gum flow in the stone fruits is not symptomatic by any one agent.

DR. O. R. BUTLER.

A FIELD DAY

In Wisconsin there is no lack of good apple land; we have millions of acres of it, the best that ever laid out of doors, and some of it, a lot of it, is in Monroe County. The ridges extending from near Tomah south and west to the Mississippi River afford some of the choicest locations for apple orchards and cherries too, for that matter, to be found anywhere. The ridges are not sharp as in some sections, but broad and rolling. Elevation, drainage, depth and fertility of soil, all that can be desired. With these ideal conditions for fruit the farmers buy their apples,—when they have any. Not all of them, there is at least one exception, Mr. Fred Muehlenkamp, who has an orchard well worth looking at.

So concluded Mr. Wm. Hanchett of Sparta, who asked that Mr. Muehlenkamp's neighbors be invited to come and spend the day at the orchard, have a drink on Mr. Muehlenkamp, of fresh cider, a picnic dinner and listen to some plain talk.

It all came about as planned on August 23. About two hundred people accepted the invitation, saw the orchard loaded to breaking, then listened, patiently, to President Bingham, Mr. Hanchett and the secretary.

Mr. Morris Merrell, a commission merchant, came all the way from Chicago to tell about packing apples for market.

Two things loom up big in looking back at this little meeting of farmers; the fact that these men saw hundreds of dollars worth of apples

on a little patch of ground, something they had never seen before, and Mr. Muehlenkamp's plain talk as neighbor to neighbor, telling them that he had sold more from his orchard than from all the rest of his farm. These things count. A day or two following the meeting, Mr. Muehlenkamp wrote as follows:

"The meeting possibly did more good than we thought, for several parties inquired of me the price of land suitable for orchard."

RECORD PRICE FOR FRUIT LAND

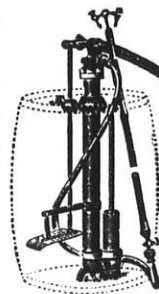
The record for land prices in the Bayfield county fruit district was reached recently when a 160-acre tract north of the city was negotiated for at the rate of \$75 per acre. Several smaller tracts have been sold during the past year at a higher figure but the price this week is the record for a 160-acre tract. Excellent fruit conditions in the territory adjacent to this city during the past two years have brought about this condition in the realty market and the predictions now are that the land will double within the next five years.

Some ten years ago this same land could be bought for from five to ten dollars per acre but once the fruit proposition has gained headway in this district the land values have advanced by jumps and bounds. Every season sees more land set out to fruit and those who have engaged in the business are making fabulous returns from their land. The strawberry crop which has just been harvested was almost a bumper one and farmers who have taken any care whatever of their bed realized from three to six hundred per acre. The apple crop is also to be a large one in the district.—Superior Telegram.

APPLES IN ONEIDA COUNTY

From what I know and can learn of the Dudley apple, I feel sure it will be a winner in this section of Wisconsin. I have an orchard of over 700 trees all planted within the past three years and they are doing finely, but any new ground I set out hereafter will be to Dudleys. Last year I set out 250 trees and this year 350 and have not lost a single tree,

Get The Best



A Good Spray Pump earns big profits and lasts for years. THE ECLIPSE is a good pump. As practical fruit growers we were using common sprayers in our own orchards—found their defects and invented the Eclipse. Its

success forced us to manufacturing on a large scale. You take no chances. We have done all the experimenting. Large fully illustrated Catalog and Treatise on spraying FREE.

MORRILL & MORLEY
Benton Harbor, Michigan

"We have a Fine Lot of
Plants for the Garden."

SEND FOR LIST

J. E. MATHEWSON

Sheboygan, Wisconsin

FOR SALE

Fruit Farm of 40-acres
five miles from city of
Sturgeon Bay, one-half
mile from water; thirty-
two acres under cultiva-
tion, level, without stump
or stone. Splendid fruit
soil. Good frame house,
log barn, well and wind-
mill; 700 cherry, 800
apple set spring of 1911.
Best bargain in Door
county. Write

BOX 535.

Madison, Wisconsin

with one exception, and that was run over by a careless hand. When any one can beat that record, I would like to hear of it. However, it is only fair to say that I planted yearling trees, and pruned every root and top myself and did not leave it to others. These yearling trees grow more rapidly than older ones and overtake them the second or third year and besides are much easier to shape. Think I shall establish the fact that they can grow mighty good apples around Rhinelander. A few of my trees are bearing and a good many people around here are watching for results.

PAUL BROWNE.

REPORT OF THE WAUPACA COUNTY HORTICULTURAL SOCIETY

Our society consists of from twenty-five to thirty families as active members. We have a full set of officers and books. We have over \$7 in cash on hand, and a few delinquent members.

Our society was organized as the Waupaca Horticultural Society 22 years last June, but after the demise of the Waupaca County Society, we adopted the name "Waupaca County Horticultural Society."

We hold from four to six stated meetings each year, and our officers hold office for one year. We usually have picnic suppers following the program. We are at the present time expending a considerable effort along the lines of domestic science and hygienic living, but our subjects are made to cover a wide field, including all lines of horticulture, floriculture, road making, decorating of home and school grounds, rural delivery, parcels post, construction of and plans for buildings, etc.

We usually have from 50 to 100 members present at each meeting, and there seems to be as much interest manifested in the work of the society at the present time, as there has ever been in its history. It has always been the effort of the originators to affiliate the country and city people in this movement, and we believe there has been much good accomplished along this line. And it is and shall be our effort to aid and encourage boys and girls along the

WANTED

Eight or ten more buyers for five or ten acres of Cherry Orchard Land to take the balance of 1911 planting on the

CO-OPERATIVE PLAN

We guarantee 6 per cent annually on your investment for ten years. We promise at least 100 per cent in profits in ten years. We mature your orchard up to where you will have an independent income.

WHERE??

STURGEON BAY, WIS. The Sour Cherry Land of the United States.

WHY??

Write Us for a Booklet.

220 acres planted with 22,000 Sour Cherry Trees. 240 acres prepared for 24,000 trees in 1912. **Safe Proposition. No Risk. Large Profits.**

(You Get a Deed to Your Land when Paid for.)

Co-Operative Orchard Co. STURGEON BAY,
WISCONSIN

lines of domestic science and agriculture.

We would be pleased to have some of the members and officers of the state society with us more frequently, and we take great pleasure in seconding Hon. E. E. Browne's invitation to hold the next summer meeting at his cottage and garden, at the Chain O'Lakes, near Waupaca.

Respectfully submitted,

ELSIE O. BARNES,

Delegate.

Extra copies of this issue will be sent to members for distribution. Apply early.

Ask your neighbor to subscribe for this paper,—we need the circulation.

THIS IS THE VERY LATEST FROM STURGEON BAY

The following from the *Advocate* of Sturgeon Bay gives a summary of the 1911 fruit crop. Cherries averaged \$1.40 per case of 16 quarts.

"There were shipped from this city by rail during the season a total of 24,144 cases of strawberries; 10,741 cases of cherries, (21 carloads) 518 cases of currants, 45 cases of gooseberries, and 25 cases of raspberries, each case containing 16 quarts. The approximate value of the shipments is \$50,000. This is exclusive of the shipments made by water and outside of the Fruit Exchange, which will no doubt swell the aggregate by at least 25 per cent."

CHEAP APPLE TREES

Cheap Varieties, mean a cheap orchard and a cheap owner. Markets glutted with early and poor varieties of Apples prove the error of continued plantings on this line.

WINTER APPLES OF QUALITY

Gem City, Hanko and Tuttle's Winter, all Wisconsin seedlings of fine quality and proven hardiness. These apples will keep in ordinary cellar until spring.

Seventy-five cents each; \$7.50 per dozen; \$60.00 per one hundred.

Standard varieties, \$6.00 per dozen, \$40.00 per one hundred. We grow one year top fruit trees only. We sell only our own grown trees. Three year 5 to 7 foot fruit trees are worthless for orchard planting. Only a very ignorant planter will set them. The branches are all formed in the nursery in a bunch on the main trunk which latter produces a malformation that ruins the trees just as they arrive at a profitable bearing age. Orchards throughout the country are all the proof needed.

HENRY LAKE SONS CO. Nurserymen
Black River Falls, Wisconsin

FAR REACHING DISCOVERIES IN APPLE POLLENATION

G. H. TOWNSEND.

For some years past it has been a matter of conviction with many orchardists that cross pollination was essential to successful apple growing, but strange as it may seem no one took the pains to find out what varieties were self-fertile and those that were not.

Prof. Lewis of the Agricultural College of Oregon has been conducting experiments on a large number of varieties for the past five years and the results were published in "Better Fruit" for May. The system adopted was to cover the bloom with a bag so that it could not receive any pollen from any other source than from its own flower.

Of the varieties tested fifteen out of eighty-five were self-fertile and thirteen partly fertile. If fifty or a hundred blossoms covered with bags did not give any fruit for successive years, such variety was classed as self-sterile.

Of the varieties grown at all in Wisconsin the Baldwin, Grimes Golden, Oldenburg (Duchess) Scott's Winter, are self-fertile; and the Ben Davis, Yellow Transparent and Whitney's Crab are classed as partly self-fertile.

Of the self-sterile varieties grown in Wisconsin McMahon, Wealthy, King, Gano, Pewaukee, and the Transcendent Crab are the only ones reported.

The remaining varieties recommended for Wisconsin have not been tested to the extent to justify a report, but there is no reason to hope that a larger per cent will be self-fertile in Wisconsin than in Oregon. It is reported that the Bartlett pear is self-fertile in California but self-sterile in the East and this suggests that varieties may vary in different localities, but from observation and from the tests of Prof. Lewis it appears that the Baldwin, Oldenburg, Grimes Golden and Newtown Peppin are the principal pollenizers — the principal self-fertile varieties in apple growing districts.

Another important observation made by Prof. Lewis is that the wind

does not to any extent carry pollen: that pollination is effected by bees (presumably all flower sucking insects).

We have all observed that when there was a cold rain several days in succession when apples are in bloom, that there is but little fruit, but if the weather is very warm, the rains may be frequent and the fruit not injured. Bees do not work in cold wet weather but will work between showers in warm sunshine.

If Prof. Lewis's discovery proves to be the missing link in horticulture, it is very important that each apple growing district ascertain just what varieties are self-fertile and what are self-sterile and the blooming period of each.

The horticultural department of the state university has kept records as to blooming of a large number of varieties.

Bees seem to work most actively when the bloom is practically all open, and the date of full bloom should be taken as the standard in comparing varieties. The difference in blooming period at the state university grounds is much more uniform on the average as one would expect. To summarize the record, the Duchess or Oldenburg and Patten Greening ordinarily bloom from one to four days earlier than other varieties but that the relative period of blooming varies with different seasons.

Until we know more it looks as though the Oldenburg should be considered as the best early pollenizer and we will anxiously wait till we are sure of a self-fertile late bloomer adapted to Wisconsin.

Some effort has been made this season to test varieties at the university grounds but no report collected at this date.

Should not the State Horticultural Society arrange to test the matter of pollination next year?

THE UTTER

The Utter is a fine home orchard apple. It was generally planted in Wisconsin orchards fifty years ago, but has almost wholly disappeared. Mr. Jay Palmer of Baraboo ventures

the opinion that the reason we seldom find Utter in old orchards is because it will not stand neglect. Whenever we find an apple tree over fifty years old it is quite certain to be one of three kinds,—Fameuse, Tolman Sweet or Plumb Cider.

President Bingham will be judge of fruit at the State Fair and Mr. Wm. Toole judge of flowers.

The Great Northern Nursery Co.

Sells First-Class

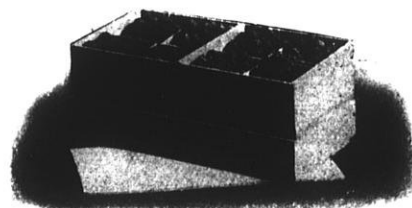
Wisconsin Grown Trees

Our Trees Live. We had an opportunity to compare 500 of our Wisconsin grown trees with a similar lot of an Eastern Nursery. At the end of the season only 52 per cent of the eastern grown stock was alive, while 95 per cent of ours lived and grew. Moral: buy home grown stock and avoid loss. Our trees are **HARDY**, and our stock is **HEALTHY**. A comparison will prove that our stock has not the willowy and watery soft growth of southern or eastern grown stock.

Every tree and shrub is packed entirely under cover, free from exposure to sun and wind.

Great Northern Nursery Company, Baraboo, Wis.

Write for Catalogue and Price - List.



**"BERRY CRATES, BOXES
and a Full Line of all
OTHER FRUIT PACKAGES."**

Medford Veneer Co.

Medford, Wis.

PHILLIPS — HANSEN

The writer had the pleasure and honor on August 3, 1911, of a day's visit at home with Prof. N. E. Hanson of Brookings, South Dakota, who came to inspect some of his experiments with plums as some seven trees that he sent to me for trial in different years are bearing this season. All are fine plums. Have the Opata and Sapa which for parents the Sand Cherry on one side and a choice native plum on the other they are very choice fruit for canning or eating and the professor thinks will be planted in large quantities, as they are very hardy. His No. Seven and Nine selected from over 2,000 seedlings, are bearing heavy and are fine, large plums, and if they prove good in quality, will be a great addition to our list of native plums. I have a memorial tree of the Brittlewood, presented to me by the veteran plum grower of Minnesota, O. M. Lord, who was an old time friend of Prof. Bailey of New York. Prof. Hanson admired this tree very much, as it is heavily loaded with very large, red plums of choice quality. My Surprise trees are bearing very heavy. Prof. Hanson was much pleased with the Lords L. apple tree which is bearing its first crop. It is a seedling of the Wealthy, originated by O. M. Lord. The fruit resembles the Wealthy, but is said to keep longer; the tree is handsomer than the parent and seems hardier and better for the reason that so far it shows no blight. The professor admired my 30 foot circular bed of Geraniums, Blue Ageratum, White Allysium and Cannas in my front yard, and my fine show of Gladiolas, which came from the stock grown by Matthew Crawford at Shiocton, Wisconsin. Prof. Hanson's large experimental grounds at Brookings entitles him to the title he often receives, the "Burbank of the Middle West." He has been sent by the Department at Washington four times to traverse the old world in search of new fruits and plants. He now thinks he has found a new hardy alfalfa, a native of Siberia, which is being tested from the Atlantic to the Pacific. He is now experimenting to produce a

blackberry sufficiently hardy for the Dakotas. I appreciated his visit and wish him success.

A. J. PHILLIPS.

West Salem, Wis.

HELP HORTICULTURAL HISTORY

The Museum of the State Historical Society of Wisconsin requests that it be made known to readers of WISCONSIN HORTICULTURE that it is endeavoring to assemble in its halls, for purposes of public instruction, a collection of pictures and articles illustrative of the history of the progress of agriculture and horticulture in the state. For this purpose it is desired to secure through the interest and generosity of Wisconsin people articles of the following classes:

Pictures and photographs of old-time and present day farm dwellings, barns and other buildings, fields, orchards, fences, machinery, tools, cattle, poultry, etc.

Photographs of agriculturists of prominence.

Old-style household utensils, hand-made tools, wearing apparel, jewelry, weapons, etc.

The state museum particularly desires, among other articles, to obtain an old-style ox whip, flail, tar bucket, skutching knife, string of sleigh bells, farm bell, dinner horn, rail-splitter's maul, wooden shovel, wood-

en fork, sap trough, cow bell, cow horn knobs, pig yoke, wooden well bucket, strike-a-light, tinder box, mirror knobs, candle extinguisher, sconces, betty lamp, whale oil and lard lamps, powder horns and flasks, bullet mould, and samples of pioneer crockery, pewter and wooden ware.

Persons having specimens of any of the above mentioned or other articles of interest which they are willing to present to the state historical museum are requested to communicate with Mr. Charles E. Brown, chief of the museum, at Madison, in order that directions for their sending may be given. All donations will be carefully cared for and their permanent preservation thus secured. When received they will be placed on exhibition in cases in its halls and will be marked with the giver's name. It is important that all persons who can do so should thus aid the museum, since these specimens will thus present to the coming generations of Wisconsin people an object lesson of the trials and struggles of the early agriculturists of our great state.

Thousands of teachers and school children now visit the museum each year for the purpose of studying its collections. It is estimated that fully 100,000 persons, coming from every section of the state, and from adjoining and distant states, passed through

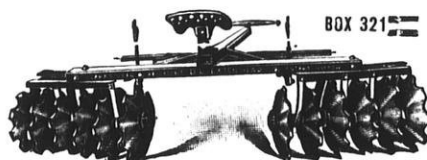
Door County Lands

ARE THE BEST IN THE STATE OF WISCONSIN

For Fruit Culture. Door County Orchards Pay a Revenue of from Five Hundred to Eight Hundred Dollars per Acre Annually. For Particulars Write : : : : :

**DOOR COUNTY LAND CO.,
STURGEON BAY, WIS.**

CLARK'S CUTAWAY HARROWS ARE WONDERS



BOX 321

Two-Horse Single Action Cutaway Orchard or Farm Harrow with Extension Head, Reversible; also One Horse Size. Also Double Action Steel Jointed Pole Cutaway Harrows. (Can be Extended.) For Orchard and Farm. Send for Catalogue. If a Fruit Grower, send for our New Catalogue of Fruit Growers' Supplies.

E. G. MENDENHALL,

GENERAL DISTRIBUTING
Agent for the West

KINMUNDY, ILLINOIS

its halls during the year 1910. In that year nearly 3,000 specimens were added to its collections. The state museum is today the most progressive museum of its class in the United States. Wisconsin people have reason to be justly proud of it, and should be willing to assist in its progress.

ROTTEN APPLES

A lie will travel so fast and so far that the truth can rarely overtake it.

"A report from Baraboo is to the effect that the apple crop in Sauk county is the largest ever known. The market is glutted and thousands of bushels are rotting on the ground. Choice apples are worth only twenty-five cents a bushel."

This item has appeared in at least fifty newspapers in the state and we venture the guess that the end is not yet. An excitable individual up Reedsburg way happened into an orchard at Duchess picking time and found the windfalls and culls on the ground and was told by the owner that he could have any quantity for twenty-five cents a bushel; that if not disposed of the apples would surely rot on the ground. A local paper fell for the story that "thousands" of bushels were rotting on the ground for want of a market.

Every grower experiences the difficulty of disposing of this class of stock, and the difficulty will continue until the business of raising apples increases, until we have large apple centers like the eastern states; then the windfalls and culls will find a ready outlet through the evaporation and cider mills. In the meantime no apples worth mentioning are rotting in Sauk county.

Send For **PANSY GUIDE AND CATALOG**
... Our ...
of Flower Seeds and Plants
FREE TO ANY ADDRESS
WILLIAM TOOLE & SONS
PANSY HEIGHTS, BARABOO, WIS.

"FOR SALE—Apples of New York, by Beach. 135 colored plates. 2 vols. Albany, 1905; \$7.50. Grapes of New York, by Hedrick. 100 colored plates. Quarto. Albany, 1908; \$5.00. Send for fine copies to John Skinner, 44 N. Pearl street, Albany, New York.

Bayfield County Lands

Experienced authorities claim that there is no better fruit land in the United States than on

THE BAYFIELD PENINSULA

Splendid market apples are raised. Most luscious fruits and berries indigenous to Wisconsin, mature late and bring the highest market prices in this frost-proof area.

Inquire of JOHN WALSH, President of

Bayfield County Land Co., Washburn, Wis.

Fig. 1291



Fig. 1317



MYERS SPRAY PUMPS

Nozzles, Hose, Fittings, etc.



Fig. 653



Fig. 640



Fig. 1410



Fig. 702



Fig. 1125



Fig. 1358



Fig. 1363

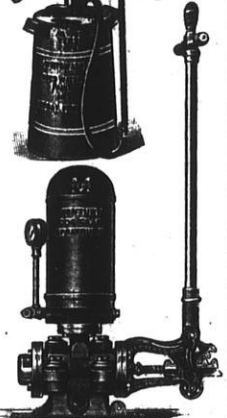


Fig. 1229

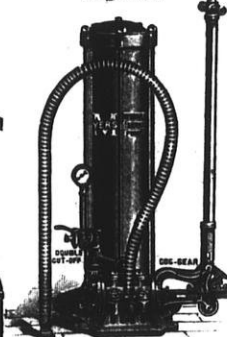
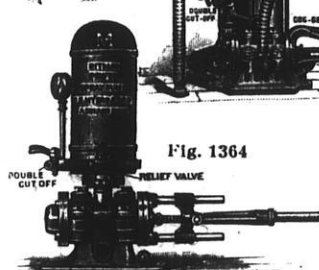


Fig. 1318



Fig. 1364



When the season arrives you want to be able to SPRAY WITHOUT ANY DELAY OR ANNOYANCE. A single day's delay may prove costly. In order to be safe at all times you must have a dependable spray pump outfit. YOU CAN ALWAYS DEPEND ON THE MYERS. The above illustrations show only a few MYERS SPRAY PUMPS made in all styles and sizes with a full line of NOZZLES AND ACCESSORIES for complete outfits with which to meet every requirement. GET READY NOW. WRITE FOR OUR SPRAY PUMP CATALOG.

F. E. MYERS & BRO.,

ASHLAND, OHIO

WISCONSIN HORTICULTURE

OFFICIAL ORGAN OF THE WISCONSIN STATE HORTICULTURAL SOCIETY

Volume II

Madison, Wisconsin, October 1911

Number 2

THE STATE FAIR EXHIBIT

It was a success. For the benefit of those who did not see it we tell the story here, in pictures. Every detail of the exhibit was planned weeks ahead and it all worked out beautifully. It was the first real apple show ever staged in Wisconsin. Nearly one hundred and fifty bushels of apples were shown, every one perfect. Such specimens of Wealthy, twenty-five bushels, have never before been shown in this state or elsewhere. The poorest were better than the best plates shown for premiums. One Wealthy measured twelve and one-quarter inches in circumference. The same is true of Northwestern, McMahan, McIntosh and many other varieties.

On the center table (Fig. 2) five feet wide and twenty-five feet long were seventy-five bushels of apples symmetrically and beautifully arranged. At the north end of this section was the box apple exhibit (Fig. 1.) The apples were beautiful but the boxes whetted. Standard apple boxes were ordered and we got shabby boxes fearfully and wonderfully made of scraps of rotten lumber. The boxes were of no particular shape or size, making it impossible for the packer to do a first class job. In spite of this, Mr. Wm. Dorney Valleau of Minneapolis was able to show off the McMahan, Wealthy, McIntosh, Fameuse and Wolf to excellent advan-

tage. No such box apples as these ever came out of the West; the few Oregon and Washington men who dared make themselves known admitted it.

On the east side (Fig. 3) was the plate exhibit, six hundred and eighty-seven plates and about one hundred

ches in circumference. The contributor's name was lost and we would like to locate him. Another feature was a display of splendid fruit by Mr. L. Herziger, Jr., of Neenah, and with it a plate of apples, variety unknown, picked October 26, 1910, and still sound and eatable.



Fig. 1. One-half of box Exhibit, State Fair

varieties; everything named in the apple lists and then some. By way of variety twenty-six kinds of grapes and a dozen of pears were thrown in for good measure. There were just a few more plate apples here than in the premium display and three times the variety. One of the many features of this display was a Wolf River fifteen and one-half in-

Mr. Chas. Patterson, A. H. Lohberger, Ernest Schaal, A. W. Richter, A. J. Philips, H. Kaufman, P. Kalbakken and many others whom we do not intend to slight but whose names do not now occur to memory, contributed fine fruit.

The west side was divided into three booths, twenty, twenty and ten feet, and six feet deep. The larger

ones were occupied, one by Bayfield and one by Door county, and the ten foot space by Crawford county. It is fortunate for the northern counties that Crawford was confined to ten feet or they would have been completely eclipsed. Mr. John Hays, who was in charge, showed rare taste and skill in staging his exhibit. Fruit

ess by any means, dozens of other kinds being shown.

Some immense Bradshaw and Green Gage plums were in evidence. There was no lack of interest in the Bayfield exhibit. It was crowded every minute.

At the end, next to out-doors, was Door county. Apples, cherries, plums

citizens may well feel proud of the State Fair exhibit.

President Bingham, G. P. Bingham, W. I. Lawrence, Henry Page, B. Hahn, and Mr. Martin separately and collectively, humbly and modestly served as hosts.

This completes the round of the tent, but to really see it all needs

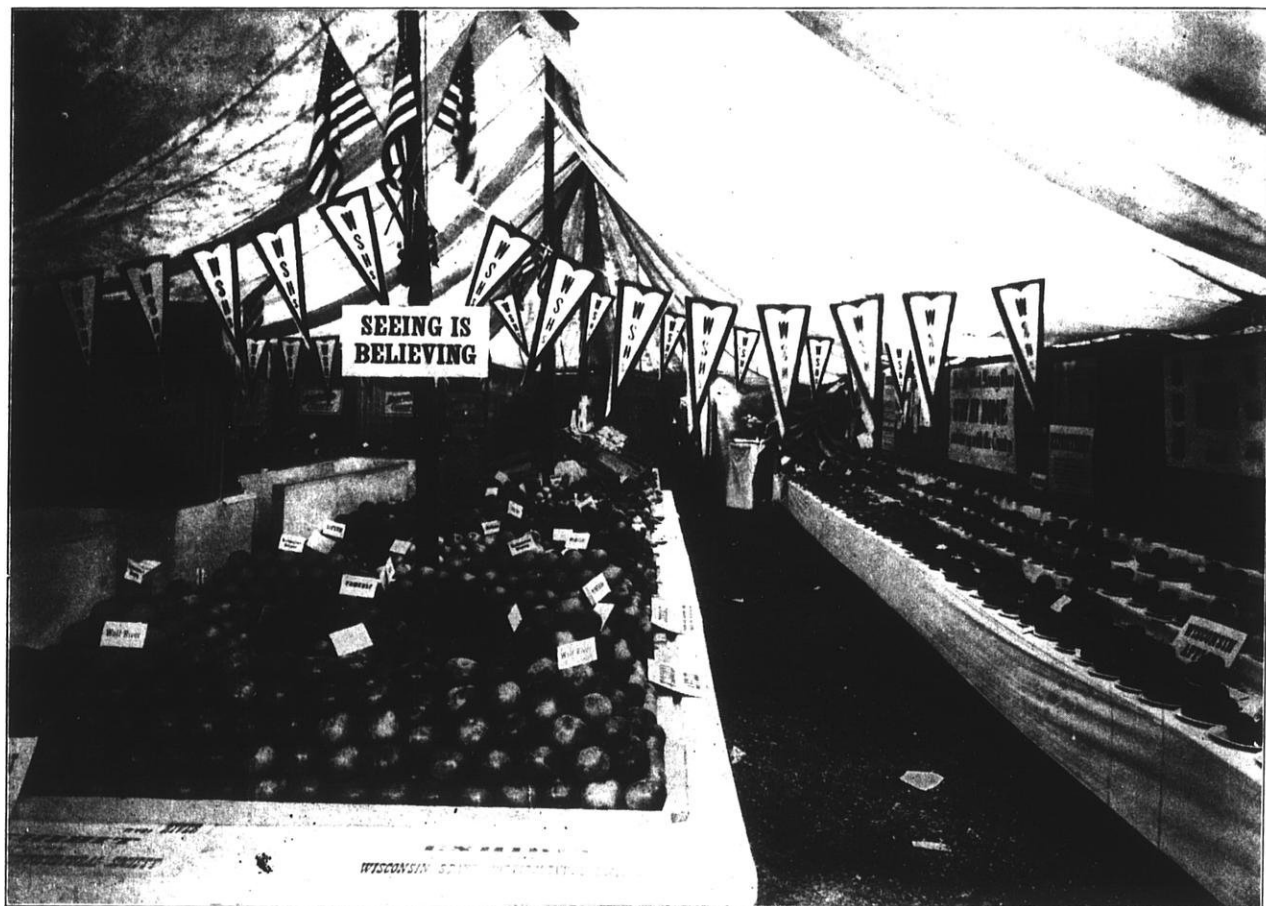


Fig. 2 General view, State Fair Exhibit, Milwaukee, Sept. 12-16, 1911

from our Gays Mills orchard figured largely in this exhibit and among it a group of beautiful Wealthy from a tree planted in 1908; the tree bore one hundred seventy-six apples this year. Several plates of grapes were shown from our vineyard, which was set in 1909. Mr. Hay's evolution of the apple shown in the foreground was a clever trick and a pleasing one.

Next was Bayfield, in charge of Henry Sykes and H. H. Burns. Bayfield and Washburn sent fruit enough for three exhibits and all of it excellent. Bayfield county Duchess in bushel lots, every one sound and firm as a Russett, was the crowning feature here. The exhibit was not all Duch-

and pears in abundance. The cherries were in jars, and, of course, did not even to a slight degree give any idea of Door county's greatness in cherries. A sign in a conspicuous place, "Eight Hundred Dollars an Acre for Cherries is Going Some," helped to tell the cherry story. This exhibit was one of the very best things that ever happened for Door county, as the impression has gained headway that Door county is good only for cherries; the apples and plums in the Door county booth were all that could be desired. A pyramid of our coming apple, the Dudley, attracted much attention. Door county

another round trip. We would then see on the east wall, above the plates (Fig. 3) placards, photographs and legends outlining the work of our society in the different departments. We would find in the corner an office with two registers, one for members, and a general register. One hundred and seventy-eight members registered and each received a handsome badge, "Boost for Wisconsin, Land of the Fall Apple."

The tent and booths were handsomely trimmed in white and green by Milwaukee decorators. In front were two immense signs and a forty-foot flag staff from which floated the only clean and bright edition of Old

Glory on the grounds, and below a pennant, "W. S. H. S." The above is an attempt at a description but the exhibit could only be appreciated by seeing it. Its influence will be very far-reaching. We have talked about Wisconsin apples for many weary years and people have only half believed that we could raise good

Richland county McMahan, Sauk county Fameuse and Chippewa county Wealthy and McIntosh.

Great credit is due President Bingham, G. P. Bingham, W. I. Lawrence and H. Sykes for work and skill in assembling the exhibit. They worked all Sunday and Monday, neglecting their own exhibits.

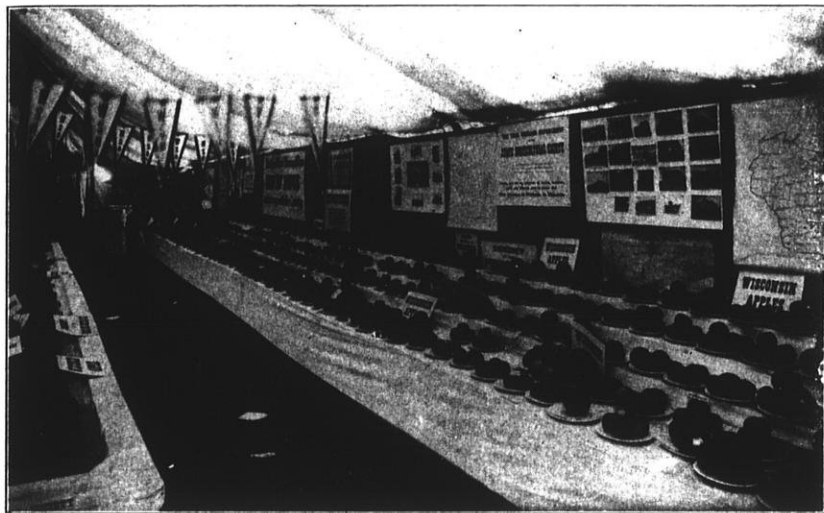


Fig. 3. Plate Exhibit, State Fair

fruit, but here was the actual, tangible, convincing proof before their eyes. It was the most attractive and popular exhibit on the grounds. At least seventy-five thousand people visited the tent during the week. On Thursday from eleven to five o'clock 12,380 people passed through. The aisles were crowded every hour of the day and every day.

Many will be curious to know how such a large quantity of high class fruit was obtained.

Most of it was purchased from the growers.

The remarkable Wealthy and Northwestern, also Gideon and most of the McIntosh were from Mr. Jas. Melville's orchard, which is ten miles from Chippewa Falls. The McMahan were largely furnished by Mr. John Reis of Richland Center, although some of the very best were grown by L. H. Palmer of Baraboo. J. S. Palmer sent McIntosh and Fameuse.

The big Wolf River in front were grown by Fred Muehlenkamp of Sparta.

Arthur Bassett and Mr. Toole sent a great variety of standard sorts. The box apples, our star attraction, were

Mr. G. H. Townsend of Madison aided by word and deed during the whole week.

The secretary was there some of the time.

We must end this story as we began,—it was a success.

WINTER PROTECTION FOR BUSH FRUITS

The most successful growers of raspberries and blackberries in this state give thorough winter protection. This is done by burying the entire plantation.

Sounds like a fish story to one who has never seen it done, but is wholly practical. Around Sparta, hundreds of acres of "brush" are laid down and covered every year.

Right after berry harvest the old canes, the ones that bore fruit this year, were cut out and burned.

Late in October or early in November, according to approach of heavy frost, the canes are bent down to the ground and covered with earth.

Two men with spading forks or heavy six tined manure forks proceed as follows:

Suppose the rows to run east and

west, and starting at the west end. Remove a little soil from west side of first hill; thrust fork down close to roots on east side; gather canes closely together and pull down to ground parallel with row pushing with fork at the same time; throw a forkful of soil on tips to hold the canes down and back up to next plant.

Two men can do all of these things and do them rapidly after a little practice. If done properly there will be few canes broken. Let the strain come on the roots by crowding with the fork. A few roots may be broken but these can be better spared than one cane. Sometimes blackberries are fairly tipped out of the ground by this plan but recover and bear heavy crops.

In regions where a heavy snow fall is the rule only the tips are covered, but the practice is not safe or good as March suns frequently take off all the snow leaving the canes exposed during the worst season of the year.

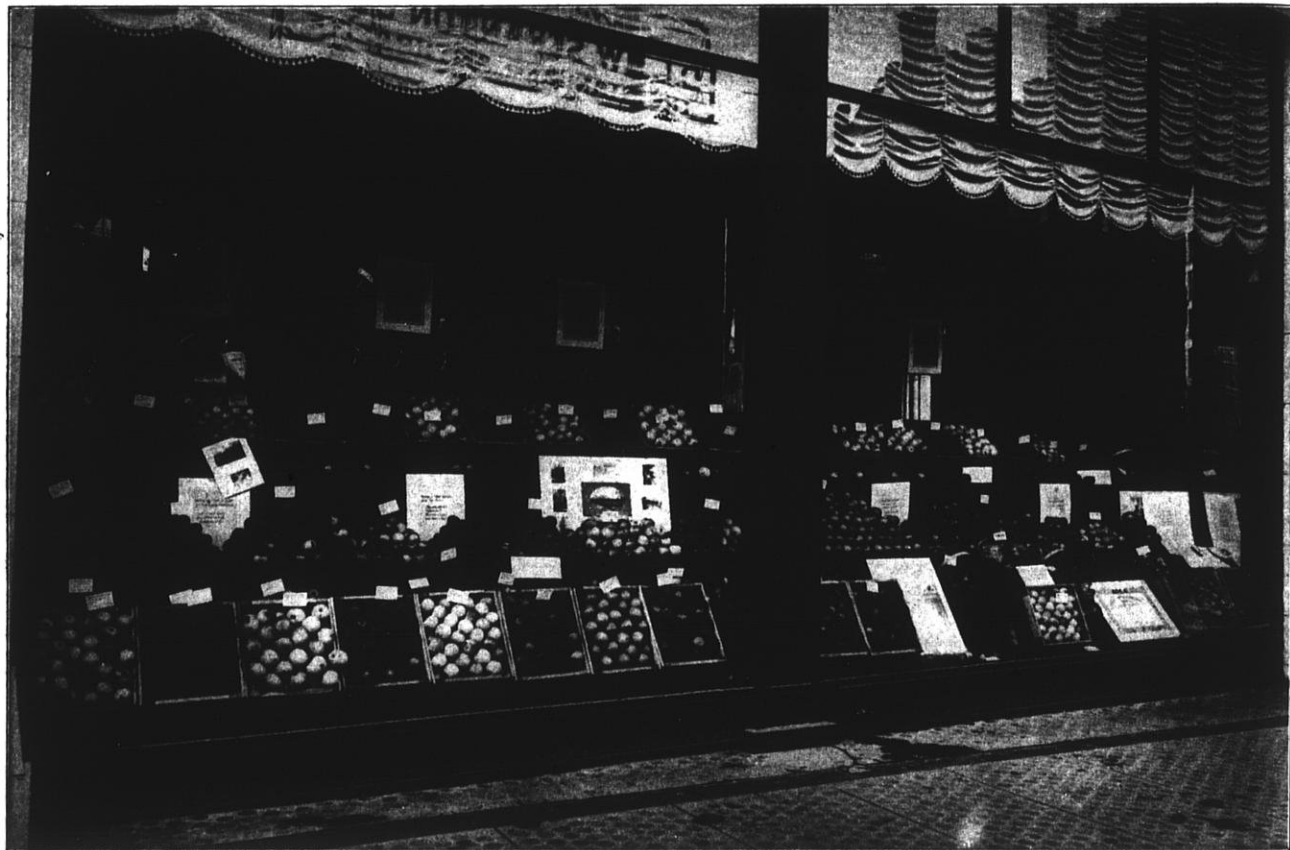
To complete the work cover canes completely with earth to at least two inches in depth.

Some years ago it was estimated that ten dollars in labor was sufficient to cover an acre, but with present prices this amount will have to be doubled. However much it may cost it will always pay as the loss of a single crop may mean a loss sufficient to pay for winter protection for ten years. This applies to grapes also so far as covering is concerned.

HOLD YOUR WEALTHY

Anyone having good sound Wealthy apples, sprayed fruit, will do well to put them in cold storage. Most growers already know, and the others are hereby informed, that the Wealthy is one of the best storage apples that grows. The right kind of Wealthy properly handled will keep in storage until May. At the World's Fair in St. Louis in 1904 we had 1903 and 1904 Wealthy apples on the tables September 1904.

Wealthy next February and March will be worth good money. This will apply as well to Fameuse and McIntosh. Wormy, scabby or bruised fruit should never be stored.



Our Second Apple Show, Grand Ave., Milwaukee, Sept. 18-23

THE SECOND APPLE SHOW

Following the State Fair, the best of the fruit, about seventy-five bushels, was shown for a week in one of the thirty-foot show windows of Gimbel's store, on Grand Avenue, Milwaukee. The picture shown herewith gives only a faint idea of the beauty of the display. The different signs which may be discerned, but not read, all relate to Wisconsin fruit and the W. S. H. S. The word "Gimbel" does not appear in the window. In the lower right hand corner our "Truth" and "Field Work" circulars were shown with an invitation to step inside and get copies free. Within a few minutes after the exhibit was opened it was necessary to call a policeman to open the walk to traffic. If anyone can conceive of a better or more effective method of advertising Wisconsin fruit please mention it.

On Saturday the show was closed. Every children's hospital in Milwaukee received a liberal supply of the apples and the remainder distributed

free to children who called for them, two apples to each child accompanied by an adult.

CEDAR APPLES AND APPLE RUST

Specimens of this curious disease have been sent in from different parts of the state. In one large orchard visited every Wealthy tree was badly affected.

Prof. Jones gives the remedy:

Your specimens of diseased apple leaf reached me. Others have also come in this week from Baraboo sent by Mr. Toole and from Janesville, sent by Mr. Kellogg. This indicates a widespread occurrence of the trouble. The disease manifests itself late in July as yellowish spots on the upper surface of the apple leaves often with minute black specks at the center surrounded by a reddish ring. Later yellowish fungus outgrowths appear on the lower side of these same spots. This is due to the apple rust, a fungous disease which may so weaken the leaves that they fall prematurely in August, defoliating the tree and so shortening the fruit crop succeeding years, as well as this one.

In bad cases the fruit also is attacked. As you have noted, it is worse on some varieties, e. g., Wealthy.

We have had very little success in controlling it by spraying. Fortunately, there is another and easier way. This fungus has a very peculiar life history. From the rusted apple leaves the spores are carried in late summer to the Red Cedar or Juniper, and, infecting that, cause peculiar brown nut-like galls on the small branches, known as Cedar apples. These in turn produce spores in May, which re-infect the apple leaves. The fungus is thus dependent upon the presence of Red Cedar in proximity to apple trees that it may overwinter. The way to stop it is to destroy all Red Cedars in the vicinity of the orchard.

L. R. JONES.

STATE FAIR SOUVENIRS

We have on hand a few of the "Boost for Wisconsin" badges distributed at the State Fair. As these were ordered for members, one will be sent to any member on application as long as they last.

HARDY BULBS AND THEIR CULTURE

A. J. SMITH, Lake Geneva, Wis.

This subject of bulbous plants is far reaching and interesting, not only to the practical gardener but also to the amateur, as a great many of these varieties of bulbs are of very easy culture.

The family of Lilliums comprise some of the most beautiful flowers. We have in cultivation *Lillium Auratum*, the grandest of all the lillies. It is called the gold banded lily of Japan—so named because it has a gold band running through the center of each petal. The power of its fragrance is marvellous. There are several types of the *Auratum*, such as *Auratum Pictum* and *Vilatum Rubrum*, but I think the old *Var* which was discovered in Japan many years ago by Mr. Gold Veitch is preferable, because it is a stronger grower, you get larger spikes of bloom.

These bulbs should be planted as soon as you receive them in November. They should be planted in good rich soil, covering the bulb ten inches. They will flower the following July and August.

There are many of the Japan lily bulbs that do not arrive here until the ground is frozen and if you intend planting these bulbs in the fall, it is a good plan to prepare your beds and cover them with leaves or litter to keep the frost out.

Lillium Lancifolium or *Speciosum* varieties are great favorites by all that know them. *Lancifolium Album* pure white Roseum, light color spotted Rose, *Lancifolium Melpomene*, Rich Crimson. This variety is a stronger grower and has larger flowers than the other *Speciosums*. I like it better both inside and out than Roseum. These varieties, like *Auratum*, are natives of Japan, and should be planted as soon as the bulbs are received. Plant them in good rich soil, covering ten inches. *Lillium Longiflorum* *Muliflorum*, trumpet shaped flower, pure white, very fragrant, should be planted in October to flower the summer following. *Lillium Candidum*, the old English Lent Lily, the best bulbs of this variety, are grown in the north

of France. Everyone knows this old garden lily with its long racemes, of pure white flowers, and its delightful fragrance, which can not be surpassed by any other variety. Under proper conditions, these large spikes will average from six to eighteen blooms. I showed some spikes of bloom last spring of *Candidum* with seventeen flowers, nor were these from new bulbs; it was the second year flowering with me. This variety, like most lilies, should be planted ten inches below the surface; they get a natural protection during winter and summer. In winter they are shut in airtight by the frozen crust, and in summer they do not dry out so soon. They need a good, rich soil; it is a good plan to

Lillium Brownii is another species which is not grown as much as it deserves, or as it used to be. Of course, there are good reasons why *Brownii* has to take a back seat, because of the increased production of *Lillium Longiflorum* and *Giganteum*. The odorless *Brownii* can not compete with these varieties. Although *Brownii* is a beautiful flower and as large as *Giganteum*, trumpet shaped, color pure white inside, and the outside purplish brown, easy to grow and perfectly hardy, the native lilies the best for producing natural effects, also the family of the Japanese elegant type, for planting amongst shrubbery, or in the natural wild gardens varieties such as *Lillium Superbum*, *Canadense* and *Philadel-*

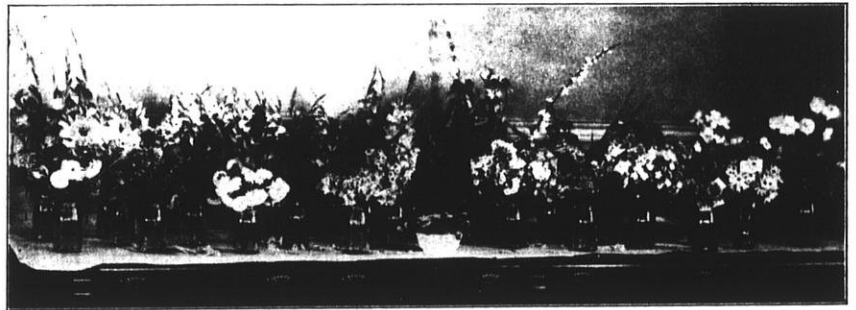


Table of Flowers at Oshkosh Meeting. Exhibit of Mr. C. Philipson

fork in some well decayed cow manure in the spring as soon as the frost is out of the ground. *Lillium Tigrinum* and *Lillium Tigrinum* double, known as the Tiger Lily, *flora plena*, both the single and This old variety is a great acquisition in perennial borders or dotted amongst shrubbery. This variety is a strong grower and easily cultivated and makes a very showy effect with its large spikes of orange colored blossoms spotted black. This variety should not be forgotten at planting time.

Lillium Henryii is a native of northern China; hardy, and resembling the *speciosum* type. On good soil it will grow six feet and produce five to eight flowers on a spike. The color is apricot yellow spotted brown.

Lillium Hansonii is another variety that should not be overlooked, especially for its early blooming. It grows about three feet, with golden yellow flowers, and blooms in June.

phicum. These grow well in a moist soil, and partial shade, and in such aspect as these I don't know any flowers that are more satisfactory.

I wish to say a word for cold storage lily bulbs. This is practically a new feature, that is to say, it has not become general, but is fast becoming so. The high prices of these bulbs has kept them from being distributed more generally. The most useful amongst these retarded bulbs is *Lillium Speciosum* and *Giganteum* for winter blooming. These bulbs require more careful treatment than the same variety grown in the summer. They have not the vitality; they do not make so much root. I find they want to be confined to the smallest pot possible in accordance with the size of your bulb. I use nothing larger than a five inch pot, and a good many in four inch pots. It takes a little over five months to flower the *Speciosums* after planting the bulb, that is to

say, you may plant the bulb in the middle of July and have them in bloom at Christmas. The Giganteums are somewhat stronger and quicker to bring into bloom; it takes about three months from planting the bulb to flowering. If you want a succession of cut flowers during the winter, it is a good plan to use the same methods as you do with Lily of the Valley; plant for succession, one month apart, starting the first batch August 1. This will keep you all the winter in Lillium Giganteum.

Lillium Harrisii, the Bermuda lily; these newly imported bulbs will follow your Giganteums, beginning January 1. This beautiful lily is not so large in its individual bloom as Longiflorum, but when well grown produces more flowers on a spike. Harrisii can be brought into flower in a shorter time than Longiflorum, which makes it more valuable for that reason; the medium size bulbs are best for early forcing. It does certainly seem wonderful when we stop to think, what nature has done in producing a natural succession of different varieties to follow one another until their season is past; and then again the ingenuity of man in retarding some of these varieties in cold storage, to be produced in all their glory out of their natural season.

Readers are again warned against the contract orchard fakirs, the ones who charge extravagant prices for trees with fake agreements about pruning, replacing, etc., for a term of years. All such are humbugs of the worst type. Buy your trees as you do your seeds and your dry goods, from a responsible party, pay the price and close the transaction.

APPLE GROWING IN WISCONSIN COMPARED WITH OTHER STATES

G. H. TOWNSEND.

The extraordinary exhibit of the Wisconsin State Horticultural Society at the State Fair has awakened great interest in the possibilities of apple growing in Wisconsin. The State Horticultural Society is a State institution under the control of reliable men thoroughly acquainted

with fruit growing in this and other states.

The scarcity of apples for several years past has made it possible for the alert commercial orchardists to make very large profits, and men having land to sell in possible orchard regions, have taken the actual facts and adorned them with prismatic colors to make people rush for the pot of gold.

CAUSES OF INADEQUATE APPLE SUPPLY.

The short supply is due to the failure of the farm orchards more largely than the decline of the old commercial orchards but the natural death from age and neglect in both are factors. The neglect of orchards is due partly to ignorance as to the real needs of trees and partly to insect pests. Fruit trees are destroyed by insects, but these are not serious when looked after. The fruit is subject to two classes of destructive pests: the worm infesting, and the apple stinging. The former makes wormy apples and the latter knotty scabby ones, and taken together ruin practically all the farm orchard fruit. Owing to the very remarkable freeze last year there was insufficient fruit to furnish breeding ground for these pests and the farm and orchard and back yard apple tree are in evidence this year. It may safely be predicted that they will be a very small factor in the supply next year and thereafter. A great many people will say "we can't raise fruit here because of the insect pests," and when these same people read of the wonderful results of some of the commercial orchards, conclude that it is a mere matter of location. The truth is, that the insect pests are worse elsewhere than in Wisconsin and the wonderful orchards—where it is seemingly so easy to raise such beautiful fruit—have been sprayed at least five times a year. I am personally acquainted with nearly all the fruit regions of the United States and instead of being the worst, Wisconsin is probably less serious affected than other fruit regions.

It is true that some varieties are not hardy, but most winter killing is an incident of lack of cultivation.

An apple tree will frequently exhaust itself to develop its fruit, if it is not cultivated. If kept in sod a large part of the rain that falls runs away and the grass uses a large part of the moisture remaining. Clean culture early in the season and a cover crop late, to hold the snow, reduces winter killing to an inconsequential quantity.

FROST KILLING.

Nearly all the fruit growing regions of the United States are subject to killing frosts when in bloom or just after, and in this respect the danger of frost increases as we go south. The icy lake regions hold the bloom back until the frost season is over, and the high ridge lands on the west side of the state have only suffered two destructive frosts in thirty years. Cold air sinks and warm air rises and commercial orchards should be planted either on high ridge lands where fruit is protected by altitude or on the shore line of the lakes where the air is warmed by the water.

VARIETIES.

There are hundreds of varieties of apples raised, and unsuitable or worthless kinds are responsible for a large share of the failures. Only fifteen varieties out of eighty-five have self fertile bloom and a few others partly fertile flowers. An orchard that has only self-sterile bloom will not produce any fruit except as it may be pollenized from self-fertile bloom of other orchards. The pollen is carried by flower sucking insects. Of the twenty-two leading commercial varieties grown in the various regions of this country, Wisconsin can claim superiority for several of the best. The Wealthy and the McMahan (White) come at a season when most apples are consumed. They grow better here than anywhere else and are sure bearers and belong to the class of enormous producers, but require a pollinizer. The same may in the main be said of the Snow and McIntosh Red. These apples will keep till mid winter and the McIntosh Red shares honors with the Grimes Golden and the Delicious as the best quality of any grown in the world.

Another apple that succeeds better here than anywhere else is the North Western Greening. It is a large apple, a good keeper but not as good quality as the Windsor Chief which is hardly yet classed as a commercial apple. It should be kept in mind that the commercial apples grown in any region are usually limited to from four to six varieties. Of the various sorts grown Grimes Golden, King, Rhode Island Greening, Jonathan, Wagner, Gano, Ben Davis, York Imperial and Yellow Bellflower, all make a favorable showing. Some of these varieties shown at the exhibit were not matured and some taken from trees overloaded and not cultivated, so that the size is not a fair index of what can be done. The Delicious is growing well but not in bearing in this state, but its origin and season and present showing justifies large hopes.

The Baldwin is practically a failure in Wisconsin. The soil is evidently too rich for it and its failure has done more to discourage fruit growing than all other causes.

Of the six remaining commercial varieties grown East or West none have been tested in this state. The prairies were the first settled in this state and time has proven that they are not adapted to apple growing. The black rich soil causes too early and too late growth. The inadaptability of the Baldwin apple and the prairie soils led to the erroneous conclusion that only the hardy Russian varieties could be grown in this state.

The Wisconsin State Horticultural Society has steadily been combatting the early mistakes and has demonstrated that the high ridge lands and the lake fronts are splendidly adapted to apple growing.

Wisconsin has many advantages not the least of which is early bearing and great fruitfulness. The ridges of several counties on the west side of the state are essentially the same as that of the trial orchard in Crawford county. One tree three years old last spring bore a bushel and a half of apples and several trees must have had a bushel. In New York a tree would have to be twelve to fifteen years old before it would

bear any fruit worth considering, especially such varieties as the Baldwin or Spy.

The orchard regions of this state do not suffer seriously from either drought or frost and the soil is rich enough to produce large crops of large, marketable apples. It requires a great deal of moisture to mature a large crop of apples and at the same time grow fruit buds for the next season. It also requires a soil rich in plant food and in this respect Wisconsin is ahead of all the fruit growing districts except the mountain valleys of the Pacific states, and inter-mountain states. All the rich valleys of the West require irrigation, which is a large expense.

It costs fifty-six cents freight a bushel to market apples from the Mountain or Pacific states and ten cents a bushel in Wisconsin, and this added to the difference in the expense of packing gives Wisconsin a margin of fifty cents a bushel and this is a good profit, as apples can be grown here profitably for fifty cents. It is all very well to talk about three dollar box apples but the consumption of three dollar apples is limited. The vast consumption of apples is by the masses for pies and sauce and to supply this market—the big market—apples must be sold so they can be retailed at not to exceed one dollar a bushel. Wisconsin has demonstrated that fancy box apples can be successfully grown for the Holiday trade and less fancy apples for the entire winter.

WILL APPLE GROWING BE OVER-DONE IN WISCONSIN?

Some years ago the country produced approximately a barrel of apples for each person but it recent years it has produced only one barrel for each four persons, but it does not follow that the people will buy such an amount as one barrel for

each person at three dollars a box. The great increase in acreage has been at a long distance away and we need not be concerned whether those regions (where freight and labor costs over a dollar a box) are overplanted or not. The planting in the North Central States does not much more than equal the decline of orchards and the increase in population.

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Grow and handle all kinds of nursery stock. We employ no agents but sell direct. If in the market you can save money by buying of us. Get our prices.

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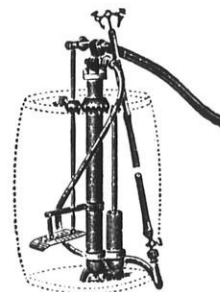
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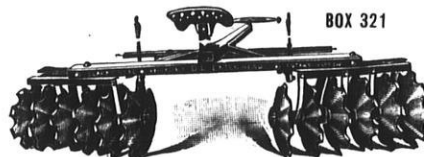


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Madison, Wis.

Boost for Wisconsin, "Land of the
Fall Apple."

We have them on the run,—the
Western orchard boomers.

Fall delivery of fruit trees is all
right, but not fall planting.

Plant spring flowering buds in Oc-
tober; tulips, crocus, hyacinth, daffo-
dil and others.

Not too late to plant peonies. Di-
vide and replant old clumps. Mulch
heavily after ground freezes.

We invite attention to our adver-
tising columns. Fakirs can't buy
space in WISCONSIN HORTICULTURE.

Beware of swindlers. We have
plenty of good nurseries right here
in Wisconsin.

One more Apple Show like that
and the doubters will crawl into a
hole and pull it in after them. Most
of them have done that already.

Any agent who sells cherry trees
in wholesale lots, one hundred or
more, at one dollar each, is a thief
and a robber.

Delay digging dahlia tubers until
the first light frost, but no longer;
cut off tops and ripen the tubers in a
dry, open space for a few days be-
fore storing.

The Northwest cherry originated
in Illinois; not tested in Wisconsin.
Of doubtful value.

The Ostheim cherry is neither
hardy nor productive. Has been
tested and discarded.

Plant only Early Richmond cherry
for early, and either Montmorency
or Late Morello for late; and proba-
bly but few of the Morello.

Uncle George Jeffrey of Milwaukee
has been going to State Fair for
some time; this was his forty-sixth
year as an exhibitor of fruit. We
hope to meet him fifty-four more
years.

All hail, McMahan! Queen of
Fall Apples. Since first reaching the
Chicago market this fall McMahan
has topped the market, no other va-
riety being quoted within fifteen
cents a barrel.

FALL PLANTING

Nursery agents who plan to sell
but once in a place advise fall plant-
ing of fruit trees. Don't do it. Fall
delivery is all right but instead of
planting, bury the trees in a thor-
oughly drained spot and plant as
early in the spring as possible.

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We offer a complete line of Fruit,
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one. Splendid blocks of two-
year 5 to 7 foot trees and one-
year 4 to 5 foot trees. Early
Richmond, Montmorency and
other leading varieties by the
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a general line of other Nursery
stock. Personal inspection in-
vited. Correspondence solicited

One of our latest recruits is the president of the biggest railroad system in the east. We guarantee him the same fair treatment as Brother X of Blank Corners. Ours is a democratic institution and Mr. President's position shall be no handicap to him.

Plant tulip and narcissus bulbs four inches deep and six to eight inches apart.

Hyacinths six inches deep and eight to ten inches apart.

Snowdrops and crocus two inches deep and two to four inches apart.

The newest in Door county is the Ellison Bay Orchard Company. A four hundred acre tract has been purchased just south of Ellison Bay and two hundred acres of tree fruits will be planted next spring, twenty-five plum and forty cherry and balance apple. Upper Door is coming!

Cherry trees of standard, reliable sorts are worth in hundred lots from thirty to forty cents, according to size and quality. At these prices the buyer usually pays freight and receives no guarantee. Singly or in dozen lots delivered at your door and a guarantee to replace once, about fifty to seventy-five cents. We have not consulted our advertisers in making these statements, but believe we are safe as to maximum prices.

Mr. J. Arthur Davis is a Milwaukee business man and has a summer home at Hartland. Mr. Davis, who takes great pride in his garden and grounds, writes as follows:

"I planted eight trees last year and now have twenty-one. I had also a neglected orchard of ten trees three years ago, few apples and those small and wormy. I have cultivated, mulched, pruned and sprayed

and now we are getting a splendid harvest in quantity and quality."

No need to say Mr. Davis is a member of the W. S. H. S.

Who knows Mr. George S. Hinkley? We want to know. It is the all important question in this office just at present. Such minor questions as, Will there be war in Morocco? Will Bob La Follette still raise cherries after he is elected president and will Sturgeon Bay land prices go higher? all sink into insignificance. Who is George S. Hinkley, and where does he live? He was last seen at our state fair exhibit. We have something of importance to ask him; and any reader who knows a person by that name will confer a favor by writing this office.

CREDIT LIST FOR SEPTEMBER

Names of members who have secured new members. Would you like to be here? It costs but little effort.

R. J. Coe, 1; Irving Smith, 1; B. Hahn, 1; C. B. Thomas, 1; A. W. Lawrence, 1; Geo. B. Smith, 1; A. Morawetz, 1; J. B. Loverin, 6; E. W. Longfellow, 1; Geo. L. Tift, 1; H. Simon, 1.

FRUIT FOR CONVENTION

Don't forget the Annual Convention. Now is the time to save fruit for the exhibit in Madison next winter. Our premium list carries more money than the average county fair and premiums are always paid in full. Wrap apples in paper and store in the coolest part of the cellar that is dry.

A better way is to collect a box and put in cold storage. This is an apple year in Wisconsin and we ought to have a good showing in January. This will be a good place to show late-keeping seedlings.

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A trial order will convince any one of their quality.

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AMATEUR FLORAL DECORATIONS

WM. TOOLE

To the true lover of flowers there is joy in sharing with others the pleasure to be derived from their beauty.

In the garden, in their natural form is to be found the greatest beauty of flowers, but fortunately they may be separated from where they grew and retain much of their beauty so that we may share with others the delight of their contemplation, in our homes, or elsewhere. Gathered in loose sprays or with more formal arrangements of what we call bouquets is the most useful manner of assembling flowers to show their beauty in a decorative way, or to enhance the enjoyment of some occasion.

The present tendency to group together separate kinds and even separate shades of color of one kind of flower is commendable and yet we desire change and variety, and we sometimes choose to have varying tones of color in our groups. Then it becomes necessary to consider harmony of colors. Most generally, though not always, we find that there is no decided shock to our sense of the fitness of association when grouping together the various colors of any one variety of flowers. Those who have made a scientific study of color harmony can tell us all about color complements and dissect the rainbow to illustrate their ideas. We need not burden our minds with set rules, nor must we be able to define the various distinctions between lavender, mauve, ecru, with the varying shades of lilac, bluish purple, and heliotrope, or the finer distinctions of red, from pink and rose through carmine, magenta, solferino, cerise, crimson and scarlet, to know if we have placed together shades which seem to clash, like false notes in music. The one who cannot discern fitness of association in colors after careful comparison, will not be helped much by committing to memory set rules on color harmony.

It is accepted as orthodox in floral arrangement that we may make free use of white or green among other shades of color for contrast or an effect of finish, and yet it is often necessary to consider how the green shall be placed next our flowers. Pansies and many other flowers may nestle among foliage without loss of good effect, but try your asters, zinnias, dahlias, and many other varieties in various ways, and it will be seen that the beauty of the flowers is most effective when kept above the foliage as nature has provided.

It is generally the case that the foliage of any particular kind of flower is the most suitable accompaniment, but it is not always

FORCING AND GARDEN CULTURE OF RHUBARB

By HUBERT D. WHITE

Rhubarb, or Pie-Plant as it is sometimes called in this country, is the easiest to grow of all our perennial garden plants, and should have its place in the home garden. It is a very hardy plant and will stand considerable neglect but like most cultivated vegetables it responds readily to good care and proper treatment.

The ideal soil for rhubarb is a heavy sandy or clay loam, naturally cool and moist yet having good drainage. Heavy soils should be worked deeply, light sandy or gravelly soils less deeply and if naturally lacking in the essential food elements these should be supplied. Rhubarb is a gross feeder and delights in extremely rich soil. Humus is especially indispensable to the best results, and the soil should be prepared by plowing under an abundance of barnyard manure.

Twenty plants will more than supply the demand of the average household. If a supply of old roots are available much time may be gained by propagation, or plants for setting may be obtained from any reliable seed or nursery man. The old clumps owing to their size should be divided into two or more sections with a sharp spade or heavy-bladed knife. Care must be taken not to injure or disturb the crowns or eyes. Each section should have from one to three eyes. Trim up the clump, removing all broken portions of the roots but leaving as much root as possible. Best results will be obtained if the roots are slightly protected in a shed or shelter and allowed to freeze out through the Winter.

Growing from seed is sometimes recommended in addition to the work of propagating. The chief objection, however, is the fact that, with the exception of one or possibly two varieties, rhubarb does not reproduce its like. Myatt's Victoria has become so thoroughly established in its type that it nearly always comes true when grown from seed. This is also true of Myatt's Linnaeus in some cases. To grow seedlings from any other variety is very likely to result in serious loss of time.

The seed is sown in hotbeds early in the spring in drills 4 to 6 inches apart, or in the open ground as early as the weather permits in rows a foot apart at a depth of one inch, and the plants thinned to 3 or 4 inches in the row, using the plants thus removed for other rows. Thorough tillage is kept up the entire season to give all the growth possible; then the plants are ready for transplanting the following spring. Another system which has proved more satisfactory is now being practiced at the Wisconsin Experiment Station. Seed is sown out-of-doors in a well prepared seed-bed in August. Nothing but ordinary care is given until the following Spring when the seedlings are transferred to permanent rows.

In setting the plants in the Spring set them with the buds or eyes from one to two inches below the level of the ground in hills four feet apart each way, or in rows five feet apart

convenient to provide such, and the additional green is often unnecessary when the flowers are in vases. If the flowers are carried in the hand, or arranged in a spray, as at funerals, then of course some finish below the flowers is necessary in addition to the tying on of ribbon.

The professional florist makes provision for a supply of green foliage for use as occasion requires, either with bouquets or designs. The strictly amateur flower grower is not likely to have a supply of smilax, the ornamental varieties of asparagus, or suitable ferns, therefore use must be made of whatever material is to be had. For use as supplementary green, divided foliage is desirable. We may as a makeshift at times make use of the leaves of schizanthus, cosmos, aquilegias, rose geraniums, mountain fringe, and some of our native ferns with more suitable material if it is to be had. Immature foliage wilts easily, therefore that which is full grown should be used if detached from its branches. It should be placed in water in a cool place for several hours before being used in a bouquet or design. The one who is generous with flowers will be rewarded with more, because gathering of flowers prevents seed-bearing, thus inducing the plant to produce more. For house or other indoor decoration, perhaps no flowers are more satisfactory than the gladioli. They are so lasting through renewal, by succession of flowers until the last bud has expanded. Much satisfaction can be had from the gladiolus by growing a number of each shade in several choice kinds. Many kinds of flowers as for instance the snapdragon have to a considerable extent the quality of renewal through development of succeeding buds. Nearly all of our hardy perennials are suitable for cut flowers, and many of them will give a succession if the first flowers are used and the plants are kept well cultivated. The early varieties of cosmos are being improved and give very desirable flowers which are almost as durable as asters. Of course, all persons like the late cosmos when they chance to blossom before freezing. Perhaps it would really be the province of another paper to enumerate the leading varieties of flowers which are suitable for bouquets. Sometimes it is desirable to make the most possible out of very few flowers, as for instance, a cluster of geraniums with a rose geranium leaves or other greens. A goblet and sauce-dish give opportunity for a combination of flowers with the longer stemmed varieties above and short stemmed flowers like pansies, balsam, or alyssum in the flat dish below. When arranging flowers in plat-

and three feet apart in the row. Tillage and fertilization are fundamental to the largest possible growth. It may be well to mix compost with the soil placed around the roots in setting but never put fresh manure next to the roots. Cultivation should be started as soon after planting as possible, and thorough stirring of the soil given once a week until late in the summer. In the Fall, after the ground has frozen, cover the rows 3 or 4 inches deep with manure, and in the Spring, again, as soon as permissible work this into the ground with the cultivator. Every other year the surface should receive a good dressing of manure. The plant will live through the Winter without a mulch covering, or with only the protection of its own leaves, but the mulch prevents deep freezing and thus allows an earlier start.

Early growth may be stimulated by scattering nitrate of soda about the plant by hand and hoeing it into the soil close to the roots. The plant is hungry for nitrogen in the early spring and although much barnyard manure may have been applied the process of nitrification is very slow until the ground is thoroughly warmed by the sun. This early growth of the outdoor product is especially desirable when growing for market as the quality is better, due to quick growth, and the later competition with small fruits is not met with.

Too much emphasis cannot be laid upon the matter of fertilization and cultivation. The great secret of success in raising rhubarb is high manuring. There is no danger of over-feeding this plant. Larger growers count on manuring at the rate of 25 to 50 loads to the acre and some find it pays to use even more. Quickness of growth is conducive to quality and tenderness in any vegetable and this cannot be obtained in poor soil.

No stalks should be picked the first season, and none should be allowed to go to seed, as it is very exhausting. In the second season the stalks can be pulled moderately but not so as to exhaust the plant, especially if they are to be used for Winter forcing. Exercise care in pulling; the stalks should be removed from the crown by a jerk upward and outward, being careful not to be so rough as to pull the buds from the crowns at the same time. Grasp the stalk near the ground with the forefinger extended along the inside of the stalk and then exert a prying and pulling movement simultaneously. This will eliminate the danger of breaking the stem off above ground.

The plants in the field should be taken up every 3 or 4 years, separated and parts reset in the same ground. Or with less trouble the earth may be removed from one side of the hill and outer parts of the roots cut off with a spade leaving 3 or 4 buds undisturbed in the ground. The parts removed may be reset if done in either Fall or Spring, or may be forced if done in the Fall.

Let us now turn to the other phase of the subject at hand: that of rhubarb forcing. While it is entirely practicable and feasible for nearly all classes, and especially farmers and gardeners to supply themselves with this luxury from January to May it would be entirely impracticable for all to engage in the work as a business on a commercial scale. It is not my inten-

ters or shallow dishes it is not always convenient to provide sand or moss as a supporting material. A few leaves and stems of plants—it may be clover even—serve to keep the flowers above the water. A piece of wire netting can often be used to advantage as a support to the flowers in these flat arrangements. There is often occasion where the side boquet with its front view of flowers is most suitable. For such boquets it is well to use a flat frame for a backing to which the flowers may be held in place. With floral designs the professional florist has a great advantage over the amateur in possession of available material. And yet I have known of ladies who have shown wonderful ingenuity in combining moss and wire and twine as a base for beautiful creations in floral work. There are times when friendship leads us to desire to make some formal arrangement of flowers and with sphagnum moss, fine wire, tin-foil and tooth-picks in hand it is possible to make pleasing combinations from material which could not be used in an ordinary boquet. Recently there was a funeral and the hot August weather found the greenhouse in the nearby city scant of flowers excepting a few early asters. Pansies, double petunias, sweet alyssum and a few early cosmos were arranged by a friend and something of beauty was produced which was a solace to the bereaved ones. There are times when pansies make such a generous growth of foliage that one may feel free to cut the spray from the plants. These, if arranged in flat bunches of five or six sprays to a bunch can be assembled together on the surface of a casket or table in the form of wreath, star, cross or other design. The same idea may be carried out with some other flowers.

In arranging baskets of flowers, do not have the flowers packed too solidly together, nor yet standing out singly as if stuck in sand. In baskets or designs do not forget that the green should be subordinate to the flowers and that some shades of pink flowers look well if kept away than if bedded in green. The handle should be secondary to the basket and no matter what fashion may permit, the use of ribbon can be overdone, yet if used with taste ribbon gives a finish which is very satisfying to the eye. It is the fashion of some of the papers these days to rail at the custom of presenting flowers at funerals as a waste of money and materials, but I am glad to think that we may always have such opportunity to express our sympathy and regard in times of bereavement.

tion at this point to discuss the methods and possibilities of Winter forcing as an industry but rather to present methods which are possible and profitable to the home grower.

Forcing may be practiced in the field by placing a barrel, half-barrel, box or tub, without top or bottom, over the plant and piling around it heating manure; or use a glass sash on top and cut the barrel or box off on a slant. Plants thus treated may be picked without ill results until the unforced plants begin to yield.

Another method is to put a cold frame over the plants as they grow in the open ground. Or a still better plan is to lift the roots in Autumn and set them close together in hotbeds, removing the old manure and soil to a depth sufficient to permit the full growth of the stalks. Cover the boxes with two layers of boards breaking joints to avoid, if possible, the leaching of snow or rain. Then pile manure around the boxes to the thickness of a foot or 18 inches and cover on top to the depth of six inches. The heat generated by the manure is all that is supplied. If it is desired to hurry the forcing put on fresh manure that has been piled until heated.

With the exception of forcing in hotbeds by far the best results are obtained by thoroughly freezing the roots, as has been demonstrated by extended experiments. It is better to leave the roots in the ground until there are prospects of sufficient cold weather to freeze them clear through, although exposure to any sort of weather for a reasonable time is not harmful. After digging they may be piled in a shed or otherwise protected from severe freezing and thawing.

The space under the greenhouse bench may be used but experience has shown that too close proximity to the pipes gives too high a temperature for good color, quality, and yield, and also injures the roots for future use.

The work of forcing is so simple and inexpensive that any family having a few rhubarb roots may enjoy this luxury the entire Winter through. A corner in the cellar, a storeroom or attic may be suggested where a few roots may be set in a large box or on the floor itself. Pack the frozen roots close together, filling in and packing with earth or anything to hold moisture. Cover the crowns and keep moist. Water but slightly until shoots appear when more water may be given.

Unless the roots are neglected and allowed to decay after they have ceased bearing there is no objectionable feature whatever connected with forcing in the house as very little artificial moisture is required and consequently no dampness or objectionable odors are given off.

Ether forcing is sometimes practiced, following this same general plan after first treating the roots with ether fumes in a close box: 10 cubic centimeters of liquid ether to every cubic foot of space. The plants are exposed for 48 hours and then packed in earth. Much more rapid and greater results are thus obtained.

One of the pleasing features of the work is that after the freezing part is over the crop may be matured almost at will.

(Continued in Next Issue)

Questions and Answers

Q. What protection should be given to climbing roses in winter?

A. Lay down and cover with leaves and boards. Delay covering until after first severe frost on account of mice. This pest is apt to seek winter quarters by time ground freezes,

Q. Will it be necessary to winter protect red raspberry canes the same as the black caps, laying them on the ground and covering, and what varieties of the reds are the best suited for the home garden?

A. Red raspberries require quite as much protection as black caps. Varieties for home garden, Cuthbert and Loudon.

Q. What distance apart would you advise setting young apple trees?

A. Twenty-four by twenty-four feet.

Q. Is there any harm done pruning apple trees in December?

A. The best time to prune is after mid-winter, February, March and April. Damage may result from splitting and checking of large wounds and killing back of small branches if pruning is done before March 1.

CHEAP APPLES AND SOME NOT SO CHEAP

We have reports of Duchess being sold at twenty cents a bushel this year, and Wealthy in some cases at a dollar and a half per barrel. There is no doubt that in every case the buyer paid all the stock was worth. H. H. Harris of Warrens reports the sale of eighteen barrels of mixed stock, Salome, Wealthy, Longfield, etc., for \$47.70 net. The difference lies in the quality of the apples. This leads us to moralize a little on the apple situation.

The editor has maintained for years, almost alone, that the bane of the apple situation in this state, in Michigan and other places where apple raising has not made the head-

BULBS FOR FALL PLANTING Plant Now

HYACINTHS, FANCY FORCING
Red, White, Blue and Yellow. All shades and single mixed. 5c each; 50c per dozen; \$4.00 per 100; 25 or more at 100 rate. If by mail add 15c per dozen extra for postage.

TULIPS
Separate color mixtures—Single Red, White, Yellow, Pink and striped. 2c each; 20c per dozen; \$1.50 per 100.
Double separate colors—2½c each; 25c per dozen; \$1.75 per 100.
Single, all colors mixed—15c per dozen; \$1.00 per 100.

Double, all colors mixed—20c per dozen; 25 or more at 100 rate; \$1.50 per 100. If by mail add 5c per dozen extra for postage.

MAMMOTH CHINESE NARCISSUS
5c each; dozen 50c. By mail, dozen 75c.

FREEASIAS
Best pure white, dozen 30c. 100 at \$2.25.

CROCUS
Large yellow and white shades. Dozen 10c; 100 50c.
Tall Hyacinth Glasses, in assorted colors 15c each; \$1.50 per dozen. Glasses cannot be mailed.

L. L. OLDS SEED COMPANY, Madison, Wis.

Good Fruit Requires Good Spraying

It rests with you whether your apples are wormy, whether your trees lose their foliage and are eaten by disease. You can prevent all these losses by using

GOULDS *Reliable* SPRAYERS



They make it possible to spray thoroughly with a fine, even mist that covers every leaf and inch of bark without wasting the liquid and without extra hard work.

Don't buy a cheap sprayer; it makes the work harder and is always out of order—they always cost more in the end.

Gould's Sprayers last for years. All working parts are made of bronze to withstand chemical action of spray solutions. "You can always depend on a Goulds."

Send for Our Booklet

"How to Spray—When to Spray—What Sprayers to use."

It contains most valuable information about sprayers and spraying mixtures; how and when to use and all about them. We'll be glad to mail this to you if you say so, on a postal.

THE GOULDS MFG. CO.

113 W. Fall St., Seneca Falls, N.Y.

We make hand and power pumps for every service.



way it ought, is the farm orchard. This season affords justification in ample measure. Apples have ruled cheap on the large markets but quotations have steadily shown a preponderance of poor fruit. Such terms as "soft stock," "small and inferior grades," etc., appear with monotonous regularity. Up to the present the farm orchard has had its innings. Every farmer with a couple of dozen trees has been bringing wormy, soft and bruised apples to town; the local market being quickly glutted, the grocers pack after a fashion and ship to the big centers and these soon are supplied for only cheap people want cheap apples. The peddlers are happy. In just a little while these will be cleaned up and apple prices will go to a decent level.

THE NEED OF PLAYGROUNDS FOR THE CITY CHILD

SIDNEY A. TELLER.

The first American child had the chance, right and opportunity to play. The young American Indians enjoyed unlimited playgrounds and supervised play. Physical development was an important factor in the education and training of the child. With the "civilization" of America, and the growth from rural village to cosmopolitan city, we have made great progress in all things, except proper provision for places for children to play.

Why should we have playgrounds and supervised play? Won't the streets, alleys, vacant lots and back yards do? All these things at their best are makeshifts, and lack the two greatest factors in the value of a playground, supervision and the social and civic emphasis to the play. Streets are not a safe place, neither to life or morality. Delinquency starts with degenerated street play. The "gang" is an expression of unsupervised street play, and the "gang" is known for the bad things it does. The street is bordered by saloons and other undesirable places for children to be around. The "vacant lot" is usually full of debris and filth, making it a poor place for children to play. Alleys are the places for garbage and wagons, but

WANTED

Eight or ten more buyers for five or ten acres of Cherry Orchard Land to take the balance of 1911 planting on the

CO-OPERATIVE PLAN

We guarantee 6 per cent annually on your investment for ten years. We promise at least 100 per cent in profits in ten years. We mature your orchard up to where you will have an independent income.

WHERE??

STURGEON BAY, WIS. The Sour Cherry Land of the United States.

WHY??

Write Us for a Booklet.

220 acres planted with 22,000 Sour Cherry Trees. 240 acres prepared for 24,000 trees in 1912. **Safe Proposition. No Risk. Large Profits.**

(You Get a Deed to Your Land when Paid for.)

Co-Operative Orchard Co. STURGEON BAY, WISCONSIN

Door County Lands

ARE THE BEST IN THE STATE OF WISCONSIN

For Fruit Culture. Door County Orchards Pay a Revenue of from Five Hundred to Eight Hundred Dollars per Acre Annually. For Particulars Write : : : : :

**DOOR COUNTY LAND CO.,
STURGEON BAY, WIS.**



One of our apple trees, 4th year after planted in orchard. Note the healthy, rugged and stout appearance. The natural branching habit of the limbs. That they shade the main trunk, also the ground above the root system. If it looks good to you, send for our catalogue. We are specialists in everything we grow.

HENRY LAKE SONS COMPANY, Black River Falls, Wis.

JEWELL MINNESOTA GROWN Nursery Stock

Complete assortment of Fruit and Ornamental stock in all varieties suited to northern culture. A specialty of Hardy Shade Trees, Windbreak Stock, Evergreens (Coniferous), Deciduous Shrubs, Apples and Native Plums.

THE JEWELL NURSERY CO.
LAKE CITY, MINN.

1500 Acres

Established 1868

FIRST CLASS NURSERY STOCK IN GREAT VARIETY Consisting of FRUIT, SHADE AND ORNA- MENTAL TREES

Strawberries, Raspberries, Blackberries, Currants, Gooseberries, Grape Vines, Asparagus, Rhubarb, etc.

Ornamental and Flowering Shrubs, Vines and Perennials. Roses Evergreens etc.

If you would like to see a *really good Catalogue* we would be glad to send you ours. It has more than fifty pages and describes everything in the plainest language without any extravagant or overdrawn descriptions.

The Coe, Converse & Edwards Co.
FORT ATKINSON, WISCONSIN
Wisconsin's Largest Nursery

not for children to play. The back yard is too small for the social group—and the child who plays alone develops the spoilt child who does not know how to share playthings or learn the value of being part of a "team" or "side."

The large parks are usually too far away, especially for children. Children will not go over a half mile to play. The large parks are usually full of "keep off the grass" signs and are built to admire and not to use. The large parks may do for stiff, formal play on Sundays or when the parent can take the child, but for spontaneous, wholesome play, the child wants a playground equipped with playthings, play-opportunities and a play-leader as well as other play-fellows.

Play is a serious thing in the life and development of the child. Play is the fundamental right of the child. Play is the inalienable right of "life, liberty and the pursuit of happiness" for the child. The first civic expression of the child comes on the playground. The sand pile republic precedes the public school and the junior citizen of three or four years of age learns to build a city out of sand houses, with other children, on the sand pile. The playground becomes the out-door school room, open and used after school hours and during the long school vacation. Under the guidance of a play-leader, the old "gang" becomes a "team," and the old impulse of the boy to do things is given a good and proper outlet. The degenerated street play and games take on a new aspect and we give back to childhood what the city has robbed the child of. Health and morality replace delinquency and disease, and "fair play" means ethical development.

The child of today is the citizen of tomorrow and the greatest investments we can make is in good citizenship. Land values are going up. We buy land today for factory and railroad before it rises in value. Why not plan your cities with reference to the child and see that sufficient playgrounds, the lungs and breathing spots of the city, are purchased *now* before the problems of congestion and transportation are too seri-

Send For **PANSY GUIDE AND CATALOG**
Our...
of Flower Seeds and Plants
FREE TO ANY ADDRESS
WILLIAM TOOLE & SONS
PANSY HEIGHTS, BARABOO, WIS.

FOR SALE

Fruit Farm of 40-acres five miles from city of Sturgeon Bay, one-half mile from water; thirty-two acres under cultivation, level, without stump or stone. Splendid fruit soil. Good frame house, log barn, well and windmill; 700 cherry, 800 apple set spring of 1911. Best bargain in Door county. Write

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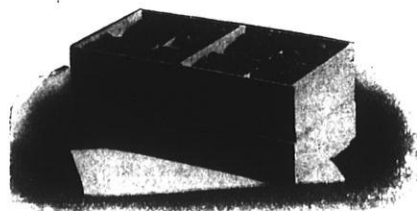
Wisconsin Grown Trees

Our Trees Live. We had an opportunity to compare 500 of our Wisconsin grown trees with a similar lot of an Eastern Nursery. At the end of the season only 52 per cent of the eastern grown stock was alive, while 95 per cent of ours lived and grew. Moral: buy home grown stock and avoid loss. Our trees are **HARDY**, and our stock is **HEALTHY**. A comparison will prove that our stock has not the willowy and watery soft growth of southern or eastern grown stock.

Every tree and shrub is packed entirely under cover, free from exposure to sun and wind.

**Great Northern Nursery
Company, Baraboo, Wis.**

Write for Catalogue and Price - List.



**"BERRY CRATES, BOXES
and a Full Line of all
OTHER FRUIT PACKAGES."**

Medford Veneer Co.
Medford, Wis.

ous? A city is judged by the children it keeps and the principal thing in those children is the development of the play instinct.

Children cannot plead for themselves or plan for themselves. We, the adult citizens of the community, men and women, demand that the child be protected in its right to play. We ask conservation in child life—the greatest natural asset this country has. We ask for the welfare of the child, not more hospitals, juvenile courts and jails, but the great factor of prevention, playgrounds. Let a little child lead us and the problems will not seem so hard. There is no man so bad that he would not make a child happy—there is no city that is progressive that is not providing playgrounds. There are over five hundred cities in the United States that have playgrounds. Thousands of children in Wisconsin ask for "fair play" from their parents. Their plea is for playgrounds now. How can you assist them?

50,000 CUTHBERT RASPBERRY PLANTS FOR SALE

These plants were grown on sandy loam, have just been inspected and found to be free from disease and in fine condition.

F. N. LANG, Bayfield, Wis.

Bayfield County Lands

Experienced authorities claim that there is no better fruit land in the United States than on
THE BAYFIELD PENINSULA

Splendid market apples are raised. Most luscious fruits and berries indigenous to Wisconsin, mature late and bring the highest market prices in this frost-proof area.

Inquire of **JOHN WALSH**, President of

Bayfield County Land Co., Washburn, Wis.

Fig. 1291



MYERS SPRAY PUMPS

Nozzles, Hose, Fittings, etc.

Fig. 1317



Fig. 702

Fig. 1199

Fig. 653



"Take off your hat to the Myers!"
BEST PUMP ON EARTH.

Fig. 640



Fig. 1410



Fig. 1358



Fig. 1229

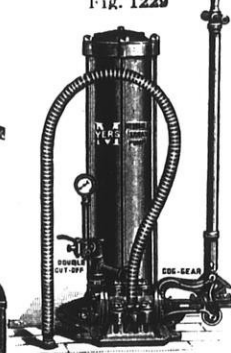


Fig. 1125



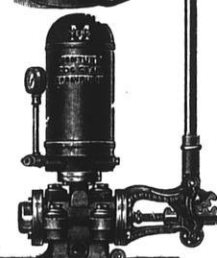
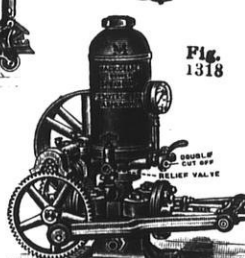
Fig. 1363



Fig. 1364



Fig. 1318



When the season arrives you want to be able to SPRAY WITHOUT ANY DELAY OR ANNOYANCE. A single day's delay may prove costly. In order to be safe at all times you must have a dependable spray pump outfit. YOU CAN ALWAYS DEPEND ON THE MYERS. The above illustrations show only a few MYERS SPRAY PUMPS made in all styles and sizes with a full line of NOZZLES AND ACCESSORIES for complete outfits with which to meet every requirement. GET READY NOW. WRITE FOR OUR SPRAY PUMP CATALOG.

F. E. MYERS & BRO.,

ASHLAND, OHIO



Volume II

Madison, Wisconsin, November 1911

Number 3

A STORY IN PICTURES

For the purpose of acquainting the people of Wisconsin with the opportunities for fruit raising at home this Society in 1910 published a pamphlet entitled "The Truth About



Wealthy Apple tree, Gays Mills Trial Orchard
Planted April 1908. One Hundred Seventy-six
apples Oct. 1911

Fruit Growing in Wisconsin." This was reprinted last September for distribution at the State Fair.

Different counties were mentioned as well suited to fruit growing and among the number Crawford county.

"Crawford has some of the best apple lands to be found anywhere in

the United States. On ridges on either side of the Kickapoo river from Wauzeka to LaFarge, west to the Mississippi and east to Richland county, are thousands of acres of fertile clay soil with air and soil drainage that produce the finest Wealthy, Duchess and McMahan in all the world. Crawford is destined to be one of the leading apple counties of the state."

It is one thing to say these things and another to prove them. Very well: Here is some proof in pictures, if any doubter wants to see the originals of these trees he should journey to Gays Mills and take a look at our Trial Orchard planted in 1908. One of the keenest pleasures the writer ever experienced came with the privilege of showing Milwaukee salesmen of Pacific Coast fruit lands through our State Fair exhibit.

"Can the West produce apples the equal of these in size, color and quality?" No answer, but instead the assertion; "our trees come into bearing earlier than yours."

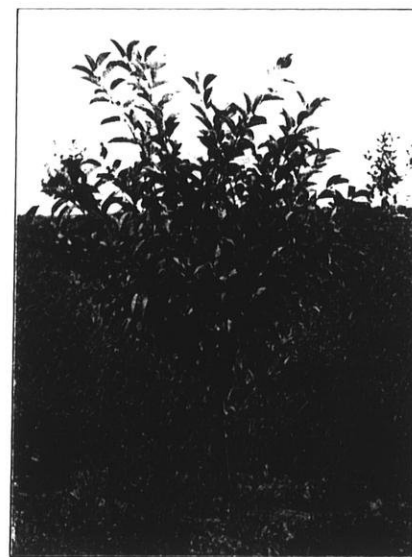
"Oh at three years we frequently get some fruit.

"Kindly step over here to the Crawford county exhibit and see these Wealthy, one tree three years planted bore two bushels like those." Silence.

Wisconsin leads in size, color, quality, productiveness and early bearing. To those who have not or cannot see the orchard we invite a

careful scrutiny of these pictures.

Remember, Crawford county is not the only place in Wisconsin where this can be done. Richland and Monroe are just as good, Chippewa is perhaps better than either in some respects and "there are others."



Cherry Tree, Gays Mills Orchard
planted spring of 1911

The State Horticultural Society is conservative. We want to promote fruit growing by every legitimate means but the localities bidding for favor must first "make good." Door has complied with the requirements and so has Bayfield so far. Crawford or southwestern Wisconsin is now in line. Keep your eyes on the Kickapoo.

FLOWERS AND FARMERS

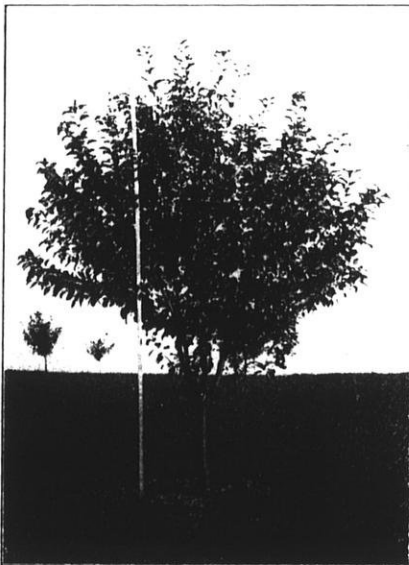
MRS. MARCIA H. HOWLETT,
OSHKOSH, WIS.

When buying a farm ninety-nine out of a hundred purchasers would select, all other things being equal, the farm that was adorned with trees, shrubs and flowers. Why? Because apart from any sentimental reason, they instinctively recognize the increased money value of the one over the other.

One has more respect for himself and his calling if his home grounds are well kept and beautiful. The Good Book says "To him that hath shall be given," and he commands more respect from others also, for well kept grounds proclaim thrift and prosperity to every passer-by, and all right minded people wish to be considered thriving and prosperous.

We need not set lessons or expensive books to teach us how to adorn our homes, the great book of nature is wide open for all to read, and it is filled with many beautiful illustrations of the artistic blending of trees, shrubs and profusion of bloom.

The Thorn Apple, Wild Crab, Wahoo, Haw, Elder and Wild Rose

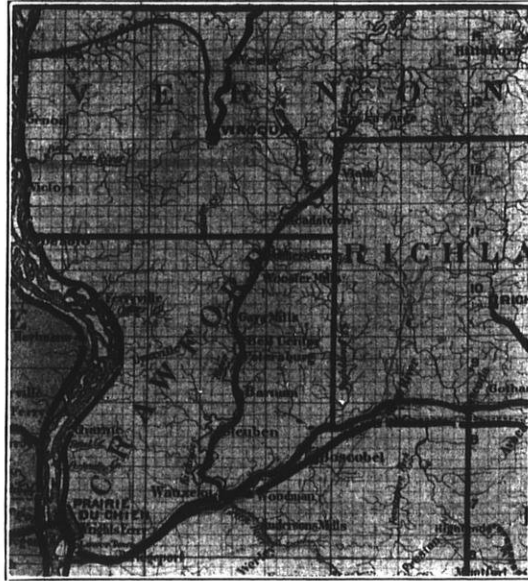


Three year Northwestern Greening
Gays Mills Trial Orchard, ten foot pole, twelve
inch caliper

are native blooming trees and shrubs that would enrich any landscape. The Sumac, Scarlet Maple and Virginia Creeper, with their gorgeous autumn coloring are as beautiful as flowers.

Our native climbers, Bitter-sweet, Wild Cucumber, Honey Suckle, Wild Grape, Wild Morning Glory and Clematis, if given a chance will cover all unsightly spots and harsh outlines, with a living, ever changing, swaying mantle of green, or twining

"Poppies in the Wheat" gives one answer to this. In this poem she tells of the "Poppies in the wheat" and to her fancy they seem like tiny men, bearing torches along the shore of the heaving billows of grain," and she adds:



their graceful vines and clinging tendrils into a leafy canopy of bud and bloom, they quickly transform a barren spot into a bower of beauty.

Hardy bulbs and Herbaceous Perennials, that will live year after year in a permanent border and furnish a succession of bloom from spring to fall, even with a little neglect, are Butter-cups, Tulips, Peony, Day Lilies, Lychnis, Columbines, Daisies, Hollyhocks, Digitalis, Larkspur, and Phlox.

Hardy shrubs that are easily cared for are Sweet Briar, Syringa, Snow Ball, Lilac, Spirea and hardy roses.

The easiest way to raise annuals for cutting is to place them in rows in the vegetable garden. Except for a little hand weeding in the row, all cultivating may be done with a horse if care is taken not to bury the tiny seedlings. The following varieties have proved good: Pansy, Pinks, Cosmos, Verbena, Poppy, Zinnia, Sweet Peas and Phlox. All of these are as easily raised as lettuce or onions.

Why then is there such a dearth of flowers around many of our farm homes? H. H. in a poem entitled

"The farmer does not know that they are there.

He walks with heavy feet,

Counting the bread and wine by Autumn's gain.

But I smile to think that years remain

Perhaps, to me, when bread be sweet
No more, and red wine warm my
blood in vain,

I shall be glad, remembering how
the fleet

Lithe poppies ran like torchmen
through the wheat."

I cannot think this is wholly true of the farmer, for Nature gives to all, in varying degrees, a love of flowers. Mayhap in our eager chase of the dollars we lose the joy and enthusiasm with which, in childhood's days we hailed the first spring blossom, or pass, unseeing, by the hedge of wild roses in bloom in our eager haste to perform the money-getting duties of the farm, and our love of flowers becomes—not lost—but dwarfed and atrophied.

I am sure it would do us all good to look at our homes with seeing eyes, as we pass along the highway. Look at it, as a stranger might, admiring

its beauties, criticizing its defects. Too often, from long familiarity we pass it by with unseeing eyes, not knowing that the Burglocks and Wild Parsnip, or other plants out of place are giving our homes an unkempt, down at the heel look, and occupying space that would better be filled with blooming shrubs and flowers.

At some time in our lives, we all cherish a desire for a home with

enthusiastic spurts, will work wonders in transforming our surroundings, and bring us each year nearer the beautiful ideal we all cherish in the innermost recesses of our hearts.

The wealth of the farm and our lives consists not in the money value of our possessions, but rather in those things that increase our pleasure and comfort and adds to our usefulness. The love for and companion-

chance of anything gaining admittance. By the 1st of the month "page proof" is ready and that is the end.

The paper is delivered by the printer on the 5th and mailed on the 6th. This is the whole story. Please write for the paper, but write early in the month.

NEW LAWS AFFECTING MEMBERS

C. L. RICHARDSON, STANLEY, WIS.

Every new law, so far as it is obeyed or is enforceable will, it is presumed, affect our members to a certain extent. Thus the taxation of incomes of single persons in excess of \$800 per annum, and incomes of man and wife in excess of \$1,200, will doubtless fall upon certain of our more wealthy members, but as the tax is \$250 for incomes of \$10,000 per year it is probable that not all our members will be oppressed thereby.

Chapter 556 revises Sec. 1453 of the R. S. 1898 to repay to county fair associations 80 per cent of the premiums paid by them on agricultural and other exhibits. The former rate was 50 per cent. This change in the law opens the way for larger premiums for apples, plums and other fruits, and may well lead to the awarding of third premiums on fruits, a matter now disregarded in too many fairs.

By Chapter 379 the display or storing of fruits, vegetables or other foods on the sidewalk is prohibited unless they are securely covered with glass, wood or metal cases, or enclosed in tight cases, boxes, bags or barrels, and raised two feet above the sidewalk. The provisions of this section do not apply to fruits or vegetables which are peeled or skinned before being used. The owner of any store violating this section shall be fined \$10 to \$50 or 60 days or both fine and imprisonment.

Chapter 583 provides for the creation of a new commission on Public Affairs, consisting of the Governor, Secretary of State, the Chairmen of the Finance Committees of Senate and Assembly, and three other members. This commission is empowered to investigate every office, officer, department, board and institution, the



Brighton Grapes, Gays Mills, September 1911, planted April 1909

beautiful surroundings, and the plans that are made in our bright-hued day-dreams are surpassingly fair. But spring time, the time when our enthusiasm reaches its height, is a busy time on the farm; for corn-planting crowds the sowing of grain, and cultivating follows closely for weeds will not wait, and our beautiful ideal never materializes, but is put off from year to year, it may be at first with a sigh for the hope deferred, until finally we cease to think of or desire it, giving our whole time and energy to the crop that yields the largest and quickest money return, ignoring and putting out of our lives, the finer things that are worth more than gold. If we cannot do just as we would like to do, all at once, let us not go to the other extreme and do nothing. Patient continuance in the work, here a little, there a little, rather than occasional

ship of flowers, refines our tastes, cultivates a love of the beautiful, and surely, though silently, uplifts our better nature.

He labors well who builds a home, and doubly well if he adorn that home with the flowers Nature so lavishly bestows upon us, making it a joy to the inmates—beautiful to the eye—fragrant with bloom—a fitting abode for—a FARMER.

SOME DATES TO REMEMBER

Communications from members and copy for advertising are frequently received too late for publication in the succeeding issue. As an aid to readers we give the following: The bulk of our "copy" is sent in by the 20th of each month and any long articles and all advertising copy should be on hand by that time. Short notes may go in as late as the 25th, after which date there is slight

conduct or operation of which involves the receipt, expenditure, or handling of any state funds or property. As our society receives a state appropriation we come within the jurisdiction of this commission. Thirty days before the convening of the next legislature, the W. S. H. S. will be required to submit an estimate of its receipts and expenditures for each fiscal year of the ensuing biennial period. The Commission may inquire into the methods of conducting our affairs, prescribe and direct the forms of accounts and blanks to be used, and cooperate with us in developing the resources of the state, and making known the possibilities of Wisconsin.

The rabbit law has been amended so that there is no closed season for rabbits in the following counties: Crawford, Grant, Iowa, Kenosha, La Fayette, Sauk, Door, Bayfield, Chippewa, Douglas, Price, Rusk, Taylor, Racine, Burnett, Polk, Barron, St. Croix, Richland, Monroe, Winnebago, Langlade, Forest, Florence, Shawano, Jackson, Clark, Sawyer, Washburn, Ashland, Buffalo, Pepin, Oconto, Adams, Marquette, Fond du Lac, Oneida, Iron, Vilas and Vernon.

Chapter 325 adds a new section to the statutes making it a misdemeanor for any person to manufacture or compound within the state, or to import or receive or sell any adulterated or misbranded Paris green, arsenate of lead, or insecticide or fungicide, and it is made the duty of the director of the agricultural experiment station and the district attorney to enforce these provisions. A peculiar provision of the law exempts the dealer from punishment if he can establish a guaranty from the vendor that the same is not adulterated or misbranded. The four terms are legally defined: Paris green must contain at least 50 per cent of arsenious oxide, not over $3\frac{1}{2}$ per cent arsenic in water soluble form, and shall not contain any substance which reduces or injuriously affects its quality or strength.

This same qualification applies to arsenate of lead, also it shall not contain over 50 per cent of water, nor less than $12\frac{1}{2}$ per cent of arsenic

oxide (As_2O_3). Insecticides and fungicides are defined in like manner, and the term "misbranded" is defined as covering "any statement, design or device regarding such article or the ingredients thereof which shall be false or misleading in any particular" such as weight, place of manufacture, efficiency, and pests or diseases against which the same is pretended to be effective. The covering of the package must state the amount of percentage of active ingredients and the total amount of inert ingredients, to be named or not at the discretion of the manufacturer.

From the standpoint of the horticulturist, perhaps the most important law of the year is the revision of weights and measures embodied in Chapter 566. The law is too long to be quoted in its entirety, so faultily-constructed and contradictory in terms as to be difficult of definition. I do not believe all of its provisions are enforceable. More attention is bestowed upon the salaries of the numerous officials created for its enforcement than upon a fair and accurate definition of standards, or a sincere effort to secure fair treatment for the purchaser while respecting the honest wishes of the members of this organization.

The dairy and food commissioner is made superintendent of weights and measures, with general supervision of all scales and measures throughout the state and power to inspect, test, correct, condemn and destroy the same. All cities of 5,000 or more inhabitants are required to appoint a city sealer, who shall test all local scales and measures at least once a year, and prosecute all violators of the law.

Some changes have been made in the weights and quantities of certain products. Thus tomatoes are to be sold by weight, unless otherwise specially agreed in writing, 56 pounds constituting a bushel, 50 pounds for a bushel of hickory nuts, 35 pounds for a bushel of cranberries, etc., while "all dry commodities not otherwise specified in this act shall be bought or sold only by standard dry measures, standard weight or numerical count except where the

parties otherwise agree in writing."

Section 1666 has been rectified to declare the custom and fact, that 2150.42 cubic inches shall constitute a *struck* bushel, but the law then goes on to provide that in measuring fruits and vegetables the half bushel or other smaller measure shall be heaped as high as may be without special effort or design. In other words, the law defines struck measure but does not define the quantity in a bushel *heap measure*, and then compels the farmer, fruit man and grocer to sell, at his peril, his fruits and vegetables by "heap measure." This section should be amended to some fair and consistent form.

The dry gallon of 282 cubic inches is abolished. The old apple barrel holding 100 dry quarts is abolished, the new provision reading:

"The standard barrel for apples or pears or other fruit, unless otherwise specifically defined, shall have an interior capacity of 7,056 cubic inches, and shall not be less than 26 inches between the heads inside; the diameter of the heads shall be $17\frac{1}{8}$ inches including the beveled edge; the outside bilge or circumference shall be not less than 64 inches, the thickness of the staves being four-tenths of an inch; provided, however, that any barrel of a different form but of an interior capacity of 7,056 cubic inches shall be a legal barrel." This barrel appears to contain about 3 bushels and 1 peck.

It is interesting to compare the figures 26 by $17\frac{1}{8}$ and 64 inches with the dimensions $25\frac{1}{4}$ by $16\frac{1}{4}$ and $58\frac{1}{2}$ inches, these latter being the dimensions of the standard cranberry barrel.

While all persons will not agree as to the wisdom of these particular dimensions, it will be generally conceded that the defining of a standard barrel is a much needed step in the right direction.

The "bushel" crate whose contents were problematical has been defined: "A bushel crate of apples, pears, plums, peaches, and other fruits not secondarily contained in quart or other boxes within such crate, shall have an interior capacity of one bushel heap measure." I respectfully

submit that this provision should be amended to have the crate contain one bushel struck measure.

"A bushel crate of cranberries or blueberries shall have an interior capacity of one bushel struck measure." This is a fair provision to both producer and consumer and does away with the former cranberry crate which was two or three quarts short measure.

The much discussed "berry-box law" reads as follows: "All sales of blackberries, blueberries, cranberries, gooseberries, raspberries, cherries, strawberries and similar berries in packages of less than one bushel shall be by the quart, pint or half pint dry measure, and all berry boxes sold, used or offered for sale within the state shall be of the interior capacity of not less than one quart, pint or half pint dry measure. Any person violating the provisions of this paragraph shall be punished by a fine of not less than five nor more than fifty dollars and by confiscation of the illegal boxes or packages and of the fruit therein contained." Provision is also made for all standard apple and cranberry barrels to be stamped with the letters "W. S. A." and "W. S. C." for apple and cranberry barrels respectively, and the manufacturer's name, and for fines for failure to so do.

"All contracts for the sale of apples, pears, cranberries, or other fruits by the barrel or crate, unless otherwise expressly stipulated, shall be construed to mean barrels or crates of the capacity herein prescribed."

The law attempts, as far as possible, to place similar restrictions upon fruit shipped into the state, by providing: "It shall be and is hereby declared unlawful for any person or persons to bring, transport, or convey into the state, or to sell, offer to sell, or otherwise dispose of for profit, any apples, pears, plums, blackberries, blueberries, cranberries, gooseberries, raspberries, strawberries, or other fruits, except the first sale within the state in the original packages, unless the crates, boxes, barrels, or packages wherein the same are contained shall be of the full interior capacity re-

quired for sale in the state to comply with all the provisions of this section as fully and completely as if the said packages had been packed, and the said fruit grown in Wisconsin. Any person violating the provisions of this paragraph shall be punished by a fine of not less than \$25 nor more than \$50 and by confiscation of the illegal packages and of the fruit therein contained."

Until January 1, 1912, nothing contained in this act shall prevent the use, sale and disposal of crates, boxes, barrels and packages not conforming to these standards.

An inspection of the law as it now stands would seem to indicate:

1. The law cannot prevent the sale of apples and other fruits in crates of one struck bushel interior measure—for there is no penalty for so doing. The triple penalty applies only to sales in barrels.

2. The law does not prevent sales of fruits in crates and barrels of less than the standard capacity, *by agreement of the parties*. Can sell by standard weight in scant bushel crates or barrels.

3. The law cannot prevent the sale *without the state* of any size of crate, box or barrel, containing fruit, nor can it apply to contracts of sale made within, for deliveries to be made without the state.

4. The only penalty for selling apples, etc., in scant barrels, is the penalty of three times the deficiency and court costs, in case action were begun.

5. Sales of strawberries, etc., must be by the quart. There is now no established custom that a full quart box shall be heaped. Section 1666 provides for the sales of fruits customarily *sold by heap measure*, while Section 1668, Subsection 10, is silent as to whether the quart shall be heaped or not. It is at least a question of doubt whether the grower can be compelled to heap up his quart box under the new law, especially as the law merely directs that the interior capacity of the box shall be one quart.

6. This law is designed to prevent the competition of scant quart crates from outside the state. It would

seem that the provisions of 1668-11 are constitutional and do not contravene the decisions of the interstate commerce decisions, in that they only apply to secondary sales within the state, and except from the law the first sale within the state in the original packages. The original package is the crate, the small box therein when sold is a secondary sale and not in the original package. This provision cannot be made to apply to apple and other fruit crates and barrels but the "W. S." sign on the barrel will be a guaranty of a standard barrel, and its absence will at least put the purchaser on his guard.

7. It would also appear legal to sell scant quart boxes and crates to customers without the state, free from any penalty therefor.

8. The quart is nowhere defined, but as it is a thirty-second part of a bushel, it would appear to contain a thirty-second part of 2150.42 cubic inches, or 67.2 plus cubic inches. Personally I believe very strongly that the change from the liquid to the dry quart in the sale of fruit was a mistake, and that the law should be amended. If it is not the answer of the horticulturist must be to increase proportionately the cost of the box or crate. A moment's calculation makes it clear that the dry and liquid quarts bear the relation of 6720, 5775 to each other. If a liquid quart case sold at \$1.00 a dry quart case should cost \$1.16½ and if the liquid quart case cost \$1.50 the dry quart case should sell for \$1.75. In other words, there must be the sharp rise of 16½ per cent next year in the price of strawberries, raspberries, etc., due to the larger box now demanded.

Asters, coxcomb, snapdragon, cosmos, nasturtium, mignonette and balsams all in a tiny garden six by ten feet. Bushels of flowers, enough for the children and all the neighbors' children. They carry them to school and to Sunday school, make garlands of them, decorate their playhouse and actually play with flowers. It cost thirty-five cents for all this. Pity the poor, starving, hungry-eyed children of the rich, who have only roses and carnations.

SPRING FLOWERING BULBS

Summer is lingering, October nearly gone and Autumn scarcely here. We meet you but once a month and space is limited else the article on Spring Flowering Bulbs would have appeared in October. There may yet be time to plant bulbs. A long period of autumn growth is unnecessary. If the bulbs can be planted and the beds heavily mulched the day before the ground freezes good results may be expected. Try it.

The spring-flowering bulbs are a joy and a blessing. Flower beds and borders that would otherwise be bare and unsightly in the spring may, if filled with tulips, be a blaze of color for weeks. These with crocus, narcissus and others of the Holland bulbs, will give an abundance of bloom before the annuals and the summer flowering plants may be safely planted. In order to have this it is necessary to plant in the fall. October and November is the time of preparation for this brilliant spring show. But the planting may be done any time before the ground freezes.

Crocus, tulips and similar bulbs are grown in Holland and sent to us in late summer or early autumn and may then be had from florists or seedsmen dry and dormant. The bulbs have in their thickened leaves a storehouse of food surrounding the perfectly formed embryo blossoms. We need only to plant them in rich well drained soil any time before the ground is frozen and cover with a mulch of heavy leaves. However, in order to meet with full success we must observe certain practical considerations.

Preparation of Soil.—The beds where summer flowers have been growing should now be cleared of rubbish, the soil deeply spaded and well pulverized. Deep tillage is essential, as the roots of bulbous plants strike straight downward, branching but little.

Drainage.—The soil must be light in texture and well-drained, as the bulbs will decay if water settles about them. If the soil is heavy clay it will be well to raise the beds a few inches to insure perfect drainage.

Manure.—It is not essential that the soil should be very rich. It is more important that it be light and porous. Use only thoroughly decayed manure. Fresh manure will cause the bulbs to decay.

Planting.—Tulips, etc., are usually planted in "designs" or masses of contrasting colors. As the bulbs of the different varieties are all much alike in appearance great care is necessary in handling to avoid mixing. After the beds are prepared for planting and the design outlined the bulbs may all be set on the surface

FORCING AND GARDEN CULTURE OF RHUBARB

By HUBERT D. WHITE

Continued from October Issue

Forcing may be begun at once or the roots kept in the dormant state for weeks as desired. If a plentiful supply of roots are at hand and the room for forcing is limited, two crops may be grown in succession. As soon as the first roots cease to bear they should be removed from the cellar and replaced by the roots for the second crop.

Plants *not too much forced* by the ordinary method may be reset in the field and used again after two or three years. The forcing process is very exhaustive and should be discontinued as soon as the plants begin to show a lack of vigor if it is desired to reset them. The growth can be stopped only by removal from the cellar or by lowering the temperature to 30 or 35 degrees. Rhubarb will grow itself to death if allowed, specially in the cellar. Either forcing exhausts completely, and plants forced in hotbeds as previously explained are rendered unfit for further use. Some growers consider it more profitable practice to force their roots to the limit and then throw them away, claiming that they can save time by growing a new supply of forcing roots each year than endeavoring to revive old forced roots.

Roots for forcing should be from beds at least 3 or 4 years old as the larger and more vigorous the roots the better the results.

The temperature for forcing should be about 55 or 60 degrees and where necessary, in the cellar or attic, this may be maintained at a very little cost by the use of lanterns or lamps. The temperature may vary from 45 degrees to 70 or even 80 degrees without serious injury, so that no harm will be done if the fires should go out even in the coldest weather, providing frost does not get in. Of course the lower the temperature the slower the growth, with a darker color and perhaps somewhat heavier yield; and the higher temperatures will give quicker returns and lighter color in proportion.

Daylight, even in small amounts, is best excluded. Rhubarb is one of the things which are improved in color and appearance by being forced in the dark. If fully exposed to light it will have full color, but the quality is better and the color quite sufficient if forced in the dark. Even artificial light will cause the leaves on some of the plants nearby to open to some extent and begin to grow green which is undesirable in forcing practice. Smoking the chimneys to subdue the light will entirely obviate this difficulty.

If the plants are well loaded with wet or moist soil when planted in they will need very little additional moisture. Ordinarily the use of tepid water is advisable to some extent, especially as the crop is maturing.

The time of maturing of a forced rhubarb crop will depend on the temperature maintained and also on the variety. The

of the bed, placing all of one kind before commencing with another.

Make the holes for planting with the fingers. Cover lightly and after planting compact firmly the whole surface of the bed by walking over it. Do not push the bulbs into the soil without first making holes, for this leaves them on a bed of hard soil and the straight downward growing roots will tend to push the bulbs to the surface.

Winter Protection.—The bulbs here recommended for planting are all hardy in the sense of power to withstand cold, but all require a winter mulch to prevent alternate freezing and thawing. This is best put on after the ground is frozen and may consist of 3 to 6 inches of strawy manure. Field mice are very fond of bulbs and are apt to harbor in the mulching if it is put on before heavy frosts.

Spring Treatment.—Uncover early in the spring as soon as their first buds appear. Do not fear late spring frosts, as tulips, etc., suffer but little or not at all from freezing if the growth is made in the open. There is greater danger of injury by frost to the spindling growth resulting from delayed removal of the mulch.

Summer Treatment.—After flowering the tops turn yellow and die and the bulbs may be allowed to remain in the ground for a second and even a third year. Annuals and bedding plants may be planted without disturbing the bulbs. In case it is desired to remove them immediately after flowering dig carefully and "heel-in" or transplant closely in rows in the garden and leave until the tops die; then lift the bulbs, dry a day or two in the sun and store in a dry place until fall.

KINDS TO PLANT

Tulips.—There are several classes (trade lists) of tulips, but the single early sorts are most satisfactory for outdoor culture. The following kinds are of like period of flowering and of the same height, two important features in large beds:

Red—Crimson King, Artus, Belle Alliance.

Yellow—Chrysolora, Yellow Prince.

White—Pottebakker, Cottage Maid, La Reine.

Variegated—Keiserskroon.

The Duc Van Thol class is somewhat earlier than the above, but with smaller flowers. These may be had in scarlet, rose, yellow, white and crimson.

The Parrot tulips have curiously shaped blossoms with fringed petals. These are odd but not adapted to massing.

first picking will mature in three to eight weeks and the season will continue for three or four weeks or even longer, depending on the vigor of the roots and the degree of heat used. Usually 12 to 14 inches is a good height for picking, but experience will enable one to best judge the proper time.

The two most commonly favored varieties, both for forcing and for out door culture, are Myatt's Linneaus: an early variety having deep green stalks and attaining large size; and Myatt's Victoria: a later maturing sort, with red stalks, very thick and large.

Summarizing, let me emphasize the following points: First—Don't be without some rhubarb plants in your garden. Besides being a profitable market-garden crop, it is a convenient luxury easy to maintain.

Although a very hardy plant do not neglect it. Cultivate and fertilize to the limit and you will be repaid in the vigor of the roots and the quality of the product. The large fleshy stems desired for cooking purposes are produced in part by the great store of plant food held in reserve by the many big roots. Everything should be done to increase this supply of plant food. Tillage and fertilizing, then, are fundamentals. Your plants will last you 20 years under field culture if given a good start, and if the roots are separated occasionally.

If you have never tried Winter forcing, do so! Almost any nook or corner can readily be fitted up to protect the plants from light and cold.

Choose only thrifty roots and be sure they are thoroughly frozen out. In packing for forcing crowd them close together in boxes or on the floor itself. A little soil between and under the roots is all that is necessary. Keep out the light; remember that no method of culture, either outdoor or forced where light is used, has ever produced an article equal to the dark-forced.

In gathering the crop be careful not to break the stems or injure the crowns. Being a very hardy plant does not mean it will stand rough treatment.

If you will include rhubarb in your garden list what at first will be regarded as a luxury in time will become a necessity. A large number of home gardeners are without it on their premises simply because they have never given it a fair trial.



Some Kickapoo Fruits at the State Fair, 1911

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Remit to Secretary W. S. H. S.
Madison, Wis.

ANNUAL CONVENTION JANUARY 9, 10 and 11

We ought to have a big display of
apples.

Save the very best specimens, wrap
in paper and pack away in a cool
cellar. The premiums are liberal
and always paid in full.

This paper belongs to the members
of the State Horticultural Society.
Space is held every month for com-
munications from members. Who
will be first next month?

Extra copies of this paper always
on hand for members who want to
hand them out.

Read the advertisements. You
may learn something to your advan-
tage.

The big Wolf River at Milwaukee
was grown by J. T. Wood of Rich-
land county.

Please mention this paper when
writing to advertisers. It helps us
more than you can realize.

Native plums from our Poplar
orchard sold in Superior for two dol-
lars a bushel wholesale.

We have not found Geo. S. Hinkley.
Mr. Hinkley paid fifty cents for mem-
bership at Milwaukee and we failed to
get his address.

Just now we are very busy in Wis-
consin planting orchards, getting
ready to feed the fifty million of
apple and cherry eaters at our doors.

When we have a little leisure and
some apples to store we will take
time off to smash the unholy alliance
that now exists between the commis-
sion men and the cold storage houses.

Fall delivery of nursery stock is
the proper thing but the trees must
be properly handled. In this connec-
tion see April number of WISCONSIN
HORTICULTURE for directions.

Bayfield growers are not slow. Less
than a year ago they organized a co-
operative marketing association and
at the close of the season had a com-
fortable surplus in the bank. They
have now purchased a lot and will
put up a concrete building 30x60
feet, two stories and basement.

CREDIT LIST FOR OCTOBER

We are drawing steadily nearer to
the two thousand mark every day.
Let's make it 2,000 by January 1,
1912.

Two hundred members, one new
member each will do the trick. Here
is our roll for October:

H. Albrecht, 2; E. W. Longfellow,
1; Geo. Schimmelpfenning, 5; H. M.
Chase, 1; H. P. Lochemes, 2; J. A.
Hayes, 1; J. W. Roe, 1; F. C. Meyer,
1; A. S. Kriebel, 1; H. C. Black, 1;
Wm. Finger, 1; G. P. Bingham, 1;
J. H. Sykes, 6; Robt. S. Kerr, 1;
A. Lohberger, 2; H. F. Woerfel, 1;
E. P. Giese, 1; J. C. Roese, 1; J. T.
Russell, 1.

PREMIUM LIST

To aid members in selecting fruit
for exhibit next January the follow-
ing abbreviated premium list is given.
The full list will be printed in the
December issue.

For best collection of apples not
less than ten varieties, \$10.00, \$5.00,
\$3.00, \$2.00.

Best 5 plates commercial varieties,
\$5.00, \$3.00, \$2.00.

Single plate, three premiums, \$1.00,
75c., 50c., on each of the following
kinds:

Avista, Baldwin, Ben Davis, Dud-
ley, Eureka, Fall Orange, Fameuse,
Gano, Gem, Gideon, Golden Russet,
King, Malinda, Mann, McIntosh,
McMahan, Milwaukee, Newell, North-
ern Spy, Northwestern Greening,
Patten, Pewaukee, Plumb Cider, Seek-
no-Further, Scott Winter, Fall Spit-
zenberg, Tolman, Twenty Ounce, Ut-
ter, Wagner, Walbridge, Wealthy,
Windsor, Wolf River, York Imperial.

For pecks of Dudley, Fameuse,
Gem, Golden Russet, McIntosh, Mc-
Mahan, Northwestern Greening, Tol-
man, Wealthy, Windsor and Wolf
River three premiums on each, \$2.00,
\$1.00, 75c. Let us exhibit.

CARRYING NURSERY STOCK OVER WINTER

We have a letter full of kind words
from Mr. Wm. H. Stark of Stark
Bros. Nursery Company. Some of it,
about fall delivery, we print here-
with:

"Your plan of favoring fall de-
livery for spring planting is a good
one but your people should not force
early shipment in the fall. Would
rather lose an order than endeavor to
fill it from stock that has not been
allowed to mature.

"If trees are to be kept over winter
and there is no good cellar for stor-

age, heeling in is all right. However, trees should be buried to the very tips. Some people have the idea that in carrying trees over in this way, that they should only be covered over at the roots and allow nature to select the hardy, doing away with the weaklings. They forget that trees have been deprived of a large part of their root system and until it is established in the soil it does not have a normal resistance."

GOOD NEWS

We are just naturally tickled to death, delighted you know, overcome with joy.

All on account of a piece of news. We had it at first hand and can vouch for it.

The Sturgeon Bay Advocate was the first to print and we therefore quote: "On Saturday last a deal was closed with Profs. Jas. G. Moore and L. R. Jones of the state university at Madison for the purchase of the John Ellison farm of 340 acres in the town of Liberty Grove. These gentlemen will devote the large tract to the raising of fruit."

To be exact only a small part of the farm will be planted next year. This beautiful tract includes all of Ellison Bay with over a mile of shore line, docks, residence, etc. In scenic beauty it is second only to Peninsula Park twenty miles south. However, the scenery is a secondary considera-

tion, the confidence shown in Wisconsin by our friends on the Hill is the main thing.

TO THE AMATEUR

Cover the strawberry bed this month. Any time after a hard freeze spread clean swamp grass, or marsh hay as it is called in Wisconsin, over the whole bed, covering lightly both plants and alleys.

The next best covering is clean straw. Cornstalks, autumn leaves, coarse manure, sawdust, planer shavings, etc., may be used but guard as far as possible against weed seed. Also remember that a light covering is sufficient, the idea being to protect from heat rather than cold.

The hardy garden roses including Persian Yellow and Austrian Yellow, Madame Plantier, Rugosa, etc., need no winter protection but about everything else in the line of roses needs an overcoat of some kind even in the Southern part of the state.

Carpet, rugs or matting tied around the tops serve only as a partial protection and are often useless on account of wind. If the stems are exposed and injured near the ground protection to the tops is of but little value.

We have in mind a splendid Crim-son Rambler that was bent to the ground and very carefully wrapped and packed away for winter except for a space of a foot or more at the

base; injurious amputation was necessary the following spring.

As in the care of strawberries the covering is to protect from sun and wind, unseasonable winter weather quite as much as from extreme cold.

Hybrid perpetuals and hybrid teas need thorough protection. It is a waste of time and energy to attempt to winter tea roses out-doors in Wisconsin.

WAY UP AT ASHLAND

Up here at Ashland we have had a very wet season since about mid-summer. Have just finished harvesting carrots (Oct. 20) and they are fine.

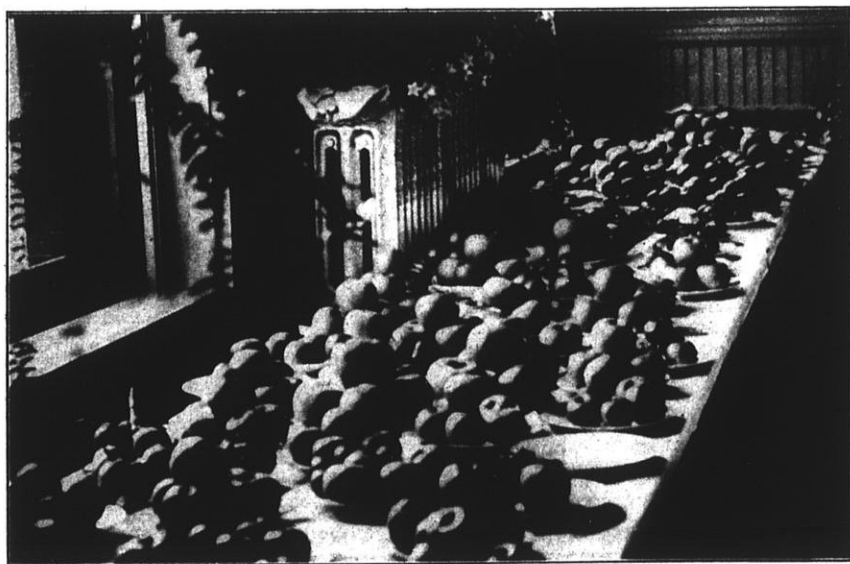
Potato crop is good where land is well drained. Root crops generally, are good. Cabbage is big. Saw load of as fine Holland cabbage on the street this week as I ever saw anywhere. There should be a fine strawberry crop next season if full stand of plants is an indication. We have just finished a peck of apples which proved to be very fine Whitney. They were very highly colored and in prime condition. The grocery man sold them for Snow.

Just got in our third cutting of alfalfa (Oct. 19), rather late but it has been too rainy for a very good job of haymaking. No frost to speak of lately. Weather prediction warmer for the 22nd. Rained nearly every day for over a week.

IRVING C. SMITH.

A CORRECTION

Allow me to correct the statement made by Mr. E. E. Dunning in the August number of WISCONSIN HORTICULTURE, regarding the possibilities of fruit culture in Milwaukee county. He says: "I do not know today any tree fruit orchards in Milwaukee county that have been planted to any extent and given any reasonable attention" etc. My orchard on the "Waldhof" fruit farm is now eighteen years old, situated in town of Milwaukee north of the city of Milwaukee. I have a little over four acres in apples. A half an acre pears sixteen years old (Clapps, Flemish and Idaho) we rooted up some three years ago on account of fire-blight which happened to spread to the apple or-



One of the Apple Exhibits at Oshkosh, August 16-17

chards. The varieties of apples we grow are N. W. Greenings, Wealthy, McMahan, Golden Russetts, Alexander, Windsor and Garfield (the latter will come to the front as a good winter apple). I bought the Garfields from the originator some eighteen years ago. We practice clean culture from May to July, followed by a cover crop (vetch, sometimes oats). We thin all apples four to six inches apart. In former years we sprayed with Bordeaux, this year we used lime and sulphur one to thirty (one to forty will probably be better in the future, as we notice some burning of the skin of the apples on Greenings and Alexanders). This year is the first time that we notice a *second brood* of the codling moth in our locality and from now we resolved to spray *four* times a season. So far we have sprayed the first time before buds open, the second time after blossoms fall and about fourteen days later a third time. The second brood of codling moth will change the situation. More sprayings are now in order.

I find that the rough part of the apple skin, where lime and sulphur spray has done the burning, there the second brood of codling moth enters the apple. After burning the skin of the apple undergoes a healing process, the old skin peels off and a new skin is formed. It remains to be seen how the apples with this new but rough skin will behave in ordinary cellar storage. As we all know, the Bordeaux sprayed apples, when they have skin injuries by burning, do not keep as good as sound fruit. But it is my belief that we can avoid the burning when we spray with lime-sulphur by proper dilution of the solution. I will not use the Bordeaux mixture any longer. For me lime and sulphur has come to stay. Our McMahan apples have taken on a beautiful color as never before seen and the N. W. Greenings commence to color (September 2) as we never saw before.

I will make an exhibit of our fruit in the tent of our State Horticultural Society. There you can see for yourself what lime and sulphur spray will do in changing the color of fruit.

I forgot to mention that we use

the powdered form of arsenate of lead, two pounds to fifty gallons of spray material. It is the strongest and best of all the arsenics manufactured.

I have some thirty-five young Wagner apple trees, four to six years old. They bring their *second* crop, and about twenty McIntosh red of the same age. Some of these trees have up to twenty apples. Further, our Grimes Golden (seven years), a fine tree in form and foliage, has its first crop of apples about three-quarters of a bushel. Our young Hubbardstons have some sample apples. Our trial tree of York Imperial, a fine well shaped tree (seven years old) has set no fruit so far, but the grafts I made into Alexander some six years ago (now strong branches) have their *third* crop, an immense load, and the fruit of York Imperial is as good in looks and quality as is grown in our section.

Some six years ago I grafted some scions of McIntosh Red into MacMahan White; the branches are laden with beautiful fruit (second crop). Our Jonathan apple trees (three trial trees, now eight years) have their first crop of fruit and it remains to be seen whether the fruit will be as fine as same variety from Missouri. One Gravenstein apple tree from Rochester, New York (now six years) has set a good number of fruit spurs for the next year's crop. Another surprise for me and tree fruit lovers in our section. It is a fine upright grower, a beautiful tree to look at.

I hope to demonstrate for the *southern Lake Shore Region*, that we can grow with a profit York Imperial and Grimes Golden, Wagner and McIntosh. I know that we can.

I am also a member of the American Pomological Society, and my name is on the mailing list of many of the Experimental Stations where fruit growing leads. As a horticultural writer and contributor to leading German horticultural papers I am known in the Fatherland for more than twenty years, and in our section, that is north of the city of Milwaukee, I claim to be the pioneer in fruit culture. For

JEWELL MINNESOTA GROWN Nursery Stock

Complete assortment of Fruit and Ornamental stock in all varieties suited to northern culture. A specialty of Hardy Shade Trees, Windbreak Stock, Evergreens (Coniferous), Deciduous Shrubs, Apples and Native Plums.

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Wisconsin's Largest Nursery

our fruit, I am proud to say, I have built up a reputation. We have a fancy family trade and to many of my old customers I can sell the fruit right over the telephone. Our prices as shown by my book are \$1.50 to \$1.75 for Greenings, McMahan and Wealthy for A No. 1 fruit.

W. A. RICHTER.

TREE FRUITS ON SANDY LOAM SOILS

B. M. VAUGHAN, GRAND RAPIDS.

The apple and plum season are now practically over and a report from a sandy-loam orchard may not be without interest to readers of HORTICULTURE.

When we planted our apple orchard, about sixteen years ago, we were told—even by nursery men—that we would fail. Well, we did *fail* to grow many varieties but we did grow and are successfully growing several varieties of apples. From less than eighty trees we have just harvested over two hundred and fifty bushels of apples, in spite of the heavy freeze of May 5, which came just as the blossom buds were opening. Many of our bearing trees are young. We find well adapted to sandy loam, the Whitney No. 20, Northwestern Greening, McMahan's White, Sweet Russet, McIntosh, Sweet Brier crab and Martha crab. All of these bear well and grow well.

We have not been able to grow any plums on our sandy lands, except Americanas, unless you class the Miner in some other group. This year we have had a magnificent crop of Early DeSoto, Rollingstone, Cheney, Forest Garden, City, Comfort, Stoddard and Surprise plums.

Wolf, Knudtson's peach, Kathrin and Miner did not yield so well,—probably because the blossoms were more injured by the May 5 frost. One Wolf tree that was protected produced an excellent crop.

We sold no apples for less than one dollar per bushel and no plums for less than two dollars per bushel, while part of our plums brought three dollars and twenty cents a bushel. We found a ready sale for both apples and plums. In fact we have never been able to fully supply the local demand for well grown

Americanas plums. They sell readily beside the "imported" Europeans at prices twenty-five to fifty per cent above the prices charged for the Europeans.

UP SPARTA WAY

Some people hold to the opinion that Sparta and all of Monroe county is only sand, strawberries and tunnels. It is true the county has plenty of all these but there is something more to Monroe county; for one thing some mighty fine apple land on the clay hills. Editor Wells of the Monroe County Democrat who attended the Field Meet at the Muhlenhamp farm has the faith that endures. He believes in his own county and people.

We give herewith some of his opinions and regret that we cannot publish the editorial in full:

"Today orchard lands in Oregon, 3,000 miles from the best fruit markets, are selling at \$2,000 per acre, and we regret that much Wisconsin money has been invested there which could have been more profitably employed in developing the neglected opportunities presented for apple culture in Wisconsin. If orchard lands in Oregon, under their adverse market conditions, are worth \$2,000 per acre, we ask what are the possibilities under the more favorable conditions existing in Wisconsin? Within 24-hours shipping distance of Monroe county are located the great market cities which supply 39,000,000 of the most prosperous people on which God's sunlight shines. Our markets, the best in the world, are at our doors. The money paid for freight alone on the Oregon apples would give the Monroe county grower a good price for his entire apple crop. Have you ever thought of that?

"The Democrat lays no claim to possessing knowledge which qualifies it to advise the intelligent and progressive farmers of Monroe county regarding the most profitable products, but we feel that a county which has made the strides that Monroe county has in dairying and in small fruit culture has a class of farmers who can tackle and carry to success any agricultural problem where success is possible. After listening to the in-

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We offer a complete line of Fruit,
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Grape Vines, Asparagus
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structive talk and inspecting the magnificent orchard that we did yesterday we have no doubt as to the practicability of apple culture in this county. We only regret that every man in Monroe county interested in agricultural pursuits could not have heard and seen what the Democrat representative did yesterday.

"Monroe county is capable of supporting more than double the population it now possesses and supporting them better than we live today. The farm of the future, we believe, instead of being a 160 or 200-acre tract will consist of not more than 20 to 40 acres, with 80 acres considered a large farm. Intensified farming will bring about this change, and with the new condition will come double and treble the present land values. It appears to us that the first and one of the important steps to take in order to bring about this desirable condition, is for those who have lands suitable for apple growing to commence investigating the question; make a study of it, start an orchard and give it attention. Make the same efforts to care for it in a manner to bring the best results that the Monroe county farmer has been making for 25 years to improve their dairy herds, and which has resulted in making Monroe one of the best dairy counties of the best state in the union. Ten years of such intelligent attention to the orchard we believe would bring surprising results and convince all that at last the Monroe county farmers had realized the golden possibilities in an industry which had been neglected for fifty years. We believe any farmer, properly located, who will make a study of the question of apple growing will make a success of an orchard, but if he does not intend to apply intelligent methods to the work he had better let the other fellow raise the apples."

For water culture try Paper White Narcissus. Set half a dozen bulbs in a shallow dish with some pebbles for support. No need to put them in the dark. Treat exactly the same as Chinese Lily. For Christmas bloom start now.

BUY MONTANA ORCHARD LANDS AND KEEP COOL.

The newspapers early in October reported two feet of snow in Montana. The following clipping gives an idea of prevailing temperatures there.

Dillon is two hundred miles south of Hamilton, Montana, which is the heart of Bitter Root valley.

Dillon, Mont., Oct. 29.—Unusually cold weather for this season of the year is reported from Big Hole basin,

in the southwestern part of the state. Thermometers at Wisdom, Mont., registered 10 degrees below zero on Saturday according to reports received here on Sunday.

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Grow and handle all kinds of nursery stock. We employ no agents but sell direct. If in the market you can save money by buying of us. Get our prices.

WISCONSIN NURSERIES,

Union Grove, Wis. W. S. Moyle, Prop.



BUILT TO LIVE,

Away up north or away down south, or any point between. It has the health and strength to carry all the apples nature can pile onto it. The hole in which it was planted was not "shot with Dynamite". It was not "leaned to the sun" nor, "to the wind". It never wore a "tree protector" because it never needed any. If you are in the market for fruit trees and this one looks good to you, send for our catalogue. We are specialists in everything we grow. Henry Lake Sons Co., Black River Falls, Wisconsin

WANTED

Eight or ten more buyers for five or ten acres of Cherry Orchard Land to take the balance of 1911 planting on the

CO-OPERATIVE PLAN

We guarantee 6 per cent annually on your investment for ten years. We promise at least 100 per cent in profits in ten years. We mature your orchard up to where you will have an independent income.

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(You Get a Deed to Your Land when Paid for.)

Co-Operative Orchard Co. STURGEON BAY, WISCONSIN

Questions and Answers

Q. Should fruit trees (particularly apple) be pruned after the fourth year and if so to what extent?

A. Apple trees need more or less pruning every year no matter how old they may be. In the case of trees over four years old but little pruning will be required if careful attention has been given up to that time in shaping the trees. There will be some branches in the center of the tree that need to be removed and not infrequently sap sprouts appear which should also be cut out.

Q. What is meant by "Summer" pruning?

A. Pinching growing shoots to prevent further growth in length, the removal of branches, in fact any pruning if done during the growing season is summer pruning. Pruning during the growing season checks growth and must be very carefully done. The amateur should proceed very carefully.

Q. What time of the year should grapes be pruned?

A. October or November. Pruning should be done sufficiently early so that the canes may be laid down and covered before the ground freezes.

Q. When should Arbor Vitae be pruned after planting, at what time of the year?

A. June.

Q. When can Arbor Vitae be planted to best advantage and should it be pruned at planting time?

A. Evergreens may be planted quite as early in the season as deciduous trees and to quite as good advantage. Fortunately we may delay the planting much later in the case of fruit trees and with hopes of success. If attention has been given to securing a good root system but little pruning will be necessary at the time of planting.

Q. What are the different ways and which is the best way to propa-

gate the high bush cranberry on a large scale? How should the seeds be gathered, stored and planted?

A. There are several methods of propagating high bush cranberry. One of the easiest and most rapid is by the use of seed. It may also be propagated by hard wood cuttings made much the same as cuttings for currant propagation. It may also be propagated by green wood cuttings taken during August and rooted under glass. Where seeds are used they should be gathered in the fall when mature, and stratified. This is done by alternate layers of sand and seed in a box of convenient size. They may be left here over winter and planted in drills the following spring, or kept stratified until the second season. The seeds usually lie dormant the first year.

PROF. J. G. MOORE.

Q. Which dogwood is it that has the large white flowers and is used for ornamental planting? As its peculiar habit of growth is one of its charms, must they be transplanted without pruning? How is it propagated?

A. It is impossible from the description given to identify the particular species of cornus here referred to. A specimen of the plant would be necessary in order to identify this as there are a number of species of cornus which are used for ornamental planting and which have white flowers.

J. G. M.

Q. How are Winterberry holly, sheep berry and June berry propagated?

A. 1. Winterberry holly is *Ilex verticillata*. This shrub is usually best propagated from berries which lie dormant the first season. Stratifying, the same as recommended for high bush cranberry, should be followed. 2. The sheep berry, *Viburnum lentago*, belongs to the same group of plants as the high bush cranberry and is similarly propagated. 3. The June berry, *Amelanchier* sp? may be propagated from the seed which is handled the same as the seed of the high bush cranberry, except it should be planted the

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Wisconsin Grown Trees

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Every tree and shrub is packed entirely under cover, free from exposure to sun and wind.

Great Northern Nursery Company, Baraboo, Wis.

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**H. M. SIMPSON & SONS
Vincennes, Indiana.**

season following harvesting, or it may be sown the same season produced, or may be propagated from the suckers which arise around the roots. It may also be grafted on Mountain ash.

Q. What is the sheep bur and how propagated?

A. There is no such plant as the sheep bur listed in horticultural books. What is undoubtedly meant is the sheep berry.

Q. May veneer tree protectors be left on permanently without injury to the trees?

A. Veneer tree protectors can undoubtedly be left on trees a number of years without serious injury. However, we have found it desirable to remove the veneer at least every other season so as to clean out the space between the trunk of the trees and the protector as it is a hiding place for all kinds of insect pests.

Q. How would you propagate Tartarian honeysuckle, Syringa, Lilac, Snowball, high bush cranberry?

A. Tartarian honeysuckle may be propagated either by hard wood cuttings or by layerage. Hard wood cuttings are handled the same as currant cuttings. Cuttings are preferably made in the spring.

Syringa or Philadelphus, may also be propagated by dormant wood cuttings. It is also frequently propagated by green wood cuttings made in late summer and rooted under glass.

Lilac is propagated by green and mature wood cuttings, also by root cuttings and by suckers.

Snowball and high bush cranberry are both Viburnum opulus. The Snowball being a sterile form cannot be propagated by seeds. Other than this it may be propagated the same as the high bush cranberry.

J. G. M.

Q. Is it a good plan to grow raspberries between apple trees the first four, or five years? If so should more than one row be planted?

A. The best, most successful orchardists are agreed that only annual crops should be planted in



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RELIABLE
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It discusses the matter thoroughly. It gives valuable spraying formulas and tells how and when to use them.

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We Make both Hand and Power Pumps for Every Service

the young orchard and of these only the ones that require thorough cultivation.

NO BUGS IN MONTANA

Dear Mr. Cranefield:

As promised, I am sending you a verbatim copy of a portion of the Eighth Annual Report of the State Entomologist of Montana—Montana Agricultural College and Experiment Station Bulletin Number 82.

PROF. J. G. SANDERS.

MONTANA NOT FREE FROM PESTS AS OFTEN REPORTED.

"There is a widespread impression in Montana that, while other parts of the country are seriously affected with pests, our fair land is nearly or quite free. We have shown, in earlier reports and bulletins, that there is already a large proportion of the pests and diseases that could reasonably be expected to thrive in our climate and that, in number and power of doing injury, there is really little difference between the pests of our state and those of other states.

"This erroneous idea may be attributed to two things, namely, the false impression given out by interested property owners, and a general lack of knowledge of the facts of the case. We have been repeatedly called upon to give information to persons who were thinking of buying property in Montana and had been led to believe that climatic and other conditions were such that, while fruits reach a high state of perfection, their pests are unable to live here.

"It is not the aim of the State Entomologist to interfere with the development of our agricultural industries by needlessly advertising the pests that are to be found here or that are expected to appear, but it is our purpose to discover the facts and make them known through the regular publicity channels of the Montana Agricultural College."

PROF. R. A. COOLEY.

Entomologist.

Montana.

Please send me a copy of your bulletin No. 18, containing the Helpful Fruit Growing Hints. Also: Could the soil be analyzed to tell whether it is fit for growing small

Bayfield County Lands

Experienced authorities claim that there is no better fruit land in the United States than on

THE BAYFIELD PENINSULA

Splendid market apples are raised. Most luscious fruits and berries indigenous to Wisconsin, mature late and bring the highest market prices in this frost-proof area.

Inquire of JOHN WALSH, President of

Bayfield County Land Co., Washburn, Wis.

Fig. 1291



MYERS SPRAY PUMPS

Nozzles, Hose, Fittings, etc.

Fig. 1317



Fig. 653



Fig. 640



Fig. 1410



Fig. 1199



Fig. 702



Fig. 1229

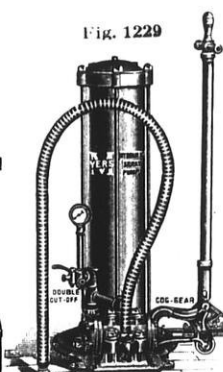


Fig. 1125

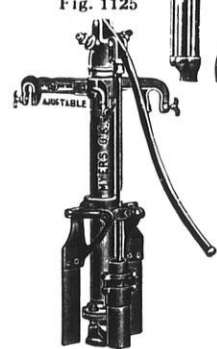


Fig. 1358



Fig. 1363



Fig. 1364

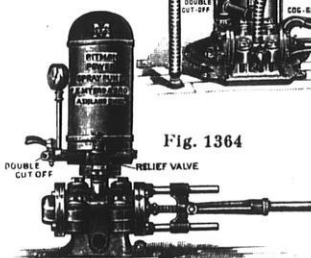
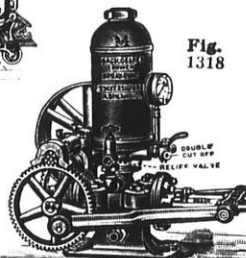


Fig. 1318



When the season arrives you want to be able to SPRAY WITHOUT ANY DELAY OR ANNOYANCE. A single day's delay may prove costly. In order to be safe at all times you must have a dependable spray pump outfit. YOU CAN ALWAYS DEPEND ON THE MYERS. The above illustrations show only a few MYERS SPRAY PUMPS made in all styles and sizes with a full line of NOZZLES AND ACCESSORIES for complete outfits with which to meet every requirement. GET READY NOW. WRITE FOR OUR SPRAY PUMP CATALOG.

F. E. MYERS & BRO.,

ASHLAND, OHIO



SPRAY THOROUGHLY

Thorough spraying is a crop insurance of the strongest kind, but you cannot spray thoroughly unless you use

GOULDS RELIABLE SPRAYERS

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Every Fruit Grower should send for our Booklet—
"How to Spray—When to Spray—What Sprayers to Use"
 It goes into the subject of sprayers and spraying mixtures very thoroughly. We'll be glad to mail it to you upon request.
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SEND FOR LIST

J. E. MATHEWSON
 Sheboygan, Wisconsin

fruit such as raspberries and strawberries, by sending a small package of the same? If so, please tell me where to send it. And, Could you tell me if it is a good plan to bend the tops of the spring setting of raspberries down this fall, the variety being Cuthberts; and is it best to cut the tops off to make them yield heavier? and what time of the year should this be done, and how should they be cultivated, shallow or deep? And is it best in setting out raspberries to make the land rich with manure, or is it best not to use any manure?

F. H.

Answer.—Bulletin No. 18 no longer available.

Soil question referred to Prof. Whitson of the Agr. College. Anticipating his reply will say that a soil analysis is of very little practical value, at best tells only one of the things that must be known.

There is no good reason why the tops of Cuthbert raspberries should be bent down this fall unless for winter protection.

Blackcap raspberries are propagated by covering the tips of the shoots with soil in midsummer. It is too late for that now.

The best growers cut back fruiting canes in spring. One-third or less is sufficient. This is done after growth starts.

Culture topics may better be taken up next April.

Winter protection of bush fruits discussed elsewhere in this issue.

The Prize Orchard of Wisconsin

A Richland County orchard took \$211 dollars in premiums at the State Fair and the orchard is a pronounced financial success. It now happens that the owner wants to retire and the property may be purchased at a low price. The property will pay very good dividends now and will increase yearly. Want others to join me in buying this and other paying orchards. This will stand investigation and we invite it. A quick reply is desired, otherwise the matter may be closed.

G. H. TOWNSEND,
 MADISON, WIS.

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THE HAWKS NURSERY COMPANY
 Wauwatosa, Wisconsin



Volume II

Madison, Wisconsin, December, 1911

Number 4

FACTS ABOUT MONROE COUNTY

We like to tell the truth,—about fruit growing in Wisconsin.

The Pacific Coast states have sent us big stories and we have been asked to believe them,—some of the more credulous did actually swallow everything and sent good money to Oregon, Washington, and even to the Bitter Root Valley to pay for desert land

never be satisfied with an investment at home. It must always be somewhere else, just at the foot of the rainbow. Anyway we don't want speculators in the fruit business in Wisconsin, we want men like J. W. Leverich of Sparta.

We are pleased to give here another of these plain stories of success such as we have printed in earlier issues.

est acreage of small fruits in the state, his different plantations comprising thirty-four acres; ten acres of blackberries, all Eldorado; fourteen of strawberries; eight of black raspberries and four of reds.

However that is quite another story which we may tell later, the present discourse concerns the orchard. We cannot improve on the following ac-



Six Year Old Orchard of J. W. Leverich, Sparta

on the mountain tops, water rights belonging to some one else, enormous salaries to "managers" and the privilege of letting promoters speculate with their money.

In exploiting Wisconsin as a fruit state we give only bare facts. We can scarcely hope that the recital of these facts will stop the western flow of Wisconsin money for we have always with us, not only the poor but the wild-eyed speculator who will

It came about in this way:

The Editor of the Monroe County Democrat attended our Field Day meeting at the Muehlenkamp farm and there learned something about apple raising in Monroe county.

With true newspaper instinct Editor Wells, following the clue, soon landed at the Leverich fruit farm which is about 3 miles north of Sparta.

Mr. Leverich has probably the larg-

count as printed in the Monroe Co. Democrat of Aug. 31st:

"After a trip of a half mile across fields, through berry patches and over hills our eyes rested on a scene of beauty, being five acres of fruit laden trees and vines, where in the spring of 1904 stood nothing but the stately oaks and the underbrush which had clad these hills from the beginning of time. Mr. Leverich explained to us that he selected this particular tract

ANNUAL CONVENTION

of ground for his experiments in fruit growing for several reasons, the tract in the first place being a rich loam soil with a heavy clay sub-soil. To the north and west of the tract stands timber which protects the orchard from the winds, and to the south and east are hills which protect the trees from winds blowing from those directions. This lot he platted into 16 rows for tree fruit and two rows of grapes. The fruit trees are set 22 to the row, and two rows of grapes about 400 feet in length each, in which are set seven distinct varieties.

Mr. Leverich has here conclusively demonstrated, by a living and thriving example that a man can, in a period of seven years, create a bearing orchard of apples, plums, cherries and grapes from the wild land, and during that entire time cultivate the ground between the rows for the production of other crops, thus securing from the tract a continuing revenue during the period of growth of the orchard.

At the time of setting this 5-acre orchard in the spring of 1904 Mr. Leverich placed between the rows of trees either black raspberries or red raspberry or blackberry brush. These berry brush have been thoroughly cultivated and cared for as the trees and vines of the orchard, and as a consequence there has been a crop of berries each year, commencing with 1905. In 1906 the first returns from the orchard proper were secured 10 baskets of grapes being picked. The plum trees commenced bearing in 1907, the apples in 1908, while the first cherries were secured this year, it being the opinion of Mr. Leverich that this locality is not adapted to the culture of cherries.

What impressed us the most forcibly was the fact that here was an illustration of the possibilities of valley soil of Monroe county which has awaited demonstration for more than fifty years, and today there are doubtless many places on the sheltered side hills in the valleys of this country just as well adapted naturally for the culture of fruits as is the spot which Mr. Leverich has in seven years trans-

formed from a forest to a model orchard. Such spots only need the application of intelligence, industry, and the perseverance for which the Monroe farmer is noted, to place this county in the same enviable position regarding the cultivation of the apple, grape and plum, that it now occupies



J. W. Leverich, Sparta

regarding the cultivation of the small fruits and the development of the dairy herd.

The following table gives the returns in detail of the products of this five-acre tract, in addition to furnishing some idea of the care and precision with which Mr. Leverich keeps account of his farming operations:

Receipts of a Monroe County Orchard

Planted and owned by the Leverich Fruit Farm, Sparta, Wisconsin.

Sales from five acres of land planted May, 1904, to fruit trees and set between the trees to blackberries, red and black raspberries and grapes.

Blackberries.

1905	24 cases	\$1.19 per case	\$28.56
1906	152 cases	1.47 per case	223.44
1907	207 cases	1.67 per case	405.69
1908	288 cases	1.59 per case	557.92
1909	239 cases	1.54 per case	368.06
1910	124 cases	1.93 per case	239.32

1911 155 cases 1.64 per case 254.20

1190 cases \$2,077.19

Black Raspberries.

1905	54 cases	\$1.21 per case	\$65.34
1906	421 cases	1.46 per case	614.66
1907	305 cases	1.60 per case	488.00
1908	235 cases	1.89 per case	445.25
1909	145 cases	2.05 per case	297.25
1910	76 cases	1.95 per case	148.20
1911	111 cases	1.56 per case	173.16

1342 cases \$2,231.86

Red Raspberries.

1905	10 cases	\$1.21 per case	\$12.10
1906	154 cases	1.47 per case	226.38
1907	125 cases	1.68 per case	200.00
1908	215 cases	1.75 per case	376.25
1909	54 cases	1.85 per case	99.90
1910	10 cases	1.98 per case	19.80
1911	0		

568 cases \$934.43

Grapes.

1906	10 baskets.
1907	100 baskets.
1908	200 baskets.
1909	20 baskets.
1910	10 baskets.
1911	175 baskets.

505 baskets, 25c per basket,
\$126.25

Cherries.

20 cases, \$1.50 per case \$30.00

Apples.

1908	5 bushels.
1909	10 bushels.
1910	0 bushels.
1911	75 bushels.

90 bushels, 75c per bu., \$67.50

Plums.

1907	5 cases.
1908	30 cases.
1909	50 cases.
1910	0 cases.
1911	130 cases.

215 cases, \$1.25 per case, \$268.75
Plants sold 500.00

Grand total of all sales \$6,235.98

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These figures are for cases of 24 pints each of blackberries and black and red raspberries and 16 quarts of plums and cherries.

This tract being largely in the nature of an experimental orchard, Mr. Leverich has set it in a greater variety of trees than he probably would if he was to now set it with the knowledge he now possesses after seven years of experimenting. Some of the varieties have done better than others, but it is not the object of this article to specify particularly in regard to that, but to tell of the orchard as we found it. It consists of the following trees, vines and berry brush:

Apples.

- 88 Northwestern Greening.
- 44 Wealthy.
- 11 Tolman Sweet.
- 11 McIntosh Red.
- 11 Milwaukee.
- 11 Wolf River.
- 11 Scott's Winter.
- 11 Longfield.
- 11 Patten's Greening.
- 11 McMahan.
- 11 Duchess.
- 11 Plumb Cider.

242

Plums.

- 22 Wyant.
- 22 Cheney.
- 11 Brittlewood.
- 11 Surprise.
- 11 Hawkeye.
- 11 Forest Garden.
- 11 Desoto.

99 *Cherries.*

- 11 Early Richmond.
- Total number of trees set 352

Grapes.

- 20 Moore's Early.
- 10 Campbell's Early.
- 10 Brighton.
- 10 Concord.
- 10 Moore's Diamond.
- 10 Worden.
- 10 Wilder.

80

Berries.

- 1584 Eldorado blackberries.
- 2575 Gregg black raspberries.
- 1957 Cuthbert and Marlboro red raspberries.
- 6516

After the inspection which we had the privilege to make of this orchard, growing on what is generally known as valley land, and which in a period of seven years has reached a stage of profitable productiveness, and which bore every indication of being thrifty, and has during that seven years, when the 1911 returns are all in, brought the owner over \$6,000.00, we are again impressed with the truthfulness of the assertion that any man who will use intelligence in the culture of fruit will not find it necessary to go to Oregon or Washington and invest \$2,000.00 an acre in orchard land, when there awaits him in Monroe county unnumbered opportunities for the profitable development of the orchard business if one half the intelligence and money is devoted to it that is necessary in the west."

Comment on this story is scarcely necessary. The returns are not up to some of those given in Western orchard literature but this account has the merit of being founded on fact. We do not point to it as the most remarkable thing that ever happened in Wisconsin but it answers in one way definitely and positively a question often asked by young men contemplating fruit growing. "How will I live while the trees are growing?" Here is the way Mr. Leverich answered the question,—"I planted the trees and while they were getting ready to bear, 6 years, averaged \$207.86 per acre from the land between the trees." Also note that the cherries were not successful which lessens materially the gross income.

Go, young man, and do likewise.

We have 500 extra copies of this issue. These may be had for the asking, postage paid. If you want to mail them ask for envelopes also.

CONVENTION PROGRAM

Members may be disappointed that the program is not given in full in this issue. Unfortunately the details were not completed in time for publication but the main features are outlined below. The complete program will be ready for the January issue which will reach every member before Convention.

TUESDAY, JAN. 9TH.

First session at 2:00 P. M. giving exhibitors an opportunity to get fruit in place and everybody a chance to visit.

The features of the afternoon session will be an address by W. H. Hanchett of Sparta on the New Era in Wisconsin Horticulture.

After the introduction of delegates from other states A. E. Bassett of Baraboo will tell about marketing apples direct to the consumer, and Hon. P. A. Rodgers of Gravette, Arkansas, will talk on Co-Operative Marketing of Fruits. Mr. Rodgers is a member of the Arkansas senate but of more importance to us he is general manager of the Ozark Fruit Growers Association.

The Ozark section comprises a territory 200 by 400 miles in extent and has 40,000,000 trees in orchards and twenty thousand acres of berries. Also, co-operative marketing of fruits is a success in Missouri.

TUESDAY EVENING.

Some good music, followed by an illustrated lecture by Frank C. Pellett of Atlantic, Iowa, "The Economy of Nature in the Plan of Eden."

Mr. Pellett is highly recommended as an entertaining speaker.

WEDNESDAY FORENOON.

The usual business session and election of officers to be followed by five papers or talks on The Farm Orchard and one by G. H. Townsend on Individual or Collective Effort in Fruit Growing. Mr. Townsend will compare, without prejudice, the stock company, the co-operative, and the in-

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dividual ownership plans in fruit raising.

WEDNESDAY AFTERNOON.

W. Paddock, professor of horticulture in Ohio State University, will tell us about Horticultural Methods in the East, and Prof. Washburn of Minnesota about Minnesota plant pests.

Mr. W. N. Tracy, seed expert of the U. S. Dept. of Agr. will be present on Thursday and talk on Seeds and Seed Selection. The market gardeners will do well to listen. Mr Tracy knows about seeds and seed selection and can tell what he knows in a convincing and entertaining way.

The Students Speaking Contest which proved so entertaining last year will be repeated this year. Prof. Moore will attend to the details.

WEDNESDAY EVENING.

This is the ladies session, Pres. Bingham will be deposed and told to go way back and sit down, and Mrs. Marcia Howlett of Oshkosh will preside. Five ladies besides Mrs. Howlett will present papers and there will be something doing from start to finish. There will also be some music, instrumental.

THURSDAY FORENOON.

This is a new one, a session for and by the nurserymen. As this part of the program is pretty well settled, it is given seriatim.

NURSERY SESSION.

- (1) Propagation of Nursery Stock with Demonstrations, Prof. Moore.
- (2) Cultivation and Care of Tree Fruits in the Nursery, R. J. Coe, Ft. Atkinson.
- (3) The Strawberry and Bush Fruit Nursery, M. S. Kellogg, Janesville.
- (4) Some Insects Liable to be Distributed on Nursery Stock, Prof. J. G. Sanders.
- (5) Some Diseases Affecting Nursery Stock, Dr. L. R. Jones.

- (6) Top-Working in the Nursery, E. A. Smith, Lake City, Minn.

- (7) Organization of a Wisconsin Nurserymen's Association.

This session will be of interest to growers and amateurs as well as nurserymen for we all want to know how nursery trees and plants are grown.

THURSDAY AFTERNOON.

Alfred Senn is city forester of Milwaukee. He is responsible for the health and vigor of Milwaukee's street

COMMERCIAL VARIETIES OF APPLES

G. H. TOWNSEND.

Out of some two or three thousand varieties of apples grown in the United States, only about twenty-five have been found desirable to grow as a business. Lack of knowledge and individual whims are responsible for the planting of many worthless varieties, but the largest responsibility rests on the nursery agent, grower and dealer. Not a few nursery agents offer to sell anything that will get the purchaser's money and then de-



A Portion of Exhibit Department of Horticulture, University of Wisconsin, at State Fair

trees. Mr. Senn will talk on the Rational Care of Street and Shade Trees.

Madison is justly famous the world over for its parks, drives and private grounds. Wm. G. McLean, park superintendent, has some original ideas on the laying out of Home Grounds and will get them out of his system.

There are a few other items still cooking and when well done will be served up,—next month. If all goes well there will be a surprise or two to add to this feast.

Now, really, dear reader and fellow member, can you afford to miss it?

To the men: bring your wife along, if you don't, some of the women present will ask you pointed questions, if you are not married, why, get busy, there is still plenty of time.

live whatever is most easily obtained. Apple trees are longest lived in poor soils and mild climates but it takes a soil that forces growth to make the yield of apples large year after year and it is nothing against Wisconsin that orchards have died—they do that everywhere. It would be interesting to know how much of the Winter killing is really due to borers, foliage destroying insects, and drouth—trees robbed of moisture by crops, weeds and grass.

The Duchess is the most extensively grown of our Summer apples because so hardy and productive and it is a self-fertile variety. If the Dudley is a self-fertile apple it should largely supersede the Duchess because larger, better colored and better quality. Its season follows the Duchess.

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The McMahan is adapted to the Northern limit of the corn belt, and is a large yellow apple with pink blush. It is grown because it is a large producer and sells at a fancy price. It is one of the best pie and sauce apples and beautiful in appearance.

The Wealthy grows everywhere, almost, and has all the qualities desired except that the tree is not of the spreading kind, has a tendency to overbear and be small on old trees, and it will not hold its fruit that matures early. In young trees it grows to large size and often red all over. In quality it is mildly acid, juicy, sprightly in texture and slightly wine flavored. The McMahan should be marketed not later than November, and the Wealthy by the first of December, unless put in cold storage.

The Snow and the McIntosh Red are late Fall and early Winter apples. The Snow is a great favorite and the McIntosh is larger and much richer in wine flavor and considered by many the best of all apples in quality. It succeeds in Canada and favorable localities in the Northern states.

The Grimes Golden is a beautiful small or medium sized yellow apple, grown from Virginia to Oregon, and is mild, rich wine pippin flavor. The best bearer, but requires rich land and the best culture. Should be marketed not later than December.

Jonathan, King, and Yellow Bellflower are mid-winter apples. The Jonathan is slightly oblong, dark red of medium size, juicy, mildly acid, and wine flavored. Grown from Virginia to Oregon and more extensively planted than any other apple. The King is a larger apple and light red, wine flavored and grown in Canada and the lake regions. The yellow Bellflower is a large popular tart apple grown in the lake regions and California. It is an annual but not a large bearer.

The Baldwin, York Imperial and the Rhode Island Greening are late winter varieties grown in the East,

and the North Western Greening in the North. The York Imperial is a good sized apple of a yellowish red and green mixture often irregular in shape and has practically superseded the Baldwin and the Rhode Island Greening because better in quality and more productive. The North Western Greening is a large apple and tree a rank grower, a moderately good bearer, but rather dry in texture and coarse, but mild flavored.

The Ben Davis and the Gano are large highly colored apples desirable in all except quality. They were originally planted because it was believed that the public would never be discriminating but are now not much in favor.

The Northern Spy is a large red, juicy, wine flavored apple grown in the lake regions and in Colorado. Its size and quality are offset largely by the fact that it does not bear much under fifteen years, and then irregularly.

The Newton Pippin is a large yellow apple grown from Virginia to Oregon. It is a hardy tree but requires rich soil and is a good producer and has a rich wine pippin flavor when fully ripened and finds a ready market abroad.

The Wagener of recent years has come into favor in the Northwest because of its many qualities. It is somewhat flat, of brownish red color and ridged, making it almost octagonal in shape. The Winesop and the Stayman Winesop are red apples grown from Virginia to Colorado. They are rather tart but have the rich wine flavor and are the best quality of all the very late keepers.

The Spitzenberg is a large red apple extensively grown in Oregon and Washington. It is a good producer and keeper but tart in quality.

The Rome Beauty and the Arkansas Black reach the markets last. The former is rather large brownish red striped, oblong apple, and the latter same shape but very dark red. They are both somewhat coarse in texture

and not very juicy but mild almost sweet in flavor.

The Delicious is a new apple that promises to give the Grimes Golden and the McIntosh a good race for first place in quality. The White Winter Pearmain is another apple that is likely to take a prominent place among commercial apples because of quality and vigor.

The Duchess, Dudley, McMahan, Wealthy, Snow, McIntosh Red and



Only a Tree but Worth Looking at. McIntosh
3 Years Planted, Gays Mills Orchard

the North Western Greening are a proven success in many parts of Wisconsin. The Jonathan grows well in Richland county. Grimes Golden in Richland, Sauk, Milwaukee and Door counties but their prospective value not reported. Old and thrifty trees of the King are found in Southern Wisconsin and is growing successfully top worked in Richland county. The York and the Wagener on the lake shore and the Winesop growing well in Crawford county.

Anyone who has tried the varieties named (except the seven Wisconsin varieties) should report results to this journal.

Mention this paper when writing to advertisers.

Ask your neighbor to subscribe for this paper,—we need the circulation.

ANNUAL CONVENTION

SOIL ANALYSIS

Letters of inquiry regarding soil analysis have been frequent of late and we have referred them to Prof. Whitson of the department of soil physics who writes as follows:

"I have your letter of the 23d asking for a brief statement of my ideas as to the value of the analysis of soils to be used for small fruit culture. I believe that as time goes on it will become apparent that this is a matter of very great importance. A considerable part of the small fruit farming of Wisconsin is on the lighter types of soil. These soils as a class are very variable in chemical composition, many of them being quite deficient in certain essential elements. This is particularly true of the element phosphorus. Some of our sandy soils have shown as low as .01 per cent of that element while other soils which could in no way whatever be distinguished from them except by chemical examination, have ten or fifteen times that amount. This element, of course, is absolutely necessary to the growth of all plants and is removed in considerable quantities from the soil in fruit as sold. The lack of a sufficient supply of this element in the soil manifests itself in different ways in the crop. It not only greatly reduces the yield but renders the plant more subject to disease. This is in accordance with the general principle applying to plants and animals alike, that health and vigor of growth are the greatest preventatives against disease. What has been said in regard to phosphorus applies to nearly the same extent to the element potash.

But the need of more complete knowledge of the soil conditions is not limited to these two mineral elements but applies to other conditions of the soil necessary to maintain fertility in general. For instance, acidity, which prevents the growth of the best legumes so necessary to add nitrogen to the soil and thereby supply this very essential element, is of course a matter which fruit growers

in common with all farmers have to contend with.

While these matters are not serious on new lands, they will become more and more serious the longer land is used for agricultural purposes. This is becoming apparent already in some sections of the state. There is an important difference between such lines of farming as dairying, where a large portion of the essential elements are retained on the farm and

fully recognized or determined. Such matters as the soil conditions affecting color, firmness, keeping quality, and so on, are matters about which we have some general ideas but these have not been well established. Such matters should, of course, be the subject of thorough scientific investigation, but as it stands at present we have ample reasons for undertaking the chemical analysis of soils by the most approved methods.



A Snapshot; State Fair Exhibit W. S. H. S. by Prof. Milward

the supply increased by the purchase of feed stuffs, and such other lines as grain growing or fruit raising in which there is no natural supply of fertilizer, and where a very considerable amount of the essential elements is sold from the farm. This difference must be recognized and proper steps taken to maintain a balance of fertility in the soil.

While as above implied, there is enough already well known to make the chemical composition of soils to be used for crop growing highly desirable, there are many indications that there are other important influences of the chemical composition on the crop which have not yet been

In this connection I might mention the work of the Soil Survey which is being carried on by the Geological and Natural History Survey and the Agricultural College in cooperation with the Bureau of Soils of the U. S. Department of Agriculture. This work, which was begun two years ago, is progressing rapidly and includes the chemical analysis of all types mapped. This work is being carried on by counties, the reports of which will be issued as soon as possible after the completion of the field and laboratory work. It is our hope that the reports on three or four counties will be ready within one year from this date. It is also hoped that this map-

MADISON, JAN. 9, 10, 11, 1912

ping will be of great value to fruit growers generally in giving not only the chemical composition of the different types mapped but other information in regard to the physical condition of the soils.

A. R. WHITSON.

ROTTEN APPLES

Another wail of woe has come from a correspondent in the Wisconsin Agriculturist about apples rotting on the ground in the Philips orchard at West Salem. Such things do harm because the average newspaper man grabs at this sort of thing like a hungry bullhead at a piece of pork on a rainy day. (Did you ever fish for bullheads?) Then the average reader reasons like this: "Apples are rotting on the ground and yet these rascally fruit growers and retail robbers want 35 to 50 cents a peck. Robbers." And the man who had some idea of going into fruit growing and help to develop a splendid industry will easily draw the conclusion that there is nothing in it.

It was the *farm orchard apples* that rotted on the ground this fall and not the fruit man's apples. That is why we say again and again of the farm orchards "raus mit em."

The article in question was not sufficiently explicit on one point and therein may do Mr. A. J. Philips an injustice. Mr. Philips does not own the orchard now having sold it to a farmer.

Some time this owner will "come to" and find that the orchard is worth more than all the remainder of the farm if properly cared for and a little common sense shown in marketing the fruit. In the meantime we expect there will be another case of rotten apples.

Just to show the other side of the picture we give herewith a part of a friendly letter from Brother Muehlenkamp of Sparta:

"I saw in the Wisconsin Agriculturist that Geo. Kellogg visited Mr. Philips' orchard near West Salem which is mostly top grafted on the

Virginia crab which Mr. Philips claims is ever so much better than the Hibernial for top working. I would like to have him tell me why. For one thing the Virginia is more subject to black-knot, otherwise there is practically no difference for the first ten years. After that the trunk of the Virginia don't seem to grow fast enough for the top of some of the strong growers. I top-grafted hundreds of them in this neighborhood on both varieties. I never found any that would out-grow the Hibernial while I found lots of them on the Virginia that were top-heavy. Mr. Kellogg said that so many apples were rotting on the ground, some like McMahan and Northwestern Greening, which I think looks very silly. My Wolf River sold for \$3.50 per barrel, when apples were quoted very low in Chicago, and McMahan even sold as high as four dollars. Nothing rotted here but the small and undersize, and they would not had we known in time where to ship them. When we were pretty near through shipping we got an order from north Wisconsin that apples were scarce, high, and very hard to get up there. I had a relative in South Dakota during the months of August and September who said that they had to pay from 40 to 60 cents per peck all fall at the station. A friend just come back from west North Dakota said they had to pay 8 cents per pound all fall. We have to try to get in touch with the small retailers and avoid the large commission houses."

FRED MUEHLENKAMP.

JUST OVER THE LINE

We rarely go outside of Wisconsin to get figures and facts on fruit yields, because it is wholly unnecessary to do so, but Brother H. G. Street lives at Hebron, Illinois, and Hebron is only two jumps over the state line.

Mr. Street, who really belongs to us anyway, raises plums, grapes, etc. He not only raises the fruit but knows how to sell it. Listen.

Under date of October 11, Mr. S. writes:

"We are nearly sold out of apples at the following prices: Jonathan, Snow and McIntosh at \$1.25 per bushel. Windsor, Wagener and North Western Greening at \$1.00 per bushel."

We marketed 2,000 baskets (one-fifth bushel) to the small towns within 14 miles of here and nearly all retailed at 35 cents per basket, even when Michigan plums sold as low as 13 cents in Chicago.

Our grapes were also very satisfactory. Sold 600 baskets at 25 cents from one acre set four years. Campbell, Moores, Worden and Concord.

I also expect about 100 bushels of No. 1 apples from our young apple orchard set 6 to 9 years.

I have taken 58 premiums (48 firsts and 10 seconds) at the McHenry and Walworth county fairs and the people are coming to see the orchard from many miles around.

I fixed our Overland 38 auto so that we could load three tiers of baskets on the back making 62 for a full load, which made the work of delivering very satisfactory.

I wanted to send you some of our best native and Hybrid plums for the state fair but they were nearly all gone before that time.

APPLE TREES FOR TIMBER IN NEW YORK

A writer in Green's Fruit Grower in an excellent article on the farm orchard makes suggestions regarding the number of trees of each kind to plant and incidentally makes statements of much interest to Wisconsin growers.

"Apple trees at fifteen years should produce three bushels each."

"Cherry trees at eight years should produce one bushel each."

These we know are fair estimates for New York and show clearly one tremendous advantage we enjoy.

Here are a few Wisconsin figures that might be duplicated in hundreds of orchards:

Wealthy, three years planted, two bushels. Gays Mills.

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McMahan, twelve years planted, fourteen and one-half bushels. Wausau orchard.

Thirty-eight trees Hibernal, twelve years, 375 bushels. Wausau orchard.

Verily, if we had trees in Wisconsin that bore but three bushels after fifteen years, we would make cordwood of them. We expect about seventy-five bushels per tree in that time.

As to cherries, we hardly like to give Sturgeon Bay returns, lest some New Yorker might see them and accuse us of prevarication.

THE PROTECTION OF THE REPUTABLE FRUIT GROWERS

E. L. LUTHER.

Students' Contest, Annual Convention, January, 1911.

Horticulture, fruit growing, indicates the highest stage of civilization and the most settled state. The nomad took his flocks and herds with him. The cereal farmer can move every year. But the practice of horticulture requires a settled abode. A man cannot carry growing trees with him.

Growing fruit is a special business. The great drawback in fruit growing in Wisconsin, as in every state, is the failure to recognize this truth. Very few people think that anybody and everybody can raise cattle. But most every grain farmer, or stock farmer, or dairy farmer has set out trees and—neglected them.

Now the neglect would not be so bad if it influenced only the one who did the neglecting. But it does not stop there. Trees neglected are the especial prey of insects and disease. A lot of weak, sickly, insect-infected, disease-infected trees counteract the efforts of the reputable fruit grower and injure him in the production of good fruit and spoil his chances on the market. *The greatest drawback to successful fruit production is the ordinary home orchard.* For the product of this orchard on the market is pretty likely to injure the reputation of the locality.

Michigan could be a great fruit state. By the most painstaking care on the part of a few men in Oceana County, Michigan, that county produced fruit which ranked with fruit shown by any section of the United States at the land show in Chicago about a year ago.

Yet the writer, whose home is in Oceana County, would prefer to buy western fruit and to pay a higher price. And why? A personal experience will tell why. A year ago in

disreputable growers of fruit, who put out trees and then do not cultivate, prune or spray, and then are allowed to ship fruit which is not inspected. This is a fearful drawback to the reputable fruit men of Michigan.

There is little question but that Wisconsin can grow good fruit, but to make it at all profitable the Wisconsin fruit growers must create a Wisconsin market and protect this market against the impositions of the indiscriminate growers. The fruit



The beginning of a Fruit Farm on Madaline Island

November the writer received a barrel of three varieties of supposedly select-assorted and properly packed apples from the county seat of Oceana County. Upon opening the barrel it was discovered that the layers of apples at the two ends of the barrel were select-assorted apples but that almost every one of these was jammed. Of the rest of the apples scarcely one but was worm-eaten, bruised or crippled. Oceana County can carry off prizes at shows and can fool the people on the market. Instances have been known where green apples were packed in among peaches and put upon the market. The Michigan fruit industry is liable to prove something of a sham to the consumer. Not that the people over there cannot produce excellent fruit, not that a good many people over there do not produce excellent fruit, but that quite a good many growers are what we might call the promiscuous, indiscriminate,

business of Idaho and Washington, of Montana, Colorado, and Oregon would not last long and these states would not be able to boom the fruit business were the matter of *producing and marketing* left to the indifference of the promiscuous grower. But the fact that all who have trees must spray or have their orchards sprayed for them and all must bring to market a good product or take it back home makes western fruit honest and helps western fruit to make and hold a market against nearer competitors in Wisconsin and Michigan.

The dairy men are protected against oleomargarine. The seed producers are protected against weed-seed producers. The stock men are securing protection. Industries are standardizing. Honest products are making industries profitable and respectable. The fruit men have the same right to protection. *The best way to be sure of the product is to enforce some sort*

MADISON, JAN. 9, 10, 11, 1912

of orchard practice, the next best way is to be sure to enforce some sort of official inspection of fruit packing. The best asset of the fruit grower is an honest package. This should be secured either by legislation or by associations.

While the writer does not relish compulsory legislation any better than any body else, yet it would seem that if half of the game wardens could have added to their duties the matter of orchard and fruit inspection, Wisconsin could do well in the fruit business. It is a dead certainty that a business like the fruit business which requires years before any return can be secured upon money invested ought to be protected against loss occasioned by careless and indifferent producers of fruit.

OUTLINE OF TOPOGRAPHY AND SOILS OF WISCONSIN

PROF. R. B. JOHNS.

The geology of Wisconsin as it has influenced its topographical and soil features is peculiarly interesting.

From the prehistoric ocean which at one time covered the greater part of the great valley of the Mississippi river, the earliest portion to emerge was the northern part of Wisconsin. In this region the rocks are of igneous origin being classed among those of the Huronian age. The granites of the northern and northwestern parts of the state contain many deposits of valuable ore most prominent among which are iron and copper. As the receding waters of this ancient ocean passed through the successive periods of geologic time several distinct deposits were made to register its retiring progress. After the archean and algonkian rocks of this early period had appeared above the waters there was a heavy deposit of potdam sand made upon the shores and bottom of the sea. Much of this formation appears on the surface in the area included by Waupaca, Adams, and other counties in the same latitude west to the Mississippi river.

Another disturbance and consequent change of level in the great inland ocean caused the potdam formation to emerge from the waters while at its borders was now formed the magesian limestone layer.

In the next change and in a similar manner appeared the St. Peter's sandstone. Then followed several minor deposits of Trenton limestone, shales, and clinton iron ore until the great deposit of Niagara limestone along the eastern borders of the state was made.

In a brief and general way this is a statement of the formations composing the surface of Wisconsin.

Probably the greatest agency in changing this surface, as described, were the glaciers which passed over a great part of the state in three distinct lobes. One of these ice sheets coming down from the north passed over the eastern border of the state as far south as the Kettle Range of hills which extends from Washington county south and west to near Madison or even beyond it.

The two other ice sheets failed to reach points as far south as the one described but appeared to expend their frigid character and drop their loads to the north and west coming down over Marathon and Clark counties and points still farther to the northwest.

By no means least among the agents operating in forming Wisconsin's topography are the erosive and transporting action of its streams. In the southwestern portion of the state is the evidence of this action most pronounced in the so-called preglacial valleys of the Mississippi river.

Classified according to manner of production the soils of Wisconsin may be grouped under three heads; viz., glacial deposit, alluvial and residual soils. By far the greater part of the state would come under the first class the whole eastern half and the northern parts having been traversed by the glaciers.

A glacial drift being a conglomer-

ate mixture of clay, sand and rock of different and of all kinds will of necessity contain all of the earthy or mineral elements of soil fertility. The soil of the glaciated areas of Wisconsin is extremely successful in the production of all farm crops including fruits.

The alluvial soils of Wisconsin are found along the river valleys and in a few cases in the "lowlands" which at one time formed the basin of a glacial lake. These soils being deposits made by rivers in the lowlands adjacent to their channels or at their mouths contain all the elements of fertility washed out of the hills.

One of the staple fruits grown upon these lands is the cranberry in the marshes of the north central counties.

The third class of soils, the residual, forms a very inconsiderable amount of the surface of the state, it being restricted to the valleys in the extreme southwestern part of the state and the tract of potdam formation above mentioned.

Over this area no ice sheet ever passed, the abrupt and angular contour being evidence of this. The soil of the valley region consists of a mixture of clay, sand and humus which with careful management may be made very productive.

The vicinity of Sparta, in this area, is one of the most successful in the production of small fruit of any locality in the state.

The soils of the state are, in character and fertility, pre-eminently adapted to the successful growing of fruit of various kinds.

CREDIT LIST

Names of members who secured new members during November:

B. H. Grant, 2; C. R. Rowley, 1; Dr. C. L. Babcock, 1; T. J. Ferguson, 1; B. Hahn, 1; H. W. Guthrie, 2; E. R. Prindle, 1; Max Patitz, 1; Henry C. Demitz, 1; O. B. Cornish, 2; D. D. DeLong, 1; Salem E. Weld, 1; Howard E. Johnson, 1; Geo. L. Tift, 1; Ralph E. Wilson, 1.

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Remit to Secretary W. S. H. S.,
Madison, Wis.

You will please keep in mind the dates Jan. 9-10-11.

Everybody boost this month for 2000 members just a few more needed.

The Assembly Chamber will easily hold 1500 people, let's fill it.

An outline of the program is given in this issue. There will be a few minor changes and some additions all adding, we hope, to its interest and value.

Twenty-four pages this month but not every month. No, No, No, says the editor, it's too much like work.

We are indeed favored this year in a meeting place, the beautiful Assembly Chamber is placed at our disposal with the adjoining "parlor" or lounging room for our fruit display.

The Avenue Hotel will be headquarters as usual. Host Gifford's smile is worth half the price and besides there will be real apple pie made from Wisconsin apples.

The Society, in convention assembled, will fix the membership fee for the coming year; that it will be \$1.00 we have no doubt. Just hurry along those renewals and new memberships and save 50 cents.

One dollar now pays for two years.

LETTERS

Dear Sir:—

If you fail to receive your monthly magazine Wisconsin Horticulture this month don't blame the postmaster—because it hasn't been mailed. We still have your copy and we are hoping and wishing that we may have the opportunity to send it to you.

There is a little matter of ——— unpaid dues.

If for any reason you want to discontinue your membership won't you kindly notify us?

WISCONSIN HORTICULTURE.

Frederic Crane-field, Editor and
Manager, Madison, Wis.

NO PAY, NO PAPER

One hundred and forty-seven members are in arrears and will be wondering why they didn't get any paper this month. Each and every one has been notified three times and then dropped from the membership and mailing list. How do you stand? Have you received a notice? Two notices? No pay, no paper.

THREE THOUSAND BUSHELS, OR LESS, ON ONE TREE

Dear Editor:—

At the summer meeting at Oshkosh last August our editor placed a wager with either Prof. Moore, Sanders or Jones as to the number of bushels of apples on a certain Plumb-cider tree in my orchard. His estimate, I believe, was about 15 barrels, but according to the September Wisconsin Horticulture it was a much greater amount.

I kept account of the apples taken from the tree and found that the only way to clear the editor was to count each apple twice. The wager calls for cigars for all present at the winter meeting in January and as we all know that Brother Crane-field smokes good cigars, also that he is a game loser, why not hold him to his word?

N. A. R.

BEN DAVIS

Last year we had no apples. Our merchant every week would supply us with three barrels. One each Baldwin, Spy, and Ben Davis. All sold at the same price, and the Ben Davis barrel was the first to be emptied by his customers. A lot of country people who were supposed to know a good apple from a poor one, were the buyers.

This year off of several hundred trees only old Ben fruited, giving us a barrel to the tree. We've got 'em in the cellar worth \$1.00 per bushel. Wish our trees had all been Ben Davis and we would have one thousand bushels to sell. Forty acres planted to Ben Davis in western Racine County, the apple belt of Wisconsin, would yield a princely income in less than ten years. *No land on the market.*

W. J. MOYLE.

WESTERN APPLES

From a full page advertisement in Better Fruit, published in Hood River, Oregon, we glean the following: For twenty-eight carloads of apples shipped from Cashmere, the following average prices were paid the growers, F. O. B. Extra fancy, \$1.59½ per box. Fancy, \$1.40½. "C," \$.97½.

Varieties, Grimes' Golden, Jonathan, Bellflower, R. I. Greening, Stayman, Spitzenberg, etc. It cost from

Doctor Loope

Died Thursday Morning, November, 30th, 1911.

None Who Knew Him But
Will Mourn.

35 to 40 cents per box for picking, packages and drayage.

Subtract this from the price for "Fancy" and compare with Wisconsin prices.

The Lord and the Hood River grower are the only ones who know how much it costs to raise these Extra Fancy and neither will tell.

PLANT BREEDING

C. B. WHITNALL, MILWAUKEE.

Although plants as well as animals have evolved by natural processes of reproduction which may be called breeding, we have come to associate with the term "plant breeding" the idea of some connivance of man, whereby he is to acquire some personal benefit. And just now, when civilization is actuated by near-sighted policies, what is considered his personal benefit, proves to be a general loss or waste. The results are not usually happy ones. It seems strange that man should take such pains in breeding for himself everything *but himself*.

Although supervised breeding appears to be actuated by a desire for winning dollars, and the poorer specimen of man being the support of modern civilization, his so-called freedom having destroyed his intrinsic value, no investments commercially are made in that direction.

If in place of exploitation of our fellows by various processes of graft some of us would acquire ownership of the others, the dollars involved would argue in favor of intelligent breeding.

Truck gardeners, fruit growers and florists are constantly on the look-out for new varieties which will please their customers without increasing his labor to produce.

Specialized labor has developed to a point where "the breeder" is maintained much the same as inventors of machinery, promoters of gold mines, fortune-telling, etc.

"Ill fares the land, to hastening ills
a prey,
Where wealth accumulates and men
decay."

Of course there is a love for truth that impels the broad-minded scien-

tist to pursue every path of nature in quest of wisdom for the world. I have faith that he will rise, phoenix-like, above the degradation of modern commercialism. He is building the foundation on which we may all unite in economy and harmony some day. But in this day he is like the well meaning preacher of the gospel, supported from pew rentals paid by the gambler, usurer, keepers of despicable places, etc.

Nature's processes are so extremely complicated we understand comparatively little of what we accomplish.

The production of life seems to be very much like the generation of electricity. We have discovered ways

merous and make a thorough job of fertilization.

There is one feature of reproduction called "vegetative propagation" which I think should be considered first, although it is not really breeding.

We raise our potatoes from the tuber, not seed. Most of our ornamental trees and greenhouse plants from cuttings. There is no crossing.

With plants propagated vegetatively, there are several kinds of variations to consider. There are fluctuations due wholly to environments, difference in food supply, moisture, etc.

Experiments and careful observations for many years has proven quite conclusively that fluctuating varia-



Sweet William, and Sufficient to Fill the Eye

and generally know when we have it. But do not know what we have.

The successful plant breeder is a detective. He creates but little, but watches nature's developments and is quick to kidnap a child that will ingratiate itself with those who are able to "pay the piper." The more I observe, the less confidence I have in direct application of energy to make a change in product or conduct of plant or animal. And the more I am convinced that environment influences the destiny of every new life generated within its influence. However, I am not quite as radical in this contention as the seed grower who discovered that the best crops of red clover were obtained from localities where old maids were numerous, because they kept many cats. The cats destroyed the field mouse which enabled the bumble bee to become nu-

tions due to such influences do not change the plant from year to year. There seems to be no inheritance of changes induced by environmental influences. Where the descendants of an individual varied greatly in size, it was thought that by selecting continually from the largest and the smallest, two races could be developed.

Experiments have been carried on for a very long series of generations, one line consisting of the largest, the other line of the smallest progeny. At the end of experiment the two lines were brought under the same environmental conditions, and within a very short time the average size of the two types became identical.

Until some one can show that selection is effected within pure lines, it is only a statement of fact to say that the experimental evidence we have

is against this. The southern swamp cypress now used for greenhouse lumber with its peculiar club roots sent to the surface for air, we find is a **Venetian**, driven to the swamps, and **when planted** on a hillside, loses all its characteristics which had been induced by swamp environment, and **goes right** back to its original habits.

There is a feature of development, however, that will mislead a novice. The florist calls it "sporting."

About twenty years ago the Cath. Mermet Rose was introduced, a pink variety. That is to say, it looked pink when introduced, and became quite popular. Mr. John N. May was a leading rose grower then and had two houses devoted to this rose. They were growing particularly strong and it was noticed that May's Mermets were "sporty inclined." So a close watch was kept. One day a side shoot bearing a white flower, more rugged and perfect in form than the pink, and more beautiful than any white variety in market at that time. He propagated from it naming it "The Bride." It is still a popular variety, but the C. Mermet has "run out." The fact of the matter is the Cath Mermet was simply an undeveloped "bride," some of its qualities remained latent for a long time. It required Mr. May's skill to develop the child in accordance with its inheritance.

We have many undeveloped "Brides" among our children. Those who keep our Truant Officer and Juvenile Court busy and whom we permit to be punished because of our failure to maintain environmental influences that will properly develop and bring out the *latent* qualities.

Environmental influences which develop or bring out these latent characters, if removed, cause the character to become latent again. The Bride Rose may show pink again, and then disintegrate entirely. The next feature to consider is the self-fertilized species. The effect of selection in such species as wheat, barley, and oats, is essentially the same as by propagation vegetatively, although seed is formed, and we call it breeding.

Environment the Principal Factor.

There is no question about our individual development being controlled by environment more than all other factors.

But whatever environment produces, will vanish like your reflection in a mirror as soon as you disappear.

There can be no heredity of such influential effects by the individual so influenced.

Herein is the important function of the breeder, for such acquired characteristics can be fixed in or transmitted to its progeny.

Burbank says, "Environment is the architect of heredity" or heredity is the sum of all past environment. The results of environmental influences can be fixed only by crossing with plants not too closely related.

It seems that these acquired characteristics are impressed or conformed to by the germ cells. *It is their function* to transmit the rearranged formula of construction of the progeny. There is no other way, and the reason I say to cross with plants not too closely related, is that the closer related parentage is the nearer you come to conditions of self-fertilized and vegetative propagation, already referred to which do not fix or hold on to improved character.

The skill of the breeder is in the selection of the parent to cross with the strain or variety he desires to improve, that will not combine other characters strong enough to dominate in the progeny as to vitiate the development or improvement sought.

The progress is dependent primarily on cultivation and improvement of the individual, which in turn is controlled largely by environmental influences. Then to fix improvement by cross-breeding, I have spoken frequently of environment. There is also what is called place effect that is interesting. I may raise tomatoes in a dozen different exposures in Milwaukee and call it an assortment of environments. But if I compare a crop in Milwaukee with one in Memphis, we would speak of place effect.

If a northern tomato is raised in the south, the first crop of fruit will be like it is in the north. But the second season's crop will be entirely

different and remain thus different for generations. Then bring it north, the first crop will be as in the south, but the second season it will be back to its original northern character.

Kellogg's Nursery

Oldest Nursery in Wisconsin

Our stock is grown right, dug right, packed right, and by no means least, the

PRICES ARE RIGHT

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Apples singly or by the 1000.
Currants by the doz. or 25,000.
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Janesville, Wisconsin

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Our Trees Live. We had an opportunity to compare 500 of our Wisconsin grown trees with a similar lot of an Eastern Nursery. At the end of the season only 52 per cent of the eastern grown stock was alive, while 95 per cent of ours lived and grew. Moral: buy home grown stock and avoid loss. Our trees are **HARDY**, and our stock is **HEALTHY**. A comparison will prove that our stock has not the willowy and watery soft growth of southern or eastern grown stock.

Every tree and shrub is packed entirely under cover, free from exposure to sun and wind,

Great Northern Nursery Company, Baraboo, Wis.

Write for Catalogue and Price - List.

The process of crossing, of course, becomes complicated. I cannot go into it in detail for lack of ability on my part and time on yours. But I will give you just one of Gregor Mendel's discoveries which pertains to what he has called "The law of dominance."

A red primrose crossed with a white primrose yields purple primroses. But these purple hybrids will produce three kinds of progeny. About one-fourth will be white, about one-fourth will be red, and about one-half will be purple. These white and red will go on producing pure colors, but the purple will continue to divide into white, red and purple. The purple always splits into the same proportions.

Mendel suggested that the cause of these peculiar phenomena is that the hybrid produces two kinds of ovums and two kinds of pollen. The one kind of ovum and one kind of pollen being exactly like those of one of the parents of the hybrid so far as the one character under consideration is concerned. The other kind being like those of the other parent. This theory has been fairly well sustained.

When we consider that environmental influences act the same on the individual as on plants, that our children are being shaped and tempered by these influences, it is quite apparent that the future of our civilization is dependent upon the environment of the rising generations. Statistics show that in our large cities there is a deterioration. It is the mission of the city planner to determine what these devitalizing effects are, and reconstruct our cities so as to be economical and healthy.

Although humanitarian impulses should be enough to insure the requisite improvements, it is interesting to note that the heartless (successful) business man is beginning to read a "hand writing on the wall." Germany is taking a lead in skilled labor today because by better city planning the health and skill of labor has improved, and although some of our capitalists say the expense is prohibitive,—Germany is also proving that it is economy. Over 1,500 cities and towns now have no tax levy at all. There

are a great many thinking skillful Socialists in Germany.

Think it over Mr. Profit Hunter. See that a normal atmosphere, sunlight and clean water is administered to every soul. See that dust, noise, waste energy is avoided. See that natural recreation is universal and that community values go to the community. Then human breeding will balance plant breeding. We can never be normal until they function together.

IT WAS AWFUL

My dear Cranefield:—

I am in receipt of a letter from a man this morning who says as follows:—"The Wisconsin box apple exhibit at the Fair has had a terrible effect on me." You may be in for a damage suit.

Very truly yours,

JAMES G. MOORE,

Associate Horticulturist.

VERY NICE INDEED

The year 1911 started out very poorly for an apple crop. We had very little rain in the summer and fall of 1910. The trees budded out nicely but were covered with green lice that made the leaves look as if a frost had burned them, then down came a good soaking rain, followed by a warm sunny day and in less than 24 hours the orchard was in full bloom and all fear of loss by insect pests was over.

My Duchess crop was killed by frost in 1910, but this year most all of them bore a good crop. I think I had about 1,800 bushels of Duchess, which sold at \$1.00 for a while, then I sold 500 bushels to a Minneapolis firm for 75c.; the rest sold for 50c. Sold 286 bushels to Duluth for 50c, but the firm went into bankruptcy and I am still looking northward. Wealthys about 1,200 bushels, Greenings 300; all other kinds about 200 bushels. Everything except the Duchess sold well for one dollar a bushel. There was some loss on the Wealthy, it didn't keep as well as usual; it ripened too early. The Duchess crop will probably be light next season on account of the abundant crop this season.

JAMES W. MELVILLE.

Chippewa Falls.

KNOX NURSERIES

(Established in 1851)

Make a specialty of **Cherry Trees**. They strongly recommend **One Year Cherry Trees** because they are stocky, well headed, well rooted thrifty and vigorous. Plenty of **Two Year** for those who prefer the larger trees. They also have a nice lot of Apple in northern sorts.

A trial order will convince
any one of their quality.

H. M. SIMPSON & SONS
Vincennes, Indiana.

FORTY - TWO YEARS
The Jewell Nursery Co.
Hardy Fruit and Ornamental
Trees, Shrubs and Plants
Lake City, - Minnesota
FIFTEEN HUNDRED ACRES

Vincennes Nurseries

Vincennes, Indiana

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PROPRIETOR

**Cherry Trees by the
100 or 10000**

The Growing of Cherry Trees has been our Specialty for Years. Our soil and method of growing produces a Tree that is not excelled by any one. Splendid blocks of two-year 5 to 7 foot trees and one-year 4 to 5 foot trees. Early Richmond, Montmorency and other leading varieties by the 100 or car load. We also grow a general line of other Nursery stock. Personal inspection invited. Correspondence solicited

A CHERRY OR TWO

Forty-five years ago a Wisconsin farmer planted a few cherry trees on the edge of his barnyard and next to a cultivated field. These trees thrived and bore abundantly for many years until the farm passed into the hands of a man to whom cherry pies were a useless luxury and cherry trees an incumbrance on the face of the earth, and the trees were all dug out and fields changed. Nature's kind hand defeated the will of the destroyer by preserving seedlings along the new fence row and these battling with adverse conditions still gave each year multitudes of snowy



One-year old Cherry Tree, Fish Creek, Wis.
Photo 24 Months From Planting

blossoms and ripe red fruit, delighting alike the robin, the grosbeak and the child of the man who knew only corn and hogs and many dollars. These wayside fugitives themselves passed into oblivion but left behind progeny which retreating to fence rows and corners to this day bear occasionally much fruit, enough sometimes to provide juicy comfort for two families.

These groups of cherry seedlings huddled in the fence corners as if for defense tell a story that might well be heeded by every farmer and home owner in Southern and Eastern Wisconsin. If in spite of neglect and the most adverse conditions cherry trees will persist and give returns for forty-five years what may not be expected if a few trees are planted and cared for each year at least as well as a like number of hills

of potatoes or corn? A large part of Wisconsin is yet an unknown land so far as the raising of the apple and the cherry is concerned. North of 44 degrees latitude and west of Green Bay except along the shores of Lake Superior spring frosts too often blast alike the blossoms of the cherry and the hopes of the planter, but all through Southern Wisconsin and particularly along the shores of Lakes Michigan and Superior and in all of Door county the sour cherry thrives and is as reliable a cropper as apples, corn or wheat. Not when neglected, nothing, neither potatoes or corn or garden truck, will thrive under neglect. The bugs will eat these crops and weeds and grass starve them. Good farmers cultivate potatoes and spray to prevent ravages of bugs and disease. Why not try the same plan with cherries and see what will happen?

A dozen cherry trees, one-half Montmorency and one-half Early Richmond planted 20x20 feet on almost any soil, if well drained, decently cared for in the way of cultivation and an occasional spraying will pay better than anything else that can be grown on an equal amount of land.

At three years after planting there should be a little fruit, at four years enough to make everybody wish for more and at six years the trees will be in full bearing. For twenty years at least there should be no lack of cherries to eat, to can and even some to sell to less fortunate neighbors.

Some soils are better than others for the cherry, a light rather sandy soil seems best but clay loam, sandy loam, any kind if only well drained. Weeds and grass will starve them, so plant lots of garden truck between the rows and even between the trees in the row for the first three or four years, this will encourage cultivation. Spraying must be attended to but it is not a serious matter. Everybody uses Paris green on potatoes—use a little on the cherry trees and head off the slug which skeletonizes the leaves. Mildew sometimes plays havoc with cherries but is easily and effectively checked with one or at most two applications of Bordeaux mixture which is easily made from

bluestone and lime. The Paris green may be mixed with the Bordeaux and thus slugs and mildew overcome at once. Spraying sounds formidable but really is easy. Plant cherry trees in the home orchard. If you think you don't care about fruit, remember you are not the whole thing. The boy and the girl and the good housewife are to be considered. Can you raise cherries in Southern and Eastern Wisconsin? Most certainly you can! I give you my word for it. Try it.

C.

IMPORTANT INFORMATION

For Those Who Desire To Put Money in Orchards

Apples and grapes have proven very profitable on "Apple Ridge", which is beyond question the best apple and grape region in the state and better than the Bitter Root country. Owners of two large orchards want to retire and have given me a price less than good orchard land without orchards. Think of only one hundred dollars an acre for property that paid over three thousand dollars net profit last crop. Why pay more and wait years when you can get a big per cent. here from the start. Look into this and you will want this snap. State how much you wish to invest and begin a thorough and exhaustive investigation at once.

G. H. TOWNSEND,
MADISON, WIS.

FOR SALE

Fruit Farm of 40-acres five miles from city of Sturgeon Bay, one-half mile from water; thirty-two acres under cultivation, level, without stump or stone. Splendid fruit soil. Good frame house, log barn, well and wind-mill; 700 cherry, 800 apple set spring of 1911. Best bargain in Door county. Write

BOX 535.

Madison, Wisconsin

DUNNING STIRS UP THE ANIMALS AGAIN

I noticed in the November issue of "Horticulture" the article written by Mr. Richter of Milwaukee County in which he takes exceptions to what he calls the statement in my former article that there were but two men in Milwaukee County who were growing fruit systematically and states what he is doing and the results that he has accomplished along this line.

I did not state in my recent article that there were no others in Milwaukee County doing this thing, but that *so far as I knew*, there was no one else. Mr. Richter's experience instead of contradicting the statement that I made, substantiates my claim, which was in substance, that fruit could be grown in Milwaukee County as well as in Door County if given the same proper care and attention.

You, perhaps, will remember when I was at the State Fair that I brought in a branch of Lombard plums and I claim that there was nothing better in the way of plums there. I met one of our friends from Door County and in showing him the branch, he remarked that that was NO BETTER than was being grown in Door County. I have at no time made the claim that Milwaukee County was the BEST or ONLY County in the state where good fruit could be grown, but that it was ONE of the Counties in the state where fruit can be grown successfully with proper management, and the statement from parties in other parts of the state that they grow *as well*, is practically an acknowledgment of this claim; "as well," according to my interpretation means equal and no better.

I have no disposition to underrate any other part of the state. I think, however, that each district should stand on its own peg, so to speak, and if we actually do produce as good

WANTED

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plums, pears, cherries, grapes and apples in Milwaukee County as are being produced by any other county in the state, we have a right to claim it, and I can prove that this is true in any exhibits where given a chance.

E. E. DUNNING.

SELF POLLENATION OF THE APPLE

The article on Apple pollination by G. H. Townsend in the September number brought out several letters of anxious inquiry from members who had planted blocks of single varieties and feared that loss would result from lack of pollination.

The article in question was merely a review of a recent bulletin by Prof. Lewis of the Oregon station giving results of experiments in Oregon and nowhere in the article is the statement made that similar conditions exist here. Rather the question is merely raised and a suggestion that investigations be started.

The truth is we know very little about this question and it is extremely unlikely that Oregon conditions apply in this state.

Prof. Craig of Cornell University says: "Personally, I am disposed to

think that much more is being made of this subject than circumstances warrant. Again, I would not minimize the influence of special conditions. I do not think that Oregon findings are applicable to eastern conditions nor *vice versa*."

We are willing to take a chance and say that in orchards of five to ten acres containing two or more varieties there is very little danger of lack of pollination.

TOO BUSY

It has been beautifully said that "flowers are the language of the soul." They express the best and sweetest of our innermost selves. There is something so lovely and refining about the beautiful blossoms and delicate plants, that they should find abundant space in every home.

We often hear the remark, Oh! I like flowers but I don't have time to care for them. Take time, my friend. There are many that repay abundantly a little care, and if you can not have a great variety, there is no one so busy that they will not be able to find rest and encouragement in caring for one or more of the almost endless variety of lovely plants and shrubs.

Watching the leaves and buds unfold is an inspiration, as the unfolding typifies the developing of our lives, if we but measure to the best of which we are capable.

MRS. L. H. PALMER.



A Few of the Vegetables at the Summer Meeting, Oshkosh

Correspondence

I have recently purchased 160 acres of land in Chippewa county which I consider is a splendid orchard site. I expect within the next year to plant 8000 apple trees.

The soil is all first class, it being an old pasture for the past twelve years.

I intend to plant two varieties, which are: Gano, and Wealthy, and expect to have storage by the time the trees are bearing and will pick, sort, grade, and pack my fruit in bushel boxes, having each apple wrapped separately in paper, the same as western fruit is handled, and I will depend on winter marketing from January to April.

Now, would you plant more varieties and what would they be? Do you know of any better varieties for my purpose?

Kindly advise me and I assure you same will be greatly appreciated by me.

F. O. B.

We submitted this inquiry to five members and give herewith the results:

"I don't think much of Gano for Wisconsin. It has color and keeping qualities but nothing else. He had better plant McIntosh."

D. E. BINGHAM.

I have had no experience with the Gano and only know of now and then a tree in this section. It would seem like a hazardous undertaking to plant very many Gano in the vicinity of Chippewa or Chippewa county as the Gano is of the same type as the Ben Davis, and does not mature its fruit until very late in the season and varieties that mature their fruit late in the season are subject to winter killing in Wisconsin after a heavy crop, outside of the Lake region. My advice would be to go slow on Gano until it is thoroughly tested in that part of the state and plant such varieties as McIntosh, McMahan, Fameuse and Dudley—varieties that have stood the test.

L. G. KELLOGG.

I am unable to advise you about the Gano apple. It is not planted in Chippewa county. The Wealthy is a good apple but not a winter apple. This season they ripened too early and did not keep at all; they are all gone now. Some years they keep pretty well till mid-winter. I think the Gano apple is not recommended for Wisconsin. They are planting a good many McIntosh Red here now, it is the nearest to a winter apple of any we have and does fairly well here. All the Fall apples do well here but I think we will have to get some new variety of an apple before we can grow winter apples here.

JAMES W. MELVILLE.

I don't know enough about the hardiness of the Gano apple to recommend it. It may be all right and I would be willing to plant a number on trial and I think that they would prove good. My neighbor has 15 or 20 trees ten years planted. The trees look fine and have not yet suffered any winter injury. They have borne several years and this year were heavily laden. They are a handsome appearing apple and Mr. Baer says they are fine in quality and an all winter apple.

I don't know how Fameuse would seem for a box apple but they bear well, sell well and are good. Of course Wealthy is all right in the combination.

WILLIAM TOOLE.

I would advise planting more than two varieties to extend picking season. It would be impossible to pick fruit from 4000 Wealthy trees in the short period we are allowed in this climate before Wealthies drop. I have found the picking season for Wealthies is not longer than from 8 to 10 days, and even shorter depending on weather conditions.

I believe if we have any box apple that will compete with western stock it is the Snow apple. In my experience compared with Wealthy, it comes to bearing a little later, is a much more regular bearer, apples more uniform in size, and size just right; better quality, better color, six weeks later, will hang to trees much better, giving two weeks longer pick-

ing season and will bring 50 per cent. more money in market.

J. S. PALMER.

I intend to plant an orchard on land sloping toward the north. The soil is black with a clay sub-soil.

There is good drainage. Which varieties would you advise planting on a place of this kind in the western part of Kenosha county? I do not want to plant many of the early varieties, but would like winter varieties for the reason that the greater part of the apple trees through this section are summer and early fall varieties and they are seldom of much value, while the winter fruit is scarce and always brings a good market price. Our market is now being supplied by New York apples for 40 cents per peck. It seems as though we ought to be able to supply our Wisconsin market with Wisconsin apples.

I inclose a list of trees that I have marked; would like if you could give me some information in regard to them.

A. K.

Kenosha Co.

As a rule we do not advise the planting of apples on the black soils of Racine and Kenosha Counties but plenty of excellent apple land may be found in the western part of these counties. Tree fruits require thorough soil drainage and that is too often lacking in your part of the state. Also rich soils induce a heavy growth of wood at the expense of fruitage.

Regarding the varieties marked the following are generally conceded to be the best: Pewaukee, Dudley, McMahan, McIntosh, Wealthy and Wolf River. These are all hardy and productive. You will find the Northwestern Greening a failure in southern Wisconsin or nearly so. Scott's is too small, Willow Twig is not reliably hardy, Golden Russett is not productive enough for a market apple.

I note what you say about late keeping varieties and know that that is the general impression and yet more money can be made in Wisconsin from the fall apples than from winter apples if the former are properly

handled. There is more money in Duchess at 50c. a bushel than in late apples at \$1.00 or more. "C."

INFORMATION WANTED ON TOP-WORKING

For the past eight years nearly, I have been running a sort of experimental orchard and among other things I am trying out some thirty varieties of apples. Through the mistakes (?) of nurserymen in sending trees other than those ordered, I find myself *blessed* with five good thrifty Ben Davis trees, eight years old. One is all I want for experimental purposes. Can I top-graft these trees with some other variety? If so, what? I would prefer either of the following: Windsor Chief, N. W. Greening, Utters Red, Patten's Greening, York Imperial, Newell, among Winter apples or Wealthy, White M'Mahon, Canada Red, Milwaukee, Winter Banana or Pewaukee among late Fall apples.

I have all the above in bearing and of course have the material for top grafting from those varieties. Can you or some of your readers give me some suggestions in the matter, founded on experience?

J. S. ANDERSON.

Manitowoc, Wis.

A LITTLE NONSENSE

Although this pertains to a problem centuries old, and has caused endless discussion which apparently has not yet ceased, and because now is the apple season the following clipping seems apropos:

ADAM'S APPLES.

A correspondent passes the subjoined on to us as "the latest," and asks us to put it in Yarns:

How many apples did Eve and Adam eat? The old version says: Eve 8 and Adam 2 (Eve ate and Adam, too)—total 10. This is what certain American newspapers have to say about it: Nebraska Herald: Eve 8 and Adam 8—total 16. Mississippi Gazette: We don't see this; Eve 8 and Adam 8 2—total 90. New York Screamer: Our contemporary is entirely wrong; Eve 8 1 and Adam 8 1 2—total 893. Ohio Advertiser:

We reason like this—Eve 8 1 4 herself and Adam 8 1 2 4 Eve—total 8,938. Illinois Telegraph: Eve 8 1 4 2 know how it tasted and Adam 2 8 1 4 2 see what it might be like—total 36,284.

Can anyone explain to "Yarns" how this could have been possible, inasmuch as neither Eve nor Adam had to—(2)?

There is said to be nothing new under the sun, so apparently spraying must have been in vogue in the first age in order to have so many apples from one tree fit to eat.

Yours,

W. E. CROLEY.

P. S.—This is taken from "Yarns" September issue, of the St. Louis Cordage Mills.



BUILT TO LIVE

Away up north or away down south or any point between. It has the health and strength to carry all the apples nature can pile upon it. The hole in which it was planted was not "shot with dynamite". It was not "leaned to the sun" nor, "to the wind." It never wore a "tree protector" because it never needed one. It shades itself and also the ground above the root system keeping the soil moist and cool and forest conditions. No "peculiar slope" was selected. Just good soil and level ground. It was a one year top tree when planted, and by a man who had just common horse sense. If you are in the market for fruit trees and this one looks good to you, send for our catalog and a list of your wants.

We are specialists in everything we grow.

HENRY LAKE SONS COMPANY, Nurserymen, Black River Falls, Wis.

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to Subscribe for*

**Wisconsin
Horticulture**

It is worth while even to see the new Capitol if only half completed. The officers in charge are very careful about the Assembly Chamber and well they may be for it is a beautiful room.

Questions and Answers

Q. How does the Dudley apple compare with the Duchess in size, color and bearing or yielding qualities? How with the Wealthy in season and keeping qualities? Is it a dessert or cooking apple? What apple does it compare with in flavor?

A. Larger than the Duchess, not quite so highly colored, fully as prolific. Same season as Wealthy and fully as good keeper. Compares favorably with Wealthy in quality.

Q. Is it possible to raise Rhode Island Greening in Wisconsin?

A. We had half a bushel of very fine Rhode Island Greening at the apple show in Milwaukee. It is not on the recommended list of varieties of the State Horticultural Society.

Q. Is there any advantage in the quincunx form of planting more than that it gives more trees to the acre?

A. We venture to answer,—no. The quincunx or five square method of planting is one of the beautiful theories that is perpetually brought to the attention of planters but it is a curious fact that we see very few quincunx planted orchards. Like lots of other things it is very fine,—in theory.

Q. When is the proper time to prune currants?

A. November.

Q. Which is preferable, setting out young trees in their permanent places or setting them close together with a view of transplanting?

A. Leave the nursery business to the nurseryman. He knows how to do it and you don't.

Q. Is 15 feet north and south and 30 feet east and west too close to plant apple trees if I plant every other tree of an upright growing kind?

A. Better plant 24x24 feet which will permit of cultivation both ways

for twenty years or more. If planted 15 feet one way cultivation will be difficult after ten years.

Q. What are the four best varieties of plums to plant for commercial orchard in western Wisconsin?

A. De Soto, Surprise, Wolf, Rockford.

Q. Is there any variety of the "Sand Cherry" or "bush cherry" which produces really good fruit to eat or can?

A. Raw dog is said to be good if you are hungry enough to eat it.

Q. I now have some Pewaukee and Gano 33 feet apart. Can I plant fillers among them? If so what variety of filler would you recommend?

A. The orchard "filler" proposition is much like quincunx planting, fine in theory but rarely works out to a successful conclusion. It takes more courage than the average mortal possesses to deliberately cut down a vigorous apple tree that promises to bear four or five barrels of fruit the coming year. Better plant catch crops for a few years, beans or potatoes.

Q. Is it necessary to spray cherry trees the first and second years after planting for fungus diseases?

A. Yes. The slug and mildew are quite as likely to attack young trees as older ones and the young tree needs every leaf until the close of the season. By all means spray with Bordeaux and arsenate of lead.

IS IT NECESSARY TO FERTILIZE AN APPLE ORCHARD?

This is one of the big questions in connection with apple raising and no less important in Wisconsin than in New York.

Prof. U. P. Hedrick, horticulturist at the Geneva, N. Y., Experiment Station, answers the question so far as certain New York conditions are concerned.

In Bulletin 339, New York Agr. Exp. Sta., Prof. Hedrick gives a detailed account of a fifteen-year ex-

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Complete assortment of Fruit and Ornamental stock in all varieties suited to northern culture. A specialty of Hardy Shade Trees, Windbreak Stock, Evergreens (Coniferous), Deciduous Shrubs, Apples and Native Plums.

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Ornamental and Flowering Shrubs, Vines and Perennials. Roses, Evergreens, etc.

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Wisconsin's Largest Nursery

periment on rather poorly drained clay soil near Geneva.

A summary of results as prepared by Prof. Hedrick follows:

1. This bulletin is a report of a fifteen-year experiment to determine whether it is necessary to fertilize apple orchards.

2. Current recommendations for fertilizers in orchards are unreliable because there have been few investigations of the subject which have furnished trustworthy information. Present practices are largely based on the fertilization of field and garden crops, but the needs of apples cannot be compared, in the least, with the needs of herbaceous crops because of the great difference in the habits of growth of the two kinds of plants. Fertilizing apples is a difficult problem, too, for, besides variability of plant and environment to contend with, as with all plants, it is necessary to take thought of the tree and of the crop of the future.

3. This experiment has to do with apples—not apples and grass. Attention is called to this fact because most of the investigations of fertilizers for apples have been carried on with trees in sod. In all such experiments the interactions of soil, apples, grass and fertilizers are so complicated that a crucial test is impossible.

4. The experiment under discussion was carried on in a Station orchard, the soil of which is a clay loam too heavy for a good orchard soil and not better than the average clay soil in the farm lands of western New York. The orchard has been given the care it would have received in a commercial plantation.

5. There are twelve plats in the experiment. The fertilizers applied each year are as follows:

Stable manure, av. per tree, 415.15 pounds.

Acid phosphate, av. per tree, 12.66 pounds.

Muriate of potash, av. per tree, 7.26 pounds.

Acid phosphate, av. per tree, 12.6 pounds.

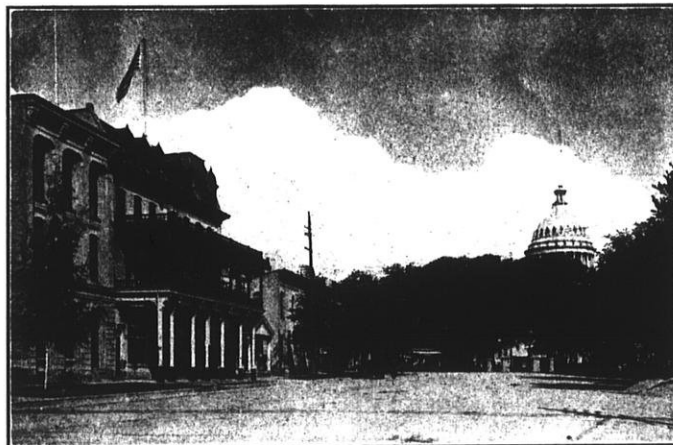
Muriate of potash, av. per tree, 7.26 pounds.

Acid phosphate, av. per tree, 12.6 pounds.

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Convention, State Horticultural Society.**



New Times, New Things

The old fertilizer formulas are giving way to the new. At every farmers' meeting one subject should be the fertilizer formula



that will furnish a balanced ration to the crop and keep up the fertility of the soil. To do this the fertilizer should contain at least as much

POTASH

as Phosphoric Acid. Our note book has condensed facts essential in farmers' meetings and plenty of space to record the new things that you hear. Let us send one to you before your Institute meets.

A supply of these is furnished by request to every institute held in several states. We will be glad to send a supply delivered free of charge to every Institute, Grange or Farmers' Club Officer on request. It contains no advertising matter.

GERMAN KALI WORKS, Inc.

Continental Building, Baltimore, Md.

Monadnock Block, Chicago, Ill.

53 Nassau Street, New York

Nitrate of soda, av. per tree, 3.67 pounds.

Dried blood, av. per tree, 12.84 pounds.

6. An important consideration is that the fertilizers were put on only underneath the branches of the trees so that a tremendous excess of each has been used and the experiment, therefore, throws light on the question as to whether excessive fertilization is deleterious to trees.

7. The apple in the experiment is the Rome top-worked on Ben Davis, the Rome buds all having come from one tree and the stocks having been selected carefully. These precautions were taken to exclude individual variations. Cross-pollination is provided for, there being over a hundred other varieties separating and bounding the plats.

8. The results of the experiment are gauged by the yield, size, color, flavor, maturity and keeping quality of the fruit, the diameter of tree, amount, color and weight of foliage and the length and weight and the annual growth of the branches.

The fertilizers have had no sensible effects upon the yield of fruit in this experiment.

The size of the apples is possibly increased by the fertilizers since the percentage of culls and seconds is a trifle higher in the check plats.

The several current generalizations as to the effects of fertilizers on apples find no verification in this experiment.

All of the trees in the several plats have borne crops very uniform in maturity, keeping-quality, texture and flavor of apples.

A study of the tables giving the diameter of the trees in the experiment shows no difference outside the range of variation in the several plats.

The foliage in the plats receiving nitrogen was greener than in other plats during the last season, the first difference to be certainly counted as an effect of a fertilizer.

There was also a measureable effect of the nitrogen in the weight of the leaves.

There is slight evidence that the trees on plats to which nitrogen is applied are making a greater annual growth of branches.

EDITORS AND PUBLISHERS

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9. The trees in this experiment would have been practically as well off had not an ounce of fertilizer been applied to them. One must conclude that if fertilizers have no value in this orchard, they have no value in many other orchards in New York.

10. From the data at hand there seems to be but one interpretation of the results of this experiment. An analysis of the soil before the experiment was begun shows that at that time there was, in the upper foot of soil, enough nitrogen per acre to last mature apple trees 183 years, of phosphoric acid, 295 years, of potash, 713 years. From this well-nigh inexhaustible storehouse, tillage, cover-crops and good care have made available all the plant food these trees needed.

11. It may be necessary to fertilize some apple orchards in New York. Such cases will be found on sandy and gravelly soils, on lands very subject to drought, on very shallow soils and on soils quite devoid of humus. Some soils may require some of the chief elements of fertility; some, though few, indeed, need the three which usually constitute a complete fertilizer.

12. A fruit-grower may assume that his trees do not need fertilizers if they are vigorous and making a fair amount of new wood. If the trees

are not vigorous the drainage, tillage and sanitary condition of the orchard should be looked to first and the fertilization afterward if then found necessary. Lastly, before using fertilizers the fruit-grower should obtain positive evidence by experimentation as to whether an orchard needs fertilizers, and what ones.

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OF THE

Wisconsin State Horticultural Society

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Madison, January 9, 10, 11, 1912

	1st Pre.	2nd Pre.	3rd Pre.	4th Pre.
1. Best collection of apples, not less than 15 varieties	\$10 00	\$5 00	\$3 00	\$2 00
2. Best 5 plates (5 varieties) commercial apples for Wisconsin.....	5 00	3 00	2 00	
3. Best Plate Avista.....	1 00	75	50	
4. Best Plate Baldwin.....	1 00	75	50	
5. Best Plate Ben Davis.....	1 00	75	50	
6. Best Plate Dudley.....	1 00	75	50	
7. Best Plate Eureka.....	1 00	75	50	
8. Best Plate Fall Orange.....	1 00	75	50	
9. Best Plate Fameuse.....	1 00	75	50	
10. Best Plate Gano.....	1 00	75	50	
11. Best Plate Gem.....	1 00	75	50	
12. Best Plate Gideon.....	1 00	75	50	
13. Best Plate Golden Russet.....	1 00	75	50	
14. Best Plate Hibernial.....	1 00	75	50	
15. Best Plate Jonathan.....	1 00	75	50	
16. Best Plate Longfield.....	1 00	75	50	
17. Best Plate Malinda.....	1 00	75	50	
18. Best Plate Mann.....	1 00	75	50	
19. Best Plate McIntosh.....	1 00	75	50	
20. Best Plate McMahan.....	1 00	75	50	
21. Best Plate Milwaukee.....	1 00	75	50	
22. Best Plate Newell.....	1 00	75	50	
23. Best Plate Northern Spy.....	1 00	75	50	
24. Best Plate Northwestern Greening.....	1 00	75	50	
25. Best Plate Patten.....	1 00	75	50	
26. Best Plate Pewaukee.....	1 00	75	50	
27. Best Plate Plumb Cider.....	1 00	75	50	
28. Best Plate Seek-no-Further.....	1 00	75	50	
29. Best Plate Scott Winter.....	1 00	75	50	
30. Best Plate Fall Spitzenberg.....	1 00	75	50	
31. Best Plate Tolman.....	1 00	75	50	
32. Best Plate Twenty Ounce.....	1 00	75	50	
33. Best Plate Utter.....	1 00	75	50	
34. Best Plate Wagener.....	1 00	75	50	
35. Best Plate Walbridge.....	1 00	75	50	
36. Best Plate Wealthy.....	1 00	75	50	
37. Best Plate Winesop.....	1 00	75	50	
38. Best Plate Windsor.....	1 00	75	50	

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Will be glad to figure on your wants either in large or small quantities.

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	1st Prem.	2d Prem.	3d Prem.
39. Best Plate Wolf River.....	\$1 00	\$0 75	\$0 50
40. Best peck of each of the following varieties: Dudley, Fameuse, Gano, Gem, Golden Russet, Jonathan, McIntosh, McMahan, N. W. Greening, Tolman, Wealthy, Windsor and Wolf River....	2 00	1 00	75
41. Best Exhibit Pears.....	1 00	75	75
42. Best Exhibit Crabs.....	1 00	75	50
43. Best Exhibit Grapes.....	1 00	75	50
44. Best Plate Seedling Apple.....	2 00		

RULES OF ENTRY.

1. All entries must be filed with the secretary before 5 P. M., Tuesday, January 9.

2. Fruit must be arranged ready for judges by 9 A. M., Wednesday, January 10.

3. Four apples constitute a plate, no more, no less.

4. Separate samples must be furnished for each entry, except for No. 1, which may include all entries.

5. Competition open to all residents of Wisconsin, but premiums paid only to members. Successful exhibitors, if not members, must forward fee for membership before receiving check for premium; fee for annual membership, fifty cents.

Members or others unable to attend the meeting may send fruit to the secretary, who will make entries and place fruit on exhibition. Transportation charges must be prepaid.

All entries must be made on regular entry blanks which will be furnished by the secretary on application.

For further information address:

F. CRANFIELD, *Secretary W. S. H. S.*, Madison, Wisconsin.

STUDENTS' JUDGING CONTEST.

Twenty dollars in prizes will be awarded to students in the long and middle courses, Horticultural Department, College of Agriculture, for the best scores in identifying and judging varieties of fruit on exhibit.

Under rules prepared by Prof. J. G. Moore.

Final awards to be decided by a judge appointed by the president.

EARLY HISTORY OF SPRAYING

"There is nothing new under the sun!" This is true of spraying. While orchardists of the present day are inclined to consider themselves the leaders if not the pioneers in spraying and combating all manner of insects and fungi, a glance backward will show that the practice is not by any means new.

In the year 1629 John Parkinson writing on "The Ordering of the Orchard" says: "The canker is a shrewd disease when it happeneth to a tree; for it will eate the bark round, and so kill the heart in a very little space. It must be looked into in time before it hath runne too farre; most men doe wholly cut away as much as is fretted with the canker, and then dresse it, or wet it with vinegar."

To those familiar with the blight canker of the apple and the present method of treatment the above will appear good advice even if it comes over a distance of 282 years. It is true we now use corrosive sublimate or copper sulfate as an antiseptic instead of vinegar but the suggestion that "it must be looked into in time before it hath runne too farre," is most excellent.

In Europe the French vineyardists were the first to look for remedies for the control of the vine mildew. Various drugs were recommended and used but the problem was finally solved quite by accident and as follows: Vineyardists in the vicinity of Bordeaux (France) had suffered considerable losses by theft of fruit from vines growing along the highways. It had been the practice

Wisconsin Horticulture

The Only Magazine

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for several years previous to 1882 to sprinkle the fruit with verdigris so that it might have the appearance of being poisoned. In 1882 for reasons of economy, certain growers substituted a mixture of lime water and copper sulphate and were astonished to note that the vines so treated were free from the downy mildew. Out of this accident grew the Bordeaux mixture the most valuable remedy known for the treatment of fungous diseases of plants. While we have borrowed most of the remedies which we now use from France or Germany, much of the early development of spraying can be found in this country.

It is with considerable pride that Wisconsin horticulturists refer to the record of the late Prof. E. S. Goff in the pioneer work of spraying.

The first systematic trial of Paris Green as a remedy for Codling Moth was conducted by Goff at Geneva, N. Y., in 1885, as was also the first experiments for the control of apple scab. In the latter case hyposulfite of soda was used. Two of the most valuable devices known for the control of insects, viz., the kerosene attachment for spray pumps and the cabbage plant protector were invented by Goff.

While it is true that we in the United States have not added materially to the list of remedies for the control of insects and diseases of plants, while it is true that the Bordeaux mixture for fungi and kerosene and lime-sulphur for insects comprise about our entire list, much has been done in the development of special formulas. Our Experiment Station Scientists have also laid bare the life histories of the plant pests, the first and most important step in their intelligent control.

Such is the indomitable spirit of the Yankee that no sooner does an obstacle present itself than he sets about to find means for surmounting it. This has proven true in the case of the much talked about and dreaded San Jose scale. As soon as it had gotten well established a spraying mixture was found known as Lime-Sulphur wash which would completely control it if properly and persistently applied.

Bayfield County Lands

Experienced authorities claim that there is no better fruit land in the United States than on

THE BAYFIELD PENINSULA

Splendid market apples are raised. Most luscious fruits and berries indigenous to Wisconsin, mature late and bring the highest market prices in this frost-proof area.

Inquire of JOHN WALSH, President of

Bayfield County Land Co., Washburn, Wis.

Fig. 1291



Fig. 1317



MYERS SPRAY PUMPS

Nozzles, Hose, Fittings, etc.



Fig. 653



Take off your hat to the Myers!
BEST PUMP ON EARTH!

Fig. 640



Fig. 1410

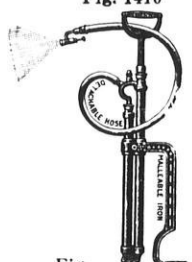


Fig. 702



Fig. 1229

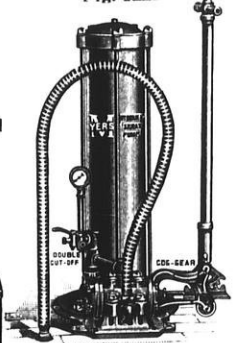


Fig. 1125

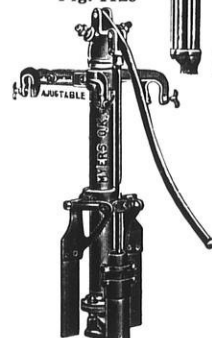


Fig. 1358



Fig. 1363

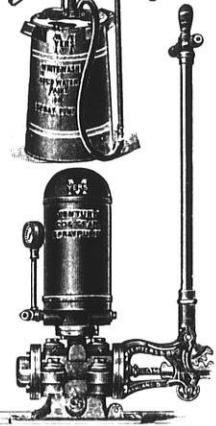
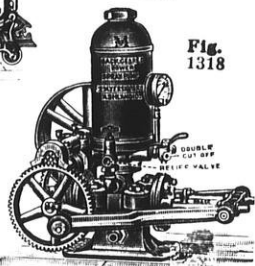


Fig. 1364



Fig. 1318



When the season arrives you want to be able to SPRAY WITHOUT ANY DELAY OR ANNOYANCE. A single day's delay may prove costly. In order to be safe at all times you must have a dependable spray pump outfit. YOU CAN ALWAYS DEPEND ON THE MYERS. The above illustrations show only a few MYERS SPRAY PUMPS made in all styles and sizes with a full line of NOZZLES AND ACCESSORIES for complete outfits with which to meet every requirement. GET READY NOW. WRITE FOR OUR SPRAY PUMP CATALOG.

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It is not too early to make your plans for spring planting. The man who delays is often disappointed. This year stock in many lines is unusually scarce—the early buyer will be sure of the best, both in trees and in service.

Write us to-day about your spring plans. We can surely help you and it will cost you not one cent.

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Volume II

Madison, Wisconsin, January, 1912

Number 5

At the School House in Wisconsin

AS the title indicates, this is mostly about country schools in Wisconsin, the one room rural school,—the "little red school house,"—the place where most of our members received their early training.

There will also be found something about trees, shrubs, vines, flowers, teachers, county superintendents, school officers, and a little discussion on the perversity of human nature.

There is also poetry and considerable sentiment and the introduction of these will forever condemn the whole as a scientific production, for science and sentiment are said to be incompatible. Even if we admit that much there is still an excuse for that which follows for in the final analysis of events great or small it is sentiment that rules the world.

LESSON I.

One book, at least, has been written about country schools, an extremely interesting and valuable book and one of the most striking things in the vol-

ume is the picture on the opening page, a picture,—not of a school house, or play grounds, but of a *two-row corn cultivator!*

This is followed on succeeding pages

for there it is set down that the country life of today is far different from that of 25 or even 10 years ago.

Improved grains, the Babcock test, improved highways, a few improved methods of tillage, vastly improved machinery have brought about a New Agriculture.

Add to these the telephone, rural mail service and the trolley and we have indeed a New Country Life. Science has invaded the field of agriculture in every part of our country and in this uplift Wisconsin has always taken the lead.

In the country districts two things and two alone have failed to keep pace with the general advance, viz., the

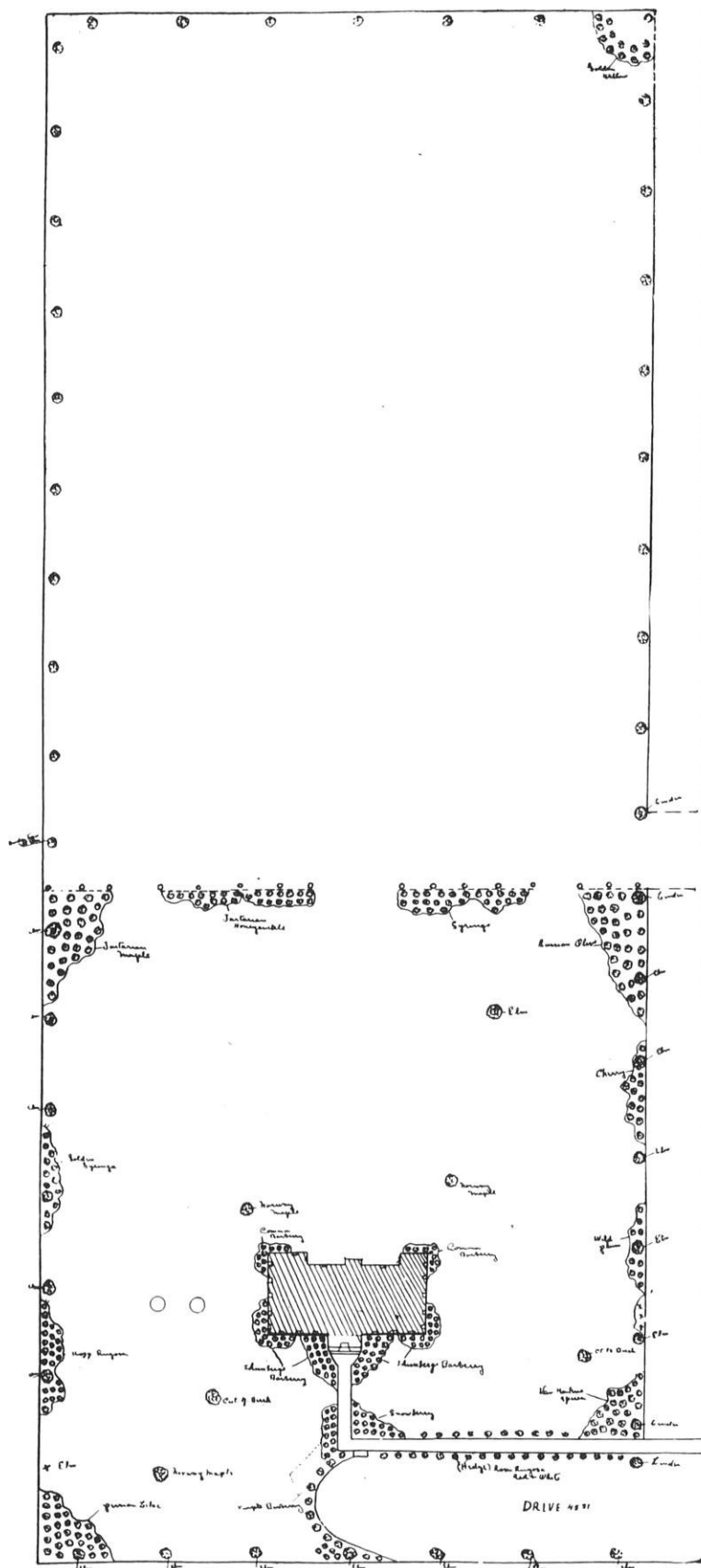
surroundings of the country home and the country school.

That the increased prosperity of the country, the improvement in methods, the increased comfort and conveniences of farm life has not extended to the country school is most painfully evident to even the casual observer. We have, then, a new agri-



A Bayfield County schoolhouse. Built of logs but cozy and comfortable inside. Two thousand acres for playgrounds. Don't waste any sentiment on the boys and girls of this school, they are to be envied.

by pictures of: a new country road, a modern interurban trolley car, a road scraper and a steam roller. There might well have been added a rural telephone line and a mail carrier. The relation of the two-row corn cultivator to the country school is not at once apparent and it is not until we search the text of the book that it appears,



Plan for Brooklyn School, Green County. Four acres of land, and more will be added if needed. Room here for trees, shrubs and children.

culture and an old school, we have changed and ever rapidly changing conditions in farm life all tending to make of that life the most independent and substantial of any existence in the wide world and with it the spectacle of the boys and girls deserting it for the cities.

The problem of "How to Keep Enough Boys on the Farm to do the Farming" is quite as keen as ever after a half century of discussion, discussion from every angle but one, and that the school.

It is not to be desired that every boy born on a farm should become a farmer, that would be too much to expect or wish for, but that every one who desires to be a farmer should have a square deal, should have educational opportunities every bit as good as the city boy no one will deny. With the improvement in educational methods, better buildings, school libraries, superintendence, inspection and a more rational and equitable division of school funds as between the so-called higher institutions and the rural schools, this Society is not directly concerned. These things are in better hands and are being conducted by the State Department of Education in a way of which Wisconsin should be proud.

With the surroundings of the schools, the school yard and the play grounds or rather the pitiful lack of play room we may consistently concern ourselves. The beautification of school grounds, the planting thereon of trees and shrubs and vines, of flowers and perhaps a garden is without doubt strictly a proper sphere of action for the State Horticultural Society.

This brings us at last and abruptly to the subject in hand, The Improvement of Rural School Grounds. To engage the attention of the reader the next lesson begins with the poetry promised beforehand followed by some pithy quotations in prose.

LESSON II.

THE IMPROVEMENT OF THE RURAL SCHOOL GROUNDS OF WISCONSIN.

There was a child went forth every day;
And the first object he looked upon that object he became;
And that object became part of him for the day, or a certain part of the day, or for many years, or stretching cycles of years.
The early lilacs became part of this child,
And grass, and white and red morning glories, and white and red clover, and the song of the phœbe-bird,
And the Third-month lambs, and the sow's pink faint litter, and the mare's foal and the cow's calf,
And the noisy brood of the barnyard.

* * * * *

These became part of that child who went forth every day, and who now goes forth, and will always go forth every day. *Walt Whitman.*

"In the country we do not yet appreciate fully the educational influence of environment. We rely too much upon books and do not pay enough attention to things. Various reasons why boys leave the farm have been assigned by speakers at farmers' institutes. I have never heard any one claim that the cheerless, treeless, country school yard of itself had any power to charm and enthrall the average country boy. * * *

"The secret of keeping more boys satisfied with the farm rests primarily with the character of the country school house and its surroundings. Why do not trees and fence posts grow in many country school yards, when they thrive with great vigor around the farm home a few rods away? Scientific agriculture tells us that soil may be inoculated so that alfalfa, soy beans, cow peas, etc., will grow and produce abundant crops. Some one will do us a great service if he will tell us of the particular microbe and its method of culture that will correct the unproductive character of the soil in so many school yards, with special reference to trees, flowers, vines, shrubbery, etc. The peculiar kind of bacteria needed is the one that will induce the average school patron or director to connect himself gently but firmly with a spade and do some excavating in the hitherto unexplored country surrounding the crossroads temple sacred to the "three R's."—Among Country Schools, O. J. Kern.

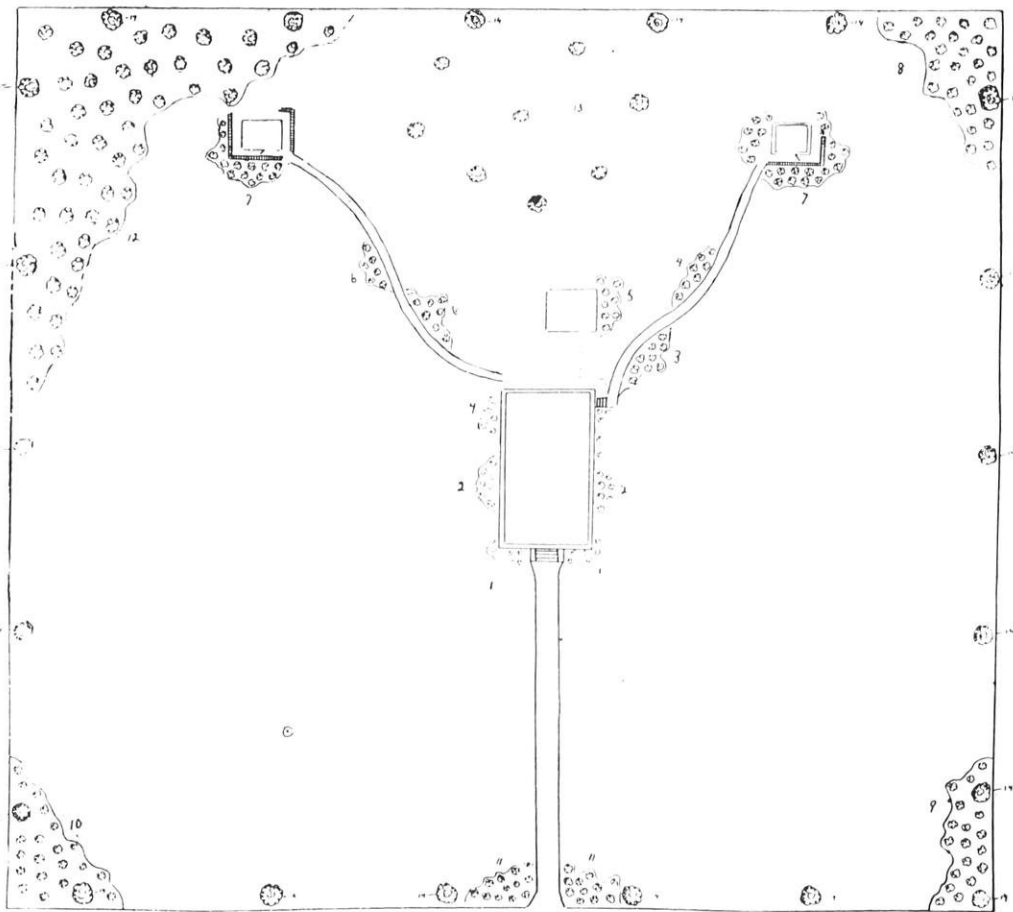
"One's training for the work of life is begun in the home and fostered in the school. This training is the result of a direct and conscious effort on the part of the parent and teacher, continued with the indirect result of the surroundings in which the child is placed. The surroundings are more potent than we think, and they are usually neglected. It is probable

that the antipathy to farm life is often formed before the child is able to reason on the subject. An attractive playground will do more than a profitable wheat crop to keep the child on the farm."—Prof. L. H. Bailey.

"The country child has rights. He is entitled to a square deal in opportunities to enjoy the best that the civilization of the world thus far has produced. To him should come art, music, and literature. Millionaires

significant thing. But this kind of man is more likely to give a fifty-cent education to a five-thousand-dollar boy,—a ten-thousand-dollar boy, perhaps, in possibilities. With charity for such a father, let us do the best we can for his children as God gives us the ability to see the best."—O. J. Kern.

Comment on the above remarks and verses is scarcely necessary and it is doubtful if anything can be said that will add to their force.



A sketch for a school in the wilds of Sawyer County. Only native trees and shrubs used.

are founding libraries and art galleries for city children, but who is doing a like service for the children living in the fields? True, a poem, a picture, or a song, as an educational agent, is likely to be regarded as a fad by the man whose mind for the last thirty years has run chiefly to corn and hogs. Such a man thinks that there is no use in putting a five-thousand-dollar education on a fifty-cent boy. As a plain business proposition there is no use in wasting so much good money on such an insigni-

It will be more to the purpose to consider conditions in Wisconsin and see if we are giving our children their full rights in the school; see if we are not perchance giving a fifty-cent education to five-thousand-dollar boys and girls; if we are not neglecting the playground which Bailey assures us is of more importance than a profitable wheat crop. (Note: For Wisconsin read corn, or cow crop.)

Almost without exception the grounds of the rural schools in this state are pitifully neglected, the sur-

roundings bare and cheerless, the playgrounds inadequate and in general the conditions abominable.

The writer would like to give a more cheerful estimate of conditions but finds it impossible to do so. The exceptions to the statement are very

Day exercises have borne no good result see the school grounds of Wisconsin.)

A portion of the 1911 Arbor Day Proclamation reads as follows:

"In Testimony Whereof, I have hereunto set my hand and caused the

the school house." This Society working in conjunction with the office of the State Superintendent aims to improve the grounds of the rural schools of Wisconsin, to rescue them from the barrenness and desolation now almost universal and make of them instead little beauty spots. It is a big man-size job, but we have begun and as follows:

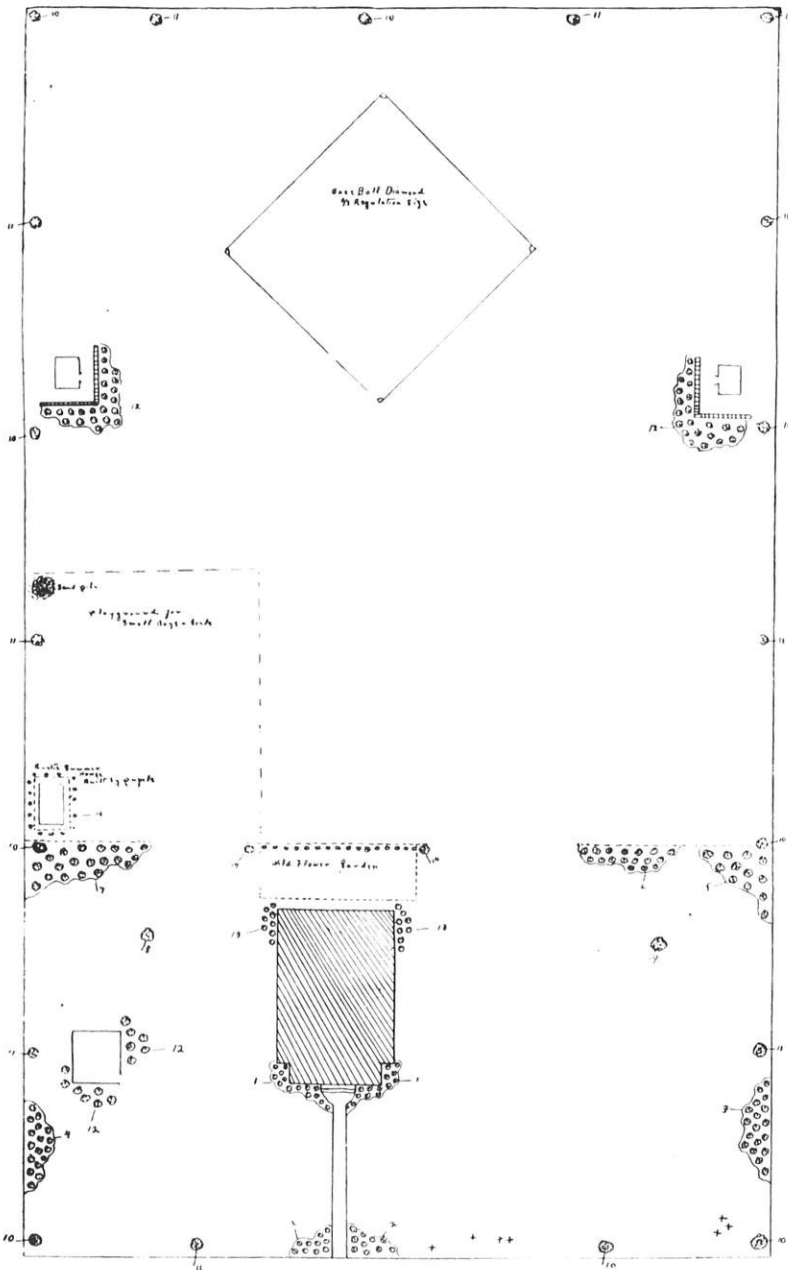
Our original plan was to select one school in each county, a school having a good school house, ample grounds and above all a wide-awake and progressive school board. On this county school spend as much money as may be required to make it attractive and beautiful; with the co-operation of the school officers lay out ample play grounds and a little later establish a school garden; endeavor to do everything possible to provide a "square deal" for the boys and girls in at least one school in a county. One little spot in a county seems insignificant but our hope is that the idea may spread. Weeds and smallpox spread, why not the aroma from flowers and the joy of a playground "all our own"?

Experience has taught us already that we may expect but little from the "grown-ups" of the country school districts as theirs is usually a policy of obstruction rather than encouragement, but from the county superintendents, the teachers and most of all from the boys and girls we expect much assistance.

If Johnnie Jones has a ball diamond, vaulting bars, etc., at his school and Ethel Jones a shady corner for dolls and marvel of marvels! a real play house, the Brown children in District No. 4 down the road will hear about it, quite often, so often that something will eventually have to be done in No. 4. Perhaps the county plan is not the best plan. If it happens that a better one arises we will back up and take a fresh start, but it is at least a beginning and it is beginnings that count. Something, however little, is being "done at the school house," actually done and not talked about.

The specific and particular things which have been done so far are here outlined.

The work was begun in 1909 with four schools, one each in the counties



Plan for a Waukesha County school; two acres.

rare, if indeed any whatever exist, and this in view of the fact that we have had an Arbor Day for many years, a day of songs and recitations, all of which tend to improve the rhetorical and musical abilities of the pupils—but fail utterly to improve the appearances of the school grounds. (For the proof that Arbor

Great Seal of the State of Wisconsin to be affixed. Done at the Capitol, in the City of Madison, this.....day of, etc.

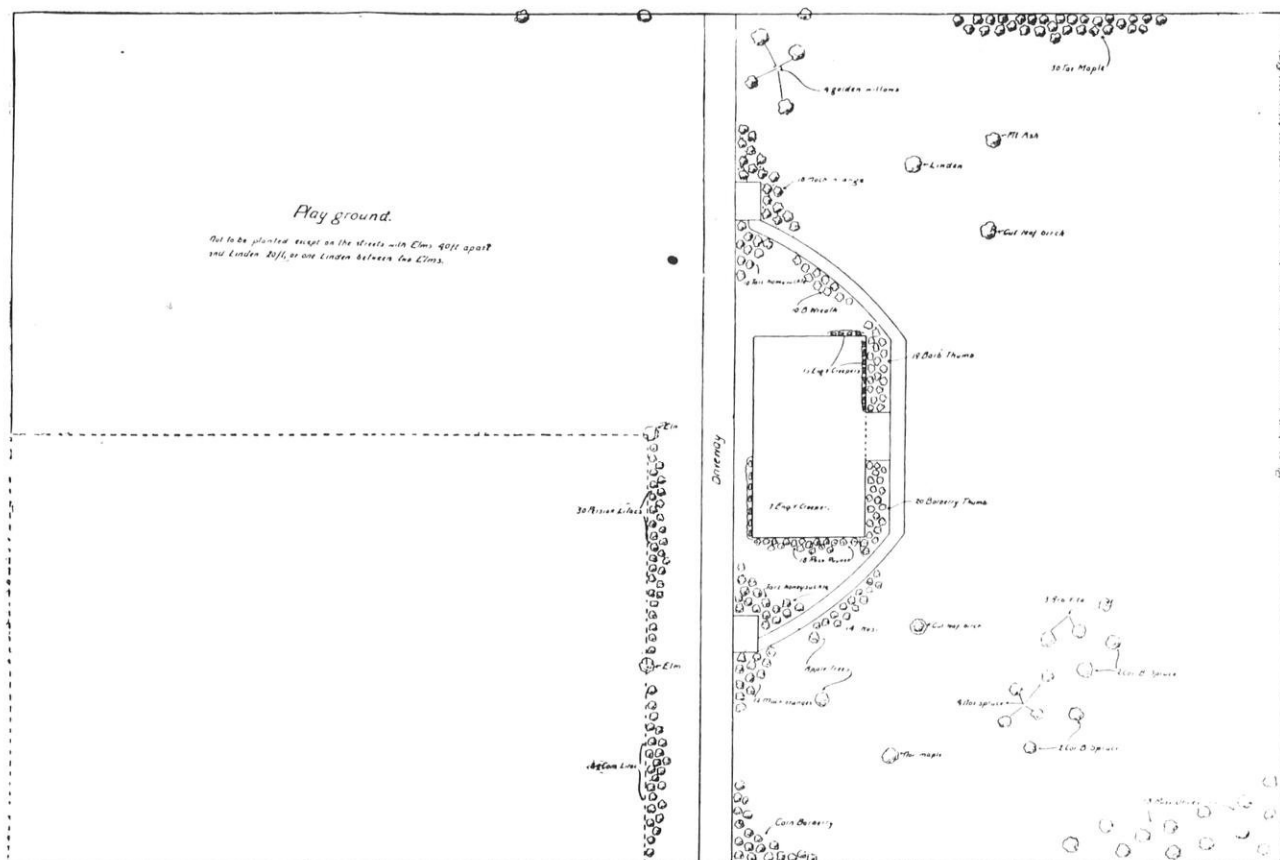
It is not the intent here to criticize the spirit or intent of this proclamation, except as to one count,—it was "done at the Capitol." What we particularly need is something "done at

who prepared the plans the school board was asked to submit data concerning the grounds.

From these data planting plans were prepared as shown in the following pages.

PLANS, NOTES AND COMMENTS.

The Door County School.—This school, known as the Sevastopol school, District No. . . , Town of Se-



Lyons School, Baraboo.

essary to replace those that may die or to extend the landscape scheme if it shall consider such replacement or extension expedient, provided, however, that such loss by death or otherwise was not in its judgment due to indiscretion, neglect or lack of care of the second party, its servants, agents or inhabitants.

vastopol, is just on the outskirts of the city of Sturgeon Bay.

This district has one of the best one-room school buildings in Wisconsin, heated by furnace in the basement and running water supplied from a tank in the attic. The grounds contain two full acres and someone very sensibly located the school house in one corner, thus giving ample room for playgrounds. The original plan has been modified in several particulars. The scheme involves a separation of the grounds into two equal parts, the one designated as "Play Ground" to be unobstructed by any

“Said first party* agrees to furnish to said second party * * * at such times, and in such manner as it deems advisable, without charge to the second party, landscape plans for landscaping, improving and beautifying the school grounds and all trees, shrubs, plants and vines necessary or convenient in adorning, landscaping and beautifying said school grounds. Said first party also agrees to provide a competent or expert person or persons to superintend and direct the

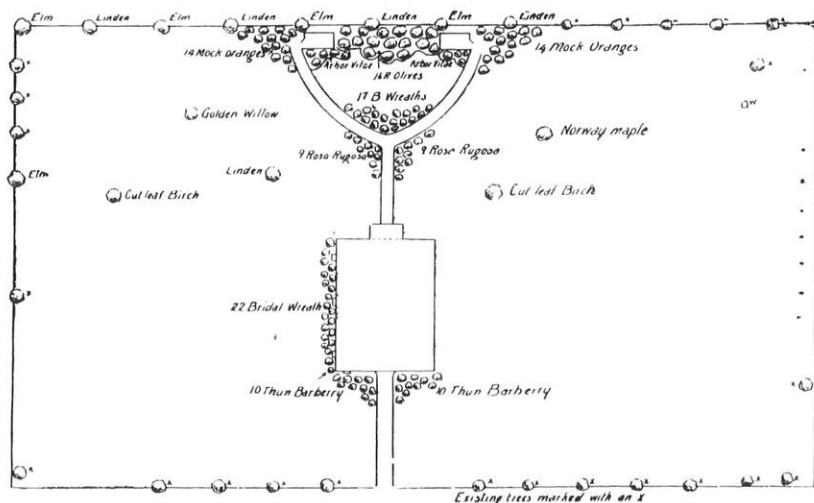
*The State Horticultural Society.

The hearty, whole-souled co-operation of the board and patrons insures success at Branch.

The grounds of the strictly rural schools of Wisconsin average less than one-half acre in extent. Is it

A campaign of education should be started, a playground campaign, urging school boards to provide at least two acres for each rural school, a little exercise paddock as it were, where the boy and girl of the farm may have an equal chance with the calf and the colt.

A new bill was introduced in both the House and Senate at the recent



Secondly, it seemed best to wait until the planting already done had developed. There are many problems connected with work of this kind that do not show on the surface. One is the indifference of the average school board to the conditions sur-

The time may come when country schools have adequate grounds, two, three, five or even ten acres, and if it does we may then work with a better spirit for there will then be room

extra session of the present Congress and will come up for discussion and enactment at the first regular session beginning in December.

This legislation has thus been indorsed by the U. S. Department of Agriculture, and also by many fruit growers and other associations, by the American Association of Economic Entomologists, and by the American Association of Official Horticultural Inspectors.

The following are the principal reasons urged for the passage of this act:

(1) The United States is the only great power without protection from the importation of insect infested or diseased plants.

(2) A large percentage of the imported insect pests and plant diseases in this country have been brought in on imported stock. Among those recently so introduced are the San Jose scale and, in New England, the brown tail moth, and in past years, more than 50 per cent of the major fruit and crop pests and plant diseases which now infest this country.

(3) The losses occasioned by these imported pests now amount to hundreds of millions of dollars every year, the San Jose scale alone costing approximately \$10,000,000.00 a year, and these losses will remain as a continuing annual tax on agriculture.

(4) There are still very many important insect pests and plant diseases which may be excluded from this country. There is now great danger of the establishment throughout the United States of the brown tail moth. Imported nursery stock, during the last two years, has carried this pest to twenty-two states, and it is by no means certain that it has not been established in some of them. The white pine blister rust and potato wart diseases are two other examples of dangers which may be kept out. The former threatens the pine forests of the country and the latter has put an end to potato culture in large districts in Europe, where it has gained a foothold.

(5) The operation of this bill will not work a hardship on any of the interests it affects in this country. It will protect the nurseryman just as much as it will the fruit-grower; nor

will it interfere with state quarantine regulations.

(6) The expense to the National government will be very small in proportion to the protection gained, probably not to exceed \$25,000.00 annually. The government is now appropriating \$300,000.00 annually, in an effort merely to control the brown tail and gipsy moth, in a small section of New England, and the New England states themselves are spending upwards of \$1,000,000.00 annually in the same effort.

(7) The entire value of imported nursery stock as declared at customs is about \$350,000.00 annually, scarcely more than the government is now appropriating to assist in the effort at the control of the gipsy moth in New England, and about one-third as much as the New England states are spending annually in the same effort.

Horticultural and agricultural societies and individuals interested in this measure can aid in securing its passage at the next Congress by forwarding resolutions of endorsement to their local representatives in Congress."

THOMAS B. SYMONS,
College Park, Md.

J. B. SMITH,
New Brunswick, N. J.

E. L. WORSHAM,
Atlanta, Ga.

Committee on National Legislation
of the American Association of
Economic Entomologists.

APPLES FOR WISCONSIN

"For several years Secretary F. Cranefield of the Wisconsin State Horticultural Society has strongly recommended the planting of summer and fall varieties of apples such as Duchess, Wealthy and McMahan, claiming that as we are near large markets and these varieties bear well over large areas in Wisconsin, that they would prove more profitable in the long run than later apples that must compete with Ben Davis, and the well known eastern varieties. Until the present apple season I had agreed with Mr. Cranefield, but the season's experience has caused some doubts. It is probably true that apples were a worse than usual glut on

the market early this fall but while visiting in Chicago this fall I hunted up the commission house where we had consigned our apples and looked things over. After noting the great supply and the critical attitude of the buyers I did not wonder at our low returns. I was somewhat surprised to find also that we of Wisconsin do not have the market for mid-season apples nearly as much to ourselves as I had supposed. Here I found very fine Jonathans from Illinois which with us is a winter variety, competing with our Wealthies and McMahans.

At that time, just before Thanksgiving, Fameuse and Northwestern Greening and other winter varieties sell locally at \$1.00 per bushel and not enough to supply the demand while but a little over a month ago good apples might be had at twenty-five cents per bushel. Although thousands of barrels of apples were shipped out from this section this fall a merchant in our home town is advertising the receipt of a carload of New York apples of winter varieties because there is not enough of winter varieties left here to supply the demand.

More than ever we have noticed the popularity of the Fameuse or Snow apple. Many people were ordering Fameuse at seventy-five cents and a dollar a bushel even when good fruit of earlier varieties might have been had at a much lower price. Northwestern Greening seems to take well with local consumers. At any rate, it would be well to carefully consider the variety question before planting any large area."

W. A. TOOLE.

The above is from the Wisconsin Agriculturist of December 21st.

It is true I have persistently and I hope consistently preached fall apples for Wisconsin for years and expect to continue for some time along the same line.

In the first place we have no winter apples that can compete with the best varieties grown in the Eastern states and the far West. We might as well admit it as to enter into long arguments and explanations.

The Northwestern Greening lacks uniformity in keeping qualities and the tree is unreliable except in a few

limited sections. The Malinda cannot stand up in size or quality with any of the standard winter kinds.

The Windsor is a keeper and would be profitable if we could keep the tree from blighting to death long enough to bear fruit.

When we get fine winter apples that compare in early bearing, quality and productiveness with Duchess, McMahan, McIntosh, Wealthy, and Wolf River we can and ought to enter into competition with the Baldwin and Ben Davis sections.

Brother Toole visited Chicago at the wrong time and in an unfortunate season. The Wisconsin apple season covers about six weeks beginning with the last week of August. During that time the Illinois Jonathan is very little in evidence and can never compete in size or even in quality with the kind of McMahan and Wealthy that we *ought* to put on the market. The glut of fall apples on the Chicago market this year was due wholly to the farm orchards and Sauk Co. is the biggest sinner in the state in this respect.

At the same time Reedsburg and Baraboo farmers were taking 20 cents a bushel, many of our growers were getting \$3.00 a barrel. The right kind of fall apples in Wisconsin properly handled have always been money makers. I would be quite willing to place the 32 McMahan trees in our Wausan orchard, 14 years old, in competition for the next 5 years with any trees of any winter variety of twice the age anywhere.

The Fameuse is really a fall apple. It comes into bearing about 12 years after planting and is profitable at about 20 years of age. As I have sons and may have grandchildren I would certainly plant a Fameuse orchard if going into the apple business but first of all would set lots of Duchess, Wealthy and McMahan, a little bunch of McIntosh and plenty of Dudley for my own needs. These would make me some money for present needs at least.

Stick to the fall apple, brother, it is a safe bet. What we want is a short life and a merry one. Grow right, pack right, assassinate the dishonest commission men, root out the farm orchard, except enough for Jack

and Jill, and the Wisconsin fall apple has everything else in the apple line beat a million miles, east or west.

F. CRANEFIELD.

SOMETHING ABOUT CURRANTS AND GOOSEBERRIES

The following statements concerning cost of production were furnished a senior in the College of Agriculture by one of our most progressive growers of currants and gooseberries, Mr. E. E. Dunning of Milwaukee.

Mr. Dunning is engaged in the business of manufacturing furnaces, etc., and must give much time and study to the very important factor, "cost of production." So also must the fruit grower if he is to succeed.

1. How many seasons of bearing?

My oldest bushes are eight years from planting, and are in their prime. Consequently I cannot speak from experience as to the life, but I think it is safe to say that they are good for the three years that it requires to mature into full bearing and ten years bearing thereafter, and gooseberries the same.

2. Cost per acre year of planting?

Assuming that you have the ground prepared the year before, the cost the first year consists of the money paid the nursery for the bushes for good standard varieties such as Red Cross, Pomona or Wilder, No. 1, two year old bushes, and the planting, cultivating and hoeing the first year, I should estimate at from \$150.00 to \$200.00, and for the Perfection or Diploma at least \$100.00 more, as these bushes are more scarce and expensive. Goose berries about \$250.00.

3. Cost per acre each year of bearing?

In this question you have included picking, marketing, etc. I will separate that question in order to get a uniform cost. They do not bear much the next year after planting and are not in full bearing even the second year, consequently, it seems to me the cost of picking should be separate. Aside from this there is mulching, (should be about twenty-five original loads to the acre) cultivating, hoeing, spraying about \$100.00 to the acre.

This is figuring mulching at \$2.00 per load. This cost would carry through from year to year, excepting the pruning which would be a little additional after the third year, but would not add a great deal, say \$25.00. The cost of picking and marketing is about twenty-five cents a crate.

4. Interest on the investment?

This would depend upon the value of the original land. We do not presume it would be fair to take my place as a basis as that is worth at least \$500.00 an acre for the bare land, and the bushes add from two hundred and three hundred dollars more. I consider those in full bearing add at least \$300.00. You actually put that much into it the first two years, before they are self-supporting, so you will see the interest item varies anywheres from \$25.00 to \$50.00.

5. Yield per acre per season?

When the currant bushes are in full bearing, a good variety like the Red Cross, Wilder or Pomona will yield from three hundred to four hundred crates to an acre, and sell at an average price on this market (Milwaukee) at \$1.50 per crate. The gooseberries will yield more, but are generally sold at a little less per crate so that the market value per acre is about the same. Deduct 25 cents crate packing leaves \$1.25 selling consumer. 12½ cents, \$1.12½.

I might add that in order to produce these results, you not only need first-class No. 1 two year old bushes but proper and prompt attention must be given to all the details such as mulching, pruning spraying and cultivating. You can scarcely give currants or gooseberries too much mulching, as they must have a considerable amount of it, and neglect of any of these details above mentioned would very materially reduce the yield and might make what seems to be a profitable investment a failure or at least a loss. That business cannot be gone into on a cheap scale and succeed.

Ask your neighbor to subscribe for this paper,—we need the circulation.

Wisconsin Horticulture

Published monthly by the
Wisconsin State Horticultural Society
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 Secretary W. S. H. S., Madison, Wis.
 Associate Editors—Nineteen Hundred
 Members of the Society.

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 which includes membership in the Wisconsin
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Remit to Secretary W. S. H. S.
 Madison, Wis.

Be sure you are right then go—to
 the Convention.

Washburn growers have bought
 30,000 fruit trees for planting next
 spring, including some peaches and
 pears.

The Bayfield growers dedicated
 their new building December 20th.
 This is the second building to be
 erected in the state by co-operative
 effort among fruit growers.

We thought that certain of the W.
 S. H. S. people were pretty fair boost-

ers for Wisconsin, but Secretary of
 State Frear has all of us beat 2000
 miles. Don't fail to be on hand
 Tuesday.

This is a special school grounds
 number. Next month there will be
 another special feature, "The Men
 Behind the Trees."

WHAT PUNISHMENT IS FIT?

We caught the office boy in a far
 corner of the back room with a well
 worn copy of,—not Diamond Dick,
 —but Part I, of the 1911 Report.

Upon being reprimanded he offered
 the following defense:—If A. Kelley
 Knox Plumb down will Elizabeth or
 I. P. Ketchum?

We ask again what punishment is
 fit for such a crime?

STRAWBERRIES OF QUALITY

Our strawberries averaged \$447.00
 an acre this year and the quality sim-
 ply immense. I picked a crop of fine
 raspberries from plants set in May
 of this year. Apples heavy crop and
 fine in quality. Am starting a 15-acre
 berry and fruit farm here.

DR. WM. F. FLINT.

Washburn.

OSHKOSH ACTIVE

The Oshkosh Horticultural society,
 at its regular meeting at the Chamber
 of Commerce rooms, appointed dele-
 gates to the state horticultural meet-
 ing, to be held at Madison on January
 9, 10 and 11. Mrs. Marcia Howlett
 read a paper on "Sentiment in Horti-
 culture." Mr. Cooper read a paper
 on "Fertilizers, Soil Fertility, and
 How to Maintain It." The next
 meeting will be held at the home of
 Mrs. Marcia Howlett on January 2,
 all the members being invited to meet
 for a social time and an oyster supper.

Oshkosh Northwestern.

WASHBURN ELECTS

The annual meeting of the Wash-
 burn Horticultural society was held
 at the Commercial Club rooms on
 Monday evening of this week and was
 quite largely attended. The annual
 election of officers was held at this
 meeting and resulted in the following
 being chosen to head the society for
 the ensuing year: H. H. Burns, pres-
 ident; F. A. Bell, vice president;

George Morgan, Secretary; O. M.
 Olson, treasurer. Executive commit-
 tee: Wm. Olson, H. H. Peavy and
 A. I. Lien.

E. C. Stevens was elected as a
 delegate to the state meeting which
 will be held at Madison January 10
 and 11.

The Washburn society is composed
 of an enthusiastic lot of members who
 are working to promote fruit growing
 on a more extensive scale in Wash-
 burn district. It is also to benefit
 farmers who are engaged in growing
 fruit. The society plans to hold meet-
 ings each month during the winter
 season and all farmers and others are
 invited to attend.

Washburn Times.

ALSO BAYFIELD

The Bayfield Horticultural society
 held its annual election Tuesday even-
 ing and elected the following officers:
 Wm. Knight, president; F. Kerns,
 vice president; A. H. Wilkinson, treas-
 urer; O. Flanders, secretary. The
 Bayfield society has about 150 mem-
 bers, being the largest in the state.
 F. Kerns was elected delegate to the
 state convention.

Bayfield Progress.

A SENSIBLE USE OF MONEY

WASHINGTON, Dec. 12.—Mrs. Levi Z.
 Leiter, the millionaire horticulturist,
 whose conservatories contain many
 rare plants valued at thousands of
 dollars each, brought home a number
 of exceptionally costly specimens from
 her recent European trip.

Mrs. Leiter is called the Flower
 Lady Bountiful because her beautiful
 blooms adorn every hospital and insti-
 tution where the sight of the frag-
 rant blossoms bring cheer to the in-
 mates.

Her entertainments are always
 unique through her treatment of
 flowers. She rarely displays cut
 blooms, declaring it cruel to separate
 them from the stalk.

Among Mrs. Leiter's personal dis-
 coveries is a beautiful verbena of a
 delicate pink shade. This verbena
 was used at the ball Mrs. Leiter gave
 Miss Helen Taft last winter in com-
 pliment to her guest's favorite color.
 A new maiden hair fern is another
 Leiter horticultural triumph.

Milwaukee Evening Wisconsin.

DR. T. E. LOOPE

A TRIBUTE.

For the first time in the life of our little journal has it become our sad duty to announce the removal by death of one of our active and well-beloved members.

From a home paper we take the following:

"Truman Ellis Loope was born in New York State May 7, 1841. He came with his parents to Wisconsin in 1845 and settled at Racine, but a year later moved to Dodge County, where they lived about twenty years. At the age of sixteen years he began teaching in the public schools and taught eight winter months. He en-



Dr. T. E. Loope.

tered the high school at Horicon, Wis., where he graduated. He matriculated at Rush Medical College of Chicago in 1864, and graduated in 1866. He then removed to Minnesota and began the practice of his profession. On November 21, 1867, he was united in marriage to Carrie J. Wood and in 1868 they came to Waukau where they resided for about eight months, when they moved to Eureka, where he has since resided. There were two children born to them: Truman Elbert of Iola and Eva Ardella who resides at home.

"Dr. Loope belonged to the Masonic order and was a member of the I. O. O. F. Lodge. In politics he was a Republican and cast his first presidential vote for U. S. Grant. He offered his services to his country during the Civil War as surgeon, but the com-

pany he was to serve was transferred and the place was filled by another.

He served his county as register of deeds two years and chairman of the town board for fourteen or more years. In connection with his practice he has been interested in fruit growing. He joined the State Horticultural Society in 1897 and became its president in 1901, serving in that capacity for a period of six years. He was a man of quick perception and of high mental power. He won an enviable reputation for himself as a physician and possessed the full confidence of the people."

"They are gathering home from every land
One by one,
As their weary feet touched the shining
strand

One by one;
Their brows are encased in a golden crown
And travel-soiled garments all laid down,
And clothed in white raiment they rest
on the mead
Where the Lamb loveth his chosen to lead
One by one.

We, too, shall come to the river-side
One by one;
We are nearer the waters each even-tide,
One by one.
We can hear the roar and the dash of
the stream
Ever and again through our life's deep
dream;
Sometimes the waves all the banks
o'erflow,
Sometimes in bright ripples the small
waves go,
One by one."

While a physician by calling, one of the noblest of professions, he was lured ever by that subtle call of Nature which none who have heard can resist.

To such as listen there is revealed a truth, a beauty and joy more satisfying, more lasting than aught else this life affords.

Dr. Loope raised fruits and flowers, but he was not a professional horticulturist. The red and gold of the apple appealed to him far more than the profits from the orchard. He left no fortune as the world counts a fortune, but to his family and friends he left a far richer inheritance. It was good to know him; his kindly spirit pervaded all our councils. He was always a peacemaker among us and if dissension threatened Dr. Loope was always at the front with song or story, jest or kind reproof, smoothing the way for us. His words left no sting and there is nothing that we want to

forget. Others may have brought to us a more profound knowledge of the ways and means for making money but none a kindlier spirit.

Just now when we are rushing so madly ahead to gather in the dollars from orchards and gardens, we needed Dr. Loope just a little longer, but while we shall miss the hearty greeting and the kind word his spirit will remain.

His profession lost a wise counselor, his lodges a loyal brother, our members a friend.

NOTES FROM MENOMONIE

For the benefit of members I may inform you that the Omaha Plum by far beats any Plum on your list. It is of same season as the De Soto, three times as large and of best quality. It is fully hardy here and a strong grower and an early bearer. It originated with Mr. Williams in Nebraska. I would say that with a Plum like that, Plum growing would be profitable here and I wish I could correspond with some one who understands and makes a business propagating the Plum that I may send them limbs or buds from it to propagate.

I believe the Delicious Apple is going to prove hardy. Upon the high table land where the Weston Orchard Co.'s orchard is located it stood last winter anyhow in perfect shape. Also the King David wintered well on that soil.

I regret our society has not yet taken steps to try out these newer varieties of winter apples upon soils and locations that seem as favorable for commercial apple production right here in our state as anywhere. The Stayman Winesop, the Senator and Black Ben are strong growers with me. While not as hardy as Duchess in the valley where I have them and where Wealthy neither is hardy, they may as the Wealthy, some of them at least, prove perfectly hardy upon those high hardwood tablelands and plateaus with limestone underlain, of which we have many along the southwestern part of our state and elsewhere also. Yours truly,

S. RUNNING,

Menomonie, Wis.

Mention this paper when writing to advertisers.

A PROTEST

Having been a member of the State Horticultural Society for several years and constantly waiting to learn that the Society was about to assume a neglected duty in paying more attention to other branches of horticulture beside commercial and experimental fruit growing, I have waited in vain, I feel that the time has come to protest and protest vigorously against such partiality in behalf of a limited class of citizens, while a greater number, standing in much greater need of instruction and encouragement are practically entirely neglected.

Article II of the constitution of the Society, as given on page VIII of the Report for 1908, says:

"Its object shall be the advancement of the art and science of horticulture *throughout the state.*"

Has that been done for any branch but commercial fruit growing? On page XXIII, Report of 1910, is a statement of "Additional aims and purposes of the Wisconsin State Horticultural Society," from which the following statements are quoted: "Purely an *educational* institution. Its purpose the advancement of *every branch of horticulture* throughout the State.—Aims to accomplish this through publications, individual help and conventions (two yearly)." Now let me ask how much except the work on school grounds has been done for any branch of horticulture except the fruit growing? Is it fair to the thousands of citizens of the state who need instruction and encouragement in truck gardening, vegetable home gardening and flower gardening that they should be ignored? Has the Society issued a manual, bulletin, or even a circular that will aid or stimulate a person with a few feet of back yard to make the most of it? Can one write to the State Horticultural Society and say, "My back yard has room for a small garden, the cost of living is rising so rapidly, can you send me a bulletin and plans telling how to make the most of it?" Has the Society plans to distribute of what to grow and how to do it in a garden 6x10 feet, or 10x20 feet, or 20x40 feet, etc.? Has the Society the data and statistics to show the slight expendi-

ture in money and labor, and the big return in the money value of the crop from a carefully tended back yard, and the great gain in flavor, delicacy and freshness in what is gathered from it, as compared to the necessarily staler and more flavorless store-bought vegetables? Or has it done anything to spread the knowledge of the enormous saving from a therapeutic and hygienic in neurasthenic cases? Does it realize or make the public realize that physicians feel that garden work for sedentary or nervous people eclipses all drugs and medicines in value?

Have the honorable board of officers and the executive committee with their large orchards and gardens ever realized what a wealth of possibilities lie in that little muddy back yard, under the well directed and instructed care of the tired clerk, or weary school teacher, or busy housewife whose closely counted pennies do not enable them to buy all they would like of radishes, young onions, or lettuce—and think again of how much of those could be grown for a family of three or four, even in a plot of six by ten feet.

Is not the cumulative value of the produce of the thousands of such gardens which are now run in a haphazard way, an inestimable asset for the state? Many families derive their entire year's supply of vegetables from such gardens. In my immediate neighborhood there are but two families who have not such gardens, and all the others derive most or all their supply of summer vegetables, and in some cases their winter's supply as well. In the families where the occupation of the father keeps him outdoors during the day, his share of the work is little more than the manuring and spading up the ground in the spring, the balance of the work is done by the women and children in odd moments and done, too, not as a wearisome drudgery, but as a pleasant recreation, enlivened more or less by a gentle rivalry between the neighbors. In the writer's neighborhood most of those people are working people of ordinary wages, and the produce of their gardens makes a very appreciable difference in their living expenses as it is,

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Complete assortment of Fruit and Ornamental stock in all varieties suited to northern culture. A specialty of Hardy Shade Trees, Windbreak Stock, Evergreens (Coniferous), Deciduous Shrubs, Apples and Native Plums.

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Strawberries, Raspberries, Blackberries, Currants, Gooseberries, Grape Vines, Asparagus, Rhubarb, etc.

Ornamental and Flowering Shrubs, Vines and Perennials. Roses, Evergreens, etc.

If you would like to see a *really good Catalogue* we would be glad to send you ours. It has more than fifty pages and describes everything in the plainest language without any extravagant or overdrawn descriptions.

The Coe, Converse & Edwards Co.
FORT ATKINSON, WISCONSIN
Wisconsin's Largest Nursery

but with short, terse bulletins giving definite instructions without much explanatory argument, their gardens could be made to yield much more than as now worked by the rule of thumb method handed down by their uneducated peasant parents. Anything that can be done to reduce, as these gardens do, the expenses of a family from two to five dollars a month is an economic saving to the state not to be despised or to be ignored in the fostering care of the state's resources by the Horticultural Society. The cumulative value of the returns of small back yard gardens multiplied by proper encouragement and the improved methods of working those already in existence, would outstrip in their relative value those of the family cow to the dairy interests, or the family chicken yard to the poultry farm, and both of these are recognized as important factors in the economy of the state by the experts working in those lines.

In attempting to aid the classes of people for whom this work is urged it is useless to prepare elaborate bulletins because the evident care and accuracy of their preparation lends a weight to them that is disgusting to an uneducated person, so that the really simple bulletin is laid aside to be "read carefully when there is time to think about it," and that time pressed and crowded and squeezed out by the little daily cares and pleasures never comes. The way to reach them will be by little leaflets not exceeding ever four pages in length, written without explanatory argument, but rather dogmatically, and planned to be read, before dinner is ready, or waiting for supper or on a rainy Sunday. It should be short, terse, simple and concentrated, yet so full of meat that there is always a hidden nibble to entice one back. Such circulars, I am sure, would work a revolution and an economy in living for not merely the small salaried city man and suburbanite, but also among the farmer's women kind, for it is well known that a farmer himself won't work a vegetable garden.

I hope that my protest may stir the Society to suitable action at the coming convention.

BLANCHARD HARPER.

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Eight or ten more buyers for five or ten acres of Cherry Orchard Land to take the balance of 1911 planting on the

CO-OPERATIVE PLAN

We guarantee 6 per cent annually on your investment for ten years. We promise at least 100 per cent in profits in ten years. We mature your orchard up to where you will have an independent income.

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STURGEON BAY, WIS. The Sour Cherry Land of the United States.

WHY??

Write Us for a Booklet.

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(You Get a Deed to Your Land when Paid for.)

Co-Operative Orchard Co. STURGEON BAY, WISCONSIN



BUILT TO LIVE

Away up north or away down south or any point between. It has the health and strength to carry all the apples nature can pile upon it. The hole in which it was planted was not "shot with dynamite". It was not "leaned to the sun" nor, "to the wind." It never wore a "tree protector" because it never needed one. It shades itself and also the ground above the root system keeping the soil moist and cool and forest conditions. No "peculiar slope" was selected. Just good soil and level ground. It was a one year top tree when planted, and by a man who had just common horse sense. If you are in the market for fruit trees and this one looks good to you, send for our catalog and a list of your wants.

We are specialists in everything we grow.

HENRY LAKE SONS COMPANY, Nurserymen, Black River Falls, Wis.

PREMIUM LIST

OF THE

Wisconsin State Horticultural Society

The Following Premiums are Offered for Exhibits of
Fruit at the Annual Convention

Madison, January 9, 10, 11, 1912

	1st	2nd	3rd	4th
1. Best collection of apples, not less than Pre.	Pre.	Pre.	Pre.	Pre.
15 varieties	\$10 00	\$5 00	\$3 00	\$2 00
2. Best 5 plates (5 varieties) commercial apples for Wisconsin.....	5 00	3 00	2 00	
3. Best Plate Avista.....	1 00	75	50	
4. Best Plate Baldwin.....	1 00	75	50	
5. Best Plate Ben Davis.....	1 00	75	50	
6. Best Plate Dudley.....	1 00	75	50	
7. Best Plate Eureka.....	1 00	75	50	
8. Best Plate Fall Orange.....	1 00	75	50	
9. Best Plate Fameuse.....	1 00	75	50	
10. Best Plate Gano.....	1 00	75	50	
11. Best Plate Gem.....	1 00	75	50	
12. Best Plate Gideon.....	1 00	75	50	
13. Best Plate Golden Russet.....	1 00	75	50	
14. Best Plate Hibernial.....	1 00	75	50	
15. Best Plate Jonathan.....	1 00	75	50	
16. Best Plate Longfield.....	1 00	75	50	
17. Best Plate Malinda.....	1 00	75	50	
18. Best Plate Mann.....	1 00	75	50	
19. Best Plate McIntosh.....	1 00	75	50	
20. Best Plate McMahan.....	1 00	75	50	
21. Best Plate Milwaukee.....	1 00	75	50	
22. Best Plate Newell.....	1 00	75	50	
23. Best Plate Northern Spy.....	1 00	75	50	
24. Best Plate Northwestern Greening.....	1 00	75	50	
25. Best Plate Patten.....	1 00	75	50	
26. Best Plate Pewaukee.....	1 00	75	50	
27. Best Plate Plumb Cider.....	1 00	75	50	
28. Best Plate Seek-no-Further.....	1 00	75	50	
29. Best Plate Scott Winter.....	1 00	75	50	
30. Best Plate Fall Spitzenberg.....	1 00	75	50	
31. Best Plate Tolman.....	1 00	75	50	
32. Best Plate Twenty Ounce.....	1 00	75	50	
33. Best Plate Utter.....	1 00	75	50	
34. Best Plate Wagener.....	1 00	75	50	
35. Best Plate Walbridge.....	1 00	75	50	
36. Best Plate Wealthy.....	1 00	75	50	
37. Best Plate Winesop.....	1 00	75	50	
38. Best Plate Windsor.....	1 00	75	50	

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(Established in 1861)

Make a specialty of **Cherry Trees**. They strongly recommend **One Year Cherry Trees** because they are stocky, well headed, well rooted thrifty and vigorous. Plenty of **Two Year** for those who prefer the larger trees. They also have a nice lot of Apple in northern sorts.

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any one of their quality.

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Trees, Shrubs and Plants
Lake City, Minnesota
FIFTEEN HUNDRED ACRES

Vincennes Nurseries

Vincennes, Indiana

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PROPRIETOR

**Cherry Trees by the
100 or 100000**

The Growing of Cherry Trees has been our Specialty for Years. Our soil and method of growing produces a Tree that is not excelled by any one. Splendid blocks of two-year 5 to 7 foot trees and one-year 4 to 5 foot trees. Early Richmond, Montmorency and other leading varieties by the 100 or car load. We also grow a general line of other Nursery stock. Personal inspection invited. Correspondence solicited

	1st Prem.	2d Prem.	3d Prem.
39. Best Plate Wolf River.....	\$1 00	\$0 75	\$0 50
40. Best peck of each of the following varieties: Dudley, Fameuse, Gano, Gem, Golden Russet, Jonathan, McIntosh, McMahan, N. W. Greening, Tolman, Wealthy, Windsor and Wolf River....	2 00	1 00	75
41. Best Exhibit Pears.....	1 00	75	75
42. Best Exhibit Crabs.....	1 00	75	50
43. Best Exhibit Grapes.....	1 00	75	50
44. Best Plate Seedling Apple.....	2 00		

RULES OF ENTRY.

1. All entries must be filed with the secretary before 5 P. M., Tuesday, January 9.

2. Fruit must be arranged ready for judges by 9 A. M., Wednesday, January 10.

3. Four apples constitute a plate, no more, no less.

4. Separate samples must be furnished for each entry, except for No. 1, which may include all entries.

5. Competition open to all residents of Wisconsin, but premiums paid only to members. Successful exhibitors, if not members, must forward fee for membership before receiving check for premium; fee for annual membership, fifty cents.

Members or others unable to attend the meeting may send fruit to the secretary, who will make entries and place fruit on exhibition. Transportation charges must be prepaid.

All entries must be made on regular entry blanks which will be furnished by the secretary on application.

For further information address:

F. CRANFIELD, *Secretary W. S. H. S.*, Madison, Wisconsin.

STUDENTS' JUDGING CONTEST.

Twenty dollars in prizes will be awarded to students in the long and middle courses, Horticultural Department, College of Agriculture, for the best scores in identifying and judging varieties of fruit on exhibit.

Under rules prepared by Prof. J. G. Moore.

Final awards to be decided by a judge appointed by the president.

THE HAWKS NURSERY CO.

are in a position to furnish high grade Nursery Stock of all kinds and varieties suitable to Wisconsin and other northern districts.

Will be glad to figure on your wants either in large or small quantities.

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WISCONSIN NURSERIES

Grow and handle all kinds of nursery stock. We employ no agents but sell direct. If in the market you can save money by buying of us. Get our prices.

**WISCONSIN NURSERIES,
Union Grove, Wis. W. S. Moyle, Prop.**



A bunch of fruit men headed north. Fish Creek, Door County, August, 1911.

Questions and Answers

Q. Let me know best time to prune hard maples.

A. Any time before March 1. After that time there is danger of sap flow and pruning should be delayed until after leaves have started.

Q. Do you not think that in ten years the apple market will be over-filled?

A. No. Ten years hence there will be fewer growers than now, but they will be the right kind. In that time the shiftless ones will be weeded out and the ones that stick will have the right kind of fruit to market. There will always be a market for the *right kind*. In ten years we will have twenty millions more people to feed, making one hundred millions.

Q. When is the best time to top graft?

A. March or April. Top-working can be done successfully almost any time before midsummer if the cions are kept dormant. The slightest indication of growth in the cion is fatal.

Q. When is the best time to cut cions for root grafts?

A. November, December, January.

Q. How can rabbits and mice be kept out of an orchard?

A. Two boys, two guns and three beagle hounds.

Q. What is the best preventative against sun-scald?

A. Healthy, vigorous stock to start with, thoroughly drained soil and clean cultivation.

Q. What can be done to retard the bloom in an early spring?

A. Whitewashing, covering the buds and branches with a heavy spray of whitewash proved effective in Missouri on peach trees. It might be worth trying on apples in Wisconsin, but we have doubts about it. Door or Bayfield people would like a chance to answer this question.

Q. How close can Wealthy apples and Duchess be planted for commercial purposes and not be crowded?

A. 24x24 feet.

Q. If chips or sawdust is good mulch, when, where and how is it applied?

A. Sawdust may be used as a winter cover for strawberries in place of straw or other material.

Q. I notice that some fruit man has said not to wrap young trees with tar paper. I have wrapped about five hundred two years and have seen no bad effects. What is the danger?

A. The correspondent does not state whether or not the paper was removed in spring, serving only as a winter protection against rodents. If so removed no damage whatever would result. The bark of young trees very frequently shows injury when closely wrapped with paper of any kind if left on all summer. The strings used in tying also frequently girdle the trunks. It is unlikely that so-called tar paper is worse than any other kind.

Q. I have a small orchard of Delaware Red, Tolman Sweet, Walbridge and Northern Spy, but before planting any further would like advice as to what kinds to plant for winter varieties. I see other kinds advertised more or less but nothing said about these. Location, Buffalo Co. Soil, ideal.

A. The Lawver or Delaware Red is certainly a keeper but not much else. It is not considered hardy in Wisconsin. It lacks size and quality. This is true of the Walbridge, which is too small for a commercial apple. The Tolman is a standard everywhere for sweet and is grown extensively in Wisconsin. Northern Spy succeeds very well in the eastern and southern counties but rarely comes into bearing under twelve years. Plant McMahan, Wealthy, McIntosh and Dudley and leave the late keepers to the East and the far West. Raise *quality* apples of these kinds, pack honestly in three-bushel barrels and there will never be any lack of market. The trees will bear five or six good crops while the Spy is getting ready.

McKay Nursery Company

PARDEEVILLE, WIS.

Offer a Complete line of

HARDY NURSERY STOCK

FOR SPRING 1912

If interested in planting FRUIT TREES, SMALL FRUITS or ORNAMENTALS, write us for CATALOGUE and PRICES. You will find our prices consistent with quality of stock offered.

**NURSERIES AT
WATERLOO, WISCONSIN**

WANTED

A position as working foreman or manager of a fruit farm. Experienced in planting, spraying, marketing, etc. Can also do general farm work. Will give references. State salary.

F. E. SHESTOCK,
Algoma, Wisconsin.

Kellogg's Nursery

*Oldest Nursery in
Wisconsin*

Our stock is grown right, dug right, packed right, and by no means least, the

PRICES ARE RIGHT

*Our Specialties are Small Fruits
and Fruit Trees*

Apples singly or by the 1000.
Currants by the doz. or 25,000.
Strawberries by doz. or 500,000.

FIFTY-EIGHTH YEAR

Get our price list before you place your order and save money.

Address Box 77

KELLOGG'S NURSERY
Janesville, Wisconsin

A LAST WILL

WILLISTON FISH.

He was stronger and cleverer, no doubt, than other men, and in many broad lines of business he had grown rich, until his wealth exceeded exaggeration. One morning, in his office, he directed a request to his confidential lawyer to come to him in the afternoon. He intended to have his will drawn. A will is a solemn matter, even with men whose life is given up to business, and who are by habit mindful of the future. After giving this direction he took up no other matter, but sat at his desk alone and in silence.

It was a day when summer was first new. The pale leaves upon the trees were starting forth upon the yet unbending branches. The grass in the parks had a freshness in its green like the freshness of the blue in the sky and of the yellow of the sun—a freshness to make one wish that life might renew its youth. The clear breezes from the south wanted about, and then were still, as if loath to go finally away. Half idly, half thoughtfully the rich man wrote upon the white paper before him, beginning what he wrote with capital letters, such as he had not made since, as a boy in school, he had taken pride in his skill with the pen:

"IN THE NAME OF GOD, AMEN. I, Charles Lounsbury, being of sound and disposing mind and memory, (he lingered on the word memory), do now make and publish this my LAST WILL AND TESTAMENT, in order, as justly as I may, to distribute my interests in the world among succeeding men.

"And first, that part of my interests which is known among men and recognized in the sheep-bound volumes of the law as my property, being inconsiderable and of none account, I make no account of in this my will.

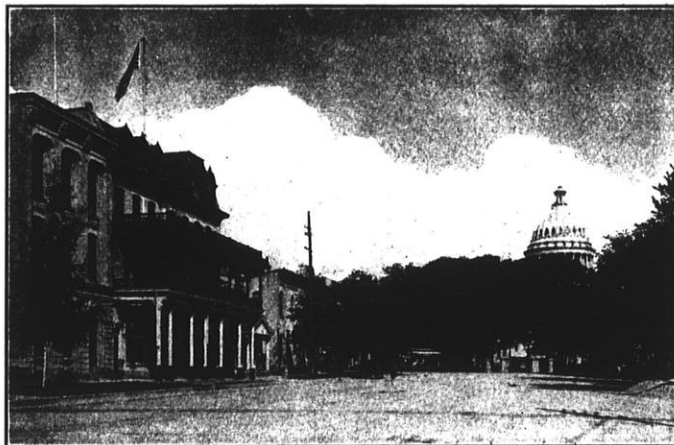
"My right to live, it being but a life estate, is not at my disposal, but, these things excepted, all else in the world I now proceed to devise and bequeath:

"Item.—And first, I give to good fathers and mothers, but in trust for their children, nevertheless, all good little words of praise and all quaint

The Avenue Hotel

MADISON, WISCONSIN

G. P. GIFFORD, Ownership Management



**Just off the Square on Monona Avenue, the
Great White Way of Madison**

FIRST-CLASS SERVICE

**MUSICAL SELECTIONS - 6 to 7 p. m. Daily. Sundays
from 12:45 to 1:45 p. m. Orpheum Theatre Orchestra.**

**Headquarters for Delegates and Members of Annual
Convention, State Horticultural Society.**

There is a difference between fruit growing and forestry yet most of the directions for fruit growing are directions for producing rapid wood growth only.

This means coming into bearing late and irregular bearing on account of lack of enough available mineral plant food to raise a crop of fruit and to set strong fruit buds in the same season.

POTASH

Two years before the trees are expected to come into bearing the annual application of minerals should begin, using 50 to 100 pounds Muriate of Potash and 100 to 200 pounds of bone, acid phosphate or basic slag per acre.

Potash improves the flavor, shipping quality and keeping power as well as the yield of fruits.

Write us for Potash prices and for free books with formulas and directions.

GERMAN KALI WORKS, Inc.
Continental Building, Baltimore
Monadnock Block, Chicago
Whitney Central Bank Building
New Orleans

**POTASH
PAYS**

pet names, and I charge said parents to use them justly but generously as the needs of their children shall require.

"Item.—I leave to children exclusively, but only for the life of their childhood, all and every, the dandelions of the field and the daisies thereof, with the right to play among them freely, according to the custom of children, warning them at the same time against the thistles. And I devise to the children the yellow shores of creeks and the golden sands beneath the waters thereof, with the dragonflies that skim the surface of said waters, and the odors of the willows that dip into said waters, and the white clouds that float high over the giant trees.

"And I leave to children the long, long days to be merry in, in a thousand ways, and the Night and the Moon and the train of the Milky Way to wonder at, but subject, nevertheless, to the rights hereinafter given to lovers; and I give to each child the right to choose a star that shall be his, and I direct that the child's father shall tell him the name of it, in order that the child shall always remember the name of that star after he has learned and forgotten astronomy.

"Item.—I devise to boys jointly all the useful idle fields and commons where ball may be played, and all snow-clad hills where one may coast, and all streams and ponds where one may skate, to have and to hold the same for the period of their boyhood. And all meadows, with the clover bloom and butterflies thereof; and all woods, with their appurtenances of squirrels and whirring birds and echoes and strange noises; and all distant places which may be visited, together with the adventures there found, I do give to said boys to be theirs. And I give to said boys each his own place at the fireside at night, with all pictures that may be seen in the burning wood or coal, to enjoy without let or hindrance and without any incumbrance or cares.

"Item.—To lovers I devise their imaginary world, with whatever they may need, as the stars of the sky, the red, red roses by the wall, the snow of the hawthorn, the sweet strains of music, or aught else they may de-

sire to figure to each other the last-
ingness and beauty of their love.

"Item.—To young men jointly, being joined in a brave, mad crowd, I devise and bequeath all boisterous, inspiring sports of rivalry. I give to them the disdain in weakness and undaunted confidence of their own strength. Though they are rude and rough, I leave to them alone the power of making lasting friendships and of possessing companions; and to them exclusively, I give all merry songs and brave choruses to sing, with smooth voices to troll them forth.

"Item.—And to those who are no longer children or youths or lovers I leave Memory, and I leave to them the volumes of the poems of Burns and Shakespeare, and of other poets, if there are others, to the end that they may live the old days over again freely and fully without tithe or diminution; and to those who are no longer children or youths or lovers I leave, too, the knowledge of what a rare, rare world it is."

SOME GOOD ADVICE

While reading the Wisconsin Horticulture, I saw that J. S. Anderson wants information on top grafting on Ben Davis.

Ben Davis is a poor variety to top graft on, although any hearty variety will grow on them. I would put on either Newell or Wealthy varieties that don't grow very fast after they come to bearing. Years ago they told me that an early variety would not grow on a late, but that is not true. I have the Yellow Transparent and Malinda both growing on the same tree and both doing well.

In regard of keeping up the fertility of an orchard, cultivating alone is not enough on the best of our clay soils. I've seen orchards in this locality that did not get a fork-full manure for forty years, still bearing a fair crop of apples every other year, but they never come up to the standard in size and color. These are mostly early varieties while late varieties such as Walbridge and Newell and most all the winter varieties don't amount to anything. It seems to me most anyone could solve this

FOR SALE

Fruit Farm of 40-acres five miles from city of Sturgeon Bay, one-half mile from water; thirty-two acres under cultivation, level, without stump or stone. Splendid fruit soil. Good frame house, log barn, well and wind-mill; 700 cherry, 800 apple set spring of 1911. Best bargain in Door county. Write

BOX 535.

Madison, Wisconsin

OPPORTUNITY

A BLOCK of shares in the Gays Mills Fruit Farm is for sale. An unusual opportunity to become interested in an established fruit growing company is here presented. Part of the orchard has reached the bearing period and well known orchard experts have pronounced it the best orchard in the state, considering its age. The property represented, in part, by this stock is located in the best fruit section of Wisconsin, in the Land of the Fall Apple. This stock will be sold reasonable but not at a sacrifice. If interested write to

T. CORNELINSON
215 9TH STREET S. W.
WASHINGTON, D. C.

Send For
Our **PANSY GUIDE AND CATALOG**
of Flower Seeds and Plants
FREE TO ANY ADDRESS
WILLIAM TOOLE & SONS
PANSY HEIGHTS, BARABOO, WIS.

question for himself, by hauling some manure on one row and plowing it under and notice the great difference in foliage and fruit. The great trouble is, most farmers have no manure to spare for their orchard, they want that for their hay and corn land.

I have a way to keep up the fertility for the last twenty years which I find very satisfactory. After putting a good woven wire fence all around, I make a moveable fence of boards so to fence off any part of it, which I seed down with clover, and after this clover has a good start in the spring turn in hogs. There ought to be about twenty on an acre, leave them in there until about the last of October. Feed them and fat them in there, move their feeding trough around on different places, and build a temporary shed in the center for them to lay under. After taking them out, plough the ground. Now some will say they will pick all the apples up. Never mind, let them, you will have all the more apples to pick off from the trees for the next three or four years. Others will say I haven't got that many hogs. I never had any trouble in that regard, one can always buy lean hogs from the stock buyers. Hogs bought that way and turned on a clover field and fed right, will pay for every pound of feed and the trouble of feeding them.

Sparta. FRED. MUEHLENKAMP.

SOMEBODY MUST HAVE HAD COLIC

I noticed in the issue for December, 1911, under "A Little Nonsense," a little sketch concerning apples eaten by Adam and Eve, and would like to run the total a little higher than 36,284, as follows:

If Eve 8 1 4 2 know how it tasted, then Adam 2 0 2 4 1 0 2 know if one's taste differs from another's. Total, 20,249,164. Yours very truly,

HERBERT H. HOWELL.

Chico, Cal.

The Question Box will always be open at the Convention. Although not mentioned in program questions will always be in order. Ask questions.



THE HARDIE SPRAYER

Hand and Power Sprayers

THE Sprayer that gives the satisfaction. Nothing to wear out, rust or get out of order. The best material used in construction. Adapted for all kinds of uses. Thousands of satisfied users in the east and west. A full line of Sprayers, Spray Material, Orchard Supplies, Nozzles, etc. Write for booklets.

M. ROHLINGER & SON

523 CASS STREET
MILWAUKEE, - WISCONSIN

THE "PROGRESSIVE" BERRY BOX

To the Wisconsin Fruit Grower:

The "progressiveness" of Wisconsin has finally reached the Wisconsin Fruit Grower. Perhaps it is not the particular brand of progress that you subscribe to, but we do not see how you can dodge it. Please read the copy of law we have enclosed. This law says that if you want to sell berries next year, you **must** sell them in dry measure quart or pint boxes. You can have boxes with as much false bottom as you like for ventilation, but the part that contains the berries must hold a little more than 67 cubic inches.

The practical difference between this new box and the old is that it will hold more berries if you see fit to fill it up. Whether you fill it or not, it is going to take more wood to make it on our part. We can manufacture fewer in a day. Due to other new and progressive laws our help will cost us more. Therefore you ought to pay more for the boxes and crates. You no doubt will have to take it out of the dear progressive people by adding it to the high cost of living. The man who ships into the state will have to use the same box you do, so the law will no doubt help local growers by keeping out the southern and Michigan berries, unless they are sold in dry quart boxes. The law applies to the grocery man as well as to you. It also means that you will not be able to use secondhand boxes and crates from outside the state. We offer the following legal standard boxes and crates:

Wisconsin dry quart boxes, 5 in. x 5 in. x 2 3/4 in. deep.
Michigan dry quart boxes, 4 3/4 in. x 4 3/4 in. x 3 in. deep.
Either style dry pint boxes. Our special pint will be
4 1/2 in. x 4 1/2 in. x 1 1/2 in. deep.

Panel end 16 quart crates to fit Wisconsin or Michigan dry quart boxes.
Solid end 16 quart crates to fit Wisconsin or Michigan dry quart boxes.
24 pint crates for dry pint boxes.

We can furnish the above either in the flat or made up ready to use.

We can furnish either the Wisconsin or the Michigan dry quart boxes, but we are recommending the Wisconsin box as it has been devised to meet the needs of the largest berry shipping centers of the state. It is the best dry quart shipping box that can be gotten up. Not being as deep as the Michigan box, the fruit will not crush from its own weight, as it will be apt to do in the dry Michigan box. If you have to put more berries in a box than formerly, you surely do not want them spoiled when they get to market.

We can also furnish either the panel end or the solid end crate. We continue to recommend the panel end crate to our customers. It is lighter and more easily handled than the solid end crate. It not only means a saving of your money to order this crate, but it also means a saving of your time and patience when handling your berries.

We wish to call your attention to some other lines. We manufacture apple boxes. Most Wisconsin people wasted their apples this season, or let them rot on the ground, for want of a smaller package than the barrel, that would fit the market. We make bushel and half bushel boxes for that purpose. We also make baskets for shipping beans, melons, tomatoes, etc. If interested send for price list and order your supplies now.

Michigan growers lost thousands of dollars the past season by not being able to get packages when they needed them. By buying your packages now you will not only get them cheaper than you will next summer, but what is more important, you insure yourself a package for your crop. You are facing a new condition in your business and you had best be prepared for it. Other states do not use the dry quart. Few if any other factories will make the dry quart box as a main product. Ordering from factories outside the state at the last minute may result in your getting the wine quart, which you cannot use. You cannot afford this risk. You can much better afford to get your supplies now. Write for copy of law and special winter offer.

Wisconsin Fruit Package Co., Crandon, Wis.

Subscribe now for Wisconsin Horticulture

Wisconsin State Horticultural Society

ANNUAL CONVENTION

TO BE HELD AT

Madison, January 9, 10 and 11, 1912

The convention will be held at the Assembly Chamber, State Capitol.
The Avenue Hotel will be headquarters for officers, members and visiting delegates. Rates \$2 and \$2.50 per day, American plan.
Opening Session, Tuesday afternoon, January 9, 2:00 o'clock.

TUESDAY AFTERNOON.—2 O'CLOCK.

OPENING SESSION.

Music.

The New Era in Wisconsin Horticulture.....W. H. Hanchett

Address.....Hon. James A. Frear, Secretary of State

Introduction of Delegates: Minnesota, Illinois, Iowa, Northern Illinois,
Northeastern Iowa.

Marketing the Apple Crop.....A. K. Bassett, Baraboo

Co-Operative Marketing of Fruits.....Hon. P. A. Rogers, Gravette, Ark.
Discussion.

Daily demonstration in Grafting by Mr. G. F. Potter, Dept. of Horticulture,
University of Wisconsin.

TUESDAY EVENING.—8 O'CLOCK.

Music.

Illustrated Lecture, Economy of Nature in the Plan of Eden.....
.....Frank C. Pellett, Atlantic, Iowa

WEDNESDAY FORENOON.—9 O'CLOCK.

BUSINESS SESSION.

President's Address.

Report of Secretary.

Report of Treasurer.

Report of Chairman of Trial Orchard Committee.

Election of Officers and Executive Committee.

The Farm Orchard: Is It Worth While?.....H. C. Melcher, Oconomowoc

Treatment of Farm Orchard—

For First Five Years.....

For Second Five Years.....A. W. Lawrence, Sturgeon Bay

After Ten Years.....J. S. Palmer, Baraboo

Discussion.

Orchard Conditions in Wisconsin and How They Can Best Be Met—

Individual or Collective Orchardling.....G. H. Townsend, Madison

WEDNESDAY AFTERNOON.—2 O'CLOCK.

Seeds and Seed Selection. W. N. Tracy, U. S. Dept. of Agr., Washington, D. C.

Horticultural Methods in the East..Prof. Wendell Paddock, Ohio State Univ.

The House or Typhoid Fly: new methods of controlling this pest.....

.....Prof. F. L. Washburn, State Entomologist, Minnesota

Students' Contest.

The State Horticultural Society offers three prizes of Five, Three and Two Dollars each for the three best five-minute talks by students in the Horticultural Department of the University.

POSSIBILITIES OF COMMERCIAL APPLE GROWING

PROF. JAMES G. MOORE.

(At Annual Convention, Minnesota State Hort. Soc., Dec. 1911.)

In discussing the possibilities of fruit growing in the middle Northwest, it becomes necessary for us at the outset to give the limits of what we mean in speaking of the middle Northwest. It cannot be entirely placed within the artificial boundaries of any group of states, but must be a section in which the climatic conditions are very similar. On account of this fact the section which we are to consider would include Minnesota, Wisconsin, northern Iowa and eastern South Dakota. In this area we find that the conditions throughout are very similar and because of this we can consider it as a unit in discussing the possibilities of fruit culture.

The early history of the development of the fruit growing in this section is one of struggle and disappointment. The early settlers coming from more eastern and southern states brought with them the varieties which they had come to know as superior in the various sections

The Great Northern Nursery Co.

Sells First-Class

Wisconsin Grown Trees

Our Trees Live. We had an opportunity to compare 500 of our Wisconsin grown trees with a similar lot of an Eastern Nursery. At the end of the season only 52 per cent of the eastern grown stock was alive, while 95 per cent of ours lived and grew. Moral: buy home grown stock and avoid loss. Our trees are **HARDY**, and our stock is **HEALTHY**. A comparison will prove that our stock has not the willowy and watery soft growth of southern or eastern grown stock.

Every tree and shrub is packed entirely under cover, free from exposure to sun and wind.

**Great Northern Nursery
Company, Baraboo, Wis.**

Write for Catalogue and Price - List.

WEDNESDAY EVENING.—8 O'CLOCK.

LADIES' SESSION.

Mrs. Marcia Howlett, Oshkosh, presiding.

Music.

Papers by Mrs. E. E. Dunning, Milwaukee; Mrs. L. H. Palmer and Miss Cora Astle, Baraboo; Mrs. Marcia Howlett, Mrs. Ward Davis and Mrs. N. A. Rasmussen of Oshkosh.

THURSDAY FORENOON.—9 O'CLOCK.

THE GROWING OF NURSERY STOCK.

Propagation of Nursery Stock with Demonstrations. Prof. J. G. Moore
 Cultivation and Care of the Tree-Fruit Nursery. R. J. Coe, Ft. Atkinson
 The Strawberry and Bush Fruit Nursery. M. S. Kellogg, Janesville
 Some Insects Liable to be Distributed on Nursery Stock. Prof. J. G. Sanders
 Some Diseases Affecting Nursery Stock. Dr. L. R. Jones
 Top Working in the Nursery. E. A. Smith, Lake City, Minn.
 Organization of a State Nurserymen's Association.

THURSDAY AFTERNOON.—2 O'CLOCK.

The Name and the Game. Wm. Toole, Baraboo
 Rational Care of Street and Shade Trees.
 Alfred Senn, City Forester, Milwaukee
 Improve the City Lot. Wm. G. McLean, Park Supt., Madison
 The Greenhouse Vegetable Industry in Wisconsin. Frank Ovenden, Kenosha

from which they came. These trees were planted in the new settlements under unfavorable conditions. In the majority of instances the results were anything but gratifying. Either the trees did not thrive or if they did by far the larger number were sooner or later destroyed by the severity of the climate. The result of these early plantings may therefore be considered largely as negative, but in negative results there may very frequently appear some positive features. This is true, for out of the early attempts at growing varieties which were brought from the east, there remain some which are among the most important in commercial fruit growing in this section today, of which the Fameuse and Duchess are notable examples.

Fortunately the discouragements met with by the early horticulturist did not have the effect of stamping out his enthusiasm for fruit growing in his new environment. As the various growers met with practically the same results there came to be a feeling of sympathy and general interest in the cause which resulted in renewed vigor being put into the work, and from which accrued results which are clearly evident at the present. One of these results is evidenced by the meet-

ing which is being held here today. We find that these early growers banded themselves together into societies for a general discussion of the best methods to be employed in overcoming the difficulties which they encountered. Out of these mere local societies came each of the great state organizations which for enthusiasm and good work performed are the peer of any in the country, for it is only where there is a common cause that enthusiasm and cooperation can be brought to the highest point.

Finding that they could not rely upon the eastern varieties, these pioneer horticulturists started out with the avowed purpose of securing varieties which would be capable of withstanding the conditions which they found to exist. With a common starting point we find the work leading along two widely diverging lines, both of which have led to affirmative and very important results. One was the importation of varieties from regions having even more severe climatic conditions than those prevailing in this section and from this work we have secured such varieties as Longfield and Yellow Transparent. By far the greater, and to an extent the more productive work was that of producing adaptable varieties. Nearly every

horticulturist was interested in the production of seedlings and from the thousands produced there have been picked out here and there those of superior merit until there has been built up a list which gives a very considerable range for the selection of the fruit grower. The horticulturists of no one of these states has been alone in this work. This state gives the Wealthy, Wisconsin boasts of being the home of the McMahan, while Pat-ten of Iowa has brought out Pat-ten's Greening and other varieties which have added much to the prospects for commercial apple growing in the middle Northwest.

TOMATO SEED

A limited amount of the famous

"EARLY BUCKSTAFF"

Per Package 25 cents

Per ounce 75 cents

RASMUSSEN'S FRUIT FARM
OSHKOSH, WISCONSIN

50,000 CUTHBERT
RASPBERRY PLANTS
FOR SALE

These plants were grown on sandy loam, have just been inspected and found to be free from disease and in fine condition.

F. N. KANG, Bayfield, Wis.

IMPORTANT INFORMATION

For Those Who Desire To
Put Money in Orchards

Apples and grapes have proven very profitable on "Apple Ridge", which is beyond question the best apple and grape region in the state and better than the Bitter Root country. Owners of two large orchards want to retire and have given me a price less than good orchard land without orchards. Think of only one hundred dollars an acre for property that paid over three thousand dollars net profit last crop. Why pay more and wait years when you can get a big per cent. here from the start. Look into this and you will want this snap. State how much you wish to invest and begin a thorough and exhaustive investigation at once.

G. H. TOWNSEND,
MADISON, WIS.

Thus we find that the early history of apple growing in this territory was primarily a period of experiment, most of the work being done by the pioneer who with courageous heart and steadfast purpose was laying the foundation of a commercial apple industry for those who were to possess the inheritance he had builded for them through many a struggle and discouragement.

The period of experimentation is not closed. We have no right to accept the legacy of the pioneer and turn it to our advantage without doing all we can to improve the conditions. We may never be able to do as much, or at least secure such marvelous results as the generation just past, nevertheless we have a duty to perform as well as they and unless we perform that duty to the best of our ability, succeeding generations will rightly accuse us of being an ungrateful and negligent generation of horticulturists. The legacy the pioneer horticulturists left us was a list of varieties adapted to our climatic conditions, our legacy to succeeding generations should be an established commercial apple industry.

Are there insurmountable difficulties which prevent the establishment of such an industry? If we were to talk with a fruit grower of New York or of Oregon he would doubtless tell us that there are, for there is a prevailing idea that the conditions in this section are unfavorable for commercial apple growing. There is but one method of telling whether such is the case and that is to analyze carefully the conditions as they exist and then from our analysis draw a conclusion either in the affirmative or in the negative.

The development of a commercial apple industry depends upon four factors: soil, climatic conditions, available market, and the man. The question which arises then is, does the middle Northwest possess these requisites?

Soil.

The former belief was that everything in fruit growing depended on the soil. We have come to believe that the soil is not the only factor in successful fruit raising, but still a controlling one. No matter what the

other conditions are, the soil must either be adapted, or capable of being corrected so as to become adapted or else the project is a failure. The day is past when commercial orchards can be put on any kind of soil as was the home orchard of forty years ago. Not all the soils in the section under consideration are adapted to fruit growing. Neither are all the soils in any particular state, whether in this section or any other. For the growing of apples a clay loam or gravelly loam with a fairly porous subsoil is the type of soil which is usually considered best adapted to the production of this crop. It is true that in some sections certain types of sandy soil are being used with success, but this type of soil requires much greater attention and a larger expenditure in keeping it in suitable condition for the production of a paying crop. If we were to study the soil map of the states mentioned we would find that the middle Northwest contains a sufficient area suitable for apple growing on which to develop an apple industry many times larger than that now possessed by any similar group of states. The lack of suitable soil then cannot be offered as an excuse for the lack of a commercial apple industry.

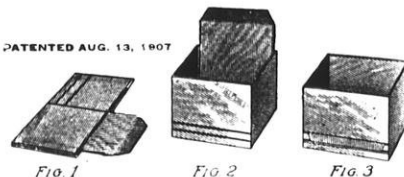
Climate.

The chief argument used by those who claim this region cannot become a commercial apple section is that the climatic conditions are such as to make it impossible to grow the apple successfully for commercial purposes. The inception of this idea was from the failure of the pioneer to grow unadapted varieties on unadapted soil. Are we to take the failure of the early fruit growers as the final word relative to commercial apple growing in the middle Northwest, or has the

wrong deduction been made from their failure? What is the true significance of their failure? That we can-

EWALDS FOLDING BERRY BOX

PATENTED AUG. 13, 1907



The only folding berry box made of wood veneer that

GIVES SATISFACTION

Made in Wisconsin style, Standard dry measure quarts and pints. Neat and strong, is all ready for business, needs no tacks nor stapling. Write us today and we will tell you more about this box and how to get it nearer home at manufacturer's prices. Do it now.

We also manufacture crates and old style quarts and pints in K. D. for crate makers and large growers who have stapling machines and make up their own crates and boxes, big reduction in price on carload lots. Our material and prices will please you.

Cumberland Fruit Package Company
Cumberland, Wisconsin

STRAWBERRY PLANTS

100,000 choice Strawberry Plants. Also Red and Black Raspberry, Asparagus and Rhubarb roots.

These plants will not be dug more than twenty-four hours before shipping. All stock guaranteed. Hot bed plants in season. Write for prices.

**RASMUSSEN'S
FRUIT FARM**
OSHKOSH, - WISCONSIN

Door County Lands

ARE THE BEST IN THE STATE OF WISCONSIN

For Fruit Culture. Door County Orchards Pay a Revenue of from Five Hundred to Eight Hundred Dollars per Acre Annually. For Particulars Write : : : : : :

**DOOR COUNTY LAND CO.,
STURGEON BAY, WIS.**

not grow apples or that we should learn, as other fruit sections have learned, that we should not expect to grow all the varieties whether adapted or not? The early fruit growers learned that they could not and set about securing varieties which they could grow as well or better than any other region. Is the New York grower discouraged because he cannot grow as good Ben Davis as Missouri, or the Michigan grower because he cannot grow Jonathan to compete with the Oregon product? Should the Minnesota or Wisconsin grower then be discouraged because he cannot grow King, Northern Spy or Baldwin as does Michigan or New York? If we look over the range of varieties which are adapted to commercial culture in the section under discussion we will find that we are no more restricted than many other commercial sections. Our Wealthy, Duchess, McMahan and McIntosh are not surpassed by those grown in any other section. In addition to this there are several other varieties which may be called into use, but we do not even need to stop here. The possibilities of adding new varieties which will fill in the vacancies which now occur in our list are greater today than ever before because the principles and laws governing plant breeding are now better understood than in the past. New varieties are constantly being added. I have only to mention the Gem City which has been recently given attention by your Society and the Dudley, which has been placed among the important varieties in Wisconsin, in proof of this statement. If our climatic conditions permit of growing such varieties successfully why should we consider unfavorable climate as our excuse for the lack of commercial fruit culture.

Available Markets.

One of the chief questions which is troubling the man who contemplates a commercial orchard at the present time is the probability of over-production due to the recent large plantings in so many sections. A careful study of the situation will convince one that the probability of over-production is very slight, but that there may be certain sections which will apparently


have an over-production because of the lack of proper distribution. I think we are safe in asserting that with proper distribution there is little or no probability of over-production, at least of any but the extra fancy grade of fruit. If, then, the question is that of proper distribution, the matter of the distance of shipping will be one of paramount importance. This question of distance from the market is of great importance to the commercial apple grower.

(Continued Next Month.)

MEMBERS OF THE 2000 CLUB

Here is our honor roll for December, a list of members who have induced others to join the Society and help swell the total to 2,000. Just notice B. Hahn's record.

A. Lohberger, 1; A. Gropper, 2; T. D. Van Buren, 2; G. M. Breakey, 1; B. H. Grant, 1; G. H. Ackerman, 2; A. A. Ten Eyck, 2; J. A. Hays, 1; B. Hahn, 31; T. W. Boyce, 1; Martin Larson, 1; C. Ackerson, 1; J. C. Reese, 2; P. A. Knudsen, 2.



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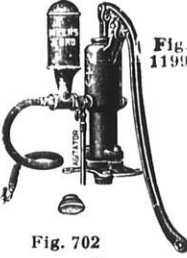


Fig. 1199




Fig. 653




Fig. 640




Fig. 1410




Fig. 702




Fig. 1125




Fig. 1358

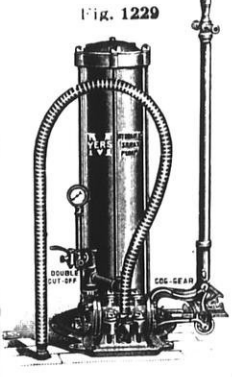


Fig. 1229




Fig. 1363

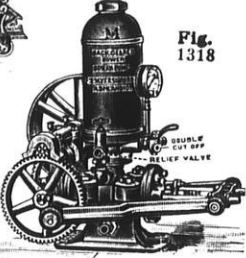


Fig. 1318

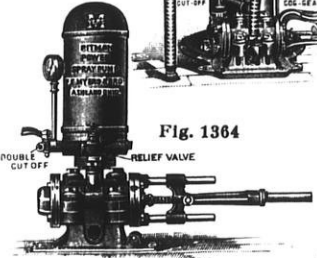


Fig. 1364

When the season arrives you want to be able to SPRAY WITHOUT ANY DELAY OR ANNOYANCE. A single day's delay may prove costly. In order to be safe at all times you must have a dependable spray pump outfit. YOU CAN ALWAYS DEPEND ON THE MYERS. The above illustrations show only a few MYERS SPRAY PUMPS made in all styles and sizes with a full line of NOZZLES AND ACCESSORIES for complete outfits with which to meet every requirement. GET READY NOW. WRITE FOR OUR SPRAY PUMP CATALOG.

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A book of trustworthy information by a recognized authority—given free to the whole world,—not a catalog or piece of advertising literature, but a well of information on the planting and care of trees from the day they are received from the nursery. As the author says:

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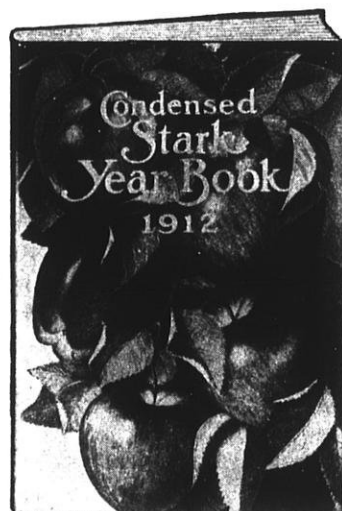
Please send me another dozen copies of the Stark Orchard Planting Book. This booklet contains very timely, valuable and some belated information. I am sending copy today to a young man who was at my place yesterday, and who is starting an orchard.—C. O. Reed, Proprietor, Model Fruit Farm, Oregon Co., Mo.

Your Stark Orchard Planting Book is the best thing I have ever seen. It is what the tree planters need badly; if they will read this book and follow the instructions they will be much benefited.—J. P. Fourot, Orchardist, Sumner Co., Kansas.

The Stark Orchard Planting Book received. This is something that I

have often thought should be in the hands of every planter. Will greatly aid them to make a success of the trees planted. I think it will be appreciated by all.—A. F. Buvinger, Labette Co., Kansas.

"Will you kindly send me one of your 'Stark Orchard Planting Books?' Have just run across one borrowed from a friend and think it is the best and simplest information on the subject of planting and pruning trees I have ever come across. Would be pleased to have one for reference and if there is any price, attached to it let me know and it will be forwarded. Trusting you have some left, I remain —R.M. Adams, Lancaster Co., Pa."



Condensed Stark Year Book "A Diamond Mine" of Information

Here is a book as different from the usual run of nurserymen's catalogs as day is from night. It is a veritable mint of boiled-down information on varieties for commercial or home-orchard planting, season of ripening of all varieties of all fruits, letters from successful fruit-growers from every part of the country, comments by our national horticultural authorities, etc., etc. It also gives the facts about Stark Trees and quotes prices. Every statement in this book is backed by a million dollar nursery. Planters the country over say this is the best, the most valuable and most practical book of its kind ever published. We have thousands of this kind of letters.

Stark Year Book received. I have several good horticultural works, but I believe your Year Book contains more valuable, up-to-date suggestions for the new beginner (or the old one either) than any of them.—John A. Minger, Memphah Co., Kansas.

Permit me to thank you for your handsome catalogue. It is the most comprehensive of its kind I have ever seen. The color plates are beautiful, and of great assistance in selecting fruit.—J. O. Lewis, Wash. Co., Tenn.

Copy of the Stark Year Book received. It is not only the most beautiful and artistic work of its kind ever issued but the most practical guide for the planter of fruit and other trees. The text is unique in many ways, especially in the directness of statement and the absolute worth of the various trees and fruits described. It should be in the library of every fruit grower.—Thos. F. Rigg, Iowa Horticultural Experiment Grounds, Hardin Co., Iowa.

Neither the Condensed Stark Year Book nor the Stark Orchard Planting Book can be purchased. They are our free gift to you. You might as well have these book treasures in your home. They are waiting for you to ask for them. Send the coupon today.

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Send me free books without obligations on my part.

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Fill in, cut out, and mail this Coupon today for two Free Books.



Volume II

Madison, Wisconsin, February, 1912

Number 6

"The Men Behind

The Trees"

"The Men Behind the Guns!" When our esteemed "ex." first used this expression we all thought he had said something new. The fact that the splendid marksmanship of our gunners no less than our guns and ships was responsible for the victories at Manila Bay and at Santiago roused our patriotism and kept us boasting for months.

When we consider the matter carefully we find it was not so new. American manhood, American character, energy, enthusiasm, determination and brains have made this nation. Other countries are as rich in natural resources but have lacked the *men*.

First of all it was the men behind the muskets at Bunker Hill, then the men behind the ax in the forest. The days of the fighting men and the pioneers



A. L. HATCH

are past but we still need, and have, the "men behind the guns." In Wisconsin we have thousands of these men and most of them are close to the soil; the others are in politics.

Wisconsin stands "first" in dairying, first in grains, and presently will be first in fruit. Not because we have richer soils, better air or better water, but because we have the men behind the cow, the men behind the seeds and the men behind the trees.

Horticulture in Wisconsin is now in the making and for some time we have wanted our readers to meet face to face the men who are making it.

To that end we will publish, from time to time, the pictures of some of the "men behind the trees" and something about each one.

Let it be plainly understood that there is no significance whatever in the order in which the portraits are published nor the position in the paper except that the pioneers will have the place of honor, on the front page. The other fellows may, owing to the exigency of the situation, find themselves back among the spray pumps and nurseries.

Be it further known that the remarks accompanying the pictures are *not* sketches written by the subjects themselves. Not a single question has been asked as to age, color, character, lineage, politics, religion or "previous condition of servitude." All of that and more has been supplied from the vivid imagination of the editor, and consist mostly of things that they didn't know themselves. We are not concerned about the year when these men were born nor where; we want to know what they have done.

We are now ready to begin. If there are no suits for libel more will follow next month.

A. L. HATCH

Mr. Hatch lives at Sturgeon Bay. The whole country up there is his—by right of discovery—and a very substantial portion of it by right of ownership, "recognized in the sheep-bound volumes of the law." It is not yet quite twenty years since Mr. Hatch, in company with Prof. Goff, discovered Door county, and today it is the leading fruit producing county in the state. (Make a heavy mark for foresight.) Just before that he owned a farm and an orchard in Richland county. All of this orchard, except one row, was in sod as was the fashion then and now in Richland county. This row, cherries, bore exceedingly even in off years. The Hatch cherry orchard at Sturgeon Bay has always been cultivated. Make another mark for judgment and observation.

He was a tree peddler once, about thirty-five or forty years ago, out in the Kickapoo country. The trees he sold are alive yet and bearing the kinds of fruit he said they would bear. Make another mark for honesty.

If you should follow closely the life of this man you would have your slate covered with marks. Briefly, it

is this: he has made the best possible use of all of the faculties with which nature endowed him to the end that he ranks today one of the leading horticulturists of the United States. Electing the business of fruit growing for a life work, he put into it hard work, hard study and integrity. Such things seem to pay in the end. Is there any young fellow within sound of the scratch of my pen who is cussing his "luck?" A. L. Hatch never met anything that weaker men call "good luck." If old man Bad Luck came his way he kicked him into the street.

We suspect he was the son of poor but honest parents. We hope so. He is somewhere between 45 and 70 years of age, it's immaterial; horticulturists never grow old.

In 1872 he joined the State Horticultural Society and has been one of its most helpful members ever since. From his "Observations of a Novice" at the 1874 convention at Madison, we will quote the following and then quit:

"There is no nobler employment of the human heart than home-making. Of all home attractions none are purer or more cheering in their tendencies than those offered by horticulture."

A. K. BASSETT

By way of contrast we take great pleasure in making you acquainted with A. K. Bassett of Baraboo. We say contrast, meaning thereby in age only, the other one being A. L. Hatch. That's the only contrast.

When we requested a copy of his latest photograph for our rose-pink boudoir, he wrote on the back, "age 30," which we are willing to concede to save further argument.

It's mostly hills around Baraboo, limestone clay-covered hills, the kind where the good apples grow. On the top of one of these hills, the very top, may be found an old orchard—and Bassett. The things he has done to that old orchard in the three years he has owned it, defy description. The first year the Fameuse, Utter and Plumb Cider all looked alike, and if you could have seen those scab masses and then the clean skinned Fameuse last year that brought \$3.00 a barrel,

you would comprehend exactly the motive of these narratives and what is meant by "the man behind the tree." He dehorned, decapitated and disemboweled those old trees, ripped out the sod, using a plow where possible, a hoe, pick axe, handsaw or his teeth, where the plow wouldn't work



A. K. BASSETT

Sprayed, prayed and fought like the devil and in the year of abundance, 1911, harvested one of the cleanest, prettiest crops of apples ever ripened by the sunshine of Sauk county. Sent some to a Chicago commission house and received net returns of 15 cents per barrel. The rest of the marketing story he told at the convention.

A young orchard is growing up around the old; says he expects to have 100 acres in time. Age, 30.

THIS IS THE LIMIT

I have been very much interested in the growing appetites of Adam and Eve. I see by the last issue of Horticulture, Mr. H. H. Howell fixed a total of 20,249,164, not saying anything about size nor quality of apples.

I wish to say that 202,020,249,164 was too many apples for the two to eat, and it's no wonder they raised Cain.

Yours very truly,

R. O. BINGHAM.

Mention this paper when writing to advertisers.

THE NAME AND THE GAME

BY WILLIAM TOOLE, BARABOO, WIS.

Probably most of you at some time or other, have heard some one say, "if I have the name I may as well have the game," such expression generally following mention of some uncomplimentary rumor or accusation. It is something of a shock to think that anyone would choose to live down to some lower standard, rather than strive for a better life, and yet there are probably many who follow a downward course, because of the impulse of an unkindly attitude toward them. We love to think that we, ourselves, are choosing a name that is worthy, one which indicated exalted aims, and we may well consider whether we are living up to the rules of the game, which is implied by the name, or the reputation which we assume. Perhaps there is no definite thought in our mind, that the stand which we take in society, imposes on ourselves obligation to live up to any definite ideals, yet we would be very jealous of any intimation, that we may not be worthy of the reputation which our acquaintances accord us. It is true that there are many who are satisfied to have acquired a name without having earned it, as we note that there are some who endeavor to secure their college degrees with as small a measure of intellectual effort as will carry them through.

If all participants in base-ball played strictly to the rules of the game, there would never be any risk in being umpire; and if all players in foot-ball, were true to the spirit of the rules of the game, there would be much less danger to those who strive for honors on the gridiron.

There are certain qualities of mind, of character with which the world credits the Horticulturist. If a lover of flowers, he is supposed to be generous and kindly, with high ideals. If a lover of fruit, then the world expects an accompaniment of temperate inclinations, and habits. If our lives do not accord with these ideals, we are not living up to the rules of the game, and our name is not a credit to those with whom we class ourselves. We will not look

around, to see if we can find in the conduct of others, misfits according to these rules of the game of life; rather let us look within ourselves, to see if we are living up to the standards which we assume, when we accept a reputation which we desire, and it behooves us to give heed that we have studied well the rules of the game. The scholar, to pass examinations and secure his degree, must give evidence that he has acquired knowledge in certain lines, before he receives his diploma. Might not we, with advantage to all concerned, make a study of the ethics and amenities of intercourse with our fellow men, or better still, treat ourselves to a periodic examination of conscience, as do the members of a certain good Christian sect? In that case, instead of considering sins of pride, wrathfulness, sloth, envy and other of the deadly sins, I might, as a worthy Horticulturist, ask myself: if I have kept my hens from my neighbor's garden, have I allowed weed seeds to wash or blow from mine to my neighbor's fields? Have I planted trees on my line next my neighbor, that his land shall help to yield profit to me? Have I harbored insects or plant diseases, that might become a menace or injury to others? Have I been as ready to share with others, as I have been to accept, the good things of life? Have I been generous or not with flowers to the sick or shut-in, or selfishly kept to myself the abundance that might have been shared with others? Have I been negligent in caring for the nursery stock I have bought, because of the promise to replace? Have I been reckless in giving advice to the inexperienced, perhaps giving them cause to regret the possession of too many trees, of such varieties as Borsdorf, Longfield, Hibernial and Repka? If in the trade, have I been as careful of the roots of the stock delivered as of the appearance of the tops? Have I been too ready to take advantage of the dealer's disclaimer of responsibility, and not used due diligence in endeavoring to furnish customers with that they have bargained for?

At the State Fair a visitor was making inquiries about the relative

value of varieties. He was advised to make a study of conditions in his own locality, and choose varieties which had proved suitable there, and it is very important to make a good selection. He replied that it is more important to be able to get the kinds you order. There are many other things that might be considered in the line of what constitutes a good Horticulturist, and not the least, is the quality of fruit we put on the market. We criticise the use by the other fellow, of red netting, which gives green peaches a luscious appearance, yet others may be as much disappointed in our apples, or berries if we have not done honest grading and packing.

And we may ask ourselves, if we have played fair with our State Horticultural Society, and given good measure of help for the benefits received. Have we given it the impulse of our enthusiasm, sustained by constant loyalty to the cause of Wisconsin Horticulture? Having considered some of the qualifications of an ideal individuality, for the members of our State Horticultural Society, may we not as well give some thought to the individuality, and desirable characteristics for our State Horticultural Society as well.

If we consider retrospectively, the history of our society, and make comparison with like organizations of other states, we have reason to be satisfied with our standing among kindred societies and yet it is well to consider if we have, at all times, given evenly balanced attention to the various interests which the broad subject of Horticulture represents. It is proper that fruit culture should receive leading consideration, for the history of the work of our society is a continued account of efforts to find, the best possibilities of fruit growing in Wisconsin. We have proved so much, and excited such hopes for profitable ventures in commercial orcharding in Wisconsin, that it is due to those whom we have encouraged, to see to it that they are wisely directed. In the meantime, we must not forget, that the interests of the farmer and small grower, are just as important as are the interests of those

who have surplus capital seeking investment. Each head of a family represents a center of happiness to several individuals; a possible membership in our society, and a vote, and an influence, in making and directing legislators. In reviewing the activities of our society we realize that in the past, we have considered a great variety of subjects, in addition to caring for the various grades of demonstration orchards, which we have established. I can now think of but one class of Horticulturists whom we have neglected. That is the commercial florist. Why should we not have them with us, as well as the nurserymen? With the many and diversified horticultural interests now being promoted by our society, it is easily possible that some may be temporarily overlooked.

We have accustomed ourselves to depend on the versatility of our secretary, feeling confident, that his varied talents will always serve us. Are we not at times negligent in not showing, with helpful suggestions, our interest in his work? A surplus of kindly thoughts would be better than apparent indifferences on our part. These promptings apply to the support of our paper, as well as to the general affairs of the society. Could we not catalog, and classify, the various subjects, and interests, that should be considered by our society, that a balance may always be maintained? In fruit culture, we have the large and small fruits to be cared for by commercial and amateur growers; market gardening and the care of the home garden; flowers for indoors and out; shrubs in various classes; evergreens and other trees; landscape art, parks, cemeteries and drives; school ground decoration and school children's gardens; promoting local horticultural and civic improvement societies. The foregoing is but a partially suggestive list of the many subjects that we have considered in the past, and which will come before us again in the future. Might not these subjects and interests be classified by subdivisions, in such a way that we might look to the various members of our executive board, to keep in mind and have a sort of supervision

of the sections assigned them? As it is, we know that we can look to our Lake Geneva brethren for certain classes of information. We know just whom to look to for light on legal questions and to whom to turn for nomenclature wisdom. Do we estimate as we should the value of the good will, and good fellowship gained through intercourse at our society gatherings? Many of us do, I am sure, but we are missing one good and enjoyable feature, in failing to maintain our annual banquets. Perhaps they have been suspended—I hope not abandoned—because it has been difficult to work up a sustaining interest in each event, but I suspect that our loss is largely due to the fact that we have overloaded our secretary with too many cares at annual meeting time. Why not have it established, that the Vice President of the society each year, shall be chairman of the Banquet Committee? Or when we have systematized our work and assigned special duties to each member of the executive committee, let us, by all means, make a good selection for a director of social functions.

Now that we have considered some of the qualities, which stand for the make-up of a good Horticulturist, someone may ask, of what avail is it to study the rules of the game and live up to the standard of conduct, which shall entitle one to feel that he is a Horticulturist in good standing? Why do so much for others? Surely he will value the good will of his fellows, and to him will be the contentment that is always the reward for unselfish service. Honors will come to him in time, but honors are not continuously satisfying. The crowning earthly joy of a well spent life, will be the consciousness that one has done his best, and that his life has been a benefit to his fellow men.

OUR STUDENT FRIENDS

The student contests were quite as interesting as ever.

The close attention given by the audience to the speaking contest and the hearty applause showed plainly the feeling of our members for these young men. The talks were all prac-

tical, well prepared and delivered with the ease and confidence of trained public speakers.

While all were excellent the jury awarded the prizes as follows: First, E. A. Seaton; second, Harry Hart; third, George Potter.

In the fruit judging and identification contest, H. S. Newcomb won first prize, Anthony Berg second and Hugo Klumb and H. A. Phlughoeft tied for third.

THE NEW ERA IN WISCONSIN HORTICULTURE

W. H. HANCHETT, SPARTA, WIS.

That we are just entering a *New Era in Horticulture* in this state is very apparent to all who have been taking note of things in horticultural lines throughout the state during the past two years. The dividing line has been sharply marked and unmistakable to even the most casual observer. The horticulture of the past has been experimental to a great degree, bringing many disappointments with just enough rays of hope interspersed to keep its devotee enthralled and keep him everlastingly at it. The Horticulture of the present is an attractive business venture with well defined areas of suitable locations and well established guideboards of experimental knowledge pointing out the way to success.

The Horticulturist of the past was looked upon as a sort of fanatic, afflicted with a harmless form of lunacy. Today we honor him as a sturdy pioneer whose persistent experimental work has made *Horticulture in this state an attractive business venture*, while we look upon the horticulturist of the present as an enterprising business man of a high order of intelligence.

As the past has been an era of experimentation so the present is an Era of Rapid Development and when we look around and see with what energy development schemes along horticultural lines are being pushed we can readily understand that we need not concern ourselves as to means of accelerating the movement but are made to feel that there is *great need* of strenuous efforts on the part of the Wisconsin State Horti-

cultural Society to make it an era, not only of rapid development, but an era of sane and businesslike development as well, else we shall fall on evil days.

Right here I wish to quote a few lines from a popular author.

"He who lives within things can never worship in truth.
Eyes blinded by the fog of things cannot see truth.
Ears deafened by the din of things cannot hear truth.
Brains bewildered by the whirl of things cannot think truth.
Hearts deadened by the weight of things cannot feel truth.
Throats choked by the dust of things cannot speak truth."

How vividly a picture of earlier days, when I, as a young man just attaining my majority, comes to me at this time. I had been an experimenter in horticulture from boyhood days. I was casting around for a business opening. The President of the Wisconsin State Horticultural Society as a farm institute lecturer was telling the people of the State that there was no danger of over production of fine strawberries. How eagerly I listened to that statement. How I wished to believe it. Why? Simply this; I was an experienced strawberry grower and I knew I could raise large crops of fine strawberries and if this statement was true, I knew I need look no further for a business opening. I knew something of markets but had some troublesome doubts as to their limits and the danger of over production. I was between the two fires of hope inspired by the president's assertion and despair inspired by my own doubts as to extent of markets. Hope said: "the president is a man of business experience beyond your years, his judgment should stand without question and held up illusions of a happy home over which I should preside surrounded by loved ones." Doubt said: "the president's statement will only lead others to take up strawberry raising and hasten the day of glutted markets and calamity and if you plunge, it will put an end to all your visions of home and loved ones."

In my perplexity I did what I have since learned was the only sensible thing to do. I wrote to the leading

commission markets and a few of the leading country towns for estimates of the number of cases of strawberries that their trade would take at certain prices. When I had heard from all, I found that estimates from different towns tallied so nearly with their population that I became convinced that they would make a safe basis of estimate of what the consumption would be in the territory within my reach. This I used with the census report to form an estimate of how many acres of strawberries it would take to supply the territory at prices which I considered satisfactory. My estimate was that 300 acres, producing such crops as I had been able to produce, would supply all the markets within reach from Sparta. A few years later Sparta alone came into the market with 600 acres and many competing towns had sprung up. The result is a matter of history. The strawberry crop was allowed to rot on the ground unharvested. The only satisfaction I got out of that year's business was to know that my pencil did not deceive me in making an estimate and that strawberries were so cheap that people got the strawberry habit which has worked to the advantage of strawberry growers ever since.

I mention this only to illustrate that there may possibly be a perfectly sane and cold blooded business method of gauging development in any horticultural line.

If you will but take the time to examine the collection of prospectuses, issued by various real estate concerns, which Secretary Cranefield has in his office, you will agree with me that we are in the midst of things horticulturally here in Wisconsin and the all important question before us is, Shall we allow our eyes to be blinded by the fog, our ears deafened by the din, our brains bewildered by the whirl, our hearts deadened by the weight and our throats choked by the dust until we can neither see, hear, think, feel or speak the truth.

Here we may well ask, "What is the truth, where may we find it, and how may we separate it from the fog and din and whirl and dust that is being kicked up by the professional

promoter and the real estate shark?"

Fortunately we have with us today representatives from several sections of the state who are so closely connected with horticultural interests in a business way as to qualify them to give us much plain unvarnished truth from their respective sections of the state. Let us ask Mr. Richardson of Sparta whether or not there is room for further development along horticultural lines in his section and if so whether he wishes to see development by the nonresident investor through the good (?) offices of the professional promoter or development by the home builder, who wishes to establish a home and obtain a livelihood as a horticultural specialist. Let us ask Mr. Kern of Bayfield and Mr. Bingham of Sturgeon Bay and others prominent in horticultural work these same questions and then let us investigate the nonresident investor development of the Bitter Root district and some of the other western sections following this plan and compare it with the Minnetonka district in Minnesota with its resident development, small holdings and happy homes and I think we shall have no trouble in deciding which plan for development we ought, as a society, to encourage.

It is, however, a fact that the argument may be truly used that the professional promoter will develop much more quickly the orchard possibilities of any section but let us stop to inquire whether even this is desirable.

Estimates from reliable sources place the acreage planted to cherries in the Sturgeon Bay district at from 2,000 to 3,000 acres and reliable parties who have been watching development, in that section, predict that this will be raised to 10,000 acres within a very few years. We are told also that the present bearing acreage is about forty, from which very handsome returns are being received which are being flaunted by the professional promoter before the dazzled eyes of prospective investors as an example of what they may receive if they will only sign a contract with them for a ten acre orchard which they are able to show them, with their pencils, will bring

in a handsome income for old age and retirement. How illusive is the inducement to the man, working on a moderate salary; a compensation or income for the retirement of old age. Ah! that has been a perplexing problem with him for some time. Here is its solution, and how easy that company of promoters are going to make it all. Just the signing of a contract, and the payment of a few dollars per month and presto change the perplexing problem is solved.

How quickly it causes the fog to raise before the eyes. How quickly the din of it deafens the ears. But before we allow the whirl of it to bewilder the brain, let us use a small grain of sense and businesslike precaution and make some inquiries. Let us ask the representatives from the Sturgeon Bay district what in their opinion will be the effect of multiplying their present output by 250 or even 100. In their opinion, will it be possible to obtain sufficient help to harvest such an output? Will it be likely that transportation facilities will be sufficient to handle it if harvested? And will markets at profitable prices be found for such an increase? Let us have estimates from them regarding the number of times their present output can be multiplied with safety to the investor. Let us ask these same questions of representatives from the various other fruit producing centers here represented regarding the particular line of production of their section. Let us insist on well considered answers, and then let us get the information thus secured tabulated in shape for distribution to the inquiring public that they must know the approximate truth and use it for their guidance and protection.

Some may object that such a course will check development and all will agree that rapid development at this time is desirable, but I think most of you will agree with me that the most substantial development will come from letting the unvarnished rays of truth so direct it as to keep production and market demands nicely balanced; by pointing out those products of which there is an underproduction; developing ways of widening

our markets and stimulating consumption, thus making room for a rapid and natural increase in horticultural production thereby building up happy and prosperous rural homes and making this an *Era of Rapid and Businesslike Development of Horticultural Interests in This State.*

POSSIBILITIES OF COMMERCIAL APPLE GROWING IN THE MIDDLE NORTHWEST

By PROF. R. A. MOORE

(Continued from January Issue.)

Available Markets.

The apple being the most cosmopolitan of fruits is grown over a much wider range than other fruits, with the result that at least some of the product is produced near by the majority of the great consuming centers. A difference of a few cents per unit in the cost of transportation may then mark the difference between being able to secure a remunerative price in any given locality or in not being able to ship to that market. How does the distance between the available market of this section compare with those of other apple growing regions? We can possibly point out this comparison better by giving a few figures than by any other way.

Hamilton, Montana, the central point of the famous Bitter Root Valley, lies 1,000 miles from Minneapolis, 1,300 miles from Milwaukee, 1,400 miles from Chicago. The approximate distance from Oregon points to the same markets are: 1,500

miles from Minneapolis, 1,800 miles from Milwaukee, 1,900 miles from Chicago. The Minnesota grower, however, has to ship his fruit 50 to 100 miles to Minneapolis, 350 to 400 miles to Milwaukee, 400 to 500 miles to Chicago; and the Wisconsin grower approximately 100 to 300 miles to Minneapolis, 25 to 200 miles to Milwaukee, and 150 to 400 miles to Chicago.

The New York grower who desires to put his product on these markets has the following distances to ship: Five hundred to 600 miles to Chicago, 600 to 700 miles to Milwaukee, and 1,000 miles to Minneapolis. Those of Virginia and West Virginia must ship about the same distance. Taking the average distance to these market points, which constitute the chief ones for the middle West, we see that the Oregon grower has from ten to fourteen times as far to ship, the Bitter Root seven to nine times and New York and Virginia three to five times. Michigan is the only state that is at all comparable and even her distances are greater for the average shipment.

Owing to this proximity to the markets and therefore the lessened cost of transportation this section should be able to hold nearly an exclusive trade in its standard varieties in Milwaukee, St. Paul, Duluth, Minneapolis, Superior and cities in the Iron region, and a large trade in any of the comparatively large cities of the section. As to the availability of markets no apple section of the country possesses more favorable condi-



The playground is all in front of the school house. Jingling Bros. pay bill board rentals in rural districts with admission tickets. Who got the tickets for this wood-shed bill board?

tions for an outlet for its crop than the section we are considering. Markets, then, are not an excuse for not building up a commercial apple industry.

The Man.

If the other three essentials for successful commercial apple orcharding are not responsible for the future development of such an industry in the middle West, then the grower must be held responsible. I do not believe we are ready to admit that the fruit grower of these states is not equal in intelligence and energy to those of any other section. Wherein, then, does the failure lie? To get at the reason for the present situation let us look at the history of the development of a commercial fruit section. In this consideration we must exclude the West because its development has been along radically different lines than that of the East. The development of the East and middle Northwest has been identical. The fruit finding its way onto the markets in the main has been the surplus fruit from the farm orchard. So long as conditions were not too adverse the farm orchardist was able to produce a fairly creditable quality of fruit, but as soon as the trees grew older, the pests more numerous, and the fertility of the soil declined, quite the reverse was true. It was not until this condition came to the point where the fruit of a section was becoming a reproach to the section that a commercial industry developed. Wisconsin,

Minnesota and northern Iowa have been passing through the state of the home orchard, and today stand at the threshold of a commercial apple growing industry. *The home orchard as a producer of market fruit must go or the home producer must reform.* Conditions have changed and practices must change to keep pace with the changed conditions. What is the cause for the present ascendancy of the Western grower? Not flavor, not superior conditions of soil or climate, not more natural blessings, but because he makes apple growing his business, not a side line. This is a day of specialization and a man to be a good fruit grower must grow fruit as a business. We have no criticism of the pioneer in his orchard practices, for he lived up to the approved methods of his day, but we do severely criticize the orchardists of today, either "farm" or "commercial" who follow the same methods the grower of fifty or even twenty-five years ago followed. No man is blameless in fruit growing who does not keep abreast of the times in the matter of the production of the highest grade of marketable fruit. His failure is not alone his, but it affects deleteriously every man who offers fruit on the market, and it matters not whether the neglect is of orchard spraying, pruning or the marketing of his crop.

With abundance of suitable soil, a list of adapted varieties as large as any commercial section, and with a

demand sufficient to take many times the amount now produced; with markets and market facilities surpassed by no other fruit growing region; with growers who are growing fruit as a business and not as a side line to dairying, grain raising, or other business, there is no conceivable reason why this region, once despised as an apple growing section, should not take its place among the foremost sections of the country as a producer of fine appearing, first-class apples of quality surpassed by none and equalled by few sections of the country.

PROCEEDINGS OF EXECUTIVE COMMITTEE

The most important action of the Executive Committee at the first meeting was increasing the number of Trial Orchards to fifteen.

This means four new orchards as soon as the orchard committee can locate them. The new orchards will be planted with winter apples only.

While the selection of varieties and other details is left to the orchard committee it is safe to say that but few varieties will be selected for each orchard and that the orchards will be on a strictly commercial basis.

We have established fall apples as one of the money-making crops in this State, now let us see what we can do with winter kinds.

The committee made provision for an assistant to the Supt. of Trial Orchards, a field man, as the work has now grown to such an extent that one man can no longer cover the ground at the proper time.

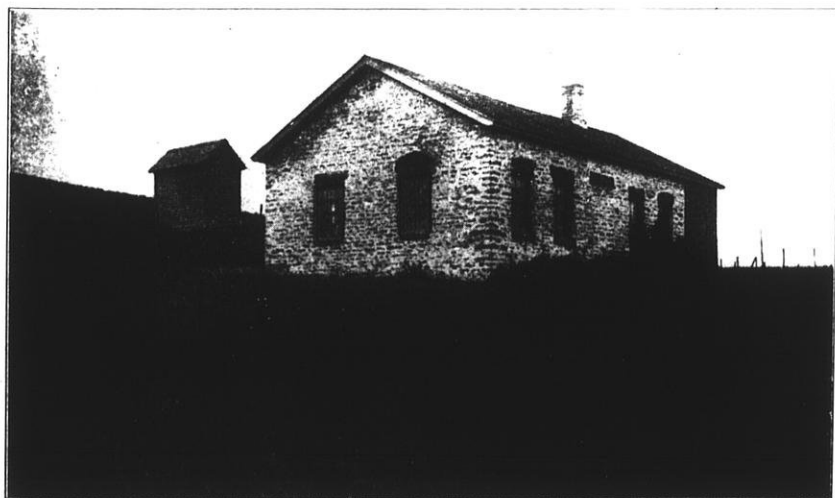
The committee at its second meeting located the Summer meeting at Bayfield.

The changes in membership fees was the only business transacted at the third session.

GET BUSY

Now is the time and the only time to get in on the old rate. Until March 1st, fifty cents goes but for only one year.

There is still a good supply of the 1911 Report and a copy will be sent to every new member. It is the most compact, concise "meaty" state report published and is easily worth five dollars to anyone interested in any branch of horticulture.



This is not a jail, but a Wisconsin school house. No wonder the boys want to leave the farm. We much fear that the artist put those bars on the windows, but it was a finishing touch for which he is forgiven.

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Annual Membership—\$0.50
 Life Membership—10 00

Remit to Secretary W. S. H. S.
 Madison, Wis.

CONVENTION NOTES

The Madison weather man is lo-
 cated on the top floor of the least
 accessible of the University build-
 ings. He is well guarded day and
 night and that's the only reason he
 is alive. Not for a minute did he
 give us zero plus during the whole
 week. In spite of ten, fifteen and
 twenty-two below the attendance ex-
 ceeded 15000 at every session.

The Capitol building was warm
 and well lighted at all times but some
 suffering was reported on the way
 over from the Avenue. Many were

lost in the wilds of the park and even
 in getting from one wing to another.
 President Bingham is a woodsman
 and after being twice lost borrowed
 an axe and "blazed" a trail to the
 west entrance. He was reported lost
 once after that, but no doubt this
 story is without foundation.

Several near-fatalities were report-
 ed, the most serious being brainstorm
 in the case of some of the berry and
 cherry growers induced by attempts
 to show State Inspector Emery and
 Attorney General Bancroft that a
 wine-quart berry box properly stapled
 holds 67 and a fraction cubic inches.

The ladies were all there, not only
 on Wednesday evening but at every
 session except Thursday afternoon
 when the ladies of the Madison Hor-
 ticultural Society took them some-
 where, we don't know yet where they
 went or what they did, but they were
 seen at the poultry show in the U. W.
 Stock pavilion, and late in the after-
 noon were reported imbibing Oolong
 or Java at the home of one of the
 Madison ladies.

In spite of the cold all were even-
 tempered except Christensen who
 occasionally grew peevish when some
 one would ask if he brought his wife
 along. He looks steady, sober and
 well trained and one would naturally
 suppose he was a married man.

Want the usual dope? Here it
 is:—A fine meeting, best we ever had.
 The attendance was excellent and the
 program interesting and profitable.
 Only one miss in the entire program,

Mr. Rodgers of Arkansas, but he sent
 a very fine paper which was read
 by the secretary.

The apples shown were from Hood
 River, all except those from Wiscon-
 sin. Some of the visitors, from Mad-
 ison, actually believed that Bassett's
 Fameuse, Wealthy and Seeks were
 Western grown apples and were per-
 mitted and encouraged to go away,—
 believing it.

Someone told Supt. Essman that
 all the McIntosh shown by the Bitter
 Root people at Chicago were bought
 from Reis of Richland Center.

He is telling it yet, or still, over
 at the Capitol.

We never had a better class of
 papers both by our own members and
 by guests. Prof. Paddock's opening
 statement condemned the farm or-
 chard in Ohio, and elsewhere. He
 said much besides which will be re-
 peated later.

Prof. Washburn enjoyed himself
 very much but not more than we
 enjoyed his company. Mr. Tracy
 came all the way from Washington
 and expressed himself as much
 pleased to be with us.

Nearly everyone, except commis-
 sion men, agree that the bringing to-
 gether of the producer and consumer
 will pretty nearly solve the problem.
 Bassett did it. Read his paper.

Two of the papers were in a class
 by themselves; The New Era in Hor-
 ticulture, by Mr. Hanchett, and The

IMPORTANT NOTICE

Madison, Wis., Jan. 20, 1912.

After March 1, 1912, the fee for annual membership in the Wisconsin State
 Horticultural Society will be One Dollar. Local Society Dues for each member,
 fifty cents.

Application for Annual Membership will be accepted for but one year in
 advance on the fifty cent basis. Local societies may forward membership
 until March 1st, at the old rate, twenty-five cents for each member, after
 that the rate will be fifty cents.

Applications for life membership must be accompanied by nominations by a
 life member or an annual member in good standing for at least two years. The
 fee for life membership is \$10.00. (Dating from January 11th.) Now is the time
 to renew and to get new members.

Membership includes subscription to Wisconsin Horticulture. Tell your
 neighbor about it. Boost a little and we can have 2,000 members by March 1st.

FREDERIC CRANEFIELD, Secretary.

Remember It Is One Dollar after March 1st., 1912.

Name and the Game, by Mr. Toole. Both appear this month.

Each of our own people had something new to tell but probably the most striking paper was the one by A. K. Bassett of Baraboo. Producers and consumers alike are excited just now about the high cost of living and the probable cause of it.

The discussions and side-talk all through the convention placed the Society clearly on record as favoring individual ownership of fruit farms as opposed to large ventures and especially the "five and ten acre" co-operative plans.

Our visiting delegates marvelled much over the presence of so many young men and women in our Society, seems they don't have our kind of women in Iowa, Minnesota and Illinois. The presence of the women from Sturgeon Bay, Oshkosh, Washburn, Baraboo and other points, this year and the splendid program furnished by them Wednesday evening, fixed for all time the place of women in our society. We know now that we cannot get along without them in the Convention and in Society doings.

The business session passed off quietly and the election was the tamest affair we have seen in years. Same old bunch all through for officers and only two changes in the executive committee. See page 8 for new committee. On Thursday article 4 of the Constitution was amended giving the Executive Committee power to fix the fees for membership. Several resolutions of more or less importance were passed at the last session.

No one sang Auld Lang Syne or told stories during the last hour but we closed as we began, doing business.

To be exact we have at the present writing 207 life members and 1,682 annual, a total of 1,889. This is just 111 less than 2,000. The total membership Feb. 1904 was 111.



THE HARDIE SPRAYERS

Hand and Power Outfits

The Hardie Sprayer is built by a practical fruit grower, for fruit growers and by a man who knows how to build sprayers.

Parts coming in contact with spraying fluid made of hard metal brass and cannot wear out.

The Hardie Sprayer is the Sprayer that will work when you want it to work and will do your spraying right. The Hardie Pump is guaranteed.

Write now for prices and catalog. We can give you the best material, prices consistent with quality on

Arsenate of Lead, Sulphur Lime, Bordeaux, Bordo-Lead, Powdered Arsenate of Lead, Scale Killer, Sulfur. We have a complete line. Do not delay. Send for booklets and prices.

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MILWAUKEE,

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WINTER APPLES OF QUALITY

Plant Fall Apples? Certainly. They are good for hogs and greatly help out the Banana and Orange Trusts at this time of the year.

Is you want a good winter apple to eat, you will certainly have to grow it yourself for you simply can't buy any and will not be able to for many years to come.

We have a winter apple that will out-show and out-class a New York grown Baldwin, in color, size and quality. As good eating as the Wealthy. We grow shrubs too and the grade and quality is a little extra. Catalogue ready now.

HENRY LAKE SONS COMPANY, Nurserymen, Black River Falls, Wis.

PREMIUMS AWARDED

L. G. Kellogg and John A. Hays, judges.

Best collection of apples not less than 15 varieties—First, A. N. Kelly, Mineral Point; second, John Reis, Twin Bluffs; third, A. D. Brown, Baraboo.

Best five plates of commercial apples, five varieties—First, J. E. Baer, Baraboo; second, A. N. Kelly; third, A. D. Brown.

Avista—First, A. N. Kelly; second, A. D. Brown; third, H. C. Melcher, Oconomowoc.

Baldwin—First, O. J. Burnham, Richland Center.

Ben Davis—First, Henry Kurtz, Cedarburg; second, E. W. Sullivan, Alma Center; third, A. N. Kelly.

Fameuse—First, A. K. Bassett, Baraboo; second, A. D. Brown; third, A. N. Kelly.

Gano—First, A. N. Kelly; second, J. E. Baer; third, John Reis.

Gem—First, A. D. Brown; second, William Toole and Sons, Baraboo.

Golden Russett—First, Oscar C. Wifler, Plymouth; second, A. K. Bassett; third, John Reis.

Hibernal—First, A. D. Brown; second, A. N. Kelly.

Jonathan—First, O. J. Burnham; second, William Toole and Sons; third, A. N. Kelly.

Longfield—First, E. W. Sullivan; second, H. C. Melcher; third, A. A. Ten Eyck, Brodhead.

Malinda—First, John Reis.

McIntosh—First, John Reis.

McMahan—First, A. N. Kelly; second, John Reis; third, A. D. Brown.

Newell—First, O. J. Burnham; second, A. D. Brown; third, John Reis.

Northern Spy—First, James Baldwin, Plymouth.

Northwestern Greening — First, John Reis; second, A. N. Kelly; third, Mrs. H. Tiehle, Baraboo.

Patten—First, A. A. Ten Eyck; second, John Reis; third, A. N. Kelly.

Pewaukee—First, O. J. Burnham; second, A. K. Bassett; third, Henry Kurtz.

Plumb Cider—Second, A. K. Bassett.

Seek-no-Further—First, A. K. Bas-

sett; second, H. C. Melcher; third, John Reis.

Scott's Winner—First, O. J. Burnham; second, H. H. Harris and Sons, Warrens; third, John Reis.

Tolman—First, L. H. Palmer, Baraboo; second, J. E. Baer; third, A. N. Kelly.

Twenty Ounce—First, John Reis, Utter—First, H. C. Melcher; second, John Reis.

Walbridge—First, A. K. Bassett; second, John Reis; third, A. N. Kelly.

Wealthy—First, H. H. Harris and Sons; second, E. W. Sullivan; third, A. D. Brown.

Winesap—First, A. N. Kelly.

Windsor—First, A. N. Kelly; second, John Reis.

Wolf River—First, E. W. Sullivan, second, A. N. Kelly; third, H. H. Harris and Sons.

Peck Fameuse—First, A. K. Bassett; second, A. N. Kelly; third, A. D. Brown.

Peck Gano—First, J. E. Baer; second, A. N. Kelly.

Peck Gem—First, A. D. Brown; second, William Toole and Sons.

Peck Golden Russett—First, John Reis; second, A. K. Bassett; third, A. D. Brown.

Peck Jonathan—First, William Toole and Sons; second, A. N. Kelly; third, John Reis.

Peck McIntosh—First, John Reis.

Peck McMahon—First, John Reis; second, A. N. Kelly.

Peck Northwestern Greenings—First, A. N. Kelly; second, John Reis; third, J. E. Baer.

Peck Tolman—First, A. N. Kelly; second, L. H. Palmer; third, J. E. Baer.

Peck Wealthy—First, E. W. Sullivan; second, A. N. Kelly; third, A. D. Brown.

Peck Windsor—First, A. N. Kelly.

Peck Wolf River—First, A. N. Kelly; second, John Reis.

Exhibition of crabapples—First, A. N. Kelly; second, John Reis.

Exhibit of grapes—First, John Reis.

Best seeding apples—First, John Reis.

Extra copies of this issue will be sent to members for distribution. Apply early.

JEWELL MINNESOTA GROWN Nursery Stock

Complete assortment of Fruit and Ornamental stock in all varieties suited to northern culture. A specialty of Hardy Shade Trees, Windbreak Stock, Evergreens (Coniferous), Deciduous Shrubs, Apples and Native Plums.

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LAKE CITY, MINN.

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Consisting of

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Strawberries, Raspberries, Blackberries, Currants, Gooseberries, Grape Vines, Asparagus, Rhubarb, etc.

Ornamental and Flowering Shrubs, Vines and Perennials. Roses, Evergreens, etc.

If you would like to see a *really good Catalogue* we would be glad to send you ours. It has more than fifty pages and describes everything in the plainest language without any extravagant or overdrawn descriptions.

The Coe, Converse & Edwards Co.
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Wisconsin's Largest Nursery

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Make a specialty of **Cherry Trees**. They strongly recommend **One Year Cherry Trees** because they are stocky, well headed, well rooted thrifty and vigorous. Plenty of **Two Year** for those who prefer the larger trees. They also have a nice lot of Apple in northern sorts.

A trial order will convince
any one of their quality.

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Send For **PANSY GUIDE AND CATALOG**
Our... of Flower Seeds and Plants
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PANSY HEIGHTS, BARABOO, WIS.

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**Cherry Trees by the
100 or 100000**

The Growing of Cherry Trees has been our Specialty for Years. Our soil and method of growing produces a Tree that is not excelled by any one. Splendid blocks of two-year 5 to 7 foot trees and one-year 4 to 5 foot trees. Early Richmond, Montmorency and other leading varieties by the 100 or car load. We also grow a general line of other Nursery stock. Personal inspection invited. Correspondence solicited

Questions and Answers

Q. Will sowing a piece of new land to corn fodder and plowing it under when 12 to 15 inches high add anything to the humus?

A. Yes, but not a sensible method of soil management. In the first place new land will not lack humus and secondly there are better methods of supplying it when needed.

Q. Which is the best Black Cap raspberry to plant in Wisconsin?

A. Gregg.

Q. What can be done in an old apple orchard that has been in sod a good many years and where the trees are planted so irregularly that it is impossible to get in with a team and work to any advantage?

A. Cut out one-half of the trees and cut back and trim up remainder. A skillful teamster with a light, steady team can get into almost any kind of an orchard. Either cultivate the orchard or dig it out.

Q. Which is the best distance for Wealthy trees, 20 ft. apart or 25 ft.

A. Twenty-four feet.

Q. What age grape vines would you advise buying and how long before expected to bear?

A. One year, select. Ought to bear two years after planting and a full crop in three years.

Q. Is it beneficial to scrape bark of fruit trees if same becomes rough and scaly?

A. Yes. Various injurious insects find lodgment in the crevices of the old and scaly bark of fruit trees.

LOOKING AHEAD

It is unlikely that Wisconsin Horticulture will consist of more than 16 pages during the coming year unless something special demands an increase, but it will be "different." The Editor hopes, with the aid of the members, to make it the best horticultural paper in the United States.

How many will help?

McKay Nursery Company

PARDEEVILLE, WIS.

Offer a Complete line of

HARDY NURSERY STOCK

FOR SPRING 1912

If interested in planting **FRUIT TREES, SMALL FRUITS or ORNAMENTALS**, write us for **CATALOGUE and PRICES**. You will find our prices consistent with quality of stock offered.

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Wisconsin*

Our stock is grown right, dug right, packed right, and by no means least, the

PRICES ARE RIGHT

*Our Specialties are Small Fruits
and Fruit Trees*

Apples singly or by the 1000.
Currants by the doz. or 25,000.
Strawberries by doz. or 500,000.

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Get our price list before you place
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WISCONSIN NURSERIES

Grow and handle all kinds of nursery stock. We employ no agents but sell direct. If in the market you can save money by buying of us. Get our prices.

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Union Grove, Wis. W. S. Moyle, Prop.

FACTS AND FIGURES

Please read all of the returns here given and analyze same. You will find nothing startling nor will you find any exaggerations. It is just a plain simple story taken from carefully kept books. It will answer the question in the minds of many now on the anxious seat. Is there any money in gardening and fruit raising? The following is a statement of gross returns for 1911, furnished by Brother Sullivan of Alma Center. (See No. 1, Vol. 1, Wisconsin Horticulture.) Mr. Sullivan combines fruit-raising and gardening, — very successfully.

Raspberries, 1½ acres.....	460.75
Strawberries, 10 acres.....	2,255.00
Apples, 4 acres.....	450.00
Celery, ½ acre.....	270.00
Onions, 1¾ acres.....	337.00
Asparagus, ¾ acre.....	45.50
Carrots, ¼ acre.....	13.45
Spinach greens	8.87
Radishes, ⅛ acre.....	16.35
Cabbage, 3½ acres.....	274.95
Beets, ⅛ acre.....	16.00
Potatoes, 10 acres.....	189.69
Plums, ⅛ acre.....	9.59
Plants, ⅛ acre.....	143.90
Trees, 1-16 acre.....	60.00
Onion Seed, 1-16 acre.....	28.00
Rutabagas	15.00
Grapes, ¼ acre.....	61.40
Tomatoes, ½ acre.....	65.00
Potatoes, not sold.	

1,200 bu. valued at 60c....	720.00
Rutabagas, not sold, 300 bu.	45.00
Carrots, not sold, 200 bu....	40.00
Squash, ¼ acre.....	20.00

\$5,545.45

We have here an average of \$163 an acre for 337⅘ acres. We have lots of room in these columns for other reports. Gardeners please speak up! Also farmers and tobacco growers.

Mr. Sullivan writes:—

"Rutabagas raised as a second crop after strawberries, so these are counted in acreage as strawberries. Spinach was raised between other vegetables. I have 8 acres of apple orchard in all but 4 acres but 3 years old. Of the 4 acres reported, 1½

acres eight years old and these trees bore most of the apples, the other 2½ acres five years planted and bore first crop last year."

THE CORNELS

As a class, the Cornels or Dogwoods would rank next to the Viburnums for general usefulness in decorative planting. All of the several species of this genus (*Cornus*) are most usually found in good soil. They are usually to be found around the borders of woodlands and along roads that pass through the woods. They are also often found along the edges of dense fence rows where they make a pleasing show, both with their flowers in the late spring and early summer and also with their attractive fruit in the autumn.

Cornus alternifolia is a very large shrub, and, if encouraged in growth, it will attain a considerable height. As the name indicates, the leaves are alternate on the stem instead of being opposite, as is the case with all the other species. The smaller branches are somewhat streaked and mottled and are shiny in appearance. The leaves are ovate, taper pointed and rather large. The greenish white flowers are fairly showy, but it is the showy bright blue fruit on the reddish stalks that is the chief attraction of this shrub. This species, like all the Cornels, transplants very easily.

Cornus circinata (Round-leaved Cornel), like the preceding species, is quite tall growing and has larger, more rounded leaves. The branches have a speckled appearance and the clusters of blue fruit are very showy.

Cornus stolonifera is usually found in swampy ground but is easily grown on drier ground. Its chief attraction is the bright red color of the bark in

winter, forming a pleasing contrast with almost any background. It increases and spreads by underground runners but is easily kept within bounds.

Cornus paniculata is quite different in general style of growth and ap-

50,000 CUTHBERT RASPBERRY PLANTS FOR SALE

These plants were grown on sandy loam, have just been inspected and found to be free from disease and in fine condition.

F. N. LANG, Bayfield, Wis.

OPPORTUNITY

A BLOCK of shares in the Gays Mills Fruit Farm is for sale. An unusual opportunity to become interested in an established fruit growing company is here presented. Part of the orchard has reached the bearing period and well known orchard experts have pronounced it the best orchard in the state, considering its age. The property represented, in part, by this stock is located in the best fruit section of Wisconsin, in the Land of the Fall Apple. This stock will be sold reasonable but not at a sacrifice. If interested write to

T. CORNELIUSON
215 9TH STREET S. W.
WASHINGTON, D. C.

Door County Lands

ARE THE BEST IN THE STATE OF WISCONSIN

For Fruit Culture. Door County Orchards Pay a Revenue of from Five Hundred to Eight Hundred Dollars per Acre Annually. For Particulars Write : : : : :

**DOOR COUNTY LAND CO.,
STURGEON BAY, WIS.**

THE HAWKS NURSERY CO.

are in a position to furnish high grade Nursery Stock of all kinds and varieties suitable to Wisconsin and other northern districts.

Will be glad to figure on your wants either in large or small quantities.

WAUWATOSA, WISCONSIN

**"We have a Fine Lot of
Plants for the Garden."**

SEND FOR LIST

J. E. MATHEWSON

Sheboygan, Wisconsin

STRAWBERRY PLANTS

100,000 choice Strawberry Plants. Also Red and Black Raspberry, Asparagus and Rhubarb roots.

These plants will not be dug more than twenty-four hours before shipping. All stock guaranteed. Hot bed plants in season. Write for prices.

**RASMUSSEN'S
FRUIT FARM**
OSHKOSH, - WISCONSIN

pearance from the other cornels. The bushes are upright in growth and branching above a distinct stem. Although growing in clumps each bush is quite treelike in form. The panicles of bloom are about the size of clusters of privet flowers. The flowers are so freely produced they are quite showy when in bloom. The flowers are followed by clusters of white berries which are very ornamental in autumn.—William Toole in Wisconsin Agriculturist.

WILD GRAPES, PINE NEEDLES AND STRAWBERRIES

I remember reading in an issue of Horticulture, an inquiry regarding why some of the wild grape vines never would bear any berries. I want to say that I have seen a dozen or more old, healthy vines, for a period of fifteen years, that to my knowledge never produced a berry, though some of them blossomed profusely while other vines right near by did not seemingly have as many blossoms, bore a great quantity of

The Great Northern Nursery Co.

Sells First-Class

Wisconsin Grown Trees

Our Trees Live. We had an opportunity to compare 500 of our Wisconsin grown trees with a similar lot of an Eastern Nursery. At the end of the season only 52 per cent of the eastern grown stock was alive, while 95 per cent of ours lived and grew. Moral: buy home grown stock and avoid loss. Our trees are **HARDY**, and our stock is **HEALTHY**. A comparison will prove that our stock has not the willowy and watery soft growth of southern or eastern grown stock.

Every tree and shrub is packed entirely under cover, free from exposure to sun and wind,

**Great Northern Nursery
Company, Baraboo, Wis.**

Write for Catalogue and Price - List.

ARSENATE OF LEAD, LIME— SULPHUR SOLUTION

Fully Comply with most rigid requirements of Insecticide Act of 1910



Grasselli Arsenate of Lead is being successfully used to destroy all leaf-eating insects, such as Codling, Moth, Potato Beetle, Curculio, etc.

The Grand Sweepstake prize of \$1000 for the best carload of apples shown at the National Apple Show, Spokane, Washington, has been won by users of Grasselli Arsenate of Lead for the last three years.

Grasselli Lime Sulphur Solution is the Standard remedy for San Jose Scale. It has also come into prominence as a summer spray to replace Bordeaux Mixture.

For Further Information Write

The Grasselli Chemical Company,
The Grasselli Chemical Company, Established 1839

Milwaukee, Wis.
Main Office Cleveland, Ohio

fruit. I have never seen this peculiarity with the tame grapes.

I have found a good way to cover a household patch of strawberries is to rake up pine needles late in the fall and scatter same over patch to cover ground and plants thoroughly, and throwing small branches from trees here and there to keep the covering from blowing off, though this kind of covering stays on better than straw.

M. N. HANSON.

Hollandale, Wis.

THE MINNESOTA STATE HORTICULTURAL SOCIETY

We clip the following from the Jefferson Co. Union:

Lake Mills, Wis., Dec. 12, 1911.


Minnesota is taking the lead in members, enthusiasm and good work of the Horticultural societies of the world. They have 3,000 members, they had 2,000 plates of apples, 50 plates of grapes and 50 bushel boxes of apples on exhibition last week. With a program with 87 subjects and committee reports, beside their annual election of officers. With a most enthusiastic banquet the week was full; their zeal in bringing out seedlings is wonderful; about 26 are competing for the \$1,000 offered for one apple seedling and the cash is in the bank, and another \$100 is offered for a seedling plum. They have already many thousand seedlings of apples, plums, grapes, raspberries and strawberries.

They are doing more for northern horticulture than any other organization in the states. C. G. Patten of Iowa is doing more than anyone in the United States for the interests of northern horticulture; he surpasses Burbank for hardy fruits. Burbank has done wonders for California but hardly a thing for Wisconsin or Minnesota.

Prof. Hanson of Brookings, S. D., is working for still harder fruits; those that will stand 40 below zero.

—GEO. J. KELLOGG.

This paper is a "free forum" and its columns are always open to the expression of opinions on matters horticultural by any member.



Yield, Flavor and Shipping Quality of strawberries are improved by the use of a fertilizer containing 10% of

POTASH

Some of the largest growers of the South use 200 lbs. Sulfate of Potash to the acre and find it very profitable.

Have your dealer carry brands of fertilizer rich enough in Potash as well as Potash Salts.

If he doesn't, we will sell you Potash direct in any amount from a 200-lb. bag up.

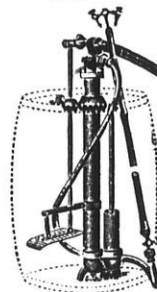
Write to us for prices and for free book of fertilizer formulas and directions.

GERMAN KALI WORKS, Incorporated
 Continental Building
 Baltimore
 Monadnock Block
 Chicago
 Whitney Central Bank
 Bldg., New Orleans

The Gays Mills Land Company

is offering for sale \$9,500.00 worth of stock in a \$12,000.00 corporation formed for the purpose of owning and developing a 160 acre tract of choice Kickapoo fruit land. This stock will be sold in \$100.00 shares on easy terms, at par if subscribed on or before April 1st, 1912. Full particulars furnished interested parties. Write any of our officers.

Bigger Fruit Profits



Here is a spray pump invented by fruit growers. It was our endeavor to secure the best spray pump to use on our 300 acre fruit farm that produced the

ECLIPSE SPRAY PUMP

It overcomes every defect found in other makes—it has proved itself best in actual work. Put an Eclipse to work on your trees and earn bigger profits. Write for our fully illustrated catalogue. It tells why you should spray—and why you should do it with an Eclipse. It's free

Write to-day

MORRILL & MORLEY MFG. CO., Benton Harbor, Mich.

Cherry Trees Will Grow WHERE?

Sturgeon Bay, Wis.

22,000 set out Spring 1911 — 26 dead ones.

No more 1911 planting to offer.

26,000 "heeled in" for 1912 planting.

Over one-half of these sold.

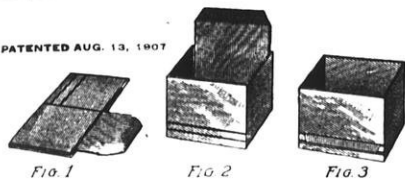
If you want to make a safe, sound investment with a guaranteed income for ten years and an independent income for ten years more, WRITE

Co-Operative Orchard Company,

Owners of the Famous "Plateau Orchard." [Largest Cherry Orchard in the World.]
 Sturgeon Bay, Wis.

EWALDS FOLDING BERRY BOX

PATENTED AUG. 13, 1907



The only folding berry-box made of wood veneer that

GIVES SATISFACTION

Made in Wisconsin style, Standard dry measure quarts and pints. Neat and strong, is all ready for business, needs no tacks nor stapling. Write us today and we will tell you more about this box and how to get it nearer home at manufacturer's prices. Do it now.

We also manufacture crates and old style quarts and pints in K. D. for crate makers and large growers who have stapling machines and make up their own crates and boxes, big reduction in price on carload lots. Our material and prices will please you.

Cumberland Fruit Package Company
Cumberland, Wisconsin

S. Borgen of Dallas, Barron Co., reports Northwestern Greening, Wolf River, and Northern Spy as bearing and in good condition. The Spy bore first crop seven years after planting, a good record for this variety.

Not too early to buy seeds. Get catalogs and plan the garden. Don't neglect the flower garden. Twenty-five cents to one dollar invested in the seeds of annuals will give returns more lasting than ten times that sum spent in cabbage or corn.

If you have anything on your mind just write it down and send to the editor, and if it will pass in the mails it will be printed.

Ask questions. For your convenience a question sheet is enclosed with this issue. Fill out and return to the editor. Your questions will be answered as nearly as possible in order received.

TOMATO SEED

A limited amount of the famous

"EARLY BUCKSTAFF"

Per Package 25 cents

Per ounce 75 cents

RASMUSSEN'S FRUIT FARM
OSHKOSH, WISCONSIN

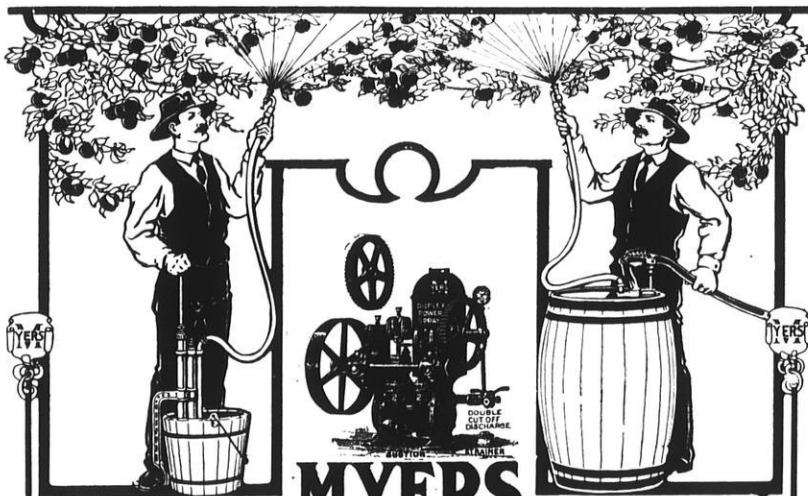
Olds' Red River Valley Seed Potatoes

Red River Seed Potatoes, grown in the cold northwest, are ahead of all others for quick early maturity, vigorous growth and great productiveness. Better than ever this year.

Olds' Seed Potatoes have a national reputation, 24 years' experience growing and handling; our potatoes are known in every section and we are acknowledged headquarters for pure seed.

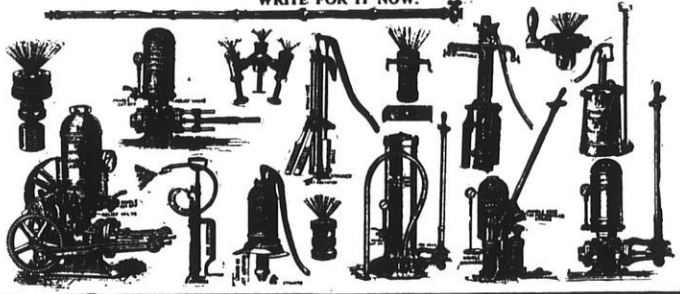
Send Postal for 88 Page Catalog giving correct descriptions and true illustrations of the best in Seed Potatoes, Corn, Oats, Barley, Field Seeds, Garden Seeds, Poultry Supplies and Tools.

L. L. OLDS SEED COMPANY, Drawer 65, Madison, Wis.

**MYERS SPRAY PUMPS AND NOZZLES**

are made in many styles and sizes to meet every spraying need from the small knapsack or bucket outfits to the large power rigs. They have all been developed in line with modern spraying requirements and have long since passed the experimental stage. We show here a few types of our complete line of Spray Pumps, Nozzles, Bamboo Extensions and Accessories. Our new catalog No. Sp-12 will give you full descriptions and prices.

WRITE FOR IT NOW.



F.E. Myers & Bro.
Ashland Pump & Hay-tool Works
ASHLAND, OHIO.

The Stark Orchard Planting Book



**Stark Bro's
Nurseries & Orchards Co.**

Two Famous STARK Books FREE

*Stark Orchard Planting Book and
Condensed Stark Year Book*

Two splendid, practical volumes which tell the amazing story of modern-day fruit-culture. Two books filled with invaluable, down-to-the-minute information on orcharding in all its phases; complete descriptions of varieties, season of ripening, locality where each variety does best, etc. They tell a common-sense the sensational story of profits that are being made from commercial and home orchard growing. These books show just what **you** can make from a Stark Orchard. **And they are both free.** Use the coupon.

Stark Orchard Planting Book

A book of trustworthy information by a recognized authority—given **free** to the whole world,—not a catalog or piece of advertising literature, but a well of information on the planting and care of trees from the day they are received from the nursery. As the author says:

"The contents is not the result of my own experience alone. It is a collection of the knowledge and experience of many men. Each has spent a large part of his life working with trees. Many have had scientific training. All are rich in that greatest of all knowledge—**practical experience.**" It tells the real secret of success in orchard planting.

At Planting Time Most Mistakes Occur!

This invaluable book explains in simple language, how to avoid those failures in fruit-growing that are directly due to easy-to-make mistakes made **when the trees were planted.**

We cannot begin to tell you here the priceless information contained in this small but most valuable book. You must have the book itself. Send for it **now.** Use the coupon. Or write a card or letter today, without fail, for this truly remarkable volume.

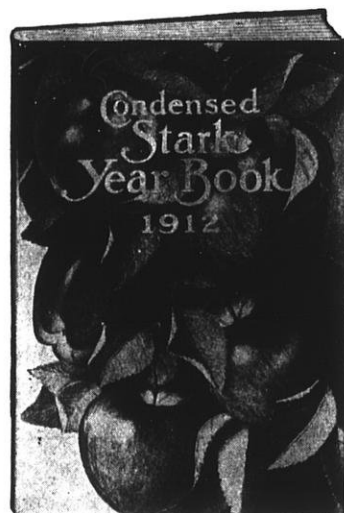
Please send me another dozen copies of the Stark Orchard Planting Book. This booklet contains very timely, valuable and some belated information. I am sending copy today to a young man who was at my place yesterday, and who is starting an orchard.—C. O. Reed, Proprietor, Model Fruit Farm, Oregon Co., Mo.

Your Stark Orchard Planting Book is the best thing I have ever seen. It is what the tree planters need badly; if they will read this book and follow the instructions they will be much benefited.—J. P. Fourot, Orchardist, Sumner Co., Kansas.

The Stark Orchard Planting Book received. This is something that I

have often thought should be in the hands of every planter. Will greatly aid them to make a success of the trees planted. I think it will be appreciated by all.—A. F. Buvinger, Labette Co., Kansas.

"Will you kindly send me one of your 'Stark Orchard Planting Books?' Have just run across one borrowed from a friend and think it is the best and simplest information on the subject of planting and pruning trees I have ever come across. Would be pleased to have one for reference and if there is any price attached to it let me know and it will be forwarded. Trusting you have some left, I remain—R. M. Adams, Lancaster Co., Pa."



Condensed Stark Year Book

"A Diamond Mine" of Information

Here is a book as different from the usual run of nurserymen's catalogs as day is from night. It is a veritable mint of boiled-down information on varieties for commercial or home-orchard planting, season of ripening of all varieties of all fruits, letters from successful fruit-growers from every part of the country, comments by our national horticultural authorities, etc., etc. It also gives the facts about Stark Trees and quotes prices. Every statement in this book is backed by a million dollar nursery. Planters the country over say this is the best, the most valuable and most practical book of its kind ever published. We have thousands of this kind of letters.

Stark Year Book received. I have several good horticultural works, but I believe your Year Book contains more valuable, up-to-date suggestions for the new beginner, (or the old one either) than any of them.—John A. Minger, Memmah Co., Kansas.

Permit me to thank you for your handsome catalogue. It is the most comprehensive of its kind I have ever seen. The color plates are beautiful, and of great assistance in selecting fruit.—J. O. Lewis, Wash. Co., Tenn.

Copy of the Stark Year Book received. It is not only the most beautiful and artistic work of its kind ever issued but the most practical guide for the planter of fruit and other trees. The text is unique in many ways, especially in the directness of statement and the absolute worth of the various trees and fruits described. It should be in the library of every fruit grower.—Thos. F. Rigg, Iowa Horticultural Experiment Grounds, Hardin Co., Iowa.

Neither the Condensed Stark Year Book nor the Stark Orchard Planting Book can be purchased. They are our free gift to you. You might as well have these book treasures in your home. They are waiting for you to ask for them. Send the coupon today.

Stark Varieties Pay Big Profits

Stark Delicious and other special Stark sorts are profit-makers—proven so by thousands of successful orchardists who have planted Stark Trees. Our stock in all classes of fruit trees, small fruits and ornamentals for Spring planting is complete.

**Stark Bro's
Nurseries & Orchards Co.,**
111 Stark Station, Louisiana, Missouri

Free Book Coupon

Stark Bro's Nurseries & Orchards Co.

Louisiana, Missouri

Send me free books without obligations on my part.

Name _____

Address _____

I expect to plant _____ trees this spring.

Fill in, cut out, and mail this Coupon today for two Free Books.



Volume II

Madison, Wisconsin, March, 1912

Number 7

"LEST WE

Sometimes we forget. When I say "we" I mean certain young sprouts around the state along about 30 or 40 or 50 years of age who are growing fruit and making a little money and a great deal of noise. I say again we sometimes forget that there were pioneers and early days and trials and tribulations and a time when the Wealthy apple was not, and to be an earnest advocate of apple raising anywhere north of Baraboo was more dangerous than being an abolitionist in the fifties. There is no chance, however, that any one connected with fruit growing in this state at any time during the past half century will forget A. J. Philips.

Why, seven-tenths of all the enthusiasm that is now making things hum in Wisconsin can be traced back directly or indirectly to "A. J." and "Uncle



A. J. PHILIPS

FORGET"

George" and others of the old guard, but largely to A. J.

He was forever talking in those days, you simply couldn't stop him day or night and always and forever about apples and pears and plums and cherries and flower gardens and new kinds of apples and the right way to plant a tree and "my dear friends, we *can* raise good fruit in Wisconsin if you will only get the right kind of trees and take proper care of them," etc., etc., etc., until midnight, and begin over again before daylight. And after a time it began to have its effect and people began to take care of their trees.

Forever looking for new kinds of apples and tracing their pedigrees; planted trees on his own account as shown by the following from the 1881 Report:

"When I started in 1871, as near

as I can remember the stock in trade was about as follows: Wild land, worth \$500; experience and observation, \$10; cash on hand, \$500; trees, bought and paid for, \$50; grit, \$100; making a total of \$1,160, for engaging in a business I knew but little about. Now, to continue the same business ten years later, I invoice as follows: Cultivated land in orchard, \$3,000; experience and observation, \$2,000; cash on hand, \$10; trees on hand and in nursery, aside from orchard, \$500; grit, \$1,990, making a total of \$7,500. Parties here who are adepts in railroad corporations may say this stock is heavily watered, but of this you can judge."

He believed in northern Wisconsin and was one of the first to suggest a trial orchard somewhere in the "cut-over" section; in company with L. G. Kellogg crossed and criss-crossed central Wisconsin and finally landed at Wausau. You all know about the Wausau orchard but perhaps not all know that Philips was there at the beginning of it, helped to select the varieties and with his own hands planted the trees. Had charge of the orchard for several years in the beginning. Couldn't keep from top-working a lot of the trees, top-working being one of his hobbies. Guernsey cattle, boys and girls, good stories, prohibition and apples for the farmer are a few others. Pretty good hobbies these.

To make a long story short, it *would* take a long story to tell all A. J. Philips has done for horticulture in Wisconsin, it will suffice to say that in all his enterprises he has "made good."

There may be no lesson in this only a reminder to the "sprouts" that there were really and truly giants in those days, but if there is one it is the suggestion that dogged persistence wins the day. We are likely to need some of that particular brand in the days to come hence we say again, Lest we Forget.

F. C.

N. A. RASMUSSEN

A human dynamo, restless, restless, always on the move and always making things move.

Dynamo:—"A species of mechan-

ism by which a high percentage of mechanical energy may be converted into electrical energy by means of rotating an armature through powerful magnetic fields."—*Webster*.

With a few modifications this definition fits the case in hand. There is a high percentage of electrical energy developed into mechanical energy when Rasmussen is around, and



N. A. Rasmussen

mostly obtained by the rotating of himself through fields, etc. That may not be exactly right but the idea is there.

Teachers of Physics have a little joke appertaining entirely to their particular subject and sooner or later every one of them springs it on some unsuspecting student. Here it is: "Suppose that an irresistible force should meet an immovable object what would happen?" When you get time figure on that awhile and in the meantime here is another.

Supposing Rasmussen knew nothing about raising apples and planted a lot of trees what would happen? Answer; Apples.

Was formerly in the creamery business and as soon as he had money enough became a market gardener and plans to continue in that line for a time and then plant fruit trees.

We lack space to tell about the market garden but many of our members saw it last August. When the fruit trees are in bearing watch for prize box apples and other choice products. All of which leads us to say again, get into the game, even

if you have started on another track, it's men and methods that count.

Says he was born in Denmark and if you give him a chance is quite boastful about it, but he will get over that in time.

These sketches are neither obituaries nor autobiographies, and as a rule we do not permit the victims to say anything, but just as we go to press the following comes by wireless telephone:

"At present am working for pleasure as well as profit. Am raising alfalfa, fruit, vegetables, flowers, poultry, dairy cattle and last but not least, three strong, healthy horticulturists, all on 20 acres of land."

There is absolutely no excuse for pursuing the subject further; enough has been said.

MARKETING THE APPLE CROP

A. K. BASSETT, BARABOO.

After carefully pruning, spraying and cultivating an apple orchard, this all important question arises, "what is the best method of marketing the crop?" When we buy spray material, farm machinery and labor, we are asked to pay a fixed price, but when the majority of apple growers wish to dispose of their crops they consign their produce to a commission house and accept what they are willing to send in return.

Secretary Cranefield states in the last issue of the Wisconsin Horticulture that we ought to assassinate the dishonest commission man. At that rate they all ought to be assassinated. It has become second nature for them to be dishonest. In the first place there are too many of them and in order for them to live in the style they do, it is necessary for them to make false reports. Last summer several stopped at my place as they were making a tour in their automobile from Chicago through to Minneapolis. They looked over my orchard and showed me how to grade fruit and said that most of my apples would go as first class. Most of the returns I got showed that they sold for cull prices. If they did sell well, they took out a little extra for handling them. On one occasion I wrote to find how the extra charges

came about. They sent me a nice letter saying that this was a choice ear of early apples of which they had more or less trouble in making disposition. They sent me a list of charges which showed \$30.75 extra for icing and demurrage.

Why not eliminate the commission man and sell direct to the retailer and consumer? The large grower and the fruit growers associations can probably do business with the commission house but it is from the standpoint of the smaller growers that I wish to speak.

I consigned the bulk of my early apples to a commission house and receiving very poor results, I began to look around for trade of my own. I began by placing a small advertisement in my local paper stating variety and price. This brought greater results than I anticipated. I received orders from many parties who had once lived in the vicinity of Baraboo, but had moved away and took the local paper. From one party I received the fourth order and could have sold them more if I had had the apples to spare. Several persons from the city, while visiting in Baraboo, saw my advertisement and ordered some sent to their homes. One Chicago lady ordered two barrels of early apples and as soon as she got home she sent me an order for ten barrels more for her neighbors.

Through Baraboo people I shipped many apples to parties living in the Dakotas, Minnesota, Utah, Colorado, Michigan and Illinois. Only a short time ago one of our leading dentists sent a box of my Snow apples to Los Angeles, California, and word came back that they arrived in fine condition and the man said that he would be sick if eating too many apples could make him so.

The majority of my orders, however, came from the northern part of Wisconsin.

Many summer visitors from Devils Lake came up during the summer and seeing the fruit, which they declared was far superior than any they could buy in the city, left orders for a barrel or two to be shipped as soon as they went back, and later ordered some for the fall and winter. This was at the time when the commission

houses reported apples a glut on the market and sent very poor returns. Yet these people declared the cheapest apples they could buy were 40c. a peck.

Then, too, I had letters from a great many grocery and fruit dealers from the small northern towns. To several I sold apples right along.

After getting started in selling direct to consumer and small retailer, I was able to dispose of the remainder of my crop and could have sold the quantity many times over. I did not get four or five dollars a barrel as some folks did that we read about, but I sold from \$1.60 to \$3.00 per barrel f. o. b. at Baraboo, according to variety. And this, considering last year, is very good money. Money talks, yet the letters I received from satisfied customers, were encouraging. This is the way they run:

Nov. 17, 1911.

Mr. Arthur Bassett, Baraboo, Wis.

Dear Sir:—Apples rec'd in fine condition, as fine a barrel of Fameuse as I ever saw. We are certainly enjoying them. Enclosed find money order for \$3.00. Many thanks for your trouble. Respectfully yours,

C. C.

Marquette, Mich.,

November 8, 1911.

Mr. A. K. Bassett, Baraboo, Wis.

Dear Mr. Bassett:—

The Snow apples were duly received. They are the finest Snow ap-

ples I ever saw—thanks. Inclosed please find a \$4.00 check for same.

Very truly yours,

G. W. G.

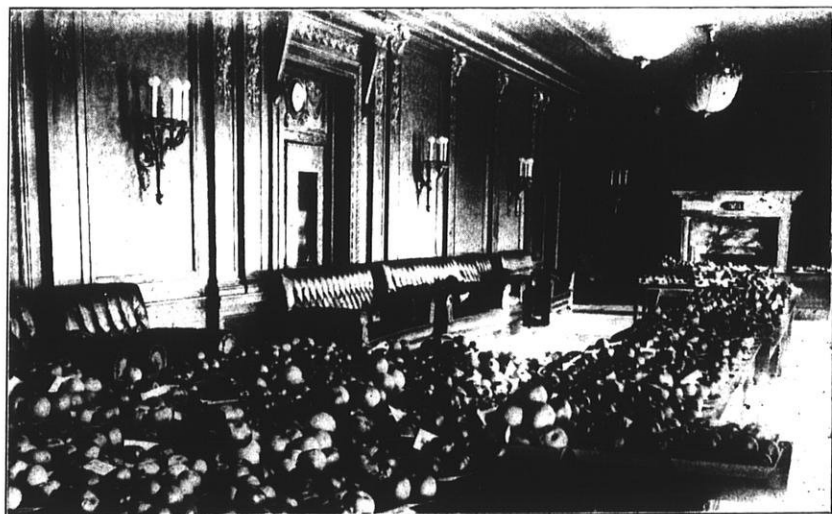
In contrast let me read you one from a commission house:

Chicago, Ill.			
21 Bbls. Apples			
Received 9-5-11			
For Acc't of	A. K. Bassett		
	Baraboo, Wis.		
7 Wealthies	1.25	\$8.75	
3 Cooking	1.25	3.75	
1 Sweet		1.40	
4		6.25	
6 Blush decayed		2.50	\$22.65
loose pack no face			
		Freight	\$7.82
		Commission	2.27
		Cartage	1.05
			\$11.14
		Net proceeds	\$11.51
(Remarks) Price for 21 Bbls.			8.40
		21	\$3.11
		Per Bbl.	.15
		Per Bu.	.05

About this same time I made a shipment of the same variety to Hillsboro, North Dakota, which were ten days on the road, and another to Hooper, Colorado, which traveled eighteen days. In both cases word came back that the apples arrived in fine condition.

I am so well pleased with the success I had in selling direct to consumer and retailer that hereafter I intend to dispose of my apples in this way.

The location of Wisconsin makes it an ideal place in which to market a crop in this way.



Some of the apples at Madison, January 9-11, 1912

The freight rates on a barrel of apples from our station to any point in the State is not over sixty-six cents. Thus making it possible for a consumer to get apples at picking time for \$3.00 or less, which is a very moderate and satisfactory price and leaves the grower a good compensation.

In the northern part of the State, where there are thousands of apple hungry people, few apples are raised, and retail prices are never lower than thirty-five to forty cents a peck for cull apples. At least that is what residents of those parts tell me.

From past experience I know a good many apples could be disposed of to the working classes living in the factory towns near the large cities. These people, like those living in the northern sections, would consume more apples if they could buy them for what they are worth.

I think if one wanted to make a specialty of selling fancy fruit they could find a ready market for them in the large cities.

If anyone has an orchard located near a city of some size he can dispose of a great many by peddling them. An aristocratic grower might consider this method beneath him, but it is an honorable business also a money making project. I sold practically all my late fall and winter varieties in my home town. I deliver them by the bushel as my customers wish them, thus saving the cost of the barrel which pays for delivering. I find that people would rather buy a bushel at a time than a larger amount. I have many customers who use from three to four bushels a month. This goes to show that people will consume more apples if they can buy them right. I notice that it is the people of moderate and ample means who buy the most apples. The rich people usually wish to purchase about ten cents worth, and of course such trade is not worth soliciting.

Many persons say to me, "I don't see where you sell your apples, I can't sell any?" My one answer is "Have the right goods and then advertise."

When my young orchard gets into bearing, I intend to advertise on a

larger scale. I shall place advertisements in the local papers of some fair sized northern towns, stating grade, variety, freight rates and price. I think it is very essential to state the price, as the majority of people do not care to bother about writing for prices. If the price suits them and the fruit is guaranteed, they are quite likely to send a trial order.

A Wisconsin farm paper is also a good place to advertise in, thus getting in contact with farmers who do not raise apples.

I spoke before of the chance of selling extra choice selected and packed fruit in the large cities. For this purpose I would advertise in some magazine likely to be read by the moneyed class. I ran across an article a while ago about an eastern grower who made a specialty of doing this. This is the way it reads:

HAVE YOU A HANKERIN'?

for those firm, sweet apples you used to knock off the tree with a club when the old man wasn't looking? That was back in the days when the East—the natural apple country—was producing bumper crops. It was before the days of Oregon apples that have size and color, but lack the real flavor of Eastern hill-sides. I have rejuvenated a Vermont orchard and will have for October delivery a limited quantity of apples that are just a little the best that can be grown. Drop me a card for the particulars.

The grower ought to place "catchy" labels, containing the farm name and location, on the barrels. This is the modern way of advertising and is extensively used by manufacturers of food products. We are all familiar with the brands—None Such Mince Meat, U-need-A Biscuit, etc. Fruit shipping associations are now falling into line. They are adopting brands which are trade-marked and are advertising them to increase consumption of their fruits and I think it would be profitable for the small grower to do likewise.

But lastly, and most important of all, one must guarantee the fruit. The recollection of quality remains long after the price is forgotten. I get a letter with the money in it, I send that man just as good apples, and maybe a little better, than I would the man who pays after he gets the apples. Send a man as good apples as you guarantee and he will tell

all his neighbors and friends and you get *their* orders, but send him poor apples and he is lost forever.

It seems to me that here is an excellent opportunity for a young person to enter a new field of work. It will take a few years of course before a brisk trade can be established, but remember this always, that unless one sends a customer apples of quality, you are killing trade. It is the come back order we are after, and a customer will not come back with a second order unless he gets what he wants.

At present, at least, there is very little competition in this line and the time is fast approaching when the middleman must go.

THE BERRY BOX LAW

Berry growers, cherry growers and all others who sell fruit in boxes will do well to examine carefully the law and decisions on same relating to fruit packages, in this issue. In case you do not care to read all of these decisions, here is the "meat" as we understand it:—

(1) Strawberries and other similar fruits *must* be sold in the full dry quart or dry pint boxes. No use to talk about your constitutional rights and privileges, you simply will not be permitted to sell in wine quart boxes whether marked "short" or any other way.

(2) The crate and not the box is the "original package" which means, as the Editor interprets the opinions, that berries, etc., may be shipped into the state in short boxes and sold *once* only and by the crate only. Any second sale or selling by the box lays the seller liable under the Wis. law. This protects the Wisconsin grower but will make the dear people howl. Let every grower appoint himself a committee of one to see that both of these opinions are upheld.

A NICE SUMMER AT BAYFIELD

Please consider carefully the following from Mr. Wm. Knight of Bayfield received at this office Jan. 26.

"I have set a mile of fence posts between Jan. 1st and 15th. Holes were dug for the posts and posts set ready for the wire all during that severe weather."

Gardens

This department is to be a permanent feature, at least the heading. We will continue to run the head and will devote as much space as required, up to two pages, to articles on the home garden, whether front yard or back yard. Every woman reader, and as many men as choose to enter, will be considered assistant editors. Miss Blanchard Harper of Madison and Mrs. L. H. Palmer of Baraboo have offered aid and comfort. How many more may we add? Send all contributions to this office not later than March 25 for the April number.

A BACK YARD GARDEN

GEO. B. SMITH, GREEN BAY.

Horticulture came last evening and I notice the communication of "Blanchard Harper" entitled "A Protest." Apparently Miss Harper does not fully realize that in nearly

to each particular circumstance; and each one must make the necessary modification for themselves. Now, all that is necessary for the small gardener to do is to modify what is done on a larger scale by the commercial growers, who Miss Harper apparently thinks is getting more than their share of the good things. There is one very important factor that the person with only a very small piece of land near the house, and oftentimes the stable too, has to contend with that they fail to realize until they try to make a garden; and that is that a considerable part of their ground is in the shade of the house or stable, and when this is the case, it is an impossibility to have a garden that is very successful. But

crops mentioned on this much ground. I will go into minute detail, as that is what she asks for. But she will have to begin by modifying my instruction to suit her circumstances as I am located at Green Bay, Wis., and I do not know where she is, so if my dates are too late plant earlier, if they are too early plant later. Plant the rows across the land beginning 9 inches from one end with one row of Eclipse beet, put the seed balls one inch apart, cover $\frac{3}{4}$ inch; 18 in. one row Parsnip seed one inch apart, cover $\frac{3}{4}$ inches, when 3 in. high thin to 4 in. apart; 18 in. one row chantenay Carrot seed 4 seed to an inch thin to $\frac{1}{2}$ inch and when the carrots are as large as your finger, pull out every other one to use. Also thin the beets in the same manner, as the beets make the finest of greens, and after having thinned the beets and carrots once, thin them again in the same manner always pulling the largest ones for use; 15 inches one row of onion seed 4 seeds to an inch; do not thin until they are large enough to use; 15 inches one row onion sets, get the small sets and put them $1\frac{1}{2}$ inches apart in the row, 1 pint will be enough. Fifteen inches one row Notts Excelsior peas $1\frac{1}{2}$ inches deep, seed 2 inches apart, 15 inches another row of peas, thin to 4 inches after they are 2 inches high; 18 inches one row of six Jersey Wakefield cabbage plants, buy these in the market, do not try to raise them; 18 inches one row, 6 Snowball Cauliflower plants, buy them in the market; 30 inches, one row, 3 plants of Earliana Tomato, two Dwarf Stone. The Earliana is the finest of the Ey. Tomatoes and will not run to vines if the ground is a little too rich, as a good many varieties will do. The Dwarf Stone is the finest of the Dwarf vine varieties; 60 inches, one row of one hill Evergreen White Spine cucumber, make the hill $2\frac{1}{2}$ feet from one side of the bed and about $1\frac{1}{2}$ feet across, put in about 20 seeds so as to allow some for bugs, cover $\frac{3}{4}$ inch and when they have about 5 leaves on thin to 4 plants; one hill musk melon, if you want orange color flesh use Admiral Togo, if you want green flesh use Rocky Ford, plant same as

Cost for Seed. 10x20 ft. Scale $\frac{1}{4}$ in. to ft.

		Beet seed.	
.05	18 in.Early radish.	
		Parsnip seed.	
.05	18 in.Early radish.	
		Carrot seed.	
.05	18 in.	Onion seed.	
.05	15 in.	Onion sets.	Beans.
.05	15 in.	Nott's Excelsior peas.	After peas seed radishes.
.05	15 in.	Nott's Excelsior peas.	Second planting radishes.
.05	15 in.	Six early cabbage plants.	Whenever a head is cut dig up and seed radishes.
.03	18 in.	Six Snowball cauliflower.	
.05	18 in.	One Earliana tomato plant.	
		Two Dwarf Stone.	
.10	30 in.	Spinach seed.	
.05		Spinach seed.	
.00		One hill cucumber. One hill muskmelon	
.05	60 in.	Lettuce seed.	
.05		Lettuce seed.	
.68c.			$\frac{1}{2}$ lb. radish seed, .20
			Beans .05
			.68
			.83
12	240		
	20 ft.		

all cases where instruction is given with the idea of helping the amateur in his work, it is necessary to modify, or change the instruction in some part in order to make it applicable

as there are some cases where a garden can be made I take one set of Miss Harper's figures "10x20 ft." and inclose a diagram of about all that it is possible to grow, of the

cucumber. Now in regard to the time of planting, the beet, parsnip, carrot, onion sets, and peas are to be planted as soon as the ground is dry and warm enough to work up good and fine. The cabbage and cauliflower are to be set out about May 10th in this locality. The tomato plants about May 20th. Set the plants a little deeper in the ground than they stood in the seed bed. Plant the cucumber and melon seed the same time that you set the tomato plants. Now, for the second crops, mark all of the land off for the rows that have been mentioned the first thing after getting the land ready to plant. When you have all of the first planting done, plant one row of Scarlet Globe radish seed in the space between the beet and parsnip rows and one row between the parsnip and carrot row. Two weeks later plant one row radish seed between the cauliflower and tomato row; the radish ought to be 4 seeds to an inch $\frac{1}{2}$ inch deep. When you plant the first seeds plant two rows of Round Summer spinach seed between the tomato row and the cucumber and melon row; plant $\frac{3}{4}$ in. deep one seed to one inch; two rows of Simpson lettuce seed between the vine row and the end of bed, sow seed one inch apart, cover $\frac{1}{2}$ inch, thin to 3 inches. When the set onions are 6 inches high plant one row of Golden Wax beans about three inches from the onions on the side towards the peas, one seed every 2 inches when they have 5 leaves thin to 4 in., plant beans one inch deep. I assume that you will pull the onions as soon as they are suitable for use as green onions. As soon as the peas are done bearing, pull the vines up and spade the ground, and plant 3 rows radish seed or part radish and part White Egg turnip seed. As soon as you cut a head of cabbage or cauliflower, dig the ground up and plant radish or turnip seed. It is safe to plant turnip seed to August 1st, and radish seed to Sept. 1st. In all intermediate crops the land must be thoroughly cultivated and worked up as soon as the crop is removed. When the vines run over the line of their space lift them up and turn them back on

their own land. The necessary manure for this much land would be 50 cents worth, and the seeds would cost 83 cents. Other expense would be labor, and you get your pay for that in the glory of watching things grow, and eating them. Of course I have assumed that you do your part well, hoeing and weeding often. Everything that is put down in this article is thoroughly practicable under good care.

AN APPEAL

In attempting to encourage home gardens, the Wisconsin Horticulturist urges upon everyone having a small garden to help the good work. One of the first necessary things to be done is for each person having a little patch which yields flowers and vegetables is to prove to his or her neighbor the advantages of such a garden, and to do so effectually as figures are more convincing than words, let us urge upon each one, first, to keep an accurate account of everything expended in the purchase of manure, seeds and labor, and, secondly, another of the returns, as for instance, a daily record of how many bunches or heads of lettuce or radishes are gathered, how many quarts of peas, or pounds of string beans or ears of corn or bunches of beets. Then send us the list and we will sum up the value of the crop at market retail prices.

The smaller the garden or bed the more anxious we are to obtain the

accounts. If you do well with a bed of three by six feet you will bring more encouragement to many who would like to do the same, than if your garden were large and spacious, and to those who have larger gardens, we appeal for the sake of many who through ignorance are not doing what they may wish with theirs. B. H.

PLAN YOUR GARDEN NOW

The daily arrival of the seed catalogue reminds one that it is time to decide what we wish to plant the coming season.

First in order is a succession of vegetables that the table may be supplied at all times with a variety of good things throughout the year.

"Last but not least," looked at from the viewpoint of home comfort, comes flowers. Let us have them without stint. There is such an endless variety to choose from that all tastes may be gratified at a minimum cost.

When Adam and Eve first opened their eyes they found themselves in a garden. Does not this fact proclaim that horticulture was to be the leading occupation for their descendants. The growing of fruits and flowers is a soul satisfying occupation, and while the men are pushing the fruit industry, suppose we ladies devote what time and talents we have to the beautifying of the home. Let it be a work of love for our home and surroundings in which we should get



Some more apples, also at Madison, in January

our children interested that they, too, may become interested in growing things. MRS. L. H. PALMER.

THE MINNEAPOLIS GARDEN MOVEMENT

A meeting of people interested in spreading the knowledge of the charms and usefulness of home gardens, was called at the residence of Mrs. Joseph Jastrow, president of the Madison Womens' Club, to consider the advisability of organizing in Madison a movement patterned after that which, under the leadership of Mr. Ronar, editor of the Minneapolis Tribune, has proved such a success. Ways and means to carry out a similar plan in Madison were discussed and much enthusiasm aroused, and those present were desired to do all possible to further the end. B. H.

PLAN THE HOME GARDEN

Plan the home garden early in the year, especially when it is small, because then every inch of space is needed and should be carefully arranged. Allot the space so that the taller plants will not shade or obscure the smaller ones, plan for an early crop of radishes and lettuce to be followed by a later one of string beans, spinach or turnips, and where the early beans, peas, and spinach have been cropped put in later plantings of lettuce, especially late cabbage and cauliflower. The smaller the garden the greater the necessity for planting the dwarf varieties of beans and peas, and for training the tomato plants on stakes or trellis. Foresight of this kind makes a greater share of the successful crop.

BLANCHARD HARPER.

KEEP THE HOME GARDEN SMALL

Enthusiasm when reading the new seed and plant catalogues, the charm of the opening spring, entice one to plan a garden which will demand more time and energy than one is prepared to give during the stress of hot and dry summer weather. The delight of working in the open and out doors usually leads one to forget the time when weeds grow quickly and peas and beans must all be picked while the onions are demanding to be

thinned and the perennials for the flower garden are ready to be set out. The garden will yield more in both flowers and vegetables if by resisting the influence of the beguiling spring one curbs one's impulse and starts in with but half what is desired, and then resists all temptations to shirk the cultivating, transplanting and replanting as each is needed. A garden sixty by sixty feet, tended faithfully will supply not only four people during the entire summer bounteously, but furnish much for the winter store of canned corn, peas, beets and beans. B. H.

ARE YOU SATISFIED

Are you satisfied with the choice of seeds and varieties planted in your home garden? Have they given you a return commensurate with conditions? Or have certain things failed? Let us know and try to help you. We want everyone who has a home garden to aid us to compile a list of varieties best suited for the home gardens of various localities. The varying climatic conditions of the northern, southern, eastern and western portions of the state, the different soil conditions, as the sandy soil near Kilbourn, the clay around Madison and the marshes now being reclaimed in other parts of the state, certainly would seem to call for an equal number of varieties to meet the different situations. To discover exactly what varieties will grow best in each locality is our purpose. To do that without the co-operation of the members of the Horticultural Society would mean the establishment of experimental gardens all over the state at great cost of labor, time and money, to do it if each and every member will contribute his or her mite of information and experience, will accomplish it quickly and economically. Come everybody, lend a hand, send us your mite, however humble, and if it takes a moment's precious time just remember that you in the past have sought and learned from some one else's experience, and were grateful and now must prove your gratitude by helping others to do the same. Tell what varieties you plant, what succeeded, what ones

failed, your soil conditions and locality and anything else you think influenced the growth. B. H.

CREDIT LIST FOR JAN. AND FEB.

Being a list of members who have secured members. This is our honor roll. We invite you to a place thereon.

W. S. Hager, 2; Jas. Baldwin, 1; Wm. Martin, 1; J. C. Reese, 2; E. W. Fenlon, 1; Ferdinand Hotz, 2; W. A. Toole, 1; R. A. Woerfel, 1; J. S. Armstrong, 1; Hugo Kegler, 2; Rob. Kerr, 1; G. H. Townsend, 1; Jacob Zaun, 1; Fred L. Blackinton, 1; E. C. Garwood, 1; John Kegel, 1; J. N. Mills, 1; Jim Borders, 2; A. A. Ullrich, 1; P. T. James, 1; R. E. Wedgwood, 1; T. D. Van Buren, 1; Geo. Trim, 1; R. W. Gilbert, 1; N. A. Rasmussen, 5; L. J. Tucker, 1; C. D. MacGillfrey, 1; Henry Naffz, 1; F. L. Mielke, 1; J. A. Hayes, 6; W. C. Sicker, 3; D. E. Bingham, 4; E. Hawarden, 1; B. Hahn, 15; H. E. Paulson, 1; J. A. Dunstan, 2; E. F. Boucsein, 1; G. J. Schneider, 1; E. W. Longfellow, 1; Arthur Fossum, 2; Percy D. Aspinwall, 1.

We think B. Hahn, of Sturgeon Bay, is a hummer. N. A. Rasmussen can go some, too. And then we love the little ones. Robt. Kerr captured his in the woods out on Sand Island near Bayfield. W. S. Hager has a special game preserve and can bag a brace most any time. Try your luck.

IN MILWAUKEE NOW

"Your kind letter of the 19th at hand, and can only say that I appreciate most deeply and sincerely the honor which the Society has seen fit to confer upon me, by re-electing me as Vice-President for the ensuing year, and that so far as lies in my power I will push along the grand work that the organization is doing. I did not attend as I was in the throes of moving to Milwaukee to practice law in a larger and I hope a more useful field. It may well happen that I can be of assistance here, and will always be at your or the Society's service." C. L. RICHARDSON.

Send one new member in March, and one in April, and one—

Wisconsin Horticulture

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Life Membership-----10 00

Remit to Secretary W. S. H. S.
Madison, Wis.

Cut cions for grafting before
March 15.

What great acorns sometimes come
from little Oaks.

March is the month for hotbeds.
See March, 1911, number for direc-
tions. Did you save your papers?

An annual membership free for the
first March renewal slip received at
this office accompanied by a dollar.

Copies of the Weights and Meas-
ures Law may be had on application
to Supt. J. Q. Emery, State Capitol,
Madison.

Let every grower see to it that the
dry quart is enforced. March is a
good month to look for southern
grown strawberries.

Why not cooperate in buying berry
boxes and crates? you can save from
twenty-five cents to one dollar per
thousand on boxes, according to the
quantity purchased. Get together.

Ask questions. The question sheets
sent out last month return but slowly.
Do not hesitate on account of the
request for name and address. Names
are never published unless requested.
Send a bunch of questions for April.

The price is now One Dollar for
subscription to Wisconsin Horticul-
ture including membership in the
Society. A dollar bill is a very con-
venient way of remitting.

How many words, in ordinary
handwriting, may be written on a
postal card? Try it some time and
when done turn the card over and
write Editor Wisconsin Horticulture,
Madison, Wis.

The new Department, "Gardens,"
should be popular. We solicit con-
tributions on vegetable and flower
gardens, house-plants or anything
that makes better homes. While this
department belongs mostly to the
women members "mere man" will be
allowed to enter.

CORRECTION

On page 6 of the February issue an
article on fruit growing in the North-
west was credited to Prof. R. A.
Moore. It should have been Prof.
J. G. Moore. "R. A." knows a whole
lot about corn, alfalfa, etc., but when
it comes to fruit you want to see J. G.
about it.

ONCE MORE

On page 4 of the July issue the
Secretary, over his signature, pub-
lished certain statements concerning
the investment of money, that it
seems necessary to repeat at this time.
It is to the effect that no advice will
be given by him either by letter or
through this paper as to the invest-

ment in any particular orchard com-
pany, scheme or plan of fruit grow-
ing.

We venture the opinion that this
is or should be the policy of every
officer of the Society; none should
lend the influence of his position to
any concern. This is also the policy
of this paper, to furnish reliable in-
formation about the different sections
of Wisconsin and their horticultural
possibilities and that is all. No one
should ask more. The wise investor
will investigate for himself.

EVERGREENS

and Deciduous Trees
OF QUALITY

For Parks, Lawns, Private Grounds and
Reforestation

Arbor Vitae Balsam Fir
White Pine Norway Spruce
Europ. Larch Aust. Pine

All standard varieties of ornamental and
Fruit Trees
Write for Catalogue

EVERGREEN NURSERY CO.
STURGEON BAY, WIS.

Kellogg's Nursery

*Oldest Nursery in
Wisconsin*

Our stock is grown right, dug
right, packed right, and by no
means least, the

PRICES ARE RIGHT

*Our Specialties are Small Fruits
and Fruit Trees*

Apples singly or by the 1000.
Currants by the doz. or 25,000.
Strawberries by doz. or 500,000.

FIFTY-EIGHTH YEAR

Get our price list before you place
your order and save money.

Address Box 77
KELLOGG'S NURSERY
Janesville, Wisconsin

THE OYSTERS SHELL SCALE

PROF. J. G. SANDERS.

The commonest and most widely distributed scale insect in Wisconsin which causes damage to various kinds of fruit trees and ornamental plants, is the "oyster shell scale," which was imported from Europe over a century ago. In the aggregate, more damage to fruit trees and ornamental shrubs is caused in Wisconsin by this scale insect than is generally realized, although its attacks are generally not so fatal as that of the San Jose Scale, which has been found at a few points.

Apple, willow and poplar trees are often times seriously infested to such an extent that the plant is decidedly stunted in growth. The scale is readily recognized by its brown color and elongated shape—much narrower at one end which bears a light yellow spot. Beneath this brown scale will be found upon examination in the winter or in the spring, many tiny, white eggs which appear like particles of dust. These eggs hatch in the late spring and the crawling lice migrate to the youngest twigs to begin feeding. Consequently, the scale does great damage by stunting the growth of the youngest shoots.

Fruit growers and others should examine their trees carefully for this scale which if present in considerable numbers should be treated. A thorough application of lime sulphur wash one part to ten parts of water sprayed on the trees as late as possible in the spring before the bursting of the buds will be highly successful in controlling the pest. The later the application is made, the more successful will the results be.

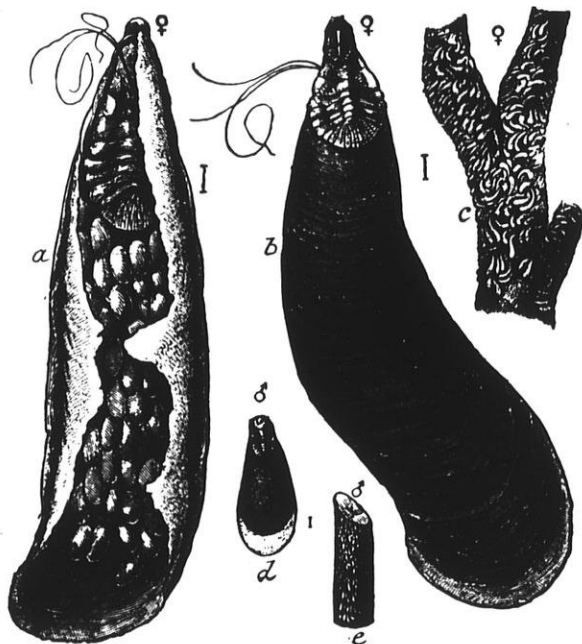
Lime sulphur in commercial form is generally more desirable than the home made product, particularly that made in Wisconsin since our lime does not generally contain a high percentage of calcium. In fact, the commercial lime sulphur can be purchased for

a very little more than the cost of the ingredients which are used in the home made wash.

It must be remembered that scale insects and plant lice which suck the sap from their host plants can not be poisoned with Paris green or other arsenical poisons nor controlled with Bordeaux mixture which is only used for the control of fungus diseases.

WISCONSIN PEACHES, WHY NOT?

I am glad to note that a special effort is to be made to try out some of the winter varieties of apples. Do not overlook Black Ben, Delicious, and several others that are quite strongly advertised. Why do we not also do some work along the line of



THE OYSTER SHELL SCALE

After Dr. L. O. Howard, Year Book U. S. Dept. of Agr., 1894

trying to develop a race of peaches that will thrive in Wisconsin. Perhaps this last should be done in our private orchards, but the writer expects to see the time when we will be producing peaches here in Wisconsin, that will be just as good as any we can get from Michigan or Texas. The best peach I ever tasted was grown in our garden at Green Bay. We will do well to think of these things before some stranger comes along and snatches the honor which we should have had. I have ordered a few peach trees to set this spring, and I note that Washburn parties have also ordered some for

this spring. You fellows down there in the southern part of the state would feel smart if this little neck of land up here should show you how to grow peaches, or show that it is possible.

Be not weary in well doing.

IRVING C. SMITH.

McKay Nursery Company

PARDEEVILLE, WIS.

Offer a Complete line of

HARDY NURSERY STOCK

FOR SPRING 1912

If interested in planting FRUIT TREES, SMALL FRUITS or ORNAMENTALS, write us for CATALOGUE and PRICES. You will find our prices consistent with quality of stock offered.

NURSERIES AT
WATERLOO, WISCONSIN

KNOX NURSERIES

(Established in 1851)

Make a specialty of **Cherry Trees**. They strongly recommend **One Year Cherry Trees** because they are stocky, well headed, well rooted thrifty and vigorous. Plenty of **Two Year** for those who prefer the larger trees. They also have a nice lot of Apple in northern sorts.

A trial order will convince any one of their quality.

H. M. SIMPSON & SONS
Vincennes, Indiana.

SOMETHING ABOUT ADS

We want your business, but we don't want it unless we can give you about one hundred and seven cents in value for every dollar you pay.

The reference is to advertisements in this paper. The ads and membership fees must pay for the paper and any time when the total receipts from these two sources are insufficient to cover the bills the paper must be cut down.

But as remarked in the beginning we don't want the business unless it pays *you*. We have suspected all along that an ad. in Wisconsin Horticulture was a money getter and now we know it.

Witness the following unsolicited testimonials.

"I have advertised extensively in various papers, most always with satisfactory results but I have never had as good returns for money expended as from "ads" in Wisconsin Horticulture. This I believe is due to the fact that all the readers of this paper are interested in horticulture and the "ad" comes to the people for whom it is intended."

N. A. RASMUSSEN.

"I have just been running over the January totals on our advertising results and I think there is due you a note of congratulation for the showing made by Wisconsin Horticulture on our January copy. During the month of January we received fifty inquiries from this piece of copy and a substantial order and more orders will undoubtedly come later as a result of our follow-up."

"It is not very often that I thus deliberately, without solicitation, talk about our advertising returns, but yours is an exceptional case—you are doing a splendid work in Wisconsin for the horticultural interests of the state and I think it is due you to know that with the right kind of copy Wisconsin Horticulture is a profit producer for the advertiser.

Wishing you continued and ever increasing success, I am

Yours very truly,"

* * * * *

This is the sort of thing that gladdens the heart and feeds the babies.

ARSENATE OF LEAD, LIME— SULPHUR SOLUTION

Fully Comply with most rigid requirements of Insecticide Act of 1910



Grasselli Arsenate of Lead is being successfully used to destroy all leaf-eating insects, such as Codling, Moth, Potato Beetle, Curculio, etc.

The Grand Sweepstake prize of \$1000 for the best carload of apples shown at the National Apple Show, Spokane, Washington, has been won by users of Grasselli Arsenate of Lead for the last three years.

Grasselli Lime Sulphur Solution is the Standard remedy for San Jose Scale. It has also come into prominence as a summer spray to replace Bordeaux Mixture.

For Further Information Write

The Grasselli Chemical Company,
The Grasselli Chemical Company, Established 1839

Milwaukee, Wis.
Main Office Cleveland, Ohio

ORCHARD HEATERS FOR PROTECTION AGAINST FROST

Write for Prices and Description

M. ROHLINGER & SON

523 CASS ST., MILWAUKEE WIS.

Door County Lands

ARE THE BEST IN THE STATE OF WISCONSIN

For Fruit Culture. Door County Orchards Pay a Revenue of from Five Hundred to Eight Hundred Dollars per Acre Annually. For Particulars Write : : : : :

**DOOR COUNTY LAND CO.,
STURGEON BAY, WIS.**

THE FINAL WORD ABOUT BERRY BOXES

During the convention representatives from several of the larger fruit centers submitted to Mr. J. Q. Emery, State Superintendent of Weights and Measures, several questions regarding the new Weights and Measures Law. These were forwarded by Mr. Emery to Attorney General Bancroft. We give herewith, by permission, the portions relating to "short" boxes and "original package," and advise a careful perusal of same by every grower.

EXTRACTS OF ATTORNEY GENERAL BANCROFT'S LETTER OF JANUARY 31, 1912.

"ORIGINAL PACKAGE."

In your letter of January 9th, you ask a number of questions regarding the weights and measures law, being chapter 566 of the laws of 1911. You state question has arisen as to the meaning and scope of the expression "except the first sale within the state in the original packages," where that expression occurs in paragraph 14 of section 1668; and you ask if the meaning of the term "original package" as therein used is that given by the United States Supreme Court in *Guckenheimer v. Sellers* (81 Fed. 997), to-wit: "an original package within the meaning of the law of interstate commerce is the package delivered by the importer to the carrier at the initial point of shipment, in the exact condition in which it was shipped." And further that an "original package" ceases to be such according to the following rule: "Goods imported do not lose their character as imports and become incorporated into the mass of property of the state until they have passed from the control of the importer, or been broken up by him from their original cases." *Low et al. v. Austin* (80 U. S. 29). And you ask if these quotations do not correctly interpret the meaning of the term "original package" as used in the Wisconsin statutes.

In my opinion, these quotations give an accurate interpretation of the phrase "original package" as used in the Wisconsin law. I would, in that connection, refer you to the following authorities also:

"An original package, as applied to interstate and international commerce, is a package, bundle or aggregation of goods put up in whatever form, covering or receptacle for transportation and as a unit transported from one state or nation to another. An original package, within the constitutional provision respecting the regulation of commerce, is the identical package delivered by the importer to the carrier at the initial point of shipment in the exact condition in which it was shipped."

17 Amer. & Eng. Enc. (2nd Ed.) 73.

"Property becomes mixed with the general mass of property within the state when the original package in which it was imported is no longer such in the hands of the importer, but until that time the article remains a subject to interstate commerce and is protected by the commerce clause from state interference."

17 Amer. & Eng. Enc. (2nd Ed.) 71.

You state that another question has arisen as to the meaning of the "first sale within the state," and you ask if this expression means the first sale by the importer in original package, or does it mean the sale made by the consignor residing in some other state to the consignee in Wisconsin; or does it mean something else?

"The right to sell any article imported is an inseparable incident to the right to import it, and there is no distinction in this regard between the sale at wholesale to individuals engaged in the jobbing or retail trade and a sale at retail to the consumer, provided the goods are sold in the original packages in which they were imported. The right of sale does not extend beyond the first sale by the importer after the arrival of the goods within the state."

17 Amer. & Eng. Enc. (2nd Ed.) 66.

"The point of time when an article of interstate commerce ceases to be such and the power of the state over it begins is not the instant when the article enters the state but when the importer has so acted

**"We have a Fine Lot of
Plants for the Garden."**

SEND FOR LIST

J. E. MATHEWSON

Sheboygan,

Wisconsin

**STRAWBERRY
PLANTS**

100,000 choice Strawberry Plants. Also Red and Black Raspberry, Asparagus and Rhubarb roots.

These plants will not be dug more than twenty-four hours before shipping. All stock guaranteed. Hot bed plants in season. Write for prices.

**RASMUSSEN'S
FRUIT FARM**
OSHKOSH, - WISCONSIN

**THE HAWKS
NURSERY CO.**

are in a position to furnish high grade Nursery Stock of all kinds and varieties suitable to Wisconsin and other northern districts.

Will be glad to figure on your wants either in large or small quantities.

WAUWATOSA, WISCONSIN

upon it that it has become incorporated and mixed with the mass of property in the state or country."

17 Amer. & Eng. Enc. (2nd Ed.) 70.

After articles have left the hands of the importer they are no longer subjects of foreign or interstate commerce.

"The first sale in the state of the imported article destroys its character as an import and incorporates it with the mass of property of the state."

17 Amer. & Eng. Enc. (2nd Ed.) 71.

The first sale within the state means the first sale by the importer in the original package. It sometimes happens that the consignor, residing in some other state, is the importer—that is, the sale may not take place until the goods have reached this state. When that is true, the sale by the consignor would be the first sale within the state. Probably, as goods are generally sold, the sale by the consignor takes place without the state and the person to whom he sells the goods may make one sale within the state in the original package.

"SHORT" BOXES.

Your next question is: "Is the selling in berry boxes or crates or barrels whose interior capacity is less than the interior capacity thereof specified by law, except the first sale within the state in the 'original package' even though those boxes, crates or barrels be marked 'short,' or so marked as to show their exact capacity, tolerated by the terms of the law?"

I find no provision of law by which boxes, crates or barrels may be sold or used within the state unless of the capacity provided by this law. The several provisions of section 1668 provide the interior capacity for barrels and also for berry boxes and crates for various articles. It nowhere makes any exception for such boxes, crates or barrels that are marked to show their exact capacity. In my opinion, sales in such short boxes, crates or barrels are violations of the law.

Your next question is: "Under the terms of the law, is the use of the old stock for making said boxes, crates or barrels now left in the possession of producers or of dealers in the fruits designated, tolerated by the terms of the law if such old stock is manufactured into barrels or crates or boxes not of legal size?"

Paragraph 10 of section 1668, relating to the sale of various kinds of berries, provides, in part:

" * * * all berry boxes sold, used, or offered for sale within the state shall be of the interior capacity of not less than one quart, pint, or half pint, dry measure."

Paragraph 12 provides that any person

"selling apples, pears, cranberries, or other fruit in barrels of less capacity than is herein provided for shall be liable to the purchaser in damages for three times the amount of the shortage therein."

Paragraph 14 provides, in part:

"It shall be and is hereby declared unlawful for any person to bring, transport, or convey into the state, or to sell, offer to sell, or otherwise dispose of for profit, any apples, pears, plums, blackberries, blueberries, cherries, cranberries, gooseberries, raspberries, strawberries, or other fruits, except the first sale within the state in the original packages, unless the crates, boxes, barrels, or packages wherein the same are contained shall be of the full interior capacity required for sale in the state to comply with all the provisions of this section as fully and completely as if the said packages had been packed, and the said fruit grown in Wisconsin."

It follows from these provisions that the law does not regulate the manufacture of boxes, crates and barrels, but it does prohibit the sale or use or the offering for sale of any boxes, crates or barrels unless of the full interior capacity required by law.

JEWELL MINNESOTA GROWN Nursery Stock

Complete assortment of Fruit and Ornamental stock in all varieties suited to northern culture. A specialty of Hardy Shade Trees, Windbreak Stock, Evergreens (Coniferous), Deciduous Shrubs, Apples and Native Plums.

THE JEWELL NURSERY CO.
LAKE CITY, MINN.

1500 Acres

Established 1868

FIRST CLASS NURSERY STOCK IN GREAT VARIETY

Consisting of

FRUIT, SHADE AND ORNA- MENTAL TREES

Strawberries, Raspberries, Blackberries, Currants, Gooseberries, Grape Vines, Asparagus, Rhubarb, etc.

Ornamental and Flowering Shrubs, Vines and Perennials. Roses, Evergreens, etc.

If you would like to see a *really good Catalogue* we would be glad to send you ours. It has more than fifty pages and describes everything in the plainest language without any extravagant or overdrawn descriptions.

The Coe, Converse & Edwards Co.
FORT ATKINSON, WISCONSIN
Wisconsin's Largest Nursery

Questions and Answers

Q. What do you know about "Bug Death?"

A. Contains much inert material such as plaster of Paris, etc., for which we cannot afford to pay 30 or 35 cents per pound. Better buy Paris green or arsenate of lead.

Q. I am interested in spraying an orchard. We also have fifty colonies of bees. Will the spraying harm the bees? Yours truly, A. B.

A. Many bee keepers claim that spraying fruit trees when in full bloom with sprays containing arsenic may poison bees but fruit growers quite generally contend that there is no danger. It may be said to be an unsettled question. However, there is little or no need of spraying in full bloom and this is the only time when there is chance of injuring bees. The first spraying for scab and codling moth on apple trees should be done immediately after the blossoms fall.

Q. I have 500 apple trees set out two and three years. I have not plowed the land but kept well worked with cultivator and disk.

Would you advise plowing?

A. No need of plow if grass and weeds can be kept down with tools named. The cherry growers at Sturgeon Bay use a light gang plow cutting furrows but 2 or 3 inches in depth followed by disk. Keep the soil stirred and free from grass using tools best adapted to purpose.

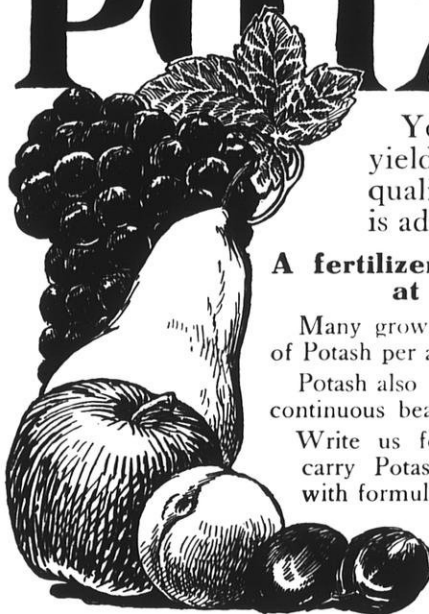
Q. How and when can hybrid perpetual roses be grafted to produce tree roses; and are our native wild roses suitable for stocks?

A. Grafting roses is rarely practiced in the northern states although sometimes successful. Budding is the method commonly followed for producing tree-roses. Bud high on Mannetti stocks in July or August, or as early as plump buds can be secured. Possibly our native stocks would answer although not very stout. Who can answer?

FOR SALE

A splendid location for chicken and fruit farm; 15 acres, adjoining beautiful little lake, in the summer resort district of Southern Wisconsin. Good six-room house, barn, etc., good drilled well, fine old shade trees and orchard of over 200 trees—apples, cherries, pears, plums, peaches, crab apples; also asparagus beds, pieplant, strawberries, raspberries, blackberries, currants, grapes, etc. First class home markets, both retail and wholesale, for fruits, vegetables, poultry and eggs. An ideal opportunity for an enterprising person—a good living from the start. Absolutely necessary to sell and for a quick sale will make low price and easy terms. Address E. W. NICHOLSON, R. R. 12, Brookfield, Wis.

POTASH



Your fruit is not at its best in yield, flavor, color or shipping qualities unless the Potash supply is adequate and available.

A fertilizer for fruit should contain at least 12% Potash

Many growers use annually 200 lbs. Muriate of Potash per acre.

Potash also insures strong wood and early and continuous bearing.

Write us for prices if your dealer doesn't carry Potash Salts; also for our free books with formulas and directions.

GERMAN KALI WORKS, Inc.
Continental Building, Baltimore
Monadnock Block, Chicago
Whitney Central Bank Building,
New Orleans



THE HARDIE SPRAYERS

Hand and Power Outfits

The Hardie Sprayer is built by a practical fruit grower for fruit growers and by a man who knows how to build sprayers.

Parts coming in contact with spraying fluid made of hard metal brass and cannot wear out.

The Hardie Sprayer is the Sprayer that will work when you want it to work and will do your spraying right. The Hardie Pump is guaranteed.

Write now for prices and catalog. We can give you the best material, prices consistent with quality on Arsenate of Lead, Sulphur Lime, Bordeaux, Bordo-Lead, Powdered Arsenate of Lead, Scale Killer, Sulfur. We have a complete line. Do not delay. Send for booklets and prices.

M. ROHLINGER & SON

523 CASS STREET

MILWAUKEE,

WISCONSIN

TOMATO SEED

A limited amount of the famous

"EARLY BUCKSTAFF"

Per Package 25 cents

Per ounce 75 cents

RASMUSSEN'S FRUIT FARM
OSHKOSH, WISCONSIN

SKILLET CREEK STRAWBERRY FARM

Don't forget that I have for sale the best of everything in the line of

Fruit Trees, Grape Vines
Berry Plants, Asparagus Roots

Everything I sell must be straight and give satisfaction or your money comes back as willingly as the goods went out. Order early for best satisfaction to both parties.

L. B. IRISH, BARABOO, WIS., Phone 179-M

WISCONSIN NURSERIES

Grow and handle all kinds of nursery stock. We employ no agents but sell direct. If in the market you can save money by buying of us. Get our prices.

WISCONSIN NURSERIES,
Union Grove, Wis. W. S. Moyle, Prop.

Send For **PANSY GUIDE AND CATALOG**
.. Our ..

of Flower Seeds and Plants
FREE TO ANY ADDRESS
WILLIAM TOOLE & SONS
PANSY HEIGHTS, BARABOO, WIS.

Vincennes Nurseries

Vincennes, Indiana

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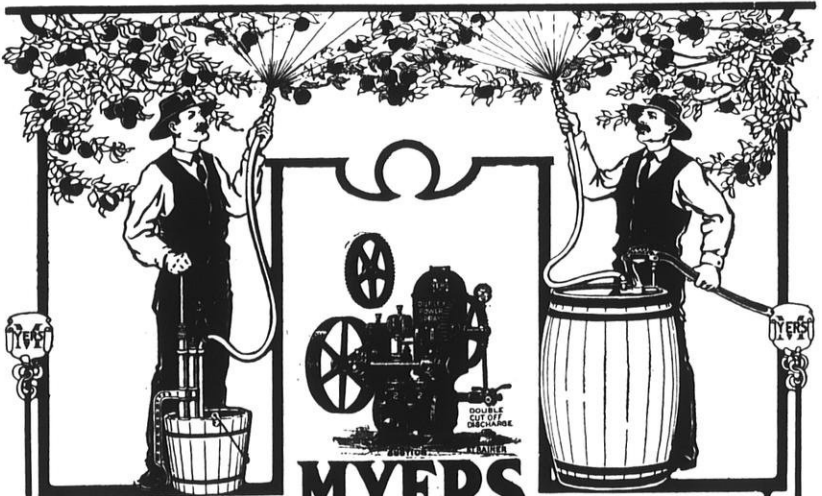
Cherry Trees by the
100 or 100000

The Growing of Cherry Trees has been our Specialty for Years. Our soil and method of growing produces a Tree that is not excelled by any one. Splendid blocks of two-year 5 to 7 foot trees and one-year 4 to 5 foot trees. Early Richmond, Montmorency and other leading varieties by the 100 or car load. We also grow a general line of other Nursery stock. Personal inspection invited. Correspondence solicited

Olds' Red River Valley Seed Potatoes



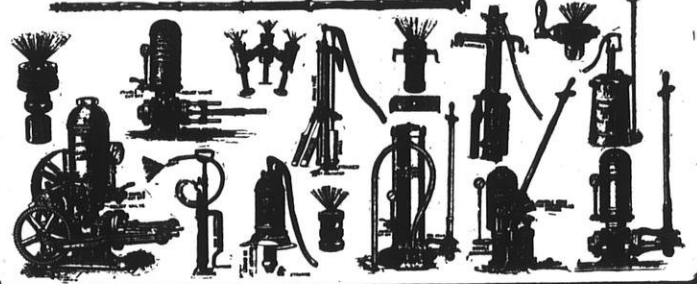
Red River Seed Potatoes, grown in the cold northwest, are ahead of all others for quick early maturity, vigorous growth and great productiveness. Better than ever this year.
Olds' Seed Potatoes have a national reputation, 24 years' experience growing and handling; our potatoes are known in every section and we are acknowledged headquarters for pure seed.
Send Postal for 66 Page Catalog giving correct descriptions and true illustrations of the best in Seed Potatoes, Corn, Oats, Barley, Field Seeds, Garden Seeds, Poultry Supplies and Tools.
L. L. OLDS SEED COMPANY, Drawer 66, Madison, Wis.



MYERS SPRAY PUMPS AND NOZZLES

are made in many styles and sizes to meet every spraying need from the small knapsack or bucket outfits to the large power rigs. They have all been developed in line with modern spraying requirements and have long since passed the experimental stage. We show here a few types of our complete line of Spray Pumps, Nozzles, Bamboo Extensions and Accessories. Our new catalog No. Sp-12 will give you full descriptions and prices.

WRITE FOR IT NOW.



F.E. Myers & Bro.

Ashland Pump & Hay-tool Works

ASHLAND, OHIO.

The Great Northern Nursery Co.

Sells First-Class Wisconsin Grown Trees

Our Trees Live. We had an opportunity to compare 500 of our Wisconsin grown trees with a similar lot of an Eastern Nursery. At the end of the season only 52 per cent of the eastern grown stock was alive, while 95 per cent of ours lived and grew. Moral: buy home grown stock and avoid loss. Our trees are **HARDY**, and our stock is **HEALTHY**. A comparison will prove that our stock has not the willowy and watery soft growth of southern or eastern grown stock.

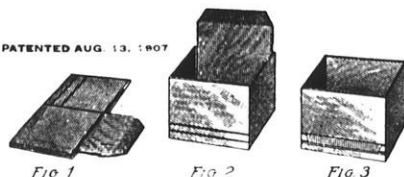
Every tree and shrub is packed entirely under cover, free from exposure to sun and wind,

Great Northern Nursery Company, Baraboo, Wis.

Write for Catalogue and Price - List.

EWALDS FOLDING BERRY BOX

PATENTED AUG. 13, 1907



The only folding berry box made of wood veneer that

GIVES SATISFACTION

Made in Wisconsin style, Standard dry measure quarts and pints. Neat and strong, is all ready for business, needs no tacks nor stapling. Write us today and we will tell you more about this box and how to get it nearer home at manufacturer's prices. Do it now.

We also manufacture crates and old style quarts and pints in K. D. for crate makers and large growers who have stapling machines and make up their own crates and boxes, big reduction in price on carload lots. Our material and prices will please you.

Cumberland Fruit Package Company
Cumberland, Wisconsin

FORTY - TWO YEARS

The Jewell Nursery Co.

Hardy Fruit and Ornamental
Trees, Shrubs and Plants

Lake City, - Minnesota

FIFTEEN HUNDRED ACRES

Vreeland's Spray Material Has No Equal

Send for prices and booklet entitled, "Spraying Simplified." Also handle nursery stock and special grade dynamite for tree planting.

Richland Co. Nursery Twin Bluffs, Wis.

Choice Strawberry Plants

Grown By Up-to-Date Methods

Senator Dunlap, Per. and Warfield, Imp., 50,000 each. Also Steven's Late Champion, Per.; Aroma, Per.; Bubach, Imp.; Haverland, Imp.; Orem, Per.; Climax, Per.; Excelsior, Per.; St. Louis, (early) Per.; Oregon Iron Clad, Per.; President, Imp. and Midnight, Imp.
Price 60c per 100, \$3.50 per 1000.
By mail 15c per 100 extra.
Black Beauty, Imp. and Grand Marie, Per. \$3.00 per 100, Fig type.

Plants Will Not be Dug More Than 24 Hours Before Shipping

Irwin Fruit Farm Lancaster, Wisconsin

SEND 15c FOR A PACKAGE OF

TOOLE'S GIANT PRIZE

PANSY SEED

We will include a copy of Toole's Guide to Pansy Culture and Catalogue of Flower Seeds and Plants

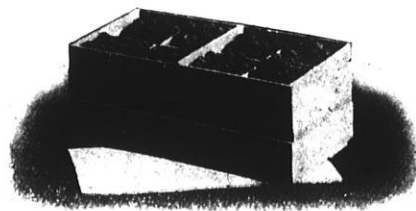
WILLIAM TOOLE & SONS

PANSY HEIGHTS
BARABOO, WIS.

50,000 CUTHBERT RASPBERRY PLANTS FOR SALE

These plants were grown on sandy loam, have just been inspected and found to be free from disease and in fine condition.

F. N. LANG, Bayfield, Wis.



BERRY CRATES FOXES

and a full line of

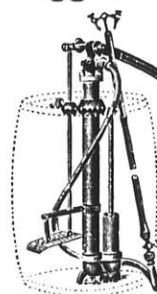
Other Fruit Packages

We furnish full dry quart and pint berry boxes and all other packages to comply with the new Wisconsin law.

Medford Veneer Co. Medford, Wis.

NEW STRAWBERRIES! 1912 Catalog FREE to all. Reliable, interesting and instructive. ALL THE NEW EVERBEARERS and other important varieties. Address C. N. FLANSBURG & SON, Jackson, Mich.

Bigger Fruit Profits



Here is a spray pump invented by fruit growers. It was our endeavor to secure the best spray pump to use on our 300 acre fruit farm that produced the

ECLIPSE SPRAY PUMP

It overcomes every defect found in other makes. It has proved itself best in actual work. Put an Eclipse to work on your trees and earn bigger profits. Write for our fully illustrated catalogue. It tells why you should spray—and why you should do it with an Eclipse. It's free

Write to-day

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GLADIOLUS BULBS GROFF'S HYBRIDS and all the Best Sorts

First premium at Iowa State Fair 1911

Write for catalogue

GEORGE S. WOODRUFF
Independence, Iowa

Fruit Trees Fruit Plants Ornamental Shrubs

From the North

Send us your list of wants
First class stock at honest prices
Address

The Cascade Nursery
Osceola, Wis.

The Stark Orchard Planting Book



**Stark Bro's
Nurseries & Orchards Co.**

Two Famous STARK Books FREE

*Stark Orchard Planting Book and
Condensed Stark Year Book*

Two splendid, practical volumes which tell the amazing story of modern-day fruit-culture. Two books filled with invaluable, down-to-the-minute information on orcharding in all its phases; complete descriptions of varieties, season of ripening, locality where each variety does best, etc. They tell a common-sense the sensational story of profits that are being made from commercial and home orchard growing. These books show just what **you** can make from a Stark Orchard. **And they are both free.** Use the coupon.

Stark Orchard Planting Book

A book of trustworthy information by a recognized authority—given **free** to the whole world,—not a catalog or piece of advertising literature, but a well of information on the planting and care of trees from the day they are received from the nursery. As the author says:

"The contents is not the result of my own experience alone. It is a collection of the knowledge and experience of many men. Each has spent a large part of his life working with trees. Many have had scientific training. All are rich in that greatest of all knowledge—**practical experience.**" It tells the real secret of success in orchard planting.

At Planting Time Most Mistakes Occur!

This invaluable book explains in simple language, how to avoid those failures in fruit-growing that are directly due to easy-to-make mistakes made **when the trees were planted.**

We cannot begin to tell you here the priceless information contained in this small but most valuable book. You must have the book itself. Send for it **now.** Use the coupon. Or write a card or letter today, without fail, for this truly remarkable volume.

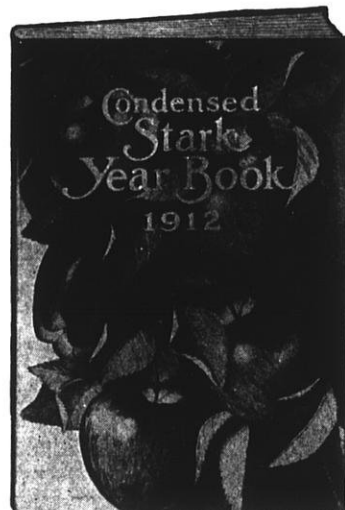
Please send me another dozen copies of the Stark Orchard Planting Book. This booklet contains very timely, valuable and some belated information. I am sending copy today to a young man who was at my place yesterday, and who is starting an orchard.—C. O. Reed, Proprietor, Model Fruit Farm, Oregon Co., Mo.

Your Stark Orchard Planting Book is the best thing I have ever seen. It is what the tree planters need badly; if they will read this book and follow the instructions they will be much benefited.—J. P. Fourot, Orchardist, Sumner Co., Kansas.

The Stark Orchard Planting Book received. This is something that I

have often thought should be in the hands of every planter. Will greatly aid them to make a success of the trees planted. I think it will be appreciated by all.—A. F. Buvinger, Labette Co., Kansas.

"Will you kindly send me one of your 'Stark Orchard Planting Books?' Have just run across one borrowed from a friend and think it is the best and simplest information on the subject of planting and pruning trees I have ever come across. Would be pleased to have one for reference and if there is any price attached to it let me know and it will be forwarded. Trusting you have some left, I remain—R. M. Adams, Lancaster Co., Pa."



Condensed Stark Year Book "A Diamond Mine" of Information

Here is a book as different from the usual run of nurserymen's catalogs as day is from night. It is a veritable mint of boiled-down information on varieties for commercial or home-orchard planting, season of ripening of all varieties of all fruits, letters from successful fruit-growers from every part of the country, comments by our national horticultural authorities, etc., etc. It also gives the facts about Stark Trees and quotes prices. Every statement in this book is backed by a million dollar nursery. Planters the country over say this is the best, the most valuable and most practical book of its kind ever published. We have thousands of this kind of letters.

Stark Year Book received. I have several good horticultural works, but I believe your Year Book contains more valuable, up-to-date suggestions for the new beginner (or the old one either) than any of them.—John A. Minger, Memaha Co., Kansas.

Permit me to thank you for your handsome catalogue. It is the most comprehensive of its kind I have ever seen. The color plates are beautiful, and of great assistance in selecting fruit.—J. O. Lewis, Wash. Co., Tenn.

Copy of the Stark Year Book received. It is not only the most beautiful and artistic work of its kind ever issued but the most practical guide for the planter of fruit and other trees. The text is unique in many ways, especially in the directness of statement and the absolute worth of the various trees and fruits described. It should be in the library of every fruit grower.—Thos. F. Rigg, Iowa Horticultural Experiment Grounds, Hardin Co., Iowa.

Neither the Condensed Stark Year Book nor the Stark Orchard Planting Book can be purchased. They are our free gift to you. You might as well have these book treasures in your home. They are waiting for you to ask for them. Send the coupon today.

Stark Varieties Pay Big Profits

Stark Delicious and other special Stark sorts are profit-makers—proven so by thousands of successful orchardists who have planted Stark Trees. Our stock in all classes of fruit trees, small fruits and ornamentals for Spring planting is complete.

**Stark Bro's
Nurseries & Orchards Co.,**

111 Stark Station, Louisiana, Missouri

Free Book Coupon

Stark Bro's Nurseries & Orchards Co.

Louisiana, Missouri

Send me free books without obligations on my part.

Name _____

Address _____

I expect to plant _____ trees this spring.

**Fill in, cut
out, and
mail this
Coupon
today for
two Free
Books.**

SUPPLEMENT

Wisconsin Horticulture

Official Organ of the Wisconsin State Horticultural Society

Volume II

MADISON, MARCH, 1912

Number 7

The Supplement is a new feature but not a permanent one. It is issued for the purpose of bringing under one head many valuable communications on corporate methods in fruit growing that are of great interest just now to many of our readers

ORCHARD COMPANIES AND COMPANY ORCHARDS

Within a few years several plans of corporate control in fruit raising have been put forward of which at least two are legitimate and based on actual development rather than speculation or fraud.

One is the joint stock company or corporation in which a number of individuals organize under the laws of the State with a stated capital consisting usually of land, sell shares of stock and with the money so secured, develop orchards.

In this case the individuals composing the company furnish their own money and control their own business through a board of directors. It is really individual ownership.

The merits and demerits, the strength and weakness of this plan will not be discussed here. That we leave to our readers hoping thereby to secure more fat "copy."

The other is the contract plan of development and operates under nearly as many different platforms or declarations of principles as does the Republican party at the present time and like the party factions agree in all essential things.

A company or corporation buys land but instead of selling stock, maintains a "close corporation" which plants trees and sells these newly planted orchards on contract in lots to suit the purchaser, usually five acres or any multiple thereof. These orchards, the company agrees to develop for a term of years at its own expense and are offered on a deferred payment plan, the purchaser receiving a warranty deed when the final payment is made. The original con-

tract, however, carries a lease, rental free to the company, for a term of years, usually ten. The profits and surplus during this period are divided between the company and the investor in some definite proportions set forth in the contract, usually 60 per cent to the company and 40 per cent to the investor.

The management and control of the orchard rests absolutely with the company throughout the term of the contract. At the termination of the lease, the orchard becomes the property of the investor or buyer to "do with as he sees fit."

This in a very general way outlines the contract orchard selling plan. In some cases, notably in the West, the investor gets only a "unit" or individual share in the whole plantation, in others a definite plot which he may select in the beginning.

We do not propose to praise or condemn either this or the stock company method, but state as fully as may be in this limited space the methods employed.

What this paper does condemn, and unreservedly, is misrepresentation, either in the sale of stock or of contracts whether in Wisconsin, Montana or elsewhere.

Commercial fruit growing in Wisconsin may easily be a profitable business when properly conducted either by an individual or a company but there is no plan known of raising fruit whereby the mere investment of a few hundred dollars, either in shares or contracts will insure the investor a fortune, an independent income or abnormal profits. Gold mines, the Board of Trade and Poker all offer such opportunities but these

are gambling games and not fruit raising.

We will not carry the argument further except to say that it should be the concern of every person whether in the Society or out of it, who is interested in the development of fruit raising to do everything possible to promote it on a sane, conservative and substantial basis.

We want this era of development to *last*. We want fruit growers, not speculators. We want 1000 or 10,000 men or women to go into the business and *stay* in it. We want them to be satisfied with their investment. We want lasting development and not a boom.

There is another phase of this question and one that cannot be ignored, and that is the Sociological side, the social side, the *home* side.

The successful development of large orchard enterprises will mean the employment of a few skilled men and many unskilled and, according to our standard as horticulturists, ignorant men. They may be home owners but not home builders.

Two hundred and fifty home owners and home builders around Sparta cultivate 500 to 600 acres of fruit. Place their acreage in one group and we would have 10 or 20 men of brains and the others Greeks or Italians. Which is best?

The social unrest in our land today is engaging the attention of every thinking person. There are many who compare conditions here with those that caused the French Revolution.

The writer, for one, is not alarmed. We will have no Revolution in the

United States such as that in France in 1797.

A Marat may arise, the Marseillaise may be sung but instead of a red-handed despot we will have a strong, virile leader of men and he will come from the farm; the battle hymn may be sung but it will be by sturdy men from the farms and its burden not war and bloodshed, but Peace, Progress, Justice and Right.

When the crisis comes it will be the men from the farms who will save the nation.

If combinations of capital, corporate methods are best in fruit growing let us have these methods. But for the sake of the future these methods should be put before the people in the right light.

Capital invested in any of the contract orchard enterprises in this State (there are several of them now and more coming) ought to, and no doubt will yield a good substantial rate of interest but keep this always in mind: there will be no fortune in it. The men who put their money, time, and brains into these ventures are the ones who will take whatever there may be above a fair and just return to the investor and *they are entitled to it*. You are not putting any brains into the business, only money.

A FEW GENERAL PRINCIPLES

Co-operation is a very good thing in selling fruit as witness the success of our fruit growers associations.

Co-operative stores, where conducted on correct principles, are successful. Co-operative creameries have usually been successful, also telephone lines.

It is reasonable to suppose that co-operative or corporate fruit growing may also be a good thing. The theory at least is good. The cost of production is lessened and disposal of the out-put simplified. The large concern attracts and is able to retain skilled managers and labor, etc., etc.

It may be well, however, to inquire if these are fair comparisons. The co-operative fruit associations and stores are engaged purely in buying and selling, are concerned solely with trade and commerce, the rules and principles of which are clearly defined. Usually the principles may be

summed up in a single sentence, "Do the other fellow before he does you."

The creameries are factories and come under the laws governing industrial enterprises.

In both of these the factors requisite for success are more or less under human control. Brains win. In fruit raising other factors enter that are not under control. We cannot control sunshine nor the winds of heaven whether the gentle breezes from the South that bring spring and the opening of buds nor the storms of midsummer that bend and break the fruiting branch. Neither can we control the seasons. For this reason the comparisons are not fair or just.

For this reason profits cannot be so surely predicated. These are merely facts for the investor to consider and are not conclusive arguments for or against corporate effort.

A TRIFLE

How important are trifles. The little inconsequential, no-account things that happen every day and every hour may readily cause much commotion and even disaster when the Fates so design. Napoleon afflicted with hemorrhoids, a trifling complaint, was unable to sit his horse at Waterloo and on this account the battle was lost.

History teems with similar instances where apparent trifles have served to change the current of history.

Even in this, our little world, a trifling paragraph in the January issue has caused much commotion. Witness the very sound articles on corporate fruit raising in this issue and more to follow.

The trifle that inspired, in part at least, these excellent articles was a paragraph on page 9 of the February issue to the effect that papers and talks at the Convention seemed to fix the policy of the Society as favoring individual effort in fruit raising as opposed to co-operative effort. This and Mr. Hanchett's paper "The New Era in Horticulture" in the same issue were the cause.

From the Editorial standpoint this is a big, fat, juicy happening for it brings out lots of copy. Now, lest we be accused of trifling with the ten-

der feelings of our beloved friend, let us consider the matter seriously.

The paragraph cited may be modified in some particulars, as follows:

The papers and discussions at the Convention, which concern present and future development of orchards in this state, all pointed out the dangers that are apt to result from over-development and the present tendency to rush into fruit growing as a get-rich-quick proposition.

This is undeniable, as the records show, but may or may not reflect the policy of the Society.

One thing is certain, however, nothing was said at the convention or elsewhere that was meant to reflect on the integrity or financial standing of any company or individual,—principles only were discussed.

Mr. Hanchett's paper also sharply criticised companies here or elsewhere which promise investors a fortune from the investment of a few hundred dollars.

We are inclined to exclaim, as did the renowned Patrick, "and if this be treason, make the most of it."

A WORD FOR CORPORATE FRUIT GROWING

Since the Winter meeting and the February issue of "Horticulture" came out, I have been asked by many if it was really the opinion of the Society in general that individual ownership of orchards is the only way of building up the fruit industry of the State.

To these I said, as I say now, very emphatically, No. It is not the opinion of the Society, as a Society, that Individual ownership is the only way to success in fruit farming.

The Corporate plan of fruit growing has many advantages over Individual ownership as can readily be seen by those who stop to figure out the cost of equipment and management of small tracts. As far as the Society is concerned there are but few if any in the Society, who know the merits and demerits of Individual ownership over Corporate ownership of orchards, but what have an interest or investment in Corporate fruit farming. They would not and could not be in the fruit business in the favored fruit sections if Individual

ownership was necessary to success. Because being non-residents of these sections they could not stand the expense necessary as regards care, etc., the first ten years. But having faith in the Corporate plan, they are willing to put their money into the plan under a general manager.

Everything, it seems to me, is in favor of the Corporate plan or some system of co-operative orcharding. We are interested in growing all the fruit the markets will stand and many years must come and go yet before this will be accomplished judging from the past.

And the past is as good a point to judge from as the imagination of a skeptical mind about the future.

We have only been at the Commercial orcharding proposition in Wisconsin about three years. Even now some begin to set up the cry, "Over-done, over-done" already. Is Michigan crying over production? Is the West crying over production? But *Door County in Wisconsin in three years has planted sufficient to flood the markets of the world.*

I was through the strawberry slump of about 1901 when prices did not pay for the harvesting but I doubt very much if it would happen again with ten times the acreage.

If Sturgeon Bay has already over-done the cherry planting how about the other sections where cherries are being planted by individual owners ten years behind Door County. Will individual ownership idea save them from loss?

Who can say that the man's judgment is wrong who favors co-operative ideas?

Who can say I am wrong if I favor Corporate fruit farming?

Who can say the man is wrong who favors the Duchess apple for Wisconsin Commercial orchards?

What ten years hence has in store for the fruit growers no one can say, but I will venture to guess that *it will not be over production.*

D. E. BINGHAM.

THE WRONG IMPRESSION

Editor Horticulture:

From some correspondence I have received from Milwaukee I see that my paper read before the last meeting

of the State Horticultural Society is being interpreted as an attack on the _____ of _____ and on re-reading the paper can see that it can easily be so construed, so I hasten to correct that impression.

I have no quarrel with reliable resident promoters or real estate men who are bending their efforts toward the development of so important an industry as horticulture in this state. The fellows I did mean to attack and shall continue to attack are the fellows who, as you know, have swarmed about our meetings of late, whose sole possessions have been a carpet bag in one hand and some elaborate plans for gathering in the peoples money through promotion schemes which they wished the Horticultural Society to countenance in the other, and who could fly the state on a moment's notice, leaving the Horticultural Society to hold the bag.

A further object of my paper was to bring out a discussion from the representatives from different parts of the state on the subject as to how far development could be pushed in their section with safety to the investor and my bringing in Sturgeon Bay as an example of possible loss from over development is responsible for the interpretation which has been given it and which I very much regret. You will doubtless remember my warning to the editor of the Wisconsin Farmer in your presence that my paper without a full discussion would be of no value, as its principal object was to provoke discussion as to possibilities in the way of development. I was not present when the paper was read, but understand that it failed to provoke the discussion I had hoped for, and I am hoping that such a discussion may be taken up through the columns of the official paper of the society by such men as Hatch, Bingham, Nourse, Kern, Knight, Richardson, Leverich, Sullivan and others from other sections of the state. It would seem to me that such a discussion ought to be both interesting and profitable and would help in keeping our official paper a "Live Wire" and an important factor in securing the development horticulturally that we want in Wisconsin.

The co-operative orchard people of Sturgeon Bay are planning development on a large scale for Door county cherries. They certainly should be able to give us a valuable paper on the subject of markets for Wisconsin cherries. They certainly have given this subject much thought and can give us a pretty accurate idea of the territory in which a market can be found for this Wisconsin product, who and where our competitors are etc.

We want development, let us try to get it through intelligent discussion of possibilities in the several adapted localities of the state.

Yours for Well Considered and Honestly Directed Development.

W. H. HANCHETT.

Sparta, Wis., Feb. 23, 1912.

TWO KINDS

Your favor saying the March issue of the Horticulturist was to deal quite largely with the matter of co-operative fruit raising and asking me for an opinion on that subject is received. There is no doubt but this is becoming a live subject, but to be perfectly frank I must say that I have had no occasion to give it much thought. I realize however, that there is at the present time a demand for reliable working plans for production in this line. The salaried man in the city is tiring of investing his savings in the artificially manipulated stocks of commercial enterprises and is seeking profitable investment in more stable ventures, and with agricultural production falling behind city consumption more and more with each passing year and food products steadily advancing in price he may well give the matter of food production as an investment some careful study.

As I understand it there are already two ventures of this kind inaugurated in this state working on radically different plans and both with fair prospects of success. These ventures will be watched with interest without doubt by your readers and a discussion of these different plans through the columns of the Horticulturist would be of interest.

W. H. HANCHETT.

NOW AND THEN

A Plea for Co-operation

Editor Horticulture:

You have had a great deal to say about developing commercial orcharding in Wisconsin, and have urged it as something to be greatly desired. During the last three years the development here has been more rapid than at any time in our history. This has been brought about by the various companies organized for this purpose. Not only has this increased development come from the plantings made by these corporations themselves but the great impulse given to individual ventures. Until the advent here of the promoter there was very little appreciation of land values, although our demonstrations for the last fifteen years had shown the possibilities. Now the

work goes on in a wholesale way with common sense energy.

Not only are we indebted to the promoter for the rapid development but for the introduction and education in a practical way of bright young men who will become live expert horticulturists, capable of handling the orchards and their products in the future. Individual effort did not do this so well. Formerly we could count the real horticulturists here with a very small tally card, but now we have scores of energetic men whose skill and intelligence are fully equal to every emergency.

Mr. Hanchett in the February HORTICULTURE seems to take a gloomy view of the large plantings at Sturgeon Bay. He needn't

worry. If we have a white elephant, we have elephant drivers.

Whether anyone should invest in any promoter's project or in individual schemes is a matter for him to determine. The larger project of co-operate effort offers features of more economical management and certainty of results if properly organized, and there is no more reason to condemn it than there is in condemning creameries, cheese factories or rural telephones. What we all want is better conditions of living—more sure returns for labor and investments. This is the time for co-operation and not antagonism. Let us boost and not knock.

Yours cordially,

A. L. HATCH.

Door County the Land of Homes

At the summer meeting of our Society held in Oconomowoc, Aug. 17th, 1910, Mr. A. L. Hatch read an excellent paper on "Opportunities for City Bred People in Door County." It appears in the Annual Report for 1911.

As some of Mr. Hatch's remarks, at that time seem so pertinent, at the present time we reprint them here:

"What are the conditions that make this region contrast so sharply with the rest of the country? Are they reliable and permanent and do they constitute 'Opportunities for city bred men?' What opportunities does he want? In discussing these questions I shall assume that he wishes to establish a home for himself and family and where he can get a living. Home building and getting a living are surely the most important of all employments, and I deem it very appropriate to limit my essay to fruit growing in Door County as

a basis of home making and getting a living." * * *

"In fruit growing we expect the largest revenue from the land so the amount needed to support a family is much less than that of other forms of soil culture. Little fruit farms of five to fifteen acres are common in Door County and promise to be sufficient for the purpose." * * *

"Another matter that should interest our prospective home builder is the development of fruit growing already established. Not only is the most of Door County a well developed farming community but fruit growing is rapidly expanding. We have wide awake young men engaged in the business, using up-to-date methods and appliances to secure the best results. To associate with those who are engaged in this work and making it pay, is of itself an inspiration and help."

"These are the opportunities Door County has for the city bred man. If he knows how to harness a team, milk a cow, grease a wagon, to plant a garden, to plow or cultivate a field, he may avail himself of these opportunities with the full assurance that they are as reliable, as satisfactory, and profitable as can be found anywhere."

* * *

"Among those now engaged in actual or prospective fruit culture at Sturgeon Bay we have sailors, doctors, printers, clerks, tailors, university students and graduates, farmers, teamsters, engineers, barbers and carpenters as well as fishermen and farmers. With such a wide representation among the various trades and professions the city man should find encouragement to believe that he, too, might join the ranks of the prosperous, under conditions that make life well worth living."



WISCONSIN HORTICULTURE

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Number 8

OUR SCHOOL HOUSE AND GROUNDS

Meaning, of course, your own particular school, where your children spend six or seven hours a day for several months in the year.

How many times do you pass the school house in a year? What, if any thing attracts your attention as you pass? How many times have you walked over the grounds? If you were a boy or girl again what games would

try school and will say that it's the best place yet discovered for educating children if the right kind of a teacher is in charge. The teaching end of this problem is not in our sphere but we want to call attention to the fact that not all the educating is done inside the school house. At least an hour a day is spent outside of the school room and on the grounds and often two hours. It is due to the children that the environment here as well as inside should be such that it will help rather than hinder in the proper education of the child.

The school belongs to the child. It does not belong to the school board or the parents or the teacher but is the particular and exclusive property of the children. It was made for their exclusive benefit and use.

Let's help make it attractive as well as helpful to them. Take a good look at the school grounds next time you go by. If you are of the opinion that a border of trees around the lot would help appearances and give some shade at recess, why not set about planting them? Surely somebody will help.

No doubt a few shrubs or even willows would serve to hide the hideous and glaring ugliness of the outbuildings. These are easily found.

A spirea, a Japanese rose and a syringa all planted in one bunch "off-side" somewhere will prove a tremendous help to the teacher and a comfort to more than one boy and girl.

Chances are there is at least one kid in the school that has no flowers at home; perhaps more than one.

While you are at the grocery store, buy three packages of aster seeds and send them to the teacher. I know that facilities for flower gardening are not the best but it wouldn't hurt you any to go over some evening after supper and dig a little space about



This is not a picture of a summer home but of a village school building in Massachusetts. Are Wisconsin children as good as Massachusetts children?

you like to play at recess or noon? Is your school yard big enough for these games? Are the outbuildings reasonably sanitary or an offense against common decency? Is there a tree for shade and a shrub or two in one corner? Is the school house on level ground or on a side hill? Whose school house is it anyway?

Quite a catechism isn't it? But then we all need catechizing occasionally, even the editor. The writer was reared on a farm and knows the coun-



We are going to have something like this in Wisconsin some day. This shows a school yard in Massachusetts

"so" big. Or perhaps the boys will do it. The asters may not do very well during vacation but there may be a flower or two when school opens in September and these will be very precious.

Now this isn't landscape art, as the artists teach it but such little things will help some. If you don't do it, no one else will and perhaps this little may lead to more next year. It may

even lead to a beautiful and attractive school in time. Surely the school will never be any different than it is now unless someone makes a beginning.

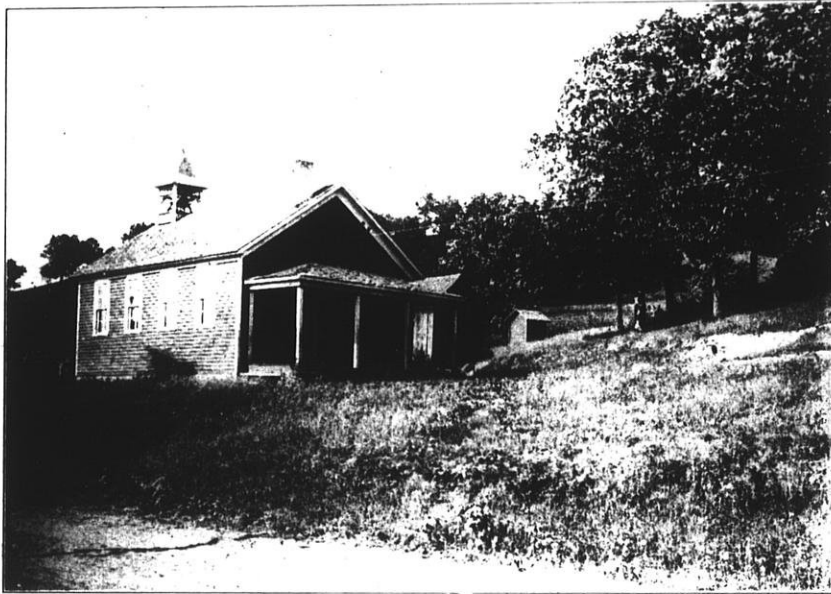
When you are at the school house notice if any other games are going on, besides base ball. Not much else, except a mild form of rowdiness. Few children know how or what to play;

also but the six demonstration school grounds are rather elaborate affairs. Much good will surely come from the work in time but in the meantime something ought to be done right here at home. Don't wait for us to go at it. We do not want to give the impression that all of the rural schools in the state are neglected as to surroundings, dirty, weed-grown, shabby and generally desolate.

There are really a few districts in the state where some pride is shown in the school but the number is pitifully small. The Society in its work aims at the ideal and it may be a long time before the results are available. While we are waiting, let a few people in every country school district make a start toward improvement.

Elaborate landscape plans are entirely unnecessary and usually impractical and out of place. Just a little common sense and consideration for the children will do more than all the fancy plans that can be drawn.

Border trees, shrub screens where needed, clumps or groups of shrubs in corners as a start will work wonders. Consider it a crime, a sin that cannot be washed away, to plant either tree or shrub in the way of the children.



A good school house poorly located. Quite likely this was the only piece of waste land in the district

There is just one more little favor we want to ask. Plan to go past the school sometime when the children are outside. Saunter idly by or lean over the fence and watch the pitiful attempts at play. Play is education. That's trite, but nevertheless true. Anyway every child has a right to play and the chances are he is being deprived of about the only opportunity he has to play.

If there are more than three boys in the school there will be a game of ball inside of one and one-half minutes after they are outside.

Every American boy over and above the age of eight years has an inherent right to play base ball. It's in the Constitution—or ought to be. He would have a high old time playing base ball anywhere around the school house shown above, wouldn't he? Is your school yard on a side hill? Then in the name of Froebel, Cary and the county superintendent, get busy and find a place that's fit for playing ball.

The girls also need a little room. Don't you think the people who stuck that nice little school house on that miserable side hill corner were rather short sighted, or stingy, or both?

but that is the text of our next sermon.

This is not an article on the improvement of rural school grounds, nothing like that, only just a little



This sort of thing costs but very little in cash outlay. It's the result of planning

gentle scolding, a little mild preaching done with the hope that somebody will start something. The State Horticultural Society is working

If the landscape artist demands it, tell him to hunt another job; the school belongs to the children. Lets take a look at our school grounds.

OVER PRODUCTION OF FRUIT

N. A. RASMUSSEN.

"Is there danger of having an over production of fruit in Wisconsin?" is a question asked by many. If I were to answer this question I would say, "No" with capital letters, but what is the public sentiment?

We might refer to other lines of business and note results. About two years ago the Paine Lumber Company of Oshkosh completed a modern sash, door and blind factory and they are, today, turning out more sash and doors than were manufactured in the entire United States a few years ago and still the Paine Lumber Company is constantly behind on orders.

A few years ago when I was engaged in the creamery business our newspapers and farm journals urged the farmers to keep more cows, feed and house them better; the same was advocated at the dairy convention and at every farmers' institute and what is the result? Dean Russell tells us we have increased our number of dairy cows fifty per cent in ten years and our dairy products seventy-five per cent in the same length of time and butter soars a few cents higher year by year.

The poultry men went at it even stronger than did the dairy men, with poultry conventions, poultry shows, magazines and journals of every description and even invented machinery with which to raise chicks. Nature was too slow; they could not wait for her. With all kinds of "get rich quick" ideas, without much capital or experience needed, a great many people embarked in the chicken business. Modern poultry houses were built throughout the country as well as the city. People who did not go into the business smiled and said: "In a year or two we will have all the eggs and chickens we want," and so they may if they are willing to pay forty cents per dozen for eggs and twenty cents per pound for chickens.

Now as to fruit. A few years ago in our town two or three crates of pineapples went begging on the market. Today two or three carloads are quickly disposed of and where formerly one car load of peaches was sold many times that number are now

needed to supply the demand. The same is true with apples and cherries. Fancy box apples are shipped from the west and car loads of barrels from the east while we have the best opportunities to grow them at home.

One of our local commission men told me he had shipped to him last season two carloads of cherries. They were positively the best he had ever handled; it had been impossible to get good cherries in the past and if they could furnish him that grade of goods he could use many carloads of them.

Perhaps the Jew was right when asked if he could sell an article which was a drug on the market, he answered, "Yes, if you have enough of it." I think the same could be said of fruit in Wisconsin. If five thousand acres more of cherries were planted and many more of apples, plums and small fruits all other states would be looking to Wisconsin for their supply of fruit and thus could our state be once more in the lead. Let us then not forget our good motto: "For better fruit and more of it."

HARDY GRAPES FOR NORTHWESTBY WM. PFAENDER, JR., NEW ULM,
MINNESOTA.

Grape growing does not seem to have kept pace with other fruit producing plants in the Northwest. Very likely the main reason is that the varieties we now have must be protected in winter and taken up again in spring, a job that is generally put off on account of other pressing work at this time of the year and in consequence is often omitted. Up to several years ago the Clinton was considered the only hardy grape and to this was added the Beta which was sent out by the Minnesota Horticultural Society and which is perfectly hardy without winter protection. The origin of the Beta was not generally known and my efforts in ascertaining the originator resulted in acquiring the hardy grapes described further on. Having grown grapes for a number of years I was constantly looking for hardy varieties. Correspondence and articles I read in my Horticultural Journals assisted me in finally placing a quartette of hardy grapes that

are of value for the Northwest and were originated by a Mr. Louis Suelter, of Carver, Minnesota. They are known as: Beta, Monitor, Dakota and Suelter. Mr. Suelter who died a number of years ago gave a history of their origin, etc., in *The Minneapolis Freie Presse*, a German paper published in Minneapolis, on October 18, 1884. This article has been translated and printed for the purpose of having the originator better known among horticulturists, as he has done valuable work, and a copy will be furnished by me to any one desiring it. He states in this article that he hybridized the Concord with a very sweet wild white variety and this is corroborated by Prof. T. V. Munson, of Denison, Texas, in his book, "Foundation of American Grape Culture."

I found the grapes on the original Suelter home but the present owner did not know them by name. I procured a number of cuttings of each and planted them separately in 1908. With the assistance of the son of Mr. Suelter and Prof. Munson I was enabled to identify them all four. Last season these grapes bore a heavy crop, without having had any protection, except the first year after planting them. They are all black and nearly as large as the Concord with a good sized bunch, make fine jelly, and a red wine of superior quality. They are all sweeter than the Concord, the Dakota being the sweetest.

Also have a grape known as Oporto which I procured from Iowa, and another known as Hungarian, which it is claimed was raised from seeds brought from Hungary. Both of these are also perfectly hardy, but with me the Carver grapes have borne best. All of these may be grown on arbors, porches or on a trellis and may be left out over winter, same as a wild grape. Of course proper pruning will secure a better yield. With these hardy plants any one may have all the grapes desired for any purpose without the work and anxiety necessary with the varieties generally planted.

It costs money to remind you. Send in your renewal on receipt of first notice and oblige. One dollar now.

Gardens

This department is to be a permanent feature, at least the heading. We will continue to run the head and will devote as much space as required, up to two pages, to articles on the home garden, whether front yard or back yard. Every woman reader, and as many men as choose to enter, will be considered as assistant editors. Miss Blanchard Harper, Mrs. R. G. Thwaites of Madison and Mrs. L. H. Palmer of Baraboo have offered aid and comfort. How many more may we add? Send all contributions to this office not later than April 25 for the May number.

TO BEGINNERS

The attention of the ambitious beginner in gardens is hereby gently directed to the numerous, timely and excellent articles, of their kind, also letters and paragraphs upon the subject in *The Woman's Magazine*, *The Ladies' Home Journal*, *Delineator*, *Woman's Home Companion*, *Ladies' World* and many others; also to the special garden numbers of the *Country Life*, *Garden Magazine* and other magazines of suburban life and domestic science. One who is uncertain of what a given situation will sustain, or who is too indefinite as to the possibilities or requirements of one's own case, may often find a sign post in these little articles. It is suggested that unless one is a seasoned amateur thoroughly acquainted by experience with the requirements and possibilities of one's own garden, or ambitions, a little browsing in the literature for the horticultural novice may not come amiss. B. H.

CAUTION

MRS. L. H. PALMER.

The home garden enthusiast is apt to let his zeal run away with him or her, when planting the garden. It seems so nice to get out into the sunshine to work after being housed in so long, that we are apt to forget that when Old Sol gets to sending down pulsating heat rays, sixteen hours a day, that we lose some of our energy and that the heat that saps our strength, acts as a tonic to the weeds.

It will be more satisfactory in the end to estimate our needs and plant to our requirements, for there is no more unsightly place on the farm than the average garden, the latter part of the season.

Plan so that tomatoes, celery, and late beans may follow early peas and potatoes, while second plantings of peas can follow early lettuce and radishes. Salsify, beets and parsnips should be planted at one side of the garden to be out of the way. Lettuce can be sown late in August, producing a fine crisp growth if a piece of old carpet or gunny sack is thrown over the seed bed to retain moisture until the lettuce is up.

Plant enough of such vegetables as the family relish, but a little economy at planting time will ensure more satisfactory results in the end.

PERENNIALS

MRS. REUBEN G. THWAITES.

It is so much better to move peonies and most of the other perennials during the late summer and fall, that they ought never to be disturbed in the spring unless it is absolutely necessary. If that is the only season when you have time or inclination for the work, then do it very early before there has been time for any new growth of buds and roots. If they are moved late in the spring some of them will be apt to die and most of them will refuse to blossom for you that year. Therefore, plan to rearrange and divide your perennials next September.

NASTURTIUM BORDER

A friend was lamenting that she could not afford to buy enough geranium plants for a border on each side of the steps leading from the sidewalk up the terrace to her front porch steps. The situation seemed hardly suitable for geraniums because of the drainage due to the terrace slope, so the suggestion was made that she plant trailing nasturtiums on each side of the steps so as to form a border of glowing red.

R. G. T.

ROTATION

One home gardener who failed to realize the necessity of rotation of crops in the flower garden as in the vegetable garden failed to make the ordinary wild cucumber grow where it had done well for five or six years or to make sweet peas grow in the

place where they had grown for several years. The coming summer will see all the annuals blooming in other situations, in other words the garden flowers will seem to be playing "puss-in-the-corner" with one another. Morning flowers will take the place of wild cucumber; sweet peas will find another strip of ground; Dahlias will take the place of sweet peas; sunflowers will shade the chicken coops; nasturtiums will riot over the hyacinth bed and poppies imitate their predecessors in the tulip bed—but all will find a new corner giving them fresh soil and situation.

PLANTS FOR THE GARDEN

If your garden is small there is no necessity for a hot bed. Shallow boxes placed in a sunny window will grow all the seedlings you can use. Each box should have about an inch of good drainage, made of broken pot, coal ashes or some rough material in the bottom. Above that you must have at least an inch of good fine soil, sifted. This soil should consist of about one-third each of lake shore sand, leaf mould and light garden loam. Wet your box well the day before you want to sow your seeds. Follow the directions for planting that come on each packet of seed. Cover the box with glass or paper until the seeds germinate. Water very carefully whenever it is needed and never when it is not. When the seedlings are large enough to handle transplant them into similar boxes about an inch apart, or in little flower pots until it is warm enough to set them out in the garden. R. G. T.

HARDY PERENNIALS FOR SHADY PLACES

The Lily of the Valley does very well in partial shade, also the Bleeding Heart (*Dielytra*) the Day Lily (*Hemerocallis*), *Tradescantia*, *Periwinkle* or *Trailing Myrtle* (*Vinca*) the Hardy Russian Violet and the wild yellow and blue violets. Our beautiful wild Trilliums, and Meadow Rue, Solomon Seals, both true and false. May apples, *Hepaticas*, wild ginger and all of the wild ferns. Provided the soil is brought from the woods, and a covering of leaves left

on in the fall, the shady corner of one's lot can be made a paradise for the beautiful wild plants of this region. Once planted they need little care except to add a little covering of fresh loam from the woods once a year and to thin out if any of them spread too quickly. A few crocus, snow drops and Scylla bulbs planted amongst the ferns add much to the interest in early spring. R. G. T.

TEN COMMANDMENTS

Thou shalt:

I. Prepare the soil of the garden by thorough tilling.

II. Enrich the soil thoroughly with barnyard manure and other fertilizers.

III. Purchase seeds from reliable seed men.

IV. Cultivate after every shower, from the sowing until the harvest.

V. Destroy all weeds uprooted by cultivation.

Thou shalt not:

VI. Till or work the soil while wet because working a wet soil destroys fertility and makes it lumpy all summer.

VII. Purchase cheap seeds—they may be old or lacking in vitality.

VIII. Leave the fruits upon the plants. The crop will be larger and of better quality if picked promptly when ready.

IX. Keep plants in the garden which have passed their usefulness—clean everything out as soon as crop is over.

X. Shirk the constant war upon the insect and fungous pests which lie in wait like ever present enemies, seeking what they may devour.

PENNY WISE

In purchasing seeds it is well to remember, that care and knowledge and labor necessary to grow the best are expensive, and that if seeds are offered at a very cheap price it is well to suspect a lack of at least care or knowledge in their preparation or that, while all these may have been given them, yet through age or accident the vitality or purity of these has become impaired. Which is cheaper in the end, to buy good seeds at a just price and reap a fair

crop or to buy cheap seeds, saving a few cents on each and then have a sparse and straggling row of weakly plants yielding not enough return to pay for the labor of planting, without taking into account the loss of the use of the ground, and the opportunity for planting in season? B. H.

The home gardener choosing vegetables for delicacy and flavor will find some good varieties among the following:

Lettuce.—May King; Hartford Bronzed Head (for sale by one seed firm as, "Crisp as Ice"); black seeded Tennis Ball; Mignonette; Paris White Cos; Express Cos.

Peas.—Little Gem; Premium Gem; Nott's Excelsior; Advance; Strategem. (All dwarf varieties.) Champion of England.

Beans.—Stringless Green Pod; Early Valentine; Refugee; Refugee Wax. (All dwarf.)

Beans, Lima.—Thorburn's or Dreer's Dwarf; Fordhook; Henderson's Bush Lima; Burpee's ditto; Wood's Prolific.

Beets.—Thorburn's New Model Red; Crosby's Egyptian.

Corn.—Golden Bantam; Portland; Stowell's Evergreen; Country Gentleman.

A very productive home garden is planned by its owner in three parts; A, B, and C. A contains peas, cucumbers and tomatoes. B contains beans, carrots, turnips, egg plants, beets, etc. C contains corn. During the first year the parts are sown in sequence; the second year the rotation commences. A takes the place of B; B of C; C of A; and the third year A takes the place of C in the first year; B of A; and C of B. This rotation has been successful for eight years and the garden bears well. Peas and cucumbers are planted together because while the peas are large the cucumbers are still small plants and do not begin to run until the peas are removed. Late cabbages fill the remaining space of the ground after the peas.

Questions about flowers and flower gardening are always in order.

SOY BEANS FOR THE ORCHARD

R. S., Milwaukee, writes for information regarding the growing of soy beans and cow peas in a two year old cherry orchard on land which needs fertilization. Soy beans are preferable to cow peas as they are very much more hardy. The cow pea is a hot weather plant and unless it has considerable of this it makes very little progress. There are several insects which work on the cow peas which make it next to impossible to grow cow peas in Wisconsin.

Soy beans have been grown for the past fourteen years to advantage in Wisconsin. They are grown generally for the seed beans or hay, but, they are great nitrogen gatherers, consequently enrich the ground upon which they are grown, especially in nitrogen content. This would be particularly true if turned under as a large part of the nitrogen is found in the leaves. The soy bean plant does not take nitrogen from the ground unless there are certain bacteria present which act in conjunction with the plant in securing the nitrogen from the air. If soy beans have never been grown on the ground it will be a good plan to secure a sack of bacteria laden soil from the Experiment Station and scatter over the ground just previous to sowing the beans. It will be preferable to plow the land if this can be done without injury to the trees as soy beans would do much better on land that has been plowed and dragged. Soy beans should either be planted in drills, eighteen inches between the rows and two inches apart in the rows or sown broadcast. If planted in drills about two pecks are sufficient to plant an acre. Where sown broadcast we use at least one bushel per acre. It would seem preferable to sow broadcast and plow under when the soy beans were about ten inches high.

Few people know the fragrant white blossoms of the nicotiana affinis. It is grown easily from seed, sheds its fragrance in the evening and is a great attraction for large tobacco moths and humming birds. It needs rich soil, moisture and a sunny situation.

LISTS OF TREES AND SHRUBS SUITABLE FOR PLANTING ON SCHOOL GROUNDS

For highway and border planting: Elm, Linden (basswood), Soft Maple, Scarlet Maple, Norway Maple and Green Ash.

The elm thrives on heavy soils but is not at home in northern Wisconsin, especially on the sandy soils.

The Maples are best under these conditions.

Hackberry, Black Cherry, Scarlet Oak and White Ash are all desirable.

Plant street and border trees at least thirty feet apart.

Wild Crab, Tartarian Maple, Mountain Ash and Russian Mulberry are trees of lesser size than the ones in the first list and more suitable for ornamental purposes than for shade or defense.

Shrubs: From the extensive lists offered by nurserymen, choose only the kinds that are fully hardy and that will withstand a little neglect. The following come in that class: Common lilac, Persian lilac, Tartarian honeysuckle, Rosa-rugosa, Mock Orange or Syringa, Van Houten's Spirea (bridal wreath), Common barberry, Purple barberry, Thunberg's barberry.

We cannot go much farther and be within the bounds defined.

When several kinds are planted in a group or border, attention must be given to the height of the different species at maturity. Of the ones named the lilacs, honeysuckles and syringa are the tallest. Common and purple barberry rank next while Rosa-Rugosa and bridal wreaths are lower growing. Thunberg's barberry is the dwarf of the family, rarely exceeding three feet in height.

For best results plant shrubs two to three feet apart in groups or borders and transplant when crowding begins.

Vines: Wild grape, trumpet honeysuckle and Ampelopsis (Virginia creeper) are all hardy and satisfactory for covering fences, arbors, screens, etc.

Englemann's Ivy, an educated form of Virginia creeper, clings to brick or stone walls but not to painted surfaces.

Wild cucumber is a very rapid growing annual vine and will often cover a multitude of sins while perennial vines are getting ready.

Native plants: The Red Osier (dog wood), Leatherwood, Winterberry (northern holly), buckthorn, sumacs, smooth and staghorn, wild rose, common elder and scarlet elder are all fine native shrubs.

For a flower garden get wild flowers and ferns. These will prove more satisfactory than annuals.

Plant tulip, crocus, hyacinth, daffodil and other bulbs in September or October. These will bloom in April.

Don't wait for Arbor Day to plant trees and shrubs, it comes too late. Do the planting as early in the spring as the ground can be worked and the speaking and singing on Arbor Day; the trees and shrubs will feel better about it.

The schoolyard belongs to the children, don't stick it full of trees and shrubs. The principles and precepts of landscape art will be satisfied by planting on the borders, close to the building and to screen outbuildings; so will the boys.

Send inquiries about trees, shrubs and directions for planting to the State Horticultural Society, Madison. We answer questions.

HOT STUFF

To the Editor:

I am trying to be a farmer and to get a small orchard, with commercial possibilities, started on my farm. I have been an enthusiastic yeller for the W. S. H. S., but when our editor comes out and hits the "farm orchard" in the solar plexus, and lets on that there's nothing in Wisconsin fruit growing but commercial orchards in Door and Bayfield counties, it grinds. Why should "we" pay one dollar for membership and let Bingham, Hatch, Rasmussen and three or four others get the benefit?

"G."

"G" is partly right and partly wrong. Let's start with some definitions. A *home* orchard is one sufficient to supply the needs of the family and every farm home should be supplied with such an orchard. We have said that a man is not a good citizen unless he at least makes

an effort to provide his family with fruit. There are few, if any, places in Wisconsin where this is impractical, none where it is impossible. Small fruits succeed everywhere in the state. Apples, fairly good ones, may be grown even in sections where commercial orcharding is inadvisable. Let every farmer plant a strawberry bed, one-eighth acre or less, 50 plants each of black and red raspberries, 6 each of currant and gooseberry and perhaps blackberries. Also two dozen apple trees. Let him give as much time to these as he does to an equal acreage of cultivated farm crops and as much more as he can give without seriously neglecting his regular farm duties.

The returns will usually be in about the same proportion as the returns from the farm; the good farmer will have plenty of fruit, nor let any excuse about lack of knowledge stand in the way of such result.

If there is a surplus from this plantation the wise farmer will invite his neighbors to share it on some equitable basis, or sell in the local market if the returns will pay for the time, or feed it to the live stock. He will simply take what he can get and be thankful for it and will never go around cussing the fruit business as a business.

To the farmer who wants to raise fruit for his own use this society has always, for 50 years, given every encouragement. At the present time more than one-half of our conventions and the annual report of the conventions and much more than one-half of the correspondence of the office is devoted to the home orchard and fruit plantation.

Without any authority or precedents the editor will define a *farm* orchard as a side line to general farming. Many farmers in southern Wisconsin raise tobacco as a side line, others sugar beets, but they give to these crops great care and attention. If the farmer was so disposed he might raise an acre of strawberries as a side line, or plant 100 apple trees.

There is, however, no assurance of a profit in such work. The tobacco and beets find a ready and unlimited local market at prevailing prices; the fruit does not. The local market is

the controlling factor in the case of the home orchard or fruit farm, and the only factor worth considering. "G" has a farm orchard and will, eventually, either abandon it or get into the commercial game.

The commercial fruit grower is one who makes fruit growing his main business and farming a side line. The possibilities in commercial fruit growing are immense in this state and the business has grown very rapidly in the past five years. A very large part of this development can be traced to the work of this society. In doing this, the society has worked mainly with a few tested localities, believing that results would be better than scattered efforts. It means millions of dollars to the state. It means a rounding out of the resources of the state. Is there then any good reason why the society should go backward? Now as to the last count: "Why should we pay one dollar a year for membership and let Hatch, Bingham, Rasmussen and three or four others get the benefit?" Reverse this statement and you have the facts. The men named get no benefits from the Society more than other members, but confer benefits constantly. They and others know how to raise fruit and are doing it. They and others are big and broad enough to give freely of their knowledge to help the beginner, and "G" is one of many who get the benefits of this help.

SOME REMARKS ABOUT PLANTING

Gentle spring is here. This beautiful sentiment is composed in March in a steam heated room and two feet of snow outside, but dependence is placed on the printer, the calendar and the weather man to make good. With spring comes tree planting—and as many amateurs are numbered among the readers the following hints may be of interest.

First, collect all of your scientific treatises, books, government publications, experiment station and W. S. H. S. bulletins, and send them to the "puzzle editor" of your family paper. He may be able to make something out of them; no one else can.

Secondly, provide, in addition to some sound trees, a sharp knife, a

spade and a stout club. It is understood and agreed that fruit trees are to be set only in a plowed field free from logs, stumps, stones or other incumbrances, and that the site for a shade tree shall be a space four feet across, free from sod.

Grasp the tree firmly in one hand and with the knife trim the roots just a little where the tree digger left bruised and ragged ends. This will soothe your feelings and will help some.

Dig a hole just big enough and deep enough to accommodate the roots, no more no less. Stick the tree in the hole, shovel in soil sufficient to cover the roots and then jump on it. Shovel in some more soil and get in with both feet and dance a jig. Fill with loose soil for a mulch and tackle the top with the knife. Cut off most of the tops, inside crossing branches first, then cut back the others until you are sure you have ruined the tree. After supper go out and cut off some more.

Go after another tree and proceed as before. On your way you are pretty sure to meet Mr. Wise Guy, who will tell you that this plan is all wrong; that you should dig a hole deep and wide, trim the roots at a certain slant, get down on your knees and work the soil carefully, very carefully, around the roots, working it in with the fingers, be very careful to avoid bruising the roots, lean the tree 21½ degrees S. S. W., trim the top little or not at all, etc., etc.

Here is where you use the club.

HISTORY OF DOOR COUNTY

Sturgeon Bay, Wis., Feb. 19, 1912.
To the Editor of "Horticulture."

In the February number we find in the article "The Man Behind the Tree" that Door County was discovered about 1893. Now, Dear Editor, with your permission I should like to quote for publication a few extracts from a History of Door County published in 1880 which takes us back as far as 1866. We quote the following:—

"to be sure the first exhibition in 1866 was not a mammoth affair but what there was, it was good and the Society was placed square up on its

feet. The farmers brought in their vegetables, and hardy and well adapted fruits of all kinds."

Another extract takes us to 1874 as follows, "On the night of July 25 a wind storm swept over Door County from west to east doing much damage to timber and farm property and also tore up 8 or 10 apple trees on the farm of Jos. Zettle." (Mr. Zettle received diplomas and medals at the World's Columbian Exposition in 1893.)

"Now we have business centers which afford the farmers ready market for farm and forest products each going on his way improving his farm by better buildings, better fences, setting out orchards of all kinds which are doing exceedingly well in this locality."

In a brief review of Door County by the Editor he says: "experiments with cultivated fruits have been very successful but a few years hence a more extended and correct essay can be written on this subject; however, our farmers are investing quite liberally in fruit trees, their former purchases have grown to fine thrifty trees bearing such fruit as apple, pears, plums, crab-apple, and grapes, etc. The present year, peaches have been successfully grown in different parts of this county and in some instances the fruit was equal to that grown in peach growing districts farther south. All kinds of berries grow in profusion either in wild or cultivated state, one variety following the other. First comes the grand strawberry, next red and black raspberries and then the nourishing blue berry followed by the palatable blackberry and ending with the healthy cranberry both of high or low bush variety which last until strawberries ripen again."

(Loud pedal.)

"The position of this county between two large bodies of water is claimed to be peculiarly favorable to fruit and the many thriving orchards in the county would seem to be good witnesses to our facilities for fruit growing."

All this was published in 1880. When was Door County discovered?

Yours very truly,

U. N. O. BETTER.

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Remit to Secretary W. S. H. S.
Madison, Wis.

Contributions on any topic related
to horticulture always acceptable.

Uncover roses and other protected
shrubby before the buds start.

The legislature meets April 30th
in special session. Among other
things the solons (wise men) will
tinker and patch the berry box law.

Don't feel that you need a lot of
money in order to have a flower garden.
The annuals are beautiful and
for less than a dollar you may have
flowers in abundance from mid-summer
till frost.

Nothing like an early garden, but
nothing is gained by puddling around
in the mud. Wait until the soil
crumbles when turned.

If you want to beat your neighbor
by a week or two, build a cold-frame.
A box six inches in front and two feet
at back, as long and as wide as you
please, and covered with glass. Two
storm windows will answer. Radish,
cress, lettuce, tomato and cabbage.
Also aster, pansy, etc.

If plants of the following varieties
are purchased for the home garden
at a green house, or from seed men
or professional gardeners they are apt
to be stronger and at the same time
obtained with a saving of labor and
worry out of proportion to the slight
cost: Egg plants, cauliflower, cabbage,
celery and tomatoes.

We list with gratitude, a new "garden"
editor this month, Mrs. R. G. Thwaites
of Madison. We have room for many
more. Have you been successful with
some flower? Tell us about it in simple
terms. If we are ever to know how to
do these things you must tell us. The
professor and the professional are both
incompetent to do it.

Some eastern seedsmen are sending
notices to their customers of the
establishment of a bureau of information
for the benefit of their patrons. Why
cannot some of our Wisconsin seedsmen
do likewise? Surely, our need is great,
our climate, soil and winds being so
different that the many books and
magazines written for and by the eastern
gardeners are sorely misleading here.
Do our seedsmen not realize that all
such efforts bring their own reward in
increased business?

When pruning shrubs keep in mind
the flowering habit. The flower buds
of the Spireas, Snowball, Syringa
Tartarian Honeysuckle, Flowering
Almond, Lilac and some others were
formed last year. Spring pruning of
these kinds is equivalent to the removal
of flower buds. Wait until after the
blossoming period and trim to your
heart's content.

In the Hydrangea, nearly all roses
and weigelia flowers are borne on
new wood and may be cut back in
spring.

If this paper don't suit you, say so.

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Oldest Nursery in Wisconsin

Our stock is grown right, dug
right, packed right, and by no means
least, the

PRICES ARE RIGHT

*Our Specialties are Small Fruits
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Apples singly or by the 1000.
Currants by the doz. or 25,000.
Strawberries by doz. or 500,000.

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Questions and Answers

Q. I would like to know if corn would be a good crop to plant in a young cherry orchard that was set out last year. We had potatoes there last year. When is the right time to plant vetch and how much to the acre?

F. C. Door Co.

A. Would not plant corn in cherry orchard; better plant beans this season. Sow vetch about July 1 to 10 where thorough cultivation has been given. Use only winter vetch, sometimes called sand vetch. Use about eight quarts of vetch seed per acre.

D. E. Bingham.

Q. I am thinking seriously of planting an apple orchard of about 500 trees on a farm seven miles from Milwaukee and one mile from Lake Michigan. I am thinking of planting the following kinds: 50 each of Duchess, N. W. Greening, Delicious, Wealthy; and 25 each of McIntosh, McMahan, King David and Roman Red Beauty. Have I too many kinds? Which should I drop and what should I substitute for commercial orchard?

A. I consider the selection is good except that I am not acquainted with the last named, unless it is a perversion of Rome Beauty, in which case no change is needed. All of these kinds should succeed in Milwaukee county and for local trade the number of varieties is not too great.

Q. How much moisture should the atmosphere in a cellar contain, in order to be most favorable for storing bulbs and vegetables? And how can it be tested?

Waushara County. K. B.

A. Depends on the kind of bulb or vegetable, some kinds requiring more moisture than others. Canna and Dahlia require more moisture than the Gladiolus. The latter may be kept in a paper sack in the pantry while such treatment would mean death and destruction to the Canna. It is largely a matter of experience and judgment. The moisture content of air is determined by the use of the hygro-

meter or wet-and-dry bulb thermometer. Directions for use in any elementary work on physics and in many works on agriculture.

Q. Is the American Blush apple raised in this state? If so, where is it a success or failure as a winter apple?

H. G.

A. I have had American Blush in bearing for 4 or 5 years. Tree is very hardy and one of the most beautiful in foliage and shape I ever saw. Is an annual bearer, fruit is large and smooth and fairly good; keeps well until February.

A. N. Kelly.

Q. 1. What kind of paint should I use on trimmed apple trees?

2. Which currant does the best in Wisconsin, the Cherry or Perfection? Is the Perfection good to plant in large fields?

W. T. B.

A. 1. White lead and linseed oil.
2. Perfection.

Q. 1. Which is the most productive of these three late strawberries, Stevens Late Champion, Chesapeake, Fremont Williams?

2. Is Early Ozark a more productive strawberry than August Luther?

3. How does the Plum Farmer raspberry compare with the Cumberland in productiveness?

L. E. L.

Jefferson County.

A. 1. Stevens Late Champion.
2. No.
3. Plum Farmer most productive.

E. A. Richardson.

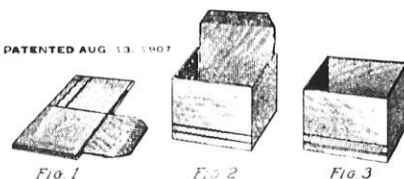
Q. Please state how and when to cultivate an orchard of thirty years of age. Give reasons. Mrs. F. H. Manitowoc County.

A. Thorough, clean cultivation until July 1 to 10, according to season. It is not a question of number of times but a question of good tilth and destruction of grass and weeds. Plant cover crop of oats, vetch or buckwheat in July. The reasons are the same as for cultivating corn or potatoes.

Q. Is there an opening in Wisconsin for a woman to engage in flower seed growing as an occupation, and

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GIVES SATISFACTION

Made in Wisconsin style, Standard dry measure quarts and pints. Neat and strong, is all ready for business, needs no tacks nor stapling. Write us today and we will tell you more about this box and how to get it nearer home at manufacturer's prices. Do it now.

We also manufacture crates and old style quarts and pints in K. D. for crate makers and large growers who have stapling machines and make up their own crates and boxes, big reduction in price on carload lots. Our material and prices will please you.

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Cumberland, Wisconsin

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Union Grove, Wis. W. S. Moyle, Prop.

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Our Trees Live. We had an opportunity to compare 500 of our Wisconsin grown trees with a similar lot of an Eastern Nursery. At the end of the season only 52 per cent of the eastern grown stock was alive, while 95 per cent of ours lived and grew. Moral: buy home grown stock and avoid loss. Our trees are **HARDY**, and our stock is **HEALTHY**. A comparison will prove that our stock has not the willowy and watery soft growth of southern or eastern grown stock.

Every tree and shrub is packed entirely under cover, free from exposure to sun and wind.

Great Northern Nursery Company, Baraboo, Wis.

Write for Catalogue and Price - List.

will it prove remunerative? If so, should she start with one variety only or how many?

A. Flower seed growing can be successfully carried on in Wisconsin, and made quite profitable, provided the grower selects good stocks to begin with and ever after watches the stocks carefully, keeping them up to a high standard of perfection. We would suggest annuals to begin with, such varieties as Asters of the Comet, American Branching, Hohenzollern, Carlson's Branching, Crego and allied types, also the early varieties of Cosmos and Salvia. Many varieties can be grown here, most of them, however, are produced so cheaply abroad that it does not pay to attempt them under our Wisconsin conditions. It may be difficult to find a market for the product until the grower has established a reputation. Placing the crop on the market is really the most difficult part, as the dealers jealously guard against sending out seeds of doubtful quality.

As to that part of your question, "Whether or not it would be profitable for a woman to engage in flower seed growing," we unhesitatingly answer "yes." Most people, we think, would rather trust the selection of a woman in flower seeds, to that of the best man we have ever known to attempt it.

Milwaukee, Wis. A. CURRIE.

Q. In planting a seed of any one tree, how often must the seedling be transplanted before its final planting to produce as good a fruit as the original?

H. R. S.

Milwaukee County.

A. Our correspondent is on the wrong track. The character of the fruit borne by a seedling tree or bush will not be materially affected by the number of times it is transplanted. Under all ordinary circumstances the transplanting will have no effect whatever. The kind of fruit a seedling tree will bear is determined by other factors than transplanting.

Out of 100 seedlings of the Golden Russett apple, for instance, the chances are about 1000 against 1 that any two will be exactly alike or that

any one of them will be exactly like the Golden Russett. Standard varieties of fruits are propagated by division of the parent plant into parts as by grafting, budding, cuttings, etc. It will probably be sufficient to simply state these facts. A discussion of the "why" would lead us into plant breeding.

Q. 1. I have a Flemish Beauty pear set out in 1904. It is growing nicely and looks good but has failed to blossom yet. What is the reason?

2. What is a Dwarf pear?

3. If two or more kinds of raspberries are planted near each other are they likely to get mixed by propagation?

4. Will cions cut from the tree in February or March do for next spring grafting?

J. H. H.

Dane County.

A. 1. Probably lack of cross-pollination. Plant a tree of some other variety near the Flemish and watch results.

2. A standard sort like the Flemish, budded on quince root which produces a dwarf tree.

3. There can be no mixing of raspberries in the manner stated. The only way in which a variety could be produced different from the existing variety would be accomplished by planting seeds. Roots, of course, might intermingle and mistake made in digging sets of red raspberries.

4. Yes. Cions cut in March should be kept in a moist medium and in a cool place.

Q. 1. What variety of winter apple would you plant in Barron County, on well-drained sandy loam?

2. What do you think of the Beta grape?

3. Can I keep my orchard from getting sod bound with a spring tooth harrow? Have kept the ground in good condition for three years, but can I keep it up indefinitely?

4. What variety of grapes would you plant, if any, up here?

A. 1. Malinda, N. W. Greening.

2. Small, fair quality, very early and may ripen in Barron County.

3. I see no reason why the spring

JEWELL MINNESOTA GROWN Nursery Stock

Complete assortment of Fruit and Ornamental stock in all varieties suited to northern culture. A specialty of Hardy Shade Trees, Windbreak Stock, Evergreens (Coniferous), Deciduous Shrubs, Apples and Native Plums.

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FRUIT, SHADE AND ORNAMENTAL TREES

Strawberries, Raspberries, Blackberries, Currants, Gooseberries, Grape Vines, Asparagus, Rhubarb, etc.

Ornamental and Flowering Shrubs, Vines and Perennials. Roses, Evergreens, etc.

If you would like to see a *really good Catalogue* we would be glad to send you ours. It has more than fifty pages and describes everything in the plainest language without any extravagant or overdrawn descriptions.

The Coe, Converse & Edwards Co.
FORT ATKINSON, WISCONSIN
Wisconsin's Largest Nursery

tooth harrow will not answer if used often enough during the growing season. No objection to plowing shallow in spring in case the grass is too persistent.

4. Beta, if any.

Q. What about planting 600 two-year old trees, 300 of which are Dudley's, and 300 Wealthys? And use dynamite? It is claimed that the blast of dynamite will loosen up the ground so that the roots will grow much faster than when the trees are planted in holes made by a spade. How is this? How is the dynamite used? What kind? How small a piece of dynamite is necessary? And what per cent dynamite? E. P. S.

Rock County.

A. In localities where "hard pan" prevails or where but a thin soil layer covers a layer of limestone, or in the case of a very heavy subsoil, it is likely that dynamite could be used to advantage. It may also be said that as a rule such conditions are very unfavorable for fruit trees. On all ordinary drift soils it is doubtful if the gain in a loosened sub-soil will be sufficient to repay the cost and danger of using dynamite. The main feeding roots of trees are found in the surface foot of soil and the anchor roots will readily penetrate anything but hard pan or solid rock.

Q. 1. Three years ago I ordered one dozen Gregg raspberries, but was sent the Black Diamond. Have borne no fruit so far. Intended for home use. Should I discard the kind I have and make another attempt at Gregg?

2. What kind of oil is used for smudge lamps, when it can be bought for five cents or less per gallon, as stated by some writers?

3. Will seed from Early Richmond cherry produce an early Richmond tree. Or if old tree cut close to ground, produce same kind from sprouts?

4. What is the name of the best celery for home use?

5. Can the curculio be controlled on plum trees? M. N. H.

A. 1. Gregg is standard over most of Wisconsin and is one of the best.

We have no information concerning Black Diamond. Who can help?

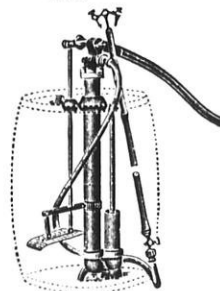
2. Crude petroleum.

3. Cherries are propagated by budding and cannot be reproduced from seed. The seedlings are almost sure to differ from the parent. If the shoot starts from the trunk, above the point where the original bud was inserted, it will be Early Richmond; if below, either Mazzard or Mahaleb, both worthless.

4. White Plume.

5. Yes, by spraying with arsenate of lead; 2 pounds to 50 gallons of water.

Bigger Fruit Profits



Here is a spray pump invented by fruit growers. It was our endeavor to secure the best spray pump to use on our 300 acre fruit farm that produced the

ECLIPSE SPRAY PUMP

It overcomes every defect found in other makes. It has proved itself best in actual work. Put an Eclipse to work on your trees and earn bigger profits. Write for our fully illustrated catalogue. It tells why you should spray—and why you should do it with an Eclipse. It's free

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For Fruit Culture. Door County Orchards Pay a Revenue of from Five Hundred to Eight Hundred Dollars per Acre Annually. For Particulars Write : : : : :

DOOR COUNTY LAND CO.,
STURGEON BAY, WIS.

Q. 1. Do you recommend the use of dynamite for planting trees?

2. We have some fruit trees that cannot be cultivated. Would the spray solution on the grass be dangerous to young chicks or horses?

3. Is lime sulphur solution tested by means of an ordinary hydrometer?
W. C. B.

A. 1. Answered elsewhere in this issue.

2. The danger is very slight.

3. Use commercial lime sulphur, mix as directed on container and there will be no need of hydrometer.

Q. 1. Would it be advisable to prune the old wood from the currants in the spring if they had not been attended to in the fall?

2. What is the advantage, if any, in the whole root graft over the piece root graft?

3. What harm does the oyster shell bark louse do? How rapidly does it spread?

4. Do you consider the Gregg a better black cap than the Cumberland? If so, why?
G. A.

A. 1. Yes, but get at it early in the season, as currants are early birds.

2. No advantage whatever but rather a disadvantage. We want trees on their own roots just as quickly as possible in this climate, at least our standard Wisconsin varieties.

3. (a) Sucks the sap and weakens the tree, usually destroying fruit spurs on old trees, when unchecked, and often kills young trees.

(b) An indefinite question. Three years' neglect is sometimes enough.

4. Largely a matter of choice and local conditions.

Q. 1. What hillside is best adapted for fruit trees?

2. How prepare ground and does the time of year make any difference?

3. What apples are best for this section (Crawford Co.) for marketing?

4. What age trees is best for planting in order to have orchard begin bearing as soon as possible?

5. What is the best time for planting these trees?

6. How far apart should they be set?

7. Care of orchard?

8. Where can I procure the very best trees for this purpose and about what ought they to cost?

A. 1. All things considered, orchardists prefer level ground, but if a slope must be used, select the north slope, next choice east. Rather than plant the south slope would prefer to forego planting fruit trees.

2. Ground should be deeply plowed and as well prepared as for corn and in much the same manner. Time of year is unimportant.

3. We recommend fall apples such as Dudley, McMahan and Wealthy for leaders, although there is no doubt that McIntosh and Jonathan can be grown successfully here; in fact any kind which can be grown anywhere in Wisconsin will thrive in Crawford County.

4. Two year old trees.

5. As early in the spring as the ground can be worked.

6. 24x24 feet.

7. Thorough cultivation until mid-summer followed by cover crop of oats or vetch.

8. From firms which advertise in WISCONSIN HORTICULTURE. Cost will depend upon quality of stock but will in all cases be reasonable.

Q. 1. Is the average quality of newly cleared land rich enough to produce good crops of small fruits—strawberries, raspberries, blackberries, currants and gooseberries without fertilizers?

2. What are the hardiest early varieties of peaches of good quality?

3. At what age do gooseberries come into bearing? When are they at their best?

4. Has the Dudley apple been tested at the state experimental orchard?

5. What, in your estimation, is the relative market value of Duchess, Dudley, Wealthy, N. W. Greening and Tolman sweet apples? Amateur.

Bayfield County.

A. 1. Yes.

2. Peaches have not been tested in Bayfield. Go slowly.

3. Two years; in full bearing at three years.

4. Yes, at Wausau, and is one of

the best in that orchard. A highly desirable apple.

5. Any should sell well in any market. Study your markets. For money makers, place Wealthy ahead of Dudley and leave others as given in list.

Ask questions.

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Make a specialty of **Cherry Trees**. They strongly recommend **One Year Cherry Trees** because they are stocky, well headed, well rooted thrifty and vigorous. Plenty of **Two Year** for those who prefer the larger trees. They also have a nice lot of Apple in northern sorts.

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Cherry Trees by the
100 or 100000

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Q. What is a good growth in length for young trees? Some of mine made three feet and most of them 2 to 2½ feet this year.

A. A very satisfactory growth, in fact, above the average. Such trees as these with this kind of treatment should be heard from in the future.

Kenosha Co. F. L. B.

Q. Which is the best soil for potatoes, sand or loam? State reasons.

A. Commercial potato growing is successful in Wisconsin upon both clay loam and sandy loam soils. The question is misleading because the better grade of sandy soils in Wisconsin contain considerable loam. These fertile sandy soils are preferred to heavy clay loam soils largely because they can be handled in wet weather easier in reference to planting, cultivation, harvesting, etc. The better grade of sandy loam soils under cultivation also stand protracted drought better than the heavy clay soils. It is important to understand that a wide range of variation exists in the sandy soils of Wisconsin in regard to fertility and water-holding capacity.

J. G. MILWARD.

Q. (1) When can plums be grafted or budded, i. e., top working?

(2) What varieties of native plums or stocks would be best to top work European or Japan plums on to make them more hardy?

(3) Would cherries be more hardy by top working on native hardy trees? Maiden Rock, Wis. G. E. H.

A. (1) Early spring. Cions used must be wholly dormant. First settled weather just as buds on stocks are swelling. If cions are kept in ice-house top-working may be done as late as June although not advisable. If cions have "calloused" at basal end, grafts will not grow.

(2) The combination of native with European or Japan plum is not congenial and will not give satisfaction.

(3) The union would not be successful.

Q. What is the cause of apple trees dying. They seem to be all right in the spring and about midsummer the

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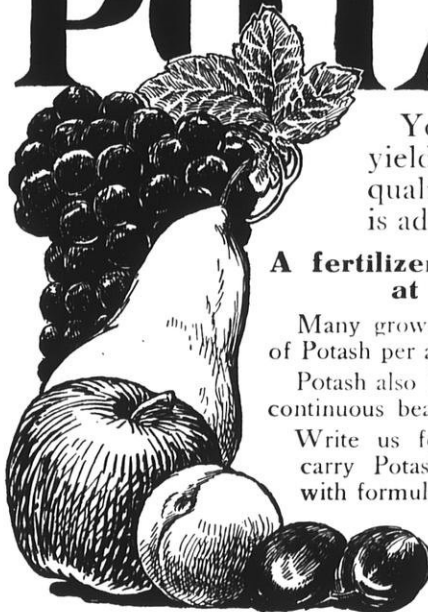
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Strawberry plants for sale. The varieties which produced the above amount; were Warfield, Senator Dunlap, and Euhance, on new soil. Vigorous, thrifty plants.

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A fertilizer for fruit should contain at least 12% Potash

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Potash also insures strong wood and early and continuous bearing.

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northern districts.

Will be glad to figure on
your wants either in large or
small quantities.

WAUWATOSA, WISCONSIN

leaves turn brown and in a few weeks
the branches also start to die. I have
cut off the branches about four inches
further than they were affected and
saved some trees for two years, but
later were again affected and killed
out. Is it what they call blight, and
is there any remedy for it?

V. E. W.

A. Undoubtedly fire blight. Some
varieties as Yellow Transparent and
Transcendant crab are more subject
to the disease than others. Very
often one or two trees of such kinds
will infect an entire orchard. Dig
out and burn such trees and continue
cutting as described. Disinfect cut-
ting tools frequently by wiping with
rag saturated with formalin.

Q. (1) My young trees—apple,
plum, and cherry fruited last season
for the first. Some apple trees turn-
ed black or very dark and died, I
thought it was blight. What would
you advise?

(2) Have you seen or know the
Beta Grape?

(3) Would you advise the planting
of Gravenstein Apple in Barron
County; also Gano.

Barron County. J. N. M.

A. (1) Send specimens to Prof. L.
R. Jones, Agr. College, Madison.
Fire blight attacks new growth caus-
ing twigs to turn black and die.
Apple trees in Barron Co. are also
frequently affected with "black-heart"
the heart wood turning dark brown or
black.

(2) The Beta originated in Min-
nesota; said to be a seedling of Con-
cord. Very hardy, early and produc-
tive. Small in size, poor in quality.

(3) No.

I would like to know if potatoes
can be successfully grown on land
cleared of stumps and some under-
brush the season before? Yes, very
successfully.

(2.) After land has been cleared of
stumps and under-brush how soon
may fruit trees be set out to obtain
the best orchard? The land may be
planted to trees at once with potatoes
between rows of trees. This assum-
ing land to be well drained. Not in-

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OSHKOSH, - WISCONSIN

frequently forest lands require a year or two after being stumped to become well drained.

To the Editor and Secretary:

It was with interest that I read the article in the last Wisconsin Agriculturist, entitled, "A Protest," as the writer of said article states, "the State society is largely a fruit growers association," which had its origin with the professional nurserymen, some of whom desire to continue on the old lines. This would be a great injustice to the average amateur horticulturist, considering the increased state appropriation which emanates from the fund raised by direct taxation, and if allowed for professionals alone would be only one more for "special privileges" and oppressive and obnoxious to the amateur. But no one could be more considerate and just, in this matter than our secretary and editor has been in the past, and with proper support will undoubtedly continue.

Mrs. D. D. HOWLETT.

Wanted at Once

Man to take care of small truck garden in Northern Wisconsin. Must have experience, be strictly sober and reliable, and furnish references. A permanent place with opportunity for advancement for the right man.

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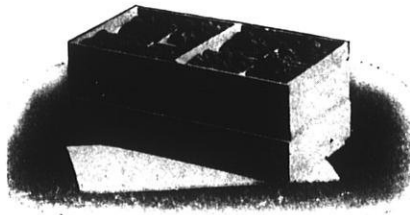
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William J. Starr

Eau Claire, - - - Wis.



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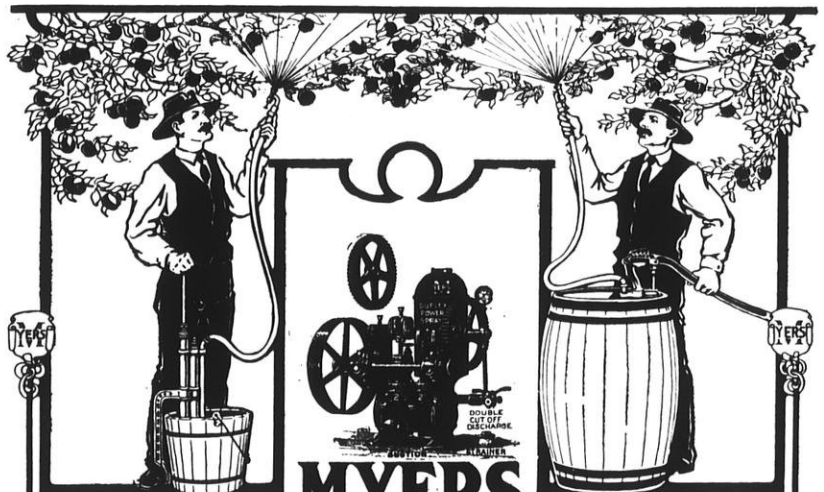
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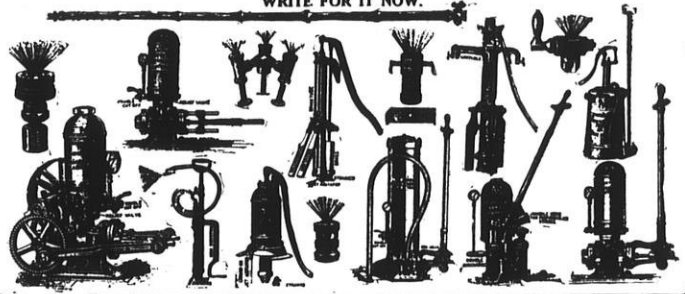


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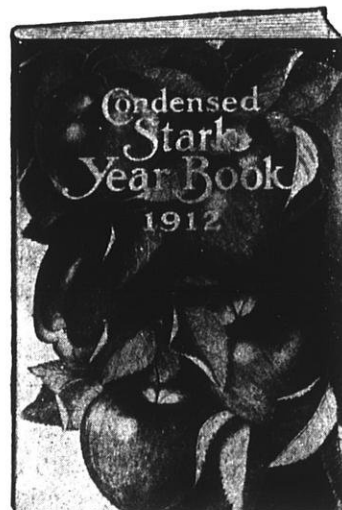
Please send me another dozen copies of the Stark Orchard Planting Book. This booklet contains very timely, valuable and some belated information. I am sending copy today to a young man who was at my place yesterday, and who is starting an orchard.—C. O. Reed, Proprietor, Model Fruit Farm, Oregon Co., Mo.

Your Stark Orchard Planting Book is the best thing I have ever seen. It is what the tree planters need badly; if they will read this book and follow the instructions they will be much benefited.—J. P. Fourot, Orchardist, Sumner Co., Kansas.

The Stark Orchard Planting Book received. This is something that I

have often thought should be in the hands of every planter. Will greatly aid them to make a success of the trees planted. I think it will be appreciated by all.—A. F. Buvinger, Labette Co., Kansas.

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Condensed Stark Year Book "A Diamond Mine" of Information

Here is a book as different from the usual run of nurserymen's catalogs as day is from night. It is a veritable mint of boiled-down information on varieties for commercial or home-orchard planting, season of ripening of all varieties of all fruits, letters from successful fruit-growers from every part of the country, comments by our national horticultural authorities, etc., etc. It also gives the facts about Stark Trees and quotes prices. Every statement in this book is backed by a million dollar nursery. Planters the country over say this is the best, the most valuable and most practical book of its kind ever published. We have thousands of this kind of letters.

Stark Year Book received. I have several good horticultural works, but I believe your Year Book contains more valuable, up-to-date suggestions for the new beginner, (or the old one either) than any of them.—John A. Minger, Memphah Co., Kansas.

Permit me to thank you for your handsome catalogue. It is the most comprehensive of its kind I have ever seen. The color plates are beautiful, and of great assistance in selecting fruit.—J. O. Lewis, Wash. Co., Tenn.

Copy of the Stark Year Book received. It is not only the most beautiful and artistic work of its kind ever issued but the most practical guide for the planter of fruit and other trees. The text is unique in many ways, especially in the directness of statement and the absolute worth of the various trees and fruits described. It should be in the library of every fruit grower.—Thos. F. Rigg, Iowa Horticultural Experiment Grounds, Hardin Co., Iowa.

Neither the Condensed Stark Year Book nor the Stark Orchard Planting Book can be purchased. They are our free gift to you. You might as well have these book treasures in your home. They are waiting for you to ask for them. Send the coupon today.

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out, and
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Volume II

Madison, Wisconsin, May, 1912

Number 9

THE SCHOOL

Once upon a time,—please be patient, this is not a fairy story, even if it does resemble one,—once upon a time in a New Jersey factory town a barefoot boy stubbed his toe on a piece of slag but it never dented his toe because this boy went barefoot most of the time and his feet minded not a piece of slag. Shoes cost a lot of money in those days, sixty years ago, and there were many feet in the family. He was just an average size boy and probably not remarkable in any way. His picture is before you. Didn't go to school very much in those early days; there were other things to do, but later in life, in young manhood and in middle age, he began to go to school and learned the secrets of wood and field and how plants grow, and the kinds of flowers and trees and shrubs and their names and the innermost secrets of their lives.



WILLIAM TOOLE

OF LIFE

Learned how they are called in the Latin tongue and their classes and relations, and that is botany. Learned how this old earth is made, and that is geology.

Spent as much time as this cruel world demanded in making a living and a little,—quite a little,—more and the rest of his time in searching out the beautiful in nature.

Apples and plums and other things that grow on trees are also his by right of discovery, but these, after all, have been of secondary importance in his life's work. Flowers and flower culture, both for profit as well as for pleasure, has absorbed his energies and enriched his life.

Wm. Toole, of Baraboo, twice president of our Society and member of the executive committee for years without number, 70 years young, has lived a full and satisfying life. To him life has meant

more than to most of us, because he has been able to see more in life than mere dollars.

A successful farmer, florist and fruit grower, he has always found time to attend our meetings and to give fully and freely of his knowledge that we, too, may learn that this old world is not such a bad place after all.

He also founded and is the spirit and life of a neighborhood club that has attracted attention far beyond the limits of Sauk County.

A good roads association, a corn growers' association, a local telephone company and a few other local enterprises receive his time and attention.

A year ago the University of Wisconsin conferred on him an honorary degree. We of the Society always honor him.

Now, dig out your moral from this to suit your taste; here is one for a beginning: Sixteen years of continuous schooling, which includes a university degree, may not spoil a boy.

PLAY

In the little sermon last month on school grounds there was a promise of another on play. In place of the sermon we will tell you about a book wherein you may read about: The Value of Play; The Equipment of the Playground; Classification of Games; How to Teach Games; and how to play at least one hundred different games.

The book is entitled, "Play," and is written by Emmet D. Angell, one time director of physical education at the University of Wisconsin, published by Little, Brown & Co., 34 Beacon St., Boston, Mass.

It ought to be in every school in the state and especially in the rural schools, for it is a fact, the average child doesn't know how to play. Now, if there are ten teachers or ten school boards, or ten real public spirited citizens among our readers that will send an order to this office for a copy of "Play," it will be furnished at one dollar a copy. The regular price is one dollar and a half, but the difference will be charged against the school grounds fund.

Who will be first?

HOW TO MAINTAIN SOIL FERTILITY

H. O. COOPER.

The maintenance of soil fertility may be accomplished in two ways, viz: *First*, by the application of stable manure; *second*, by the use of commercial fertilizers together with a system of green manuring for the purpose of keeping the soil well supplied with humus.

A good supply of humus in the soil, by the way, is a very important point;

long way toward the maintenance of the soil fertility of the farm.

The proper method of preserving and applying manure varies somewhat according to prevailing conditions. I think it is generally conceded that on the larger dairy farms it is best to haul directly to the field every day or two, with the exception, perhaps, of times when the ground is covered with deep snow. Such method, however, is hardly practical for those



Sod.

Cultivated.

Two Whitney crab trees ten rods apart, alike in age and size when planted, and under similar conditions except as to cultivation.

not only as a source of plant food, but also to put the soil in the proper tilth and increase its capacity for holding water for plant use.

In considering the use of stable manure the farmer engaged in stock raising or dairying has somewhat the advantage; for by feeding the crops grown supplemented by the purchase of feeds, especially those rich in the fertilizer elements, such as wheat, bran and cotton seed meal, a supply of manure is obtained which, if properly preserved and applied, will go a

with smaller number of stock. Some advocate storing the manure under a shed built for that purpose so that the fertilizer elements will not be leached away by the rains, while others contend that if the manure is properly piled in an open yard there is but little loss from leaching, at least not enough to warrant the expense of a shed for storing.

Care should be taken not to allow the manure to heat, as much fermentation will drive off much of the nitrogenous element. Losses from this

source may be reduced by the use of land plaster or ground rock phosphate, same to be used as an absorbent in the stable. Only a small amount per animal is needed, about one-half pound each day.

It is quite an advantage to have a manure spreader for applying the manure to the land,—not only is it a great labor saver, but the manure is broken up so that it comes more closely in contact with the soil and thus more readily becomes a part of the soil, giving quicker returns and less danger of loss.

As to the use of commercial fertilizers, I have had very little experience but understand they are used

cations of phosphoric acid. Marshy soils are rich in organic matter and in nitrogen and require as a rule phosphoric acid and potash and sometimes lime. Potash salts are of especial value for clover, grass, corn and fruit.

They should be applied in the fall on heavy clay and in the spring on sandy soil. They are more likely to be needed on the sandy soil.

Wood ashes are sometimes used as a potash fertilizer. They contain from five to ten per cent potash when unbleached. Ashes have a beneficial action on the mechanical condition of light soils, but for clay soils should be mixed with an equal amount of land plaster.



Sod.

Cultivated.

Native plum trees. Conditions same as Whitney crab shown on page 2.

quite extensively by some. I think for intensive farming they have a place, more or less in extent, according to conditions. Even where manure may be obtained in liberal quantities it sometimes is rendered much more efficient by the addition of single fertilizer ingredients in phosphate or potash compound.

Ground rock phosphate has been found to possess considerable value as a fertilizer if mixed with stable manure, or applied direct on soils rich in humus. Sandy or light soils are especially benefited by applications of potash and will not in general be benefited by phosphoric acid fertilization. The clay and loam soils, on the other hand, do not often need potash but are apt to be improved by appli-

One more point which perhaps is worthy of consideration is the importance of keeping the land covered with some growing crop, especially in the latter part of the summer, as at that season the nitrates are quite readily formed and are apt to be lost if not taken up by some plant. Rye makes a good cover crop and, when to follow corn, can be sown at the last cultivation and thus be well established when the corn is removed. Vetch, being a legume, is better but perhaps not quite so sure. The two together make a good combination. The Cow Horn turnip has been recommended as being beneficial on the heavy soils on account of the long, deep root, but it does not live over winter.

A LEFT-OVER

There are many things that add spice,—and vinegar,—to the life of an editor. He may count that day lost whose low descending sun marks no scrap with the foreman of the printing office. Each is certain that the other is a blockhead and it is not unlikely that both are right.

Last month we had a letter from a party up Squedunks way, who had studied history and claimed to prove therefrom that A. L. Hatch was not the first white child born in Door County.

Of course it was printed and the editor wrote a real sarcastic comment to follow it, but some "ivory dome," either here or over at the printery, killed it. It has come to life and follows:

"This is a fine tribute to Mr. Hatch and his contemporaries. They went up there and scraped the moss off of Door County and its antediluvian fruit growers and produced some *real* orchards. Progress dates from then. People kept cows in Wisconsin "before the war," but it needed a Hoard to make dairying a real business." EDITOR.

Now, of course, U. N. O. Better, and if you are not good you shall be spanked again and sent to bed without supper.

CREDIT LIST FOR MARCH AND APRIL

C. Jos. Mueller, 1; A. H. Schulz 1; C. L. Babcock, 1; Geo. Marley, 1; Lester Eatough, 1; A. Gropper, 4; A. F. Dod, 1; J. A. Hays, 1; H. F. Marsh, 2; Geo. L. Tiff, 2; Max Patitz 7; B. Hahn, 9; N. A. Rasmussen, 1; A. Gudmundson, 1; Wm. Finger, 1; Louis C. Meyer, 1; W. E. Larson, 1; W. G. McKay, 1; H. A. Fruechtel, 1; Elizabeth O'Brien, 1; E. F. Stabelfeldt, 1; Jas. P. Kegel, 3; B. C. Thoreson, 2; R. E. Wilson, 1; Henry Wilkie, 1; A. W. Lawrence, 1; A. K. Bassett, 1; P. J. Sorenson, 1; Jas. A. Wilson, 1; A. W. Riese, 1; G. H. Townsend, 1; Louis Mayer, 1; C. J. Medbury, 1; J. G. Martin, 1; J. M. Black, 1.

Subscribers may ask questions. The editor will send them to the "men who get the benefits" for answer.

Gardens

A department conducted by practical women who really have gardens. Contributions are solicited. The editorial staff consists of all who contribute an article each month. There are now but three,—Miss Harper, "H." Mrs. Palmer, "P." and Mrs. Thwaites, "T." If you know about flowers, home making or home keeping, write it down. The next best help is to ask questions. Send all contributions and questions to this office.

The fostering care of the garden activities of a town is the duty of the *local horticultural society*. Let each one bestir itself, and if necessary consult with the state society or other organizations interested in the subject as to ways and means and opportunities. Do a little this year, and the sum of all next autumn will cause surprise.

In planting the June and July crops of string beans and lettuce, it is a good plan to run a furrow about four inches deep; fill it with water and hoe in one-half the soil, then put in the beans, eye down, and cover with the remaining soil dry.

When planting lettuce plant such varieties as will make a succession at one planting. A good selection is May King, Mignonette, Sterling or Black seeded Tennisball; then for a second planting use the Cos or Romaine lettuces, because they stand the summer heat; and the third planting about July 15 or August 1 should be made under the cheese cloth screen, and consisting of the Cos lettuces, May King and Tennisball, should carry the crop through to freezing time.

Caution should be used by the Wisconsin amateur gardener in following out the planting directions as to time given in the leading garden and other magazines published or edited in the East. This country of ours is as diversified in its climatic conditions as the whole continent of Europe, and even more so. And as to every man's view proximity looms large, the estimates are naturally based upon the conditions surrounding editor and publisher. In the neighborhood of Madison and further North it would

be safe to substitute April for March in the time tables, and then combine the readings for April and May for May. Miss Bennett, I think it is, who in her book on "The Flower Garden" times the sowing of seed by the leafing of certain trees, thus making the directions adjustable to various localities. It is a mistake to sow seed too early, because of the risk of freezing or rotting in cold rains, and yet on the other hand, one must not delay long, because of the killing effect on young seedlings of the sudden coming of summer and the dry, hot weather.

PLANT VINES

Vines trained over the porches of the home add much to the beauty and coolness and are easily cared for. One of the best vines is Clematis Paniculata, as it is quite hardy, a free bloomer, and the vines die back nearly to the ground in the fall, so they may be cut back, thus removing the unsightly litter from the screens in winter. Morning glories form a lovely shade if planted where the sun don't strike early in the morning, causing the blossoms to close. American ivy forms a fine, strong plant, but gets too heavy unless kept cut back. "P."

MAKE HASTE SLOWLY

The inexperienced gardener is cautioned against purchasing very expensive seeds or bulbs. If reference is made to seedsmen's catalogues of the best firms, different varieties of the same plant are offered at prices varying from five cents to seventy-five cents per packet for seed, from fifteen cents to several dollars each for plants. Why so? The answering chorus is "because the more expensive ones are rarer." Why are the expensive ones rarer? They are often the most beautiful and desirable. Why not grow them so freely that they will no longer be rare, but greet one commonly on every side? But alas, it does not always rest with the growers to produce the desired quantity because a rare flower or plant is so difficult to raise, and even if raised to maturity, is so uncertain in reproduction that the difficulties must be gauged by the increased price.

"But," some one may exclaim, "if one can afford to buy such plants and seeds, why should not a beginner do so?" Unfortunately, people are so constituted that if disappointments and reverses come at the beginning of an enterprise, the resulting discouragement often makes one give up the whole project. To avoid disappointment, it is well while gaining skill, judgment and experience to confine one's efforts in the beginning to the well known tried and hardy flowers and vegetables, to avoid novelties, and where the same catalogue offers varieties of the same thing costing five cents a packet to twenty-five cents a packet, to take the five cent packet, whose very price proclaims it as easier to grow, hardier and more prolific.

When years of experience and real love of gardening have proved themselves, then is the time for the gardener, a beginner no longer, to try the more expensive seeds of the delicate varieties.

Good examples of this principle are found in the rarity of the finer dahlias in many gardens. Many purchase the more expensive bulbs, but how many succeed in carrying them over a second year? The same holds true of gladiolus, some spireas, and in the vegetable garden the most delicious okra and cucumber seem to bear sparsely and be short lived.

ALL OUR OWN

A walk through the woods these days is filled with pleasant surprises. There are so many lovely blossoms just opening out of the seemingly cold, dark, lifeless soil, and if you have a slightly sheltered sunny corner it will look like fairy-land in a few days if you will take up some clusters of Hepatieas, Snowdrops, Dutchman's Breeches and Maiden-Hair Fern, transplant with some of the woods soil. Woods Violets, and Wild Lily of the Valley with a background of ferns forms a lovely bank. Later comes Columbine, Shooting Stars and many more lovely plants whose beauty and fragrance will well repay the little cultivation they require, and cost nothing but a little labor. "P."

ONE WOMAN'S GARDEN ECONOMIES

One woman who reasons that time and money saved is time and money to use where otherwise needed has found the following items time, effort or money savers:

Manure.—a few chickens (in this case merely five) furnished enough manure, which was carefully conserved to fertilize a garden which had previously required seven loads per annum. Three loads were bought in the autumn to use for covering peonies, iris, larkspur, columbines and bulb beds, and the chicken manure and litter from the coops supplied the balance. The chickens are kept on a modification of the Philo system—the

Cold Frame.—A frame was constructed at a cost of two dollars for three sections, but was made to take the storm sash from the south side of the house instead of the regular hot bed sash.

Stakes for marking lot or garden limits are easily made from the handles of old brooms. A saw cuts off the broom part, and a draw shave points the stake, making a durable hardwood unbreakable stake.

Green feed for chickens is cheaply grown from the mixed lettuce seed sold by seedsmen at five cents per ounce.

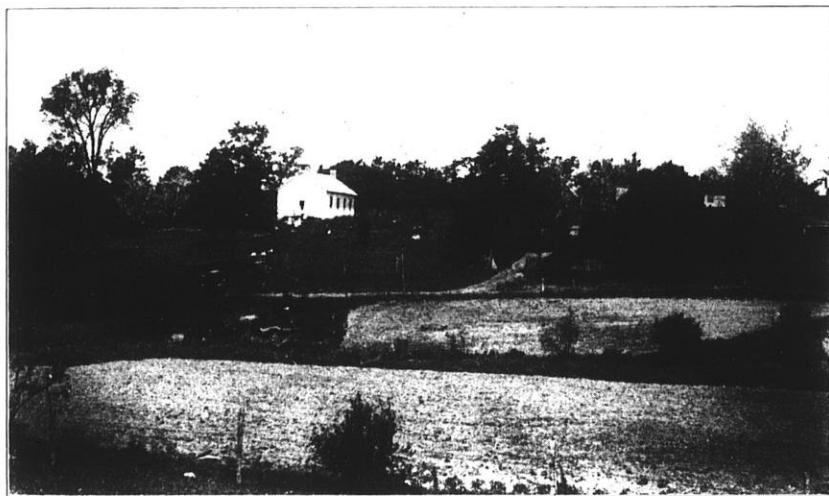
Tools.—Proper care of garden tools is an economy of time. A dull hoe or

writer has been surprised to note that among ten or a dozen University of Wisconsin College of Agriculture students employed to assist in the heavy work of the garden not one has known anything of the proper care of tools in regard to the efficiency. They know book theory, but tool practice is to them an unknown field. "II."

A GARDEN MOVEMENT IN MADISON

Last month mention was made of a meeting called to consider a report on the Minneapolis Garden Club. That meeting was followed by a Sunday afternoon meeting at the City Library at which Prof. J. G. Moore told of the work accomplished by the children in the vacation garden experiment conducted by the University, and Mr. Wm. G. MacLean, superintendent of Park and Pleasure Drive Association spoke of the benefit of gardening for children in the home. Both speakers also spoke at length upon the possibilities of the improvement by slight personal effort of backyard and dirty holes, and illustrated their points by lantern slides of actual transformations. Miss Blanchard Harper then closed by a plea for home and backyard vegetable gardening as a means of economy and offset to the high cost of living and in its hygienic effects in a dietary way and as a means of exercise. Another meeting was called by Mrs. Reber and Mrs. Kahlenberg, chairmen of the departments of education and social economics in the Madison Women's Club, to consider the question of school gardens, vacant lot gardens for poor and well-to-do, and backyard vegetable gardens. It was decided to open negotiations to work with the Madison Horticultural Society and under its auspices as far as possible, to arrange with a well known authority to give three popular lectures on the practical and technical phases of home gardening, and to obtain advice and cooperation of men of practical experience in school gardens and vacant lot gardens.

A third meeting was held April 25. C. W. Price, of the Wisconsin Industrial Commission, who had formerly been associated in the welfare work of the International Harvester Company, described the successful working of a



Picturesque and beautiful. Children like to go to school here.

roosts and droppings boards removed and the manure scraped daily into large packing boxes, which are kept covered with boards and building paper. The straw or shavings forming the litter in the coops is removed when dirty and either spread directly on the garden or piled there until the snow thaws in the spring. As manure averages a dollar a load the saving is worth while.

Labels and Markers.—Once in several years a bundle of lath is purchased and cut into halves and quarters, and sharpened at one end. These are used as markers and labels, and can easily be written on with a carpenter's pencil, even when unplanned. When the garden is cleaned up in the fall all these sticks are gathered in a pile and carefully put in the cellar for use the next spring.

spade, rusty cultivator teeth, clogged sprayer, all cause greater loss of time than that consumed in the care necessary to keep them in a good, efficient working condition, and yet not one amateur gardener in a hundred keeps the tools in working order. Always keep a broad file to sharpen spade and hoe, and remember that the file is ruined and useless if rubbed back and forth; rub only in one direction, lift it off the tool and repeat. Rubbing back and forth destroys the teeth of the file, while working it one way only cuts the tool to be sharpened. Keep an oil can on hand for the lawn mower. Never put tools such as spade, hoe, cultivator or hand plow away with clay or damp soil adhering. The spot so covered rusts and so makes friction and destruction of the efficiency of the cutting surface. The

garden plat of fifteen acres divided into lots of one-eighth acre for each family by the City Garden Association of Chicago. He insisted that a competent paid supervisor was the prime necessity for success, also the advisability of assigning the plats to families rather than individuals, of making the garden a *family affair*, a means of keeping the family together, of obtaining fresh, pure air and healthy foods for young children. Prof. K. L. Hatch, University of Wisconsin, then described the University experiment with children-gardens last year and showed photographs, and he also gave an account of the inception and success of the various garden movements in New York, Buffalo, Philadelphia and Cleveland.

The following points were brought out in discussion: *first*, that school gardens, with the cooperation of teachers and play ground instructors afforded the line of least resistance, and that through the children the influence would extend to the parents; *second*, that vacant lot gardens or backyard gardens beyond the three lectures previously planned, would require the services of a practical supervisor on a regular salary paid by the fostering organization; *third*, that the demands of existing organizations such as the Park and Pleasure Drive Association and other societies have absorbed such funds as would possibly have been available at present and that because of the difficulty of raising funds the paid supervisor would be impossible this year.

Miss Melissa Brown reported receiving from Congressman John Nelson, upon request, three hundred packages of seeds, each package containing five packets, which she was distributing among school children between the ages of ten to fifteen years. The name and address of each child is taken, and an account is to be rendered by each in the autumn. "H."

"Great oaks from little acorns grow."

(At last we have found a use for govt. seeds. EDITOR.

If you have anything to sell or exchange, advertise. If you want to buy, advertise. We reach the people.

Reviews

Under this head will be found the best from horticultural papers and experiment station bulletins; not merely scraps of information but the live topics of the period put in readable and attractive shape. The work is done by students in the agricultural college school of journalism, under the direction of Prof. J. Y. Beatty. Mr. R. E. Hodges is editor for this issue. We hope to make this a permanent feature. Price of Wisconsin Horticulture, one dollar, including membership, etc., etc.

A PERENNIAL BED FOR KEEPS

The Garden Magazine tells the very best plan for a bed of perennials. Makeshift work will not do, in this or any other permanent enterprise. Dig your bed at least two feet deep, throwing the sod and black surface soil to one side, and the subsoil to the other. Throw in six inches of the best manure available and mix it thoroughly with the sods and subsoil and a little of the surface soil. Then return the rest of the surface soil, being careful to break lumps, and you have a permanent perennial bed that will be a joy to you in years to come.

DO NOT PLANT IMPORTED POTATOES

The Department of Agriculture, the New York Experiment Station, the Weekly Market Growers' Journal and the Rural New Yorker, are warning Americans against planting potatoes imported from Europe. A serious potato wart disease common in Europe, was found in Newfoundland a few years ago. Other diseases are common in Europe but not yet found in United States. Canada has placed quarantine on all importations from those places. The United States during the past winter, imported through Boston alone, over half a million bushels. Suspicious cases should be sent to your nearest experiment station.

SILVER LEAF APPLE DISEASE

A new fungous disease of apples which kills affected trees in three to five years is reported from the New York Experiment Station and from Canada. Affected leaves have a silvery or milky gloss, which is first observable on a single limb, whence it spreads over the whole tree. The fun-

gus enters the tree through wounds, often by limbs freshly pruned and not disinfected. The fruits of the fungus are produced on the dead wood of the trees, usually in autumn. Affected trees should be promptly cut and burned on the spot and the stumps well grubbed out. Wisconsin growers should carefully prevent its introduction into this state.

NOT OVERPRODUCTION, BUT POOR DISTRIBUTION

Regarding overproduction of fruit Prof. C. I. Lewis of the Oregon Experimental Station has this to say, "Overproduction has rarely occurred in American fruit growing; at times we have had poor distribution, and in 1896, owing to a heavy crop and poor distribution, one might say an overproduction was realized, but we have had nothing of the kind since then, and both apple and pear production has been downward, the shrinkage being from 76 million barrels in 1896 to 25 million barrels in 1910. With proper organization, with good distribution, with the growers controlling their fruit and handling it when placed on the market for consumption, with storage-in-transit rates, there is a field for fruit production of all classes." Let Wisconsin learn methods from the older fruit states, and we need not fear overproduction, with such magnificent markets on all sides, as we have.

PLAN THE HOME BEAUTIFUL

The daughter coming home to the farm after a month at school, has a happy joyous thrill if she sees that home across a vista of lawn and shrubbery and flowers, with trees along the sides and perhaps a few scattered about the yard, and the house showing up like a picture against a background of tall trees.

The prospective buyer unconsciously loosens his purse strings when such a homey place invites him.

The children of the farm grow up with better, higher ideals into more beautiful lives, if they are surrounded with such beauties instead of the barren, heartsickening farmstead so often seen.

The Iowa Experiment Station has

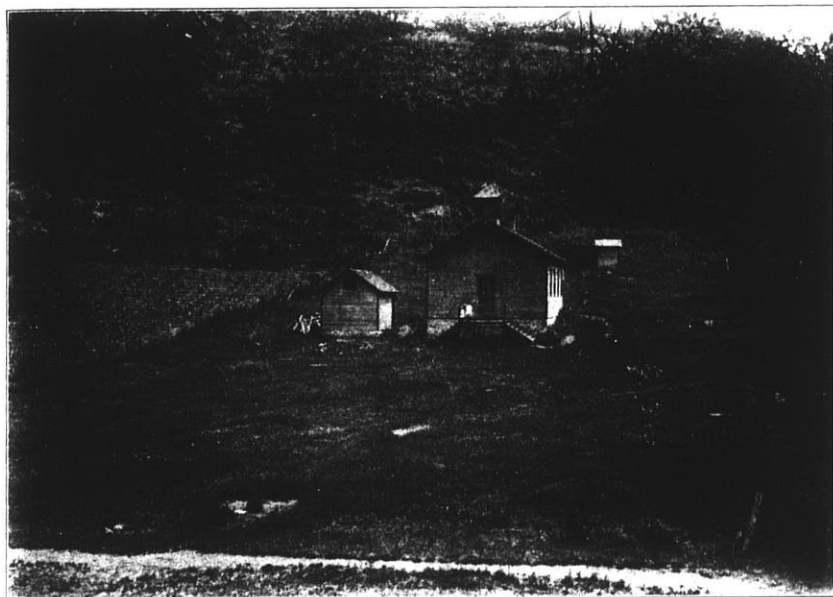
recently issued a bulletin giving suggestions for beautifying country homes. Let us picture one such as they recommend:

The house stands well back from the road and the other buildings are either behind or at the side of it, never in front. Approaching along the highway, we look across a spacious lawn of blue grass. A few hardwood, long-lived trees, which are large at maturity, such as the elm or oak or maple, or perhaps some of the many large evergreens are planted,

planting trees, according to Green's Fruit Grower. One of the secrets of successful tree planting is to get the soil into immediate contact with the fine roots of the tree. If you have a clay or muck soil, dig a hole and pour in water and loose earth, stirring it into a thin mud. Dip the roots of every plant into this just before setting. Two persons can plant together to advantage, for while one sifts in fine dirt, the other packs it around the roots. The soil will stick fast to the roots coated with thin mud, and your

advantages of thinning as follows: production of fancier fruit, regular crops from year to year, no props or breaking of limbs and "opportunity to destroy insect infested fruit, thus materially checking the spread of insects early in the season."

Fixed rules for thinning cannot be given. The amount and method depend on age, variety, and general thrift of the tree. Some growers estimate the amount they want to leave on a tree, then thin one to that amount by actually counting the apples left. Then that tree will serve as a model whereby accurate amounts can be left on the other trees without counting. Other growers note the distance apart at which the fruits ripen best, and thin them to that distance, always being careful not to injure any of the fruit spurs. The time for thinning is when the apples are a little larger than a ripe olive. Delay means waste of the tree's energy and decrease in fancy fruit.



Picturesque and might easily be made beautiful. Why not move the wood-house?

not so thick as to damage the lawn nor so near the house as to keep the shingles damp and decaying. The lawn is framed along the sides by a denser growth of the permanent trees. Back of the house are large sized trees "for a background, and the pictorial effect thus secured is a vast improvement over that of the building which stands out against the bare-sky line." On the lawn the shrubs are massed about the border and its corners to soften angularity, with lower growing kinds in front. Flowers are planted in ornamental beds two and a half or three feet wide in front of the shrubbery, as with such a background, the colors show off much better than in the open.

PUDDLING ROOTS AT PLANTING

There is no danger of packing the soil below the surface too much in

tree has every advantage. An inch of the surface should be left loose to prevent escape of moisture, and the tree should be pruned at once for the same purpose. Evaporation from a large leaf surface is the cause of most of the loss of new plantings.

PROFIT IN THINNING APPLES

One hundred and sixty-two dollars and eighty-five cents per acre net profit for thinning apples on eight year old Ben Davis trees, is reported by L. D. Batcheler, horticulturist for the Utah Experiment Station in "Orchard and Farm." The net increase of choice and fancy fruit where the fruit was thinned to a minimum of four inches, over adjoining trees unthinned but receiving the same treatment otherwise, was worth one dollar and thirty-nine cents per tree. Professor Batcheler enumerates the

GLUTTED CENTRAL MARKETS AND HUNGRY INTERIOR POINTS

"Three hundred thousand barrels of apples are estimated to have been grown in Calhoun County, Ill., alone, last season," said Louis Erbe of Missouri, at the last meeting of the Kansas Horticultural Society, reported in Green's Fruit Grower. Owing to lack of co-operation, thousands of barrels were dumped on the big river markets every week during September, October, and November, until prices went to fifty cents a barrel, and some days, several thousand barrels remained on the levee at St. Louis unsold. "There are thousands of farming, mining, stock raising, and lumbering districts everywhere that would consume enormous quantities of apples, but do not because the prices are too high, even while the central markets are glutted. The railroads charge unreasonable rates to inferior points." Individual apple growers are scarcely able to look up these neglected markets, or to get proper consideration from the railroads.

The remedy is to form apple growers' associations with offices located centrally in their districts,

(Continued on Page 9)

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Remit to Secretary W. S. H. S.
 Madison, Wis.

Read the reviews in this number.

Grass and grains must be kept out
 of the orchard.

Cultivate the orchard in May, June
 and part of July.

You can make money by buying
 from firms which advertise,—in HORTICULTURE.

Do not fail to keep an account of
 the expenditure for fertilizers, seeds,
 plants, plowing, etc., and compare it
 with the results in gathered crops—
 then send HORTICULTURE a copy to use
 in persuading others to do likewise.

There is nothing finer than a garden
 of annual flowers; try it.

One package each of Aster, Candy-
 tuft, Celosia, annual Larkspur and
 Balsam will cost twenty-five cents. If
 you feel real rich spend another quar-
 ter for Snapdragon, Coreopsis, Mari-
 gold, Mignonette and Nasturtium.

Next year you will want Petunia,
 annual Phlox and lots more.

Sow everything in the open ground
 early in May. Six by ten feet is
 enough.

ONE DOLLAR

Notice of change in fee was printed
 in the February issue and in addition
 a circular letter mailed to every mem-
 ber. In spite of this several of the
 old renewal blanks have been sent in
 with an enclosure of but fifty cents.
 There is no excuse for this. No name
 can now be entered except on receipt
 of one dollar for annual membership
 and ten dollars for life membership.

DELICIOUS

"I will make a report to you on my
 Delicious apple trees. Four years ago
 I planted twenty Delicious apple, two
 year old trees, and have lost only two
 trees, and these were killed by too
 close cultivation. This winter the
 thermometer stood from 34 to 37 de-
 grees for four days and they have not
 killed back an inch. This year they
 are set with fruit buds and give
 promise of fruit. It's a wonder the
 society don't wake up and plant an
 apple of quality, like the Delicious,
 instead of some of the doubtful vari-
 eties selected for those new trial orch-
 ards.

EVERETT G. TULLEDGE.

Fond du Lac County.

The Delicious heads the list in the
 new orchards.

EDITOR.

INFESTATION OF SAN JOSE SCALE

There has been discovered recent-
 ly a very serious infestation of San
 Jose scale in the town of Whitewater.
 This is the largest known scale in-
 fested area in the state. During the
 spring Professor J. G. Sanders, State
 Inspector of Nurseries and Orchards,
 mapped out the infested area in the
 western part of the town in the
 vicinity of the Normal School. It
 seems apparent that the scale has

spread during the past few years
 from an abandoned nursery which at
 the present time contains a large
 number of young and old trees which
 have been killed by the scale.

The new state inspection law re-
 quires all property owners to cause the
 treatment of such infested trees at
 the direction of the inspector. Dur-
 ing the past few weeks eight or ten
 city blocks have been sprayed with
 lime sulphur solution. It is certain
 that by following up this treatment
 carefully each year further rapid
 spread of the scale can be prevented
 and the adjacent orchards protected
 from infestation.

The San Jose scale infests prac-
 tically all of our fruit trees, with
 the exception of sour cherry and
 Keiffer pear, and some of our orna-
 mental shrubs.

ABOUT DYNAMITE

Your letter of some time ago,
 which was mislaid, came to my at-
 tention today, and I note what you
 say about planting by the use of dy-
 namite. I have found this a very
 effective and economical way of pre-
 paring our clay soils for tree plant-
 ing.

My method of doing this work is
 to strip off the soil to a depth of
 about six inches, making a cavity of
 about thirty inches in diameter.
 Then punch your vertical hole in the
 center of this from a foot to eighteen
 inches deep, with a sharp pointed bar.
 Into this I drop one-fourth pound of
 dynamite and tamp this with a small
 quantity of earth and light. This
 explosion renders conditions such that
 the hole can be enlarged very easily,
 also leaving the subsoil in a nice loose
 condition for several feet from this
 hole.

The young tree such as ordinarily
 planted in this section, which of
 course is properly pruned, is placed
 into this hole with the roots in their
 natural position and the top soil,
 which was removed with the shovel,
 is gently packed around the roots.
 The balance of the soil used to level
 up the surface.

I found this very satisfactory also
 in the planting of shade trees.

J. F. KADONSKY.

REVIEWS

(Continued from Page 7)

with well paid, commercially trained men in charge. These men would keep record of crop conditions in their districts and all over the country. They could then decide where to market to best advantage, whether to store the apples or sell them at once. They would work out systems of grading and packing and labeling so as to get a reputation for the association for uniformity of product. They would advertise the association in leading trade papers, so that every one that wants to buy apples will know where to find them. It is needless to say that apple buyers everywhere would prefer to send orders to associations where they could rely on standard, uniform grading rather than such as individual growers practice, who pack to suit themselves, often without regard to standards or uniformity. And lastly, the railroads are reasonable if approached before the rush begins by big customers such as the associations would be.

There are many sections in Wisconsin that are already in prime shape to form such associations. Talk about it among your neighbors. Work for uniformity of product and uniformity of distribution, which means higher prices for every barrel of Wisconsin fruit.

FIGURES ON SPRAYING APPLES

Apples from sprayed orchards brought twelve and one-half cents more per bushel than from those that were not sprayed, according to replies received from fruit growers of Missouri in answer to questions asked by the State Board of Horticulture. The Fruit Grower reports the case. Two and one-half per cent of the orchards did not bear marketable fruit, because of insects and fungus diseases. Twelve per cent reported "no crop," without giving cause.

In addition to the higher price received, it is reasonable to assume that the yield also was increased by spraying. This would make the cash value of spraying run into dollars per tree for some trees.

The cost of spraying is twenty-four cents per tree for four applications, as

reported by the Nebraska station from results of a four-year test, in which the yield of marketable fruit per sprayed tree was 2.6 bushels more than the yield of unsprayed trees. The Missouri Fruit Experiment Station shows thirty to fifty per cent increase in merchantable fruit due to spraying six times. Ninety per cent of the culls were sound, being thrown out on account of poor color or small size, both of which might have been avoided by thinning.

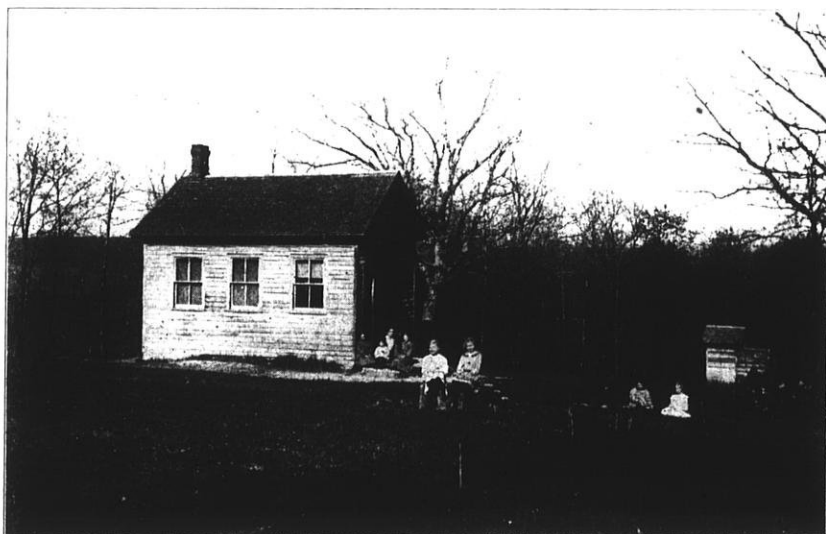
DYNAMITE FOR TREE PLANTING

"A young tree planted where an old one stood, rarely seems to do well," says Prof. Green of the Ohio College

boxes without ice to Alaska, Chicago, Minneapolis, Washington, D. C., and many other places during the past two years without losing a box in transit. He paid a cent a pound for picking, eight cents a box for packing and eight cents each for the boxes, as reported in the Northwest Horticulturist. Cherries stand shipment well if properly picked and packed.

A SHORT STORY ABOUT A SMALL FRUIT FARM

Here is the story of a twenty acre farm for 1911. It is supposed to be a market garden but you will see that cows figure largely in the story. It is a good story and of the kind we



Neither picturesque nor beautiful. If this was a cow barn it would be condemned by the "barn inspector," but it is plenty good enough for children.

of Agriculture in Green's Fruit Grower. This is probably due to impoverishment of the soil, or to infection with diseases from the old tree, or to the fact that the soil is packed hard.

Dynamite properly used to blow out the old stumps, loosens the hard soil and subsoil and the gases destroy insects and diseases. Dynamite of the forty per cent grade is safe and easy to handle under the instructions furnished by the manufacturers.

LONG DISTANCE CHERRY SHIPMENTS

Cherry growers will be interested in an address of C. E. Fitzgerald before the fruit growers' convention at Bellingham, Washington, in which he stated he had shipped cherries in

like to print. N. A. Rasmussen of Oshkosh is the owner of this farm.

Here is a hint to the quarter section farmers. Sell one hundred forty acres and get down to business on the remaining twenty.

Receipts from twenty acres, 1911.

Five cows	\$ 902.40
Poultry	210.15
Tree fruit	135.25
Strawberries	196.50
Raspberries	392.80
Other bush fruit	97.00
Musk melons	513.65
Tomatoes	461.35
Miscellaneous, including seeds, plants, roots and vegetables of all kinds	1387.20

Total, \$4296.30

SPRAY CALENDAR

What?	Why?	How?	When?			Remarks
			1st spraying	2d Spraying	3d spraying	
Apple	Scab and bitter rot	Bordeaux Mixture or Lime-Sulphur	Before growth begins (1 to 10 L. S.)	Just after blossoms drop (1 to 30 or 35 L. S.)	10 days after 2d spraying (1 to 30 or 35 L. S.)	
	Codling moth	Arsenate of Lead combined with Bordeaux	Just after blossoms drop	10 days later	Last week of July or 1st week of August for 2d brood	1st and 2nd spraying same as 2d and 3d for scab; merely add arsenate of lead to Bordeaux.
	Oyster shell scale	Lime-Sulphur 1 to 9	March or early April but before growth starts			Do not use Commercial Lime-sulphur on growing plants at less dilution than 1 to 30.
	Oyster shell scale	Kerosene Emulsion	When young are active	10 to 12 days later	10 to 12 days later	
Cherry and Plum	Mildew and shot-hole fungus	Bordeaux Mixture 3—4—50	When leaves are about 1-3 grown	2 weeks later	After fruit harvest	Add arsenate of lead for slug and other biting insects, 2 lbs. to 50 gals.
Currant and Gooseberry	Mildew, blight and Currant worm	Bordeaux and Arsenate of Lead	When leaves are fully developed	2 to 3 weeks later		
Grapes	Mildew and anthracnose	Bordeaux	Before leaf buds open	2 to 3 weeks later	3d, 4th and 5th applications at intervals of 2 weeks if required	
Strawberry	Leaf-spot or blight and leaf-eating insects	Bordeaux and Arsenate of Lead	When first leaves appear	After blossoms fall		
Raspberry and Blackberry	Anthracnose and fungous diseases	Bordeaux	As above	2 weeks later		Spray new growth after fruit harvest.

SPRAY DOPE

For clean, marketable fruit and healthy trees and plants spray unceasingly. It isn't half as much trouble as you imagine. This line of talk is purely for the amateur and beginner; the other fellow needs no telling.

Nothing is more puzzling to the amateur who has three fruit trees and six berry bushes than the reduction of the formulas given in bulletins and periodicals, as these are always in terms of barrels.

The farmer who has a dozen trees, currants, raspberries and a few grapes can use a barrel of Bordeaux to advantage. Spray the trees first and give the rest of the plantation a dose just for luck. Here is a standard formula:

Four pounds copper sulfate;
Five pounds fresh lime;
Fifty gallons water.

The regular equipment consists of a fifty gallon barrel, two half-barrels or casks, and various impedimenta in the way of pails, etc. Try this simplified method; suspend the sulfate in a sack in the spray barrel contain-

ing about forty-five gallons of water; it will dissolve in twenty minutes. Slake the lime in a pail, using plenty of water to make "milk of lime" rather than a paste, and pour this into the sulfate solution. That ought to be Bordeaux mixture. Add two pounds of arsenate of lead and go to it.

FOR THE AMATEUR.

The back yard gardener is likely to wear out both his pencil and patience in figuring one-fiftieth of four pounds, etc. Better use the formulas and directions printed in HORTICULTURE, May 1911, borrowed from the Garden Magazine, as follows:

BORDEAUX MIXTURE.

"In your garden you'll need it for anthracnose of the bean and cucumber, for leaf spot of the beet and currant, for early and late blight of the potato, and a dozen other ills. Don't forget that any fungicide is a preventive rather than a cure. It must be applied early, before the disease has made a good start.

To Make One Gallon.—Take one heaping tablespoonful of copper sul-

phate; one and a half rounding tablespoonfuls of quicklime.

This is the equivalent of one ounce of the copper sulphate and one and a quarter ounces of the quicklime. If your copper sulphate is in large crystals, break them up with a hammer until there are no pieces larger than one-fourth to one-half inch. The lime must be fresh, not air-slaked. It should be pounded up fine with a hammer, unless you buy it already ground up.

Dissolve the copper sulphate in one quart of warm water. Place the lime in a separate vessel, and slake it slowly with a little water. After it stops bubbling add enough water to make one quart in this vessel.

Now pour your quart of copper sulphate solution and your quart of lime solution together into a bucket—but do it this way: pour a little from each into the bucket and then stir, then a little more from each and again stir, and so on. When you've done this, you'll have two quarts of bluish-white mixture in the bucket.

Add to this two quarts of water, making four quarts in all of your

mixture. This is now ready to spray. It should be shaken or stirred frequently while being sprayed; and it should be made up fresh each time you spray.

LIME-SULPHUR.

Properly, lime-sulphur mixture may be considered both as a fungicide and as an insecticide, for its use as a winter wash for scale on fruit trees is usually followed by reduced injury from fungous diseases.

However, its principal use is for the control of San Jose scale. The strength ordinarily used is suitable for winter applications only; never when the trees or shrubs are in leaf.

The process of making this is both tedious and disagreeable and it must be done out of doors. I do not advise home preparation on a small scale.

There are reliable brands of concentrated lime-sulphur on the market which you can purchase in fairly small quantities. If you are in doubt as to what brands are trustworthy, write your state experiment station. Some stations test out these preparations each year. If yours has not done so, it can tell you of some station that has.

ARSENATE OF LEAD.

About the only difficulty with old-fashioned Paris green is the fact that it washes off readily. In the case of some vegetables, such as cabbages, this may be no disadvantage. We prefer to have the poison come off before the heads are marketed. As a rule, however, it is a distinct advantage to have a poison that will adhere through showers. Arsenate of lead will do this.

Standard Formula.—Arsenate of lead is used at strengths varying all the way from three pounds to the hundred gallons up to twenty pounds to the hundred gallons. It depends on the power of resistance of the species of insect for which the spray is applied. There is no danger of burning the foliage.

In Small Quantities.—This chemical comes in the form of a thick, sticky paste. For ordinary use take one tablespoonful just slightly rounded, to one gallon of water or Bordeaux mixture.

This is the equivalent of one ounce

of the paste. You may use double this amount if desired in the case of resistant insects, such as the potato beetle.

KEROSENE EMULSION.

For most sucking insects, especially the soft-bodied ones, such as plant lice or aphids, a satisfactory spray is to be found in kerosene emulsion. It is not a poison, and is of no avail against such insects as the potato beetle; nor is a poison spray like arsenate of lead of any use against the sucking insects for which kerosene emulsion is adapted. The distinction should be clearly understood. Kerosene emulsion is a contact remedy. Paris green or lead arsenate are stomach poisons.

In Making Small Amounts.—Cut from a cake of common hard soap a cube about one inch square. Take one-half pint of soft water; one pint of common kerosene, or coal-oil.

Pour the half pint of water into any convenient vessel holding a quart or more in which you can boil it. Shave the soap up fine and drop it into the water. Place the vessel on the fire, and bring the water to a boil, stirring to see that the soap is all dissolved.

Remove the vessel from the fire and, while the soapy water is still hot, add the pint of kerosene. At once churn the mixture violently. For this purpose you may use a common egg-beater. It won't hurt the egg-beater in the least; you can easily wash it clean afterward with soap and hot water. Keep on churning the mixture for several minutes until you have a creamy mass of even consistency throughout.

This is your stock solution. For ordinary summer use you will take one part of this and add to it fifteen or twenty parts of water.

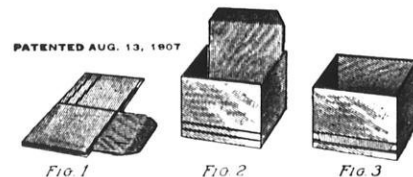
COMBINED MIXTURES.

Combining two different poisons so as to make a double-headed application at one time is often a labor-saving device for the amateur. Thus, Bordeaux mixture can be used in place of water in the preparation of Paris green, and in this way we can get one spray that will kill fungous diseases and chewing insects at the same time. Similarly, lime-sulphur

can be used in combination with arsenate of lead (but a mixture of Paris green and lime sulphur is injurious to the foliage).

Farmers, take notice! Spray your orchard this month.

EWALDS FOLDING BERRY BOX



The only folding berry box made of wood veneer that

GIVES SATISFACTION

Made in Wisconsin style, Standard dry measure quarts and pints. Neat and strong, is all ready for business, needs no tacks nor stapling. Write us today and we will tell you more about this box and how to get it nearer home at manufacturer's prices. Do it now.

We also manufacture crates and old style quarts and pints in K. D. for crate makers and large growers who have stapling machines and make up their own crates and boxes, big reduction in price on carload lots. Our material and prices will please you.

Cumberland Fruit Package Company
Cumberland, Wisconsin

The Great Northern Nursery Co.

Sells First-Class

Wisconsin Grown Trees

Our Trees Live. We had an opportunity to compare 500 of our Wisconsin grown trees with a similar lot of an Eastern Nursery. At the end of the season only 52 per cent of the eastern grown stock was alive, while 95 per cent of ours lived and grew. Moral: buy home grown stock and avoid loss. Our trees are **HARDY**, and our stock is **HEALTHY**. A comparison will prove that our stock has not the willowy and watery soft growth of southern or eastern grown stock.

Every tree and shrub is packed entirely under cover, free from exposure to sun and wind.

Great Northern Nursery Company, Baraboo, Wis.

Write for Catalogue and Price - List.

THE FARM ORCHARD

H. C. MELCHER.

In his letter assigning me a place on the program of this meeting, Secretary Cranefield said I was expected to plant and care for an orchard of two dozen trees to supply the farmer's family with apples *with none to sell*. To keep well within the question I think I will resign at the end of five years for I cannot imagine the family this side of Salt Lake City that could profitably use the product of these same trees after they reach maturity.

In times past it was often necessary to spend some time in meetings of this kind to try to prove that Wisconsin could raise apples at all, but after the showing of the past year we think that question is forever eliminated and will never be shot at us again. The commercial orchardist is taking advantage of the knowledge gained and there are being more large orchards planted in Wisconsin than ever before, and why should not the farmer also take advantage of the situation and profit by it?

The subject is "The Farm Orchard"—an old subject—one that has been discussed so often that we feel our inability to present anything new, but we remember that the Gospel has been preached for nearly two thousand years and there are still sinners in the world. The evangelist that comes to your town does not come with a new story but it is the same old story told perhaps in a little different way that finally compels you to "come across" and so, if what I have to say will induce someone that has no orchard to start one, or cause another one to add to his, I shall feel that my effort has not been in vain.

In locating the orchard the farmer is at a disadvantage. It must of necessity adjoin the home grounds. He may have an ideal spot in a remote part of the farm but his two dozen trees would be at the mercy of trespassers and would not receive many of the little attentions that would be given it when close by. It is very often possible to have the orchard simply an extension of a well kept lawn. Wherever I have noticed the effect has been very pleasing.

If there is one mistake more common than any other in the farmers' orchard it is that of too close planting and this in spite of all the advice given on the subject. Twenty-four feet each way seems like a long distance for the young trees but you can still cultivate and raise crops for the first five years and by that time they will not seem to be so close together and you can afford to let them have full possession.

I have in mind an orchard just across the street from my home, formerly owned by my father. He was a great lover of trees, also an agent for nursery stock and always did his own delivering. At the close of each season all surplus stock was planted in his limited grounds. It was so closely planted that cultivation was never possible. In this orchard were many of the early bearing varieties and for a few years bore good crops. This orchard is on a much traveled highway and was always pointed out as an object lesson in favor of close planting and was largely copied. It is now twenty years old, and although many of the trees have been cut out, it has been unprofitable since it was twelve years of age.

I have seen only this last year new orchards started with trees but sixteen feet apart, or worse still, have seen young trees planted between older trees that were already too close together. The farmer is very often an easy-mark for the persistent fruit tree agent and will often give a small order to get rid of him and think no more of it until the trees are delivered when he will take his spade in one hand and his trees in the other, will hunt for a place where they will be least in the way and never give them another thought. That farmer's two dozen trees will never supply his family with apples.

In selecting varieties the farmer has the utmost latitude. Commercial growers usually grow what the public demands, or try to create a demand for what they grow. The farmer can grow many choice varieties that are not usually considered profitable but they add variety and sometimes help to lengthen out the apple season.

Do not make the mistake of plant-

JEWELL MINNESOTA GROWN Nursery Stock

Complete assortment of Fruit and Ornamental stock in all varieties suited to northern culture. A specialty of Hardy Shade Trees, Windbreak Stock, Evergreens (Coniferous), Deciduous Shrubs, Apples and Native Plums.

THE JEWELL NURSERY CO.
LAKE CITY, MINN.

1500 Acres

Established 1868

FIRST CLASS NURSERY STOCK IN GREAT VARIETY

Consisting of

FRUIT, SHADE AND ORNAMENTAL TREES

Strawberries, Raspberries, Blackberries, Currants, Gooseberries, Grape Vines, Asparagus, Rhubarb, etc.

Ornamental and Flowering Shrubs, Vines and Perennials. Roses, Evergreens, etc.

If you would like to see a *really good Catalogue* we would be glad to send you ours. It has more than fifty pages and describes everything in the plainest language without any extravagant or overdrawn descriptions.

The Coe, Converse & Edwards Co.
FORT ATKINSON, WISCONSIN
Wisconsin's Largest Nursery

ing too many varieties. Remember we are not raising apples to sell. If you are living up to your privilege you also have small fruits on your farm. You have passed through the strawberry and raspberry season and there are still blackberries to be had when the first apples are ready. You are not so fruit hungry as you will be at almost any other time of the year, so for that reason we would not have more than four of the two dozen early varieties, and I would have as many different kinds. We all know the Duchess is the leading early apple but no family wants four Duchess trees. Other good ones are Yellow Transparent, Tetofski and Red Astrachan.

The gap between summer and early winter can be profitably filled in with Wealthy, Longfield and McMahan. If you plant two of each kind they will furnish more apples than you can use but you may want to make some cider and Longfield and Wealthy are excellent for that. You will also want a couple of crab trees and I would recommend Whitney No. 20 and Sweet Russett. They are good to eat, excellent for pickling but worthless for jelly. Never plant a Transcendent unless you can plant it by itself in an isolated place for it will surely blight and carry the trouble to all of its neighbors.

This will leave twelve trees for the winter apples. They are not as a rule as productive as the earlier kinds and besides we expect them to take us over a longer period of time.

For early winter we have Fameuse, a general favorite, and no home orchard is complete without it. While it lasts we do not care about anything else.

Seek-no-further, Newell and Tolman Sweet are also entitled to a place. The Northwestern Greening never was a favorite of mine but it is still "fashionable" and perhaps you had better have a tree or two of it. You can also plant Ben Davis with the assurance that it will live and bear you good crops but remember once more that we are not raising apples for sale.

Grimes Golden is a winter apple of high quality that should have a place in every orchard. Grown in

ARSENATE OF LEAD, LIME— SULPHUR SOLUTION

Fully Comply with most rigid requirements of Insecticide Act of 1910



Grasselli Arsenate of Lead is being successfully used to destroy all leaf-eating insects, such as Codling Moth, Potato Beetle, Curculio, etc.

The Grand Sweepstake prize of \$1000 for the best carload of apples shown at the National Apple Show, Spokane, Washington, has been won by users of Grasselli Arsenate of Lead for the last three years.

Grasselli Lime Sulphur Solution is the Standard remedy for San Jose Scale. It has also come into prominence as a summer spray to replace Bordeaux Mixture.

For Further Information Write

The Grasselli Chemical Company,

The Grasselli Chemical Company, Established 1839

Milwaukee, Wis.

Main Office Cleveland, Ohio



THE HARDIE SPRAYERS

Hand and Power Outfits

The Hardie Sprayer is built by a practical fruit grower for fruit growers and by a man who knows how to build sprayers.

Parts coming in contact with spraying fluid made of hard metal brass and cannot wear out.

The Hardie Sprayer is the Sprayer that will work when you want it to work and will do your spraying right. The Hardie Pump is guaranteed.

Write now for prices and catalog. We can give you the best material, prices consistent with quality on Arsenate of Lead, Sulphur Lime, Bordeaux, Bordo-

Lead, Powdered Arsenate of Lead, Scale Killer, Sulfur. We have a complete line. Do not delay. Send for booklets and prices.

M. ROHLINGER & SON

523 CASS STREET

MILWAUKEE,

- - - - -

WISCONSIN

Wisconsin it is a much longer keeper than when grown further south, and will keep well into March. You can see samples of this variety at this meeting that in type, size, color and quality are the equal of those grown anywhere.

We will now assume that you have planted these two dozen trees and cared for them to the best of your ability, that you have cropped the land rationally and not at the expense of the trees. We will pass over the intervening years and take a look at it at the end of five years. If you have given the trees a "square deal" you have had some apples and you have learned how much more satisfactory they are than the same kinds taken from the purchased barrel. But is that all you have learned? If you have been at all observing you have learned many things. In the beginning the trees all looked alike to you, but as they have developed you have noticed some one thing that is peculiar to each variety and you find that you can go into a strange orchard, even before fruiting, and name the varieties almost as unerringly as the experienced stockman can separate the different breeds. You have also noticed that one variety unaided will grow into a perfectly symmetrical tree while another with the same environment, like a wayward child, will need almost constant correcting to keep it within bounds.

If your orchard is on the highway the passerby has often stopped to compliment you or ask your advice and you can see the necessity of posting up on these questions and in this way you are educating yourself. But beyond all this you have seen how it has added beauty to your farm and incidentally has added value. We believe by this time you are so much interested that you will not stop with the two dozen trees, but, like the collector of antique furniture or rare cions of a promising seedling. An see or hear about. I have heard a story told of our A. J. Phillips, and I can easily believe it, that he once travelled fifty miles to secure a few cions of a promising seedling. An outsider would call him a crank, but to us he is an enthusiastic Horticulturist.

We think some of this spirit was born in him. We also believe much came to him through cultivation and be just can't help doing such things.

We believe the farm orchard, more than any other one thing, is responsible for the "Back to the Land" movement that is so strong at the present time, and we are sure you are not looking forward with so much pleasure to the time when you expected to sell out and move to the city, and this couplet from Goldsmith comes to you with its full meaning:

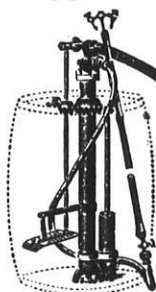
"How blest is he who crowns in shades
like these
A youth of labor with an age of ease."

You have suddenly discovered that you are in love with your farm and would not part with it at any price.

But this "Back to the Land" movement is not new. It is as old as the hills. Let us quote once more from Goldsmith; after travelling over most of the civilized world and having partaken of most of its pleasures, the time came when he longed once more for the rural scenes of early life. Listen to what he says:

"In all my wanderings 'round this world
of care,
In all my griefs—and God has given my
share—
I still had hopes my latest hours to crown
And in these humble bowers to lay me
down;
To husband out life's taper to a close
And keep the flame from wasting by
repose.
And as the hare, when hounds and horns
pursue,
Pants to the place from whence at first
it flew,
I still had hopes my long vexations past,
Here to return, and die at home at last."

Bigger Fruit Profits



Here is a spray pump invented by fruit growers. It was our endeavor to secure the best spray pump to use on our 300 acre fruit farm that produced the

ECLIPSE SPRAY PUMP

It overcomes every defect found in other makes—it has proved itself best in actual work. Put an Eclipse to work on your trees and earn bigger profits. Write for our fully illustrated catalogue. It tells why you should spray—and why you should do it with an Eclipse. It's free

Write to-day

MORRILL & MORLEY MFG. CO., Benton Harbor, Mich.

STRAWBERRY PLANTS

100,000 choice Strawberry Plants. Also Red and Black Raspberry, Asparagus and Rhubarb roots.

These plants will not be dug more than twenty-four hours before shipping. All stock guaranteed. Hot bed plants in season. Write for prices.

**RASMUSSEN'S
FRUIT FARM**
OSHKOSH, - WISCONSIN

Fruit Trees Fruit Plants Ornamental Shrubs

From the North

Send us your list of wants
First class stock at honest prices
Address

The Cascade Nursery
Osceola, Wis.

KNOX NURSERIES

(Established in 1851)

Make a specialty of **Cherry Trees**. They strongly recommend **One Year Cherry Trees** because they are stocky, well headed, well rooted thrifty and vigorous. Plenty of **Two Year** for those who prefer the larger trees. They also have a nice lot of Apple in northern sorts.

A trial order will convince
any one of their quality.

H. M. SIMPSON & SONS
Vincennes, Indiana.

Choice Strawberry Plants

Grown By Up-to-Date Methods

Senator Dunlap, Per. and Warfield, Imp., 50,000 each. Also Steven's Late Champion, Per.; Aroma, Per.; Bubach, Imp.; Haverland, Imp.; Orem, Per.; Climax, Per.; Excelsior, Per.; St. Louis, (early) Per.; Oregon Iron Clad, Per.; President, Imp. and Midnight, Imp.
Price 60c per 100, \$3.50 per 1000.
By mail 15c per 100 extra.
Black Beauty, Imp. and Grand Marie, Per. \$3.00 per 100, Fig type.

Plants Will Not be Dug More Than 24 Hours Before Shipping

Irwin Fruit Farm
Lancaster, Wisconsin

SEND 15c FOR A PACKAGE OF

TOOLE'S GIANT PRIZE

PANSY SEED

We will include a copy of Toole's Guide to Pansy Culture and Catalogue of Flower Seeds and Plants

WILLIAM TOOLE & SONS
PANSY HEIGHTS
BARABOO, WIS.

THE HAWKS NURSERY CO.

are in a position to furnish high grade Nursery Stock of all kinds and varieties suitable to Wisconsin and other northern districts.

Will be glad to figure on your wants either in large or small quantities.

WAUWATOSA, WISCONSIN

Kellogg's Nursery

Oldest Nursery in Wisconsin

Our stock is grown right, dug right, packed right, and by no means least, the

PRICES ARE RIGHT

Our Specialties are Small Fruits and Fruit Trees

Apples singly or by the 1000.
Currants by the doz. or 25,000.
Strawberries by doz. or 500,000.

FIFTY-EIGHTH YEAR

Get our price list before you place your order and save money.

Address Box 77
KELLOGG'S NURSERY
Janesville, Wisconsin

McKay Nursery Company

PARDEEVILLE, WIS.

Offer a Complete line of

HARDY NURSERY STOCK

FOR SPRING 1912

If interested in planting FRUIT TREES, SMALL FRUITS or ORNAMENTALS, write us for CATALOGUE and PRICES. You will find our prices consistent with quality of stock offered.

**NURSERIES AT
WATERLOO, WISCONSIN**

WISCONSIN NURSERIES

Grow and handle all kinds of nursery stock. We employ no agents but sell direct. If in the market you can save money by buying of us. Get our prices.

WISCONSIN NURSERIES,
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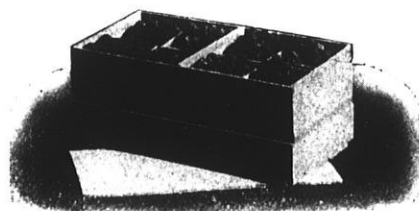
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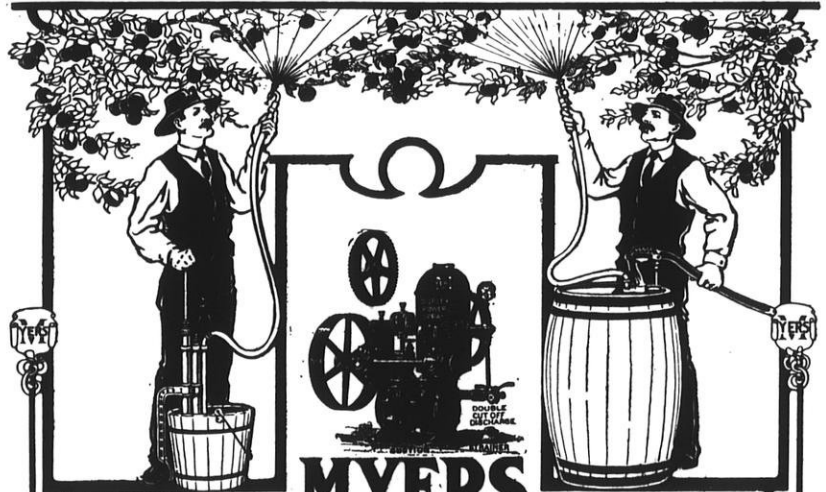
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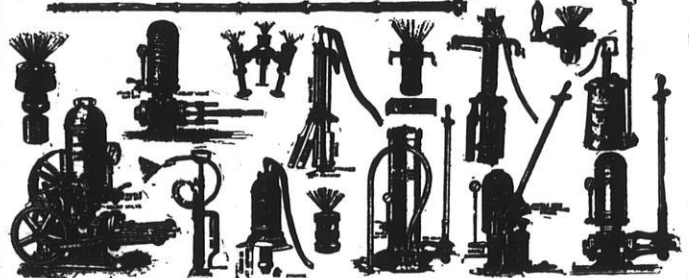


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Volume II

Madison, Wisconsin, June, 1912

Number 10

WILD FLOWERS

Being a treatise, more or less authentic, on the phanerogamous plants of Wisconsin, their habitat, analogies and homologies, with particular reference to the orders Ranunculaceae, Liliaceae and Orchidaceae.

Yesterday I met Art Gillen for the first time in years and naturally the talk turned to old times, something like forty years ago. We talked about the old school house on the hill, the rail fence just exactly six feet from the south windows and the chipmunks that scampered along the top rail or chattered at us through the open window and *dared* us to come after them; about the poplar trees whereon we carved our names, "mine the highest," but most of all of the wild flowers of those good old days. Strange that into two old grizzled heads should come thoughts of wild flowers but no doubt it was the florist's window that did it.

Somehow these greenhouse blooms seem but cheap imitations of flowers to one who has sought and found the choicest of Wisconsin wild flowers in their homes. We were great chums in those days and any wood or field unexplored by us was certainly not worth much.

Seems to me now as if it must have been a sort of heathen neighborhood for no one seemed to know even a common name for any of the wild

flowers and we were obliged to name them ourselves.

The Wind Flower grew best on the big hill near the railroad cut, and the Trilliums,—do you remember the day we first found the Trilliums over in the Haskell woods? Acres and acres

It was in May we found the Trillium woods, but many belated "Robins" lingered in June when we went for yellow Lady Slipper.

Can you remember the times when we went after the cows, across the creek, through the long grass? Bare-



Trillium grandiflorum,—large white trillium or Wake Robin. Common in Wisconsin; May and June; bears transplanting well. Photo by Mary K. Meeker, Minneapolis, Minn.

of them, and we called them May lilies! No matter, they were beautiful and we knew *that*, if we didn't know the name, "Wake Robin."

Nearly as plentiful was the Columbine that we called "Honeysuckle."

footed and with bare legs, too, we always waded through the bog where the long grass grew because the water at its roots was cool and oozed between our toes in the most delicious way; remember it Art? There is

where the fringed Gentian grew in clumps. We didn't know then they were Gentians, but picked them just the same. That was some time ago and I always wonder when I see a picture of Gentians, if boys and girls still gather them in the old pasture, or are they all "nature study" children now.

down the slope, in that little patch of woods on the old McFadden farm, where there seemed to be nothing but brakes and "fountain ferns," when right before me there on a little "island" of moss, stood a clump of that queen of all the wild flowers, *Cypripedium Spectabile*, the Showy Lady Slipper. I didn't know the

greeted me that afternoon in June down the hill in McFadden's woods.

Of course, if you insist, I will tell you all I know about the people we knew then, about Josie that we called "Juicy," and the other Art, alias "Fat Goose," and many, many other things, but mostly my mind runs on wild flowers today because, perhaps, of the weather, or because I ought to write something about our wild flowers for the paper. It really ought to be something learned, scientific, real "nature study" dope, because boys and girls these days seem to be fed on scientific pap from their very infancy and never to run wild in the woods as we did, just simply gathering wild flowers. If I ever get around to write that wild flower dope, it will bristle with botany and Latin, but you will never in the world recognize our old friends therein.

WANTS TO KNOW

Things horticultural are not opening up well here this spring. There will be a very light apple bloom, and many of the half-hardy kinds show considerable winter killing. Cherries also are showing the effects of the dry summer and cold winter.

The strawberry outlook from the same cause is discouraging, as every one failed to get a good stand of plants. Other small fruits seem to be in normal condition.

Many people will be interested in the report of the income of Mr. Rasmussen's twenty-acre farm, but the report is incomplete. The next time you see "Nick" just ask him what it cost to produce that \$4,300. There are items in that report that will interest many of us. For instance, the dairyman would like to know if he sold cream and butter on the open market, or if he sold milk by the quart. If the latter, not many of us can "go and do likewise," because we are not so favorably situated. The strawberry grower would like to know if his income was principally from fruit or plants; if the latter, but comparatively few of us can pursue that line for an acre of plants will supply several counties. We know Mr. Rasmussen has all this information and he is willing to impart it to others.

H. C. MELCHER.



Cypripedium spectabile, Showy Lady's Slipper. "In southern Wisconsin I have found it as early as June 23. It is well worthy of its name. Its stem wrapped in pale green, downy leaves is two feet high or more. The sepals and petals are snowy white, and overhang the lip. The lip is wide in proportion to its length and of a waxy, much firmer texture than the other *Cypripediums*, and keeps fresh much longer when picked. It is of a beautiful rosy pink with broad pink stripes inside. There are on each stem two or three flowers, which have a most delightful fragrance."—Alletta F. Dean in "The Wisconsin Orchids" Annual Report 1905. Photo by Mary K. Meeker.

We found the bottle Gentian, too, but paid little heed to these; we were always waiting for them to open. Many a time I have watched the bumblebee search in vain for an opening and finally whirl away in disgust. It really was a no account flower that was always so late in opening, but the color was heavenly blue.

You didn't go along the day I found the Pink Lady Slippers. Just by chance I wandered a little farther

Latin name that day, nor cared to know, only stood spellbound for a time, afraid, almost, to break those stout stems crowned with the most beautiful flowers I had even seen. I have seen them all since then, Art, or most of them, the strange, straggly, butterfly things from Brazil and India, trying to grow on blocks of wood in hot-houses, orchids from every land, but none compare with the clump of pink Lady Slipper that

GROWING OF STRAWBERRIES

Paper read at the meeting of the West Beaver Creek Progressive Farmers' Club, May 3, 1911, by C. L. Wood.

I am well aware that most of you, perhaps all of you, know as much or more about strawberry growing as I do, so that if I should attempt to instruct you it would seem a good deal like teaching a duck to swim or a Leghorn pullet to fly. Keeping this in mind you will not be expected to swallow any more of what follows than seemeth good to you; and you will no doubt keep on growing strawberries in the good old-fashioned way notwithstanding my most earnest effort to show you how to grow strawberries commercially, which I am billed to do.

In the first place, to grow strawberries commercially—or any other crop for that matter—it is only necessary to raise more than you and your family, including your poor relations, will be able to consume, so as to have some to sell. This is sometimes difficult to accomplish. At other times it may be done without much trouble. But you will have to begin at the beginning, do your planting more than a year before you harvest a crop.

When you begin to think about planting don't consult the almanac. Of course we all know that there are dozens of men who never plant *anything* without consulting the almanac, but my advice to you is, don't do it. You want to forget all about the moon, for generally speaking—at least nine times out of ten—you will have better success with strawberries if you plant them in the ground in the spring of the year. If your ground is rich and in good tilth so much the better. It would have done no harm had it been well manured and plowed the fall before, to be pulverized with the disk in the spring. Or, if not too coarse and strawy, the manure might be applied in the spring and worked in with the disk.

When you get ready to plant, don't plant broadcast. Strawberries look better in rows and will grow and fruit just as well. If you are fond of hoeing, or if you are willing to

pay out good money to other men to hoe for you, rows one way will do. But rows both ways will cut your hoe-bill at least one-half. Afraid you won't get plants enough? If your ground is in good condition, if your plants are alive when set, and if weather conditions are only half favorable you will have all the plants you need. But there are three big ifs, you say. So there are, but the same ifs stand in the way of success with any other method. With your berries in rows both ways you can keep them clean with but very little hoeing up to the first of July, or near that time. Cultivate frequently.

Strawberries in our climate will usually stand the winter without protection, but a mulch of marsh hay, straw or coarse manure will be no detriment. When spring approaches remove the mulch, or at least a part of it. Do this some time between the first of January and the 20th of June. You may hit it just right.

After that you have nothing to do for several weeks but to sit on the fence and watch the berries grow. They will ripen some time in June probably, and will then have to be picked. Right here is where the funny part comes in, and there are various ways of proceeding at this interesting juncture. One is to stand on your feet and stoop down after the berries till all the blood in your body seems to be in your head and your backache is horrible, simply indescribable. Another is to get down on the ground and hunch along between the rows till you get so cramped and stiff that getting up seems like an absolute impossibility. Some prefer one way and some the other, but whichever method you adopt you no doubt will wish you had chosen the other and make the change.

However, after some work and a heap of torture you will manage to get them picked, one way or another, and of course will immediately turn them over to the Sparta Fruit Growers' Association to sell for you. They would just as soon sell strawberries in the dark of the moon in June as to retail timothy hay and red dog in the winter time. More than that, they will actually turn over to the

grower a part of the proceeds. What more could you ask?

GREGG NOT HARDY NORTH

I noticed in the Horticulturist the question, "which is the best Black-raspberry to plant in Wisconsin," and the answer was "the Gregg." Now, this is a mistaken and misleading answer as the locality should be given. I have lived up here at Antigo since 1888 and have grown all kinds of fruit trees, berry bushes and shrubbery. Up here the Gregg will kill to the ground without protection, and will kill badly where protected. All of the fruit you get from them, you will have to dig in the ground to find and you know that would not be a very paying crop. I have tested all kinds of Black Raspberries and the only one that will stand the winters in Langlade county is the Cumberland Black. They are a very strong grower and on good soil will grow canes 5 to 12 feet high. In my garden I picked berries from bushes from 4 to 7 feet high without any protection. I just let them grow and do not cut them back in order that people can see for themselves how hardy they are. Every year I have to use a step ladder to pick the top branches. The crop is heavy and is an-all-around-number-one berry and the Cumberland Purple is as hardy and yields a good crop of fine flavored and good shaped berries.

My son, W. H. Marsh, has tried all kinds here. Years ago he tried all kinds of Black. He put out one acre and they all killed to the ground every winter, so he plowed them under. When the Cumberland came into existence he tried them. One year ago last spring he set out 2,000 Cumberland Blacks and last year he got a good crop of as fine large Blackraspberries as ever grew.

I have been in the fruit business all of my life, lived in Wisconsin since 1840 and my age is 74 years. Fruit that I recommend I have given a thorough test, so I don't get my experience from the papers.

H. F. MARSH, ANTIGO.

Cultivate the orchard at least three times during June and spray twice.

Gardens

A department conducted by practical women who really have gardens. Contributions are solicited. The editorial staff consists of all who contribute an article each month. If you know about flowers, home making or home keeping, write it down. The next best help is to ask questions. Send all contributions and questions to this office.

THE TARDY GARDENER

TO PEOPLE WHO HAVE RECENTLY MOVED.

To those who have so recently completed a new home, that everything about it in the latter part of May or even early part of June is in the raw yellow clay stage, the question of a garden for the summer seems well nigh hopeless. But if the work is undertaken in the spirit of making the best of a bad bargain, much can be done, not merely for immediate results, but for future permanent effects. Sifted coal ashes and barnyard manure mixed in liberal quantities in the clay will produce the necessary fertility and texture where one cannot afford to pay for the more desirable good black loam and leaf mold at one or two dollars a load. Prepare the borders by spading in both ashes and manure and level carefully, then sow quantities of seed (that is, three or four times as much as under normal conditions) of sunflowers where shade is needed, African marigolds, nasturtiums, zinnias, sweet alyssum, mignonette, bachelor's buttons, then water systematically. It is also advisable to scatter a few handfuls of good artificial fertilizer on the soil around the plants after they have come up.

Then in a carefully prepared seed-bed, so arranged that it can be kept covered with cheesecloth screens, sow the seeds of the perennials for the following year. A good selection is larkspur, hollyhocks, canterbury bells, gaillardia maxima, coreopsis, grass pinks, Scotch pinks, Oriental poppies. The soil must be good and fine and should be composed of rich loam, well rotted manure and sand. Sow the seeds, sprinkle carefully, cover first with a newspaper until germinated, and then

with a cheesecloth screen raised from six inches to a foot higher. Keep well sprinkled until seedlings are large enough to transplant and then place in permanent situations by the middle of August or first of September; to transplant later is rather uncertain. In transplanting, puddle each plant and shade for several days.

daisies, asters, phlox, marguerite carnations and salvia can be had at reasonable prices.

A strong incentive to make a tardy garden lies in the fact that the cultivation of the new soil attending the effort is the best preparation for a successful garden the following year.

B. H.



Gentiana Andrewsii: Closed or Bottle Gentian; common but retiring and hidden from all but true lovers of wild flowers. Photo by Mary K. Meeker.

Oriental poppies are so extremely difficult to transplant successfully, that they will be treated separately.

It is well to plan for the next year in planting perennials and shrubs for space for growth as they mature and fill in the border with annuals like baby's breath, bachelor buttons, marigold, cocksia, zinnias and castor beans (which should be started in the house in March), and four o'clocks. Where one can buy plants at the greenhouse, the filling of the new ground becomes more easy, as pansies, geraniums,

ORIENTAL POPPIES.

Oriental poppies are so extremely difficult to transplant successfully that the following plan, which worked well for the writer, is offered to others. For some weeks before planting time, egg shells from the kitchen cooking, orange skins or lemon skins, from which when cut in half the pulp had been scraped, were carefully saved, then filled with good soil and set in a box of sand. In each one was dropped a few poppy seeds. When the plants were about an inch high,

the egg shell or orange skin itself was transplanted without disturbing the seedlings. As the seedling grew the shell or skin decayed and the plant's roots were free to spread out. B. H.

SPIREAE FILIPENDULA.

This beautiful little perennial is so little known that one who loves it longs to bring it to the notice of all flower lovers. From a small rosette of finely pinnate fern-like leaves the strong slender brown stems rise bearing a cluster of tiny rose-like blossoms, so as to closely resemble a heavy white ostrich plume. The little plant is hardy in Wisconsin with slight protection and is propagated by root division. Some of the well known eastern seedsmen list it in the plant catalogues. The Turville Brothers, at their Lakeside farm, near Madison, have a number of fine plants which make a beautiful showing in June and July. B. H.

THE SECOND CROP VEGETABLES.

It will be time when this number reaches its readers to prepare for the second planting of vegetables. The peas will be gone, so plant late cabbage plants between the rows. They will spread when the peas are out of the way.

In place of the early lettuce run a furrow three or four inches deep; fill it with water and let that soak away; then plant Early Valentine string beans, eyes down, and fill in with the dry earth. Plant the Cos lettuces for the mid-summer eating, and on hot days shade the row with the cheesecloth screen described in the Horticultural Society Reports, 1910.

Early beets and early carrots and early turnips may be planted at this time and gathered in September and October. B. H.

The City Garden Society of Madison has begun actual work. Vacant lots were secured by the society and plowed by the courtesy of the Park and Pleasure Drive Association. Arrangements were made with the Olds Seed Company of Madison, whereby assortments of seeds are furnished at a low price, sufficient in quantity to

plant a plot of 60x60 feet. One patrol of Boy Scouts took several plots, and a number of families have taken others. Every plot is required to grow an assortment of vegetables.

Supervision of the gardens and gardeners is in the hands of students of the extension department of the University working under Professor Hatch. The greatest obstacles in the practical working of the scheme so far have been two: first, that most of the lots offered were covered with such heavy sod as to make them practically unusable prepared so late in the season; the second, that many lots offered were unavailable because so far from the homes of the workers. B. H.

TRELLIS THE GARDEN PEAS.

The larger varieties of peas should be trellised up on chicken wire stapled to stout stakes driven firmly in the ground. The peas will yield better, will not mould and the work of gathering will be minimized. The dwarf varieties may be left to trail on the ground, or if brush are convenient, a few stuck along the row helps keep them out of the dirt.

Mrs. L. H. P.

PANSIES.

Pansies should have a rich, mellow soil, and be somewhat sheltered from the intense heat of the sun. They should be kept moist, and the soil should be stirred frequently in the course of the day, thus conserving moisture and keeping down the weeds. Pick off all old blossoms and don't allow too many buds to open at one time if you wish large flowers.

Mrs. L. H. P.

FIRST RADISHES, THEN CELERY.

April weather has reached a long way into May and has been a severe test to the germinating strength of seed, but as in old-time warfare, the strong has survived, and we will have garden "sass" after a while. Early celery can follow after radishes and lettuce, and when ready to blanch, draw the leaves and stalks close together and slip a three-inch tile down over them, pressing the tile slightly

into the soil to shut out the under air current. When tile is not convenient, wrap a number of folds of paper about the plants and tie a cord about them. The celery will blanch beautifully and be cleaner.

Mrs. L. H. P.

SIX FEET OR MORE.

Sweet peas should be trellised up on coarse meshed chicken wire fastened to stout stakes driven into the ground. The peas will weave through the meshes and form a beautiful hedge. Keep the old blossoms cut off and thus prolong the period of bloom of these dainty, fragrant flowers.

Mrs. L. H. P.

MULCH BUSH FRUITS.

Bush fruits after being tied up and worked out should receive a heavy mulch of old leaves, coarse straw or shredded corn stalks, to help retain the moisture at fruiting time and also smother the weeds.

Mrs. L. H. P.

BIG CHERRY PROFITS—FOR OHIO

In the February number of Green's Fruit Grower an account is given of the crop from 530 Ohio cherry trees. The record shows 530 twenty-four quart crates which sold for \$1,060. The bulk of the crop was shipped to the large cities and sold on commission. "The crop was so heavy here that it was almost impossible to get pickers. All growers were forced to pay two cents a quart, and even at that it took us four long weeks to get our crop off the trees."

The cost per crate is figured as follows:

Picking	\$0.48
Crate25
Express20
Commission20
Total	\$1.13

Deducting \$598.00 total cost we have a net return of \$461.00 or less than \$100.00 per acre or less than \$1.00 per tree. How does this compare with Sturgeon Bay?

Plenty of time yet to plant seeds of annuals in the flower garden.

Reviews

Under this head will be found the best from horticultural papers and experiment station bulletins; not merely scraps of information but the live topics of the period put in readable and attractive shape. The work is done by students in the agricultural college school of journalism, under the direction of Prof. J. Y. Beaty, Mr. R. E. Hodges editor. We hope to make this a permanent feature. Price of Wisconsin Horticulture, one dollar, including membership, etc., etc.

INVESTIGATE BEFORE INVESTING IN PROPOSED ORCHARDS

Alarm is felt by some orchard men when thinking of the large new plantings in Wisconsin. They remember certain slumps in certain fruit markets and they fear overproduction, because of the rapid increase of commercial fruit growing.

We firmly believe that the slumps in the market are due, not to overproduction, but to poor distribution. Last fall there were apple-hungry communities not many hundred miles from markets where apples dragged at fifty cents per barrel. Wisconsin's population is going to increase. Farm orchards would be unable to supply the demand. Commercial plantings will prove profitable. But there are business schemes in fruit development as in other lines. *Investigate before investing.* As the Purdue Experiment Station puts it, "The danger lies in the *exploitation* rather than in the *development* of fruit growing; in the sale of stock in *speculative schemes* rather than in the sale of apples to consumers or of apple lands to apple growers."

HILL CULTURE FOR STRAWBERRIES

Hill culture produces strawberries averaging a day and a half earlier than the matted row system, but the yield in most cases is only three-eighths as much per foot, as shown by tests of a dozen varieties at the Ohio Experiment Station. On the other hand, the Northwestern Horticulturist reports a paper read before the Washington Horticultural Society by Chap Bayes, who tells of selling \$500.00 worth of berries per acre in hill culture at a cost for production and marketing of \$250.00, on land just cleared of fir and cedar forest. Until

four years ago he used matted rows. Now he is "satisfied beyond a doubt," after four years' use of the hill system, that it is better than the matted row. His plants are two feet apart in the row; fruit buds are pinched off the first year by boys, and the runners cut, and "you can almost see them grow. Cultivation is the secret of success in growing strawberries. It takes less time to cultivate and clean out the hills four times, by going over them every seven or eight days, than it does to clean out once after allowing the grass and weeds to grow three or four weeks."

DAMPING-OFF EASILY PREVENTED

Damping-off of celery, cabbage and cauliflower plants in flats, does not seem to be a disease, and can easily be prevented. The Market Growers' Journal reports the experience of a man who formerly lost thousands of small plants, but now has no trouble with damping-off. He regards it as ordinary decay caused by too much dampness around the young stalk. In planting the seed, he uses a board with a handle on the upper flat surface and narrow square cleats lengthwise of the under surface. When pressed down on the soil, this leaves it firm and flat with channels in which to sow the seed. He covers the seed up to level, with sharp, fine sand. This allows the water to drain away from the stalks quickly and prevents the trouble.

POINTS IN BUYING A SPRAY OUTFIT

Ninety per cent perfect fruit may be had by spraying the trees. But slack work doesn't count for much. You must spray at the right times, with the right materials, and reach every part of the tree that may be infested with worms, moths or fungus diseases. In order to do this, an efficient spray outfit is necessary. In buying such an outfit, there are five points to bear in mind, besides getting one proportionate to the size of the orchard. A barrel pump is satisfactory for less than five acres. Purdue Experiment Station Circular 34 enumerates them thus:

1. The pump should develop 85 to 200 pounds pressure without over-

working the operator, should have a large air chamber, and easily accessible valves, and be made of durable material.

2. An agitator that will keep the mixture well stirred.

3. About 35 feet of hose, four or seven ply, according to the pressure developed, about a half-inch in diameter, and fitted with proper bands and clamps. For large trees, another lead of 25 feet is needed for use from a tower to be built on the wagon.

4. Bamboo extension rod lined with brass or aluminum, or a quarter-inch gas pipe 12 feet long, equipped with leakless stop cocks.

5. Nozzles that will *spray*, not *sprinkle*.

CANE FRUITS IN BUSH FORM

"To insure currants and gooseberries against the borer, and to renew the fruit-bearing wood, they must be trained in bush form," says the Market Growers' Journal. When handled in this way, new shoots spring from the roots to replace those killed by borers and those that are too old to bear well. The new shoots, if clipped at convenient height to stop terminal growth, will send out side branches and increase the new fruit-bearing wood, so that unprofitable canes may be destroyed.

NOT ALFALFA

"Alfalfa should not be planted in the orchard," says Green's Fruit Grower. "It is a perennial plant, sending its roots deep into the soil, taking moisture and nourishment from the trees."

This is borne out by a bulletin of the Wisconsin Experiment Station, showing a caved-off bank in which roots of one-year old alfalfa have gone over two feet deep. With such a root system, alfalfa makes cultivation difficult.

The annual legumes, as cowpeas, soybeans, or Canada peas, are much better. They may be sown in the summer, allowing cultivation in the early part of the season when the trees are blossoming. After frost, they make an excellent cover to prevent alternate freezing and thawing through the winter.

FRUIT PROSPECTS

Reply postal cards were mailed to exactly one hundred members on May 21, asking for reports on crop as indicated by bloom and effects of winter. Up to date, May 27, only forty-four replies have been received from thirty-eight counties.

Summarizing these reports it may be said that apples will be a very light crop as indicated by bloom and winter-killing of many half-hardy varieties.

Only one county, Richland, reports full bloom and no winter injury to apples. Sauk county reports are conflicting, but show half crop or more and no winter injury.

Three reports from Door county indicate full crop of cherries, no injury to buds; apples one-half to two-thirds crop; Japanese plum buds all killed but trees O. K.

Bayfield reports encouraging, but too early to judge fairly.

The only reports, with one exception, showing severe injury to trees and plants come from the southeastern part of the state, Racine, Kenosha, Milwaukee and Walworth counties. The exception is western La Crosse county.

It is safe to say that apples will be less than one-half crop, native plums full crop, cherries full crop, Jap. plums none.

SMALL FRUITS.

Strawberry bloom heavy and prospects bright for bumper crop but acreage reduced one-third to one-half in many places on account of weather conditions last summer.

Raspberries, blackberries and grapes wintered well when covered but killed to the roots where left standing; a good lesson.

ORNAMENTAL PLANTS.

We find this spring a general clean-up of half-hardy shrubs and perennials, something badly needed. Following a few mild winters we are tempted to experiment with attractive sorts that do not belong in Wisconsin and an old fashioned winter is needed occasionally to put us back in our proper place. Some interesting and valuable reports on ornamental plants have been received and will be given next month.

Here follows a word or two from the reports:

"I did not have an apple tree killed or injured nor fruit buds injured in any way. Such varieties as Jonathan, Ben Davis, Grimes' Golden O. K."

Bayfield County. WM. KNIGHT.

"It will surely be June 1 before apple trees are in full bloom. We do not expect to begin picking strawberries before July 1. Outlook bright for a big crop of all fruits."

Bayfield County. O. FLANDERS.

Gregg and Kansas more than Older and Cumberland. Cuthbert killed three-fourths down; Miller hurt some; King least of all." M. S. KELLOGG.
Rock County.

"Apples and pears taking the rest cure. Cherries and strawberries excellent." W. P. MCGOVERN.
Ozaukee County.

"Peach trees dead. Lost nine acres of alfalfa. Roses dead to the ground. Ornamental shrubs badly injured." Racine County. B. R. BONES.



Cypripedium pubescens (Larger Yellow Lady's Slipper). "The two yellow Lady's Slippers—the large (*C. pubescens*), and the small (*C. parviflorum*), bloom about the same time. They are the most common of the large orchids in this region. The two are much alike. The smaller flower is quite fragrant, while the larger one is nearly odorless, and more solitary in its habits. The small one often grows in groups."—Alletta F. Dean. Photo by Mary K. Meeker.

"I do not know what the old sages who predicted the death of all apple trees have to say for themselves as I do not find the least sign of winter-killing in this vicinity (south of Baraboo)." A. K. BASSETT.

Sauk County.

"Not many apples this year. Strawberries full of buds. Two late varieties winter-killed, Klondike and Gandy; glad to get rid of them."

WM. FIELDHOUSE.

Iowa County.

"Strawberries badly winter-killed. Wood, Warfield, Lovett, Clyde showing most injury; Dunlap no injury at all. Cane fruits badly injured.

"Apples will be a very light crop with the exception of Wealthy, which is good. I think I will have two thousand bushels of Wealthy." Chippewa County. JAS. MELVILLE.

Dr. J. G. Seidel of Warrens, up Sparta way, begs leave to report as follows on 1½ acres of strawberries for season of 1911—

Six hundred and fifty crates
at \$1.50.....\$ 975.00
Nine thousand plants at \$3.00 27.00

Total\$1,002.00

"I think this yield is just a little better than any you have published to date."

Wisconsin Horticulture

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Remit to Secretary W. S. H. S.
Madison, Wis.

June is a good month to renew memberships.

The Annual Report will be out—next month.

Three things always in order—renewals, new subscriptions and contributions to the columns of W. H.

The 1911 Printing Law cut down the number of our reports to 2,500 copies, and in future members only will get a copy; no more free reports at institutes or elsewhere.

The Society co-operates with the Extension Division of the College of Agriculture. Prof. J. G. Milward will use our Gays Mills and Sturgeon Bay trial orchards for demonstrations in spraying.

Don't fail to spray even if the bloom is light. While trees "white with bloom" delight the eye and fill the heart with hopes, light bloom may produce a very satisfactory crop if we spray.

Keep out of the beans while the plants are wet from dew or rain. Anthracnose or "spot" is distributed by brushing or handling the vines or pods while wet. By the same token wait until the dew is off before picking beans.

KEEP YOUR EYE ON THE KICKAPOO

Slowly and surely Wisconsin people are taking an interest in Wisconsin. The Kickapoo Orchard company recently organized in Madison is evidence of the increasing confidence in Wisconsin resources as a fruit state. The incorporators are all Madison men, among them L. B. Nagler, Assistant Secretary of State, J. C. Schubert, ex-mayor of Madison, J. A. Harley, for years interested in Bitter Root enterprises, Robert Nelson, District Attorney for Dane county, and six others. Mr. J. A. Hays, superintendent of our trial orchard at Gays Mills was actively interested in the deal and is a stockholder. One hundred and sixty acres of land have been acquired one mile east of the trial orchard and a few acres will be planted this year.

This planting will make exactly one hundred acres of fruit on the ridge nearest to Gays Mills. Within five years there will be five hundred acres. Watch the Kickapoo.

A COMEBACK

If the gentle reader will observe, he will note "g"—a small one this time—sneaking up the back way and asking for a hand-out. He realizes that if he desires "benefits" he must be humble. But, also observe that in writing his opinion he jarred about

two columns of convincing editorial comment from the secretary, the remark that "If you don't like this paper, say so," "The Farm Orchard" article and a small dig as to "receiving benefits" in the May issue. Also but not least a "personal" letter. I has done "g" good to be humiliated, his mind is in condition to learn horticulture now. "Go thou and do likewise." "g."

NURSERY AGENT TO BE LYNCHED

I have your letter asking in regard to some nursery selling trees in this neighborhood. I have inquired around a good deal but I can't find anybody selling nursery stock under wrong conditions.

About two years ago some parties around here sold to my nearest neighbors mostly all new varieties at awful high prices, claiming that they had stayed at my place over night, and that I was in with the State Horticultural Society and knew all about these varieties and recommended them although I had never even seen the man. He must have sold southern grown trees to them because now they are all dead. If these people had told me about it sooner, I could probably have helped them out of it, but as they kept quiet until this spring it is too late.

The agents haven't been around here since, but if they should happen to appear you will hear of a lynching in Monroe county.

I just finished planting about one hundred Hibernial along the roadside, on which I intend to graft all-winter varieties.

The prospects for fruit are good with the exception of apples, which will be a small crop in Monroe county this year.

I read the letter of H. C. Melcher in the last issue of WISCONSIN HORTICULTURE on "The Farm Orchard." Don't agree with him on calling the Wealthy and Longfield excellent for cider. They both make a cider that is just good for some time and then it don't even make good vinegar. It is hard to beat the Whitney for cider. It will make excellent vinegar. The Whitney is easier to grow than the potato.

FRED MUEHLENKAMP.

Questions and Answers

RINGING

I have several apple trees, Wealthy and Duchess, measuring in diameter three to four inches a foot above ground that never bloomed up to last year, though standing in fairly rich soil. Thinking it about time to show their colors, I tried a cure of which I had read in an old book: to cut a ring one-quarter inch wide around the limbs a few inches above where they branch off from the trunk of the tree; this cut to be down to the wood, leaving no bark connection whatever, no bandage or other protection. I tried this on only a couple of limbs of each tree, fearing they might die, but they leafed out as usual and during last summer the bark grew, almost fully closing the gap. This spring the ringed limbs are loaded with blossoms, the rest have none whatever; so I proceeded at once to ring the rest of the limbs on these trees for next season. Is this operation injurious to the trees? It seemingly is not because the limbs above the cut have grown to be one-fourth to one-third larger than below in thickness. A. BUNGNER.

Ringling fruit trees and grape vines is a very old practice. The way of doing it is well described by Mr. Bungener and when only a part of the tree is so treated no harm will result. It rests on the theory, or possibly it is a fact, that an abundance of food tends to create fruit buds.

Plant food is conveyed from the roots to the leaves through the outer wood layers and after being digested in the leaves through the action of sunlight is distributed through the inner bark layers as needed. Now it follows that any restriction or check like a label wire or removal of a strip of bark (ringing) will "fatten" the part above the restriction. This fattening results in the formation of fruit buds as in Mr. Bungener's trees or in case of the grape or trees where fruit is already set, an increase in size of the fruit.

The portion of the branch above the ring will, of course, become

larger than the portion below. To ring all of the main branches on a tree in one season would probably kill the tree by starving the roots.

Bailey in the Pruning Book says of ringling: "Ringling to produce fruit-bearing is to be regarded as a special practice. It is generally a last resort,—not because ringling injures the tree (for it usually does not), but because there are more fundamental and general means of promoting fruitfulness."

If sound trees do not bear there is something wrong in the treatment of the orchard, usually a lack of plant food, and we should seek for the underlying cause and apply the proper remedy rather than resort to the makeshift.

Q. If you were to plant an orchard of six acres of late winter varieties in Southern Wisconsin, which of the following—Minkler, Ben Davis, Golden Russett, Salome, Willow Twig, Black Ben, or what varieties would you plant? Summer, fall and early winter apples, also the Northwest Greening not to be considered.

A. Of those mentioned only Minkler and Salome can be considered. Willow Twig is not hardy, Golden Russett is a shy and unreliable bearer and Wisconsin fruit growers cannot afford to sacrifice their reputations by growing any of the Ben Davis family. For six varieties add King, Northern Spy, Senator, Windsor. Other kinds are York Imperial, Jonathan and Grimes' Golden. Any and all of these will stand in Southern Wisconsin.

Q. I have noticed several articles in WISCONSIN HORTICULTURE, also other publications, regarding the blighting of Transcendent crab and would like to know if there is no spray which will control this trouble. I have a number planted with other trees on my place and if there is no way of controlling the blight will have them taken out. Would like to have your opinion on the matter.

W. P.

A. Very little, if any, progress has been made in controlling fire blight in the past twenty years although

many able men have been working on the problem. The best we have to suggest is watching the trees carefully and cutting out the blighted twigs. This, however, is very unsatisfactory. Fire blight cannot be controlled by spraying. Some varieties, among them the Transcendent, are very much subject to blight. In many cases we have advised the entire removal of Transcendent and Yellow Transparent from orchards as the blight spreads from these to other varieties.

Q. Would like to ask a few questions about my cherry trees. Last summer at the time the cherries got ripe the leaves turned yellow and all dropped off and didn't leaf out again. Will my trees start this spring or are they all dead? Should I have sprayed, and when? What mixture? Is the powdered or paste Bordeaux as good as the home prepared? W.

A. This correspondent probably knows by this time the results of lack of spraying. We surmise that the affected trees will leaf out this spring but all will be in a feeble condition and if not sprayed this year will be dead next spring. The trouble was caused by mildew, which will defoliate cherry trees every season if not checked. Spray thoroughly with Bordeaux as soon as the buds appear and again after the blossoms have fallen, also once or twice more during the season. Add two pounds of arsenate of lead to each fifty gallons of Bordeaux and in this way take care of the slug and other leaf-eating pests. We have some doubts about the ready-to-use Bordeaux, whether powder or paste. It costs three to four times as much as the home-made preparation and is certainly not more effective.

Q. What varieties of apples, gooseberries and currants are best adapted to Vilas County?

A. This society had a trial orchard at one time at Eagle River on the sandy lands, but were wholly unsuccessful in raising apples of any variety. We still believe that certain of the most hardy kinds such as Duchess, Hiberna, Patten Greening and Malinda will succeed on the clay ridges

of Vilas County, but would not advise planting apples on the sandy lands.

As to the other fruits, any of the common varieties will succeed anywhere in northern Wisconsin. Both currants and gooseberries are absolutely hardy anywhere in this state.

Q. Am writing to ask some questions on hardy vines. Which of the following vines are perfectly hardy here (La Crosse)? Which are desirable and worth giving some winter protection? Wistaria; Trumpet Creeper; Bitter Sweet; Engelmann's Woodbine; Clematis, large flrg.; Euonymus, rad. What vines will do well on a northern exposure? Our soil is a rich, sandy loam. Are any of the climbing roses perfectly hardy without protection? L. J. E.

A. None of the vines which you have named are hardy without winter protection except Engelmann's Ivy and Bitter Sweet. These ought to stand anywhere in Wisconsin. The Wistaria and Trumpet Creeper are both hardy as to root and will not only live forever but become almost pests by suckers from the roots but in southern Wisconsin both these vines always kill back more or less in winter and usually so far back that we get no flowers. A Trumpet Creeper planted twenty-one years ago at Madison never had a flower.

The large flowered Clematis is reasonably hardy but requires winter protection. The worst trouble with this is a fungous disease for which no remedy has been found. The Euonymus radicans is not at all hardy.

None of the climbing roses are hardy in this climate without protection. The Crimson Rambler, Dorothy Perkins, and others may be grown very successfully if laid down and covered lightly each winter.

AND HERE IS ANOTHER ONE

To the Editor:

I enjoyed G's letter. He hit you right. Not that I object to the parties mentioned in G's letter getting the benefits, for I want them to get all the benefits they can. They deserve it. But there is something true in the implied or suggested neglect of

HORTICULTURE to hammer into the farmers who have good clay northern exposures, the fact that they can raise good apples on them—anywhere in Wisconsin. The old bosh about not being able to grow apples, native plums and bush fruits anywhere in Wisconsin has been quashed so many times that it would seem as if it should be annihilated by this time, but it isn't. Say, why not put this standing column heading in HORTICULTURE in black face type: *"Any Well Drained Northern or Eastern Exposure in Wisconsin Having a Good Soil Will Grow Good Apples. Americana Plums and Small Fruits with no More Work than Corn Requires."*

It's a fact; but it's also a fact that most farmers don't believe it. Pound it into them. If you can't get it into them any other way pound it in with a club. The Donny-brook Fair method of teaching is not elegant, but—with the older part of the community at least—is effective.

I greatly enjoy HORTICULTURE,—and especially B's, H's and R's articles. They are good sense.

B. M. VAUGHN.

Just a word more about "G." He is a really truly person, an old time member who has a farm orchard. He is also one of an ever increasing number of regular correspondents of this office, who come for help and get it. We give them welcome and aid, but the aid comes most often directly from the very men that "G" and Mr. Vaughn claim "get all the benefits." This is not gratitude. There is another name for it. Readers should know that this office is merely a clearing house for information. The editor is not all-wise, you may omit the "all" and hyphen if you wish, but keeps in touch with men who have been successful and what is far more to the point, men who are broad minded and willing to help others. That is the kind of material we have in our Society and that is the reason it gets things done.

Now, about farmers and fruit: we agree most heartily with Mr. Vaughn and the writer has preached this same doctrine for over twenty years,

twenty-one and one-half to be exact. It's good dope, keep it up. Our annual reports, bulletins and magazine always contain the very best advice and encouragement to the farmer, something like this: A dozen trees enough. Cultivate, prune, spray. The Home orchard an asset, etc., etc.

We certainly believe that every farmer ought to raise fruit sufficient for his own needs,—and no more.

Here is a revised version of the standard edition of Advice to Farmers. How does it fit present day dairy farming? Plant a few trees, give them all the care you can without neglecting any important farm work, take what you get and be thankful for it.

EDITOR.

A FEW WORDS FROM WASHINGTON ISLAND

I see in HORTICULTURE for January, "Notes from Menominee," where S. Running speaks of the Delicious apple as a good apple for northern climates.

I have fifty of these trees and they are doing nicely. Last season we had as big and as fine a crop of Northwestern Greenings, Pewaukee and Walbridge as could be wished for. I see no reason why we can not grow as good winter apples here in Wisconsin as anywhere else. As to quality and flavor they cannot be beat. I only had about ten trees last fall that were about eighteen years old. I sold from these ten trees one hundred ten bushels. I put fifteen bushels in my cellar. I fed to cattle and pigs about ten to fifteen bushels or more. I had twelve bushels on one Whitney No. 20. I also had two Duchess that bore so heavy that they broke down, in fact you could pick one, two and three bushels from a tree but still you could see no difference.

I see that Mr. W. H. Hanchett's article has made quite a stir. I see nothing wrong with it. It would be a good thing to know that we could sell all the fruit we could raise and Mr. Hanchett has merely raised the question if it could be done. Now let us hear from those that seem to be so sure about it, where and how it can be done. I have been told over and over again that if the whole of Door County was one cherry orchard it

SPRAY CALENDAR

What?	Why?	How?	When?			Remarks
			1st spraying	2d Spraying	3d spraying	
Apple	Scab and bitter rot	Bordeaux Mixture or Lime-Sulphur	Before growth begins (1 to 10 L. S.)	Just after blossoms drop (1 to 30 or 35 L. S.)	10 days after 2d spraying (1 to 30 or 35 L. S.)	
	Codling moth	Arsenate of Lead combined with Bordeaux	Just after blossoms drop	10 days later	Last week of July or 1st week of August for 2d brood	1st and 2nd spraying same as 2d and 3d for scab; merely add arsenate of lead to Bordeaux.
	Oyster shell scale	Lime-Sulphur 1 to 9	March or early April but before growth starts			Do not use Commercial Lime-sulphur on growing plants at less dilution than 1 to 30.
	Oyster shell scale	Kerosene Emulsion	When young are active	10 to 12 days later	10 to 12 days later	
Cherry and Plum	Mildew and shot-hole fungus	Bordeaux Mixture 3-4-50	When leaves are about 1-3 grown	2 weeks later	After fruit harvest	Add arsenate of lead for slug and other biting insects, 2 lbs. to 50 gals.
Currant and Gooseberry	Mildew, blight and Currant worm	Bordeaux and Arsenate of Lead	When leaves are fully developed	2 to 3 weeks later		
Grapes	Mildew and anthracnose	Bordeaux	Before leaf buds open	2 to 3 weeks later	3d, 4th and 5th applications at intervals of 2 weeks if required	
Strawberry	Leaf-spot or blight and leaf-eating insects	Bordeaux and Arsenate of Lead	When first leaves appear	After blossoms fall		
Raspberry and Blackberry	Anthracnose and fungous diseases	Bordeaux	As above	2 weeks later		Spray new growth after fruit harvest.

would not block the market. At that rate we have just begun to plant, so what is the use to worry? Those at Sturgeon Bay who have the large cherry orchards that have paid them so well are all planting as much more as they can. That ought to be a good sign, as they at least ought to know what they are doing, but it is going to take some pickers to gather the crop. There is no use talking. There is no stop to the planting now until it is all full. There will be more or less planting for at least ten years to come. After we have had some bumper crops from the present planting there will be a lull in the planting, which will be more helpful to the fruit industry. After the get-rich-quick idea has faded things will be more quiet and probably a few thousand trees here and there will be neglected so as to bring things more on a level. It will, of course, be with the fruit business as with other farming. When there is a big crop all over the price will be low and maybe so low at times that it will not pay at all. Then again when the crop fails in one part of the country the other part may be good; then of course the price will be good for those that have any, and so on.

Let us hear from those who have faith in winter apples for Wisconsin.

CHRISTIAN SAABYE.

Washington Island, Wis.

GOING SOME AT BAYFIELD

I see by several of the newspapers that information purporting to have come from the State Horticultural Society gives the township of Bayfield and Washburn together, credit for having 55,000 fruit trees growing with 25,000 to be set this spring. To show how accurate this statement is I wish to give you the results of my efforts to get accurate data on this point. Last fall I sent out a request to about one hundred and twenty-five of our members, asking them to report to me what they had growing and what they intended to plant this spring. I received replies from seventy of the number, and these seventy all in the Bayfield district, none of them from the township of Washburn, as follows:

Fruit trees growing, 58,833; fruit trees to be planted this spring, 25,204; strawberries growing, acres, 168; to be planted this spring 84 acres; other small fruit growing, 52½ acres;

blackberries, raspberries, gooseberries, currants, same to be set this spring, 42 acres.

This from seventy out of one hundred and sixty members of our society. However, I will say as far as my information goes I think these figures will cover a little over two-thirds of the amount of fruit growing, but probably not half of what will be planted this spring. There are a great many new men coming in and clearing land, getting it ready to plant fruit.

If you were to drive through the county any where you would think there was a war on by the cannonading you would hear all around you. But it is only dynamiting stumps. We have gotten so used to it, we don't notice it any more.

O. FLANDERS, *Secretary.*

Hardest job we have is to get anything out of the Bayfield people. They are all so busy planning and planting that they have no time to boast, and no desire to do it. Figures in May HORTICULTURE were taken from the *Bayfield Progress*.

If you don't like it, say so.

IMPROVE THE SMALL LOT

WM. G. MCLEAN,

Park Superintendent, Madison.

This short paper is not prepared as a guide for Horticulturists setting forth what or how to plant, but rather that it might encourage more of our small holders to improve their surroundings. Burbank says, "Environment is the architect of heredity." It is time we should appreciate this, and consider it a privilege to improve our environment.

The most neglected spots in every city are to be found on the small lots, and when we stop to consider what a small amount of work would do, and then begin to multiply the benefits, we naturally ask ourselves, why is this?

It often happens that professional people, of exceptional ability, fail to reach their desired goal, simply because they advocate methods, too advanced for understanding and appreciation of the masses.

This holds as true with the art of gardening as with other vocations and I find that in general, people don't want too much preaching. What is the use of going into exhaustive details, when usually a simple primary lesson of practical application, will be better understood and really must precede that which is of a higher grade—to teach the professional—lessons to beginners, will generally tend to scare them out. Every person who improves his grounds, by planting a shrub, tree or flower, is a public benefactor.

But why does the work of garden-making languish? Is it because we do not fully realize the many benefits to be derived therefrom, or is it possible that we have been frightened out by some article, written at length, about planting effects, where the writer speaks of the many detail considerations, with complex environments, etc., until we are confused as to the real purpose.

I do not want to belittle the artist, because he is the man to do the large things, and we all know, that to be a real landscape architect, requires ability, character and many years of preparation, but give unto Caesar, that which is Caesar's, and I am

sure that it is not absolutely necessary to call on the services of an expert, to plant or maintain the average small lot, where the building usually occupies two-thirds of the grounds.

I am anxious to encourage this work by proving how simple it is, rather than by how complex. For example, the Chinaman whom we consider as being uneducated, is nevertheless a good gardener, and then again there is the pleasure of learning and improving by experience. Many of our successful farmers have gained their experience right in the field, inside their own fence. A certain good gardener, in Chicago, who happens to be a good friend of mine once consented to teach a young lady the principles of cultivating plants. This lady was very anxious to learn—she had been studying at the University of Chicago—but she came to the conclusion that it would be a great help to receive some instructions from a man who actually made a living, by raising plants. This lady was preparing to take care of a large country estate, and to this end she wished to qualify. Lessons were given twice a week, and included nearly everything, from preparing the soil and sowing the seed, to potting, transplanting, cultivating and pruning, but when spring arrived and he requested this young lady to come out into the garden and actually prepare a seedbed, he found that all of his lessons had been of little avail, in so far as their practical application was concerned,—so he began all over again—something like this: "This is a spade, it is a tool used to cultivate the ground, you grasp it by the handle with both hands—so fashion—set the blade upon the ground and with one foot you drive it in. Then by drawing the handle towards you, the soil is pried loose and it is easily turned over," etc., etc. All this simply proves how essential the practical lessons are. There are a few general rules to be observed, but it is safe to say, that nearly all are familiar with these, such as good soil, plenty of sunlight and good cultivation. I might say that cultivation is neglected more than anything else and I would like to suggest that

this work be done by the children, under the supervision of the parents. The children would be greatly benefited.

The next question is what to plant. There is no room upon the small lot for trees,—their place is out on the street,—because, while half a dozen trees may grow well enough in your back yard while they are small, as they grow up it becomes necessary to trim off the side limbs, with the final result, that you have the effect of a yardfull of crooked telephone poles.

Just plant a few native shrubs, up near the foundation of the house, and possibly a clump in the corner of your lot, or to hide some objectionable view. Keep the lawn open as much as possible, that is, don't dot it all over with plants. If you would add flower beds, place them up against the shrub planting and see what a fine background the shrubs will make. These plants need not be expensive; what would be nicer than a few dogwood, elderberry or bitter-sweet, which abound in the woods in this locality. All that is needed is the willingness to do a little work. Do not plant for the sole purpose of hiding some old ash pile, but rather clear away the ash heap and plant a few grape vines in its place or any other worthy plant.

Possibly I should have mentioned the lawn first, because that which is most pleasing and refreshing about the home, is of most value, and this must be credited to a good lawn, well maintained. The following is a simple method of improving the lawn, that may be applied at any time of the year, when the ground is dry,—known as top dressing. This is a method that has been used successfully in Holland, for many years. From the bottom of the many ditches that convey the water to the pumps in Holland, they rake out the marl, which accumulates at the bottom, and allow this to lie upon the banks over winter. The following spring, this marl is of a better consistency to handle, and is then spread upon the lawn, about one inch in depth. Upon meadows, where cows are permitted to graze, for ten months of the year, this treatment is repeated every three years, and in this way good pastures

are maintained for forty years or more, without reseeding. I believe that most of our pastures run out in six or eight years.

It is a well known fact, that the frosts of winter lift the stools of grass each year, thereby weakening it by exposure. So this top dressing, not only benefits as a fertilizer, but by filling the concaves from one stool to another, it acts as a mulch, encouraging the grass to stool out stronger. If the lawn becomes weak or weedy, it needs a treatment of this kind. It is far better to choke out the weeds by a vigorous growth of grass and clover than to dig them out with a knife. You will find that just as soon as the lawn becomes weak, the weeds will get a start. We often see stable manure spread upon the lawn in winter as a means of feeding the lawn, but this is of little or no benefit because the spring rains wash the juices into the sewer, before the ground underneath has had a chance to thaw. It reminds me of giving a man a drink of whiskey when he don't need it.

A good top dressing for this purpose can be made by a body of prepared soil, composed of nine parts of top soil thoroughly mixed with one part of well rotted stable manure. This mixture spread over the lawn, and rubbed in with the back of a rake, will also produce a smoother surface than can be obtained in any other way. If your lawn is weedy, it will be well to sow a liberal sprinkle of white clover, before applying the top dressing. This will help to choke out the objectionable weeds, as well as to make a good foundation for the hard usage a lawn often receives.

The small lot with its usual pent-up corners, is not an ideal place for the cultivation of vegetables and yet there are some varieties, such as lettuce, radish and green onions, that do well enough, but the larger varieties, such as tomatoes, cucumbers, melons, corn, cabbage and cauliflower, will need a more free and airy situation. I have mentioned vegetables, in connection with the small lot, because of the great returns realized, for the small amount of labor, properly applied,—and yet it is only good business prin-

ciple, to recommend a cleaning-up first, in order to provide a fit place for the cultivation of any plant. It is well to remember that all vegetables do best when planted out in the open, free from the one-sided conditions of light and air, which is so harmful near buildings and fences. For this reason we shall endeavor to utilize all the vacant lots in the city for the purpose of raising vegetables. There are certain sections or districts in every large city, where plant life will not exist, because of unhealthy conditions, such as too much gas, smoke, and sour soil, but I hold this criterion, that where plant life will not exist, we should not establish a permanent home, nor attempt to raise our children under such adverse conditions.

It is not necessary to draw a hair line by saying that a certain plant must be planted here, or there. We all possess some individuality, and right here, in the planting effects, as well as in the architectural design of our house, is a chance for its expression. My hope lies in the child, and by improving the front and back of our lot, the child is benefited most.

To create higher real estate values, to relieve congestion, to improve sanitary conditions, and to teach the child some of the possibilities of nature, are a few of the benefits made possible by planting a very few shrubs or flowers and then directing the child in their maintenance.

THE VEGETABLE FORCING INDUSTRY IN WISCONSIN

FRANK OVENDEN.

Few people have the faintest idea of the extent of the Vegetable Forcing Industry throughout the United States of America.

We are all more or less wrapped up in our own particular line of business and come to look on all others as a minor importance even when they may be of a kindred nature and perhaps a sister branch of the same calling.

The Forcing of Vegetables is a branch of Horticulture just as much as fruit growing but though closely related are little known to each

other. Each is an important branch of Horticulture.

The Forcing of Vegetables requires the grower to carry on his calling near the city, which is his market. The larger the city the greater is the demand and there is where we will find this industry thriving the most. In many of the smaller cities we will find the Flower and Vegetable business combined, but around cities like Milwaukee are many large establishments devoted to vegetables only. There are not nearly enough such establishments in Wisconsin to supply our demand, a demand which is steadily growing and with a little stimulating will grow very rapidly.

A luxury at first, but soon a necessity. I am sorry to say that a very large part of Wisconsin's supply comes from other states. As this supply is obtained principally through Chicago and Milwaukee commission houses, it would be hard to tell from where we procured most of it. Reliable statistics are not to be had on the Vegetable Forcing alone and our Census Bureau gives the figures together with the florists, unless in the 1910 reports which are not yet published. I will tell you of a little journey I made last fall and what I saw that may give you some idea of the extent of this business around our large cities, such as Chicago and also a probable source of supply for Wisconsin.

It became necessary for me to visit Evanston and the Northwest suburbs of Chicago last fall, so one fine morning found me standing on Ridge Avenue, Evanston. From Ridge Avenue, west, is a large level stretch of country. This country is devoted, as far as you can see each way, to Market Gardening and Truck Farming, but what struck me most were the Greenhouses in the foreground. The land is here laid out in city blocks and it seemed that every block was more or less covered with Greenhouses.

Being a Florist, and this my first visit to Evanston, I supposed these were all Florists too, so I started out to inspect them and you may imagine my surprise when I found that with an occasional exception they were all devoted to the Vegetable Forcing

business. Many of these ranges were quite large containing from fifteen to eighteen houses, each house 21 to 29 feet wide and from 100 to 200 feet in length. They were all up-to-date houses and were kept in good repair which shows they were run by up-to-date prosperous business men. The homes of the owners of these ranges were also up to date and many were real fine homes. Many of these ranges were devoted entirely to lettuce while others were devoted to various crops of vegetables. From Evanston I journeyed South along Ridge Avenue as far as Rose Hill Cemetery, a distance of six or seven miles, and it was more or less the same, but as I neared the Cemetery the Florist began to predominate and on the South side of the Cemetery I found two of the largest ranges of glass in the United States, Peter and George Reinberg's. They cover many city blocks and Peter Reinberg's contains 2,000,000 feet of glass. These are devoted entirely to roses.

I will not follow my journey any farther as it was all amongst the florists, but what I have told you of Chicago is also true of Milwaukee in a much less degree.

From this is readily seen to what an enormous extent this business has grown around our large cities as Chicago, New York, Boston, etc. As I said before, the supply is far below the demand for winter vegetables in Wisconsin and it seems to me that there is a good opening for many of our young and progressive Horticulturists in this State to try their hands at Forcing Vegetables.

I am told that in the East, many of the small fruit growers have forcing houses to occupy their time in the winter and with great success. The Forcing business begins in September and is mostly over with by May with the exception of tomatoes, cucumbers and melons, which are grown as an early summer crop as well as in winter.

Lettuce is the principal crop forced under glass and probably two-thirds of the forcing houses are devoted to this crop alone. This will yield from three to five crops in one season from September to May.

Radish stands next in importance

and as it grows and matures in from three to four weeks is often sown between much slower growing crops. Tomatoes, cucumbers and melons are important crops, but require a much warmer temperature and are more particular in their requirements. They are often used to fill the houses during the summer when none of the cooler crops can be grown. Beets, beans, spinach, onions, cauliflower, parsley, cress and many other vegetables are also forced under glass. Asparagus and pieplant (rhubarb) are two easily raised and good paying crops. These are raised under the benches as are also mushrooms.

The mushroom is more difficult to raise and those who are successful, make good money. There are some who make the raising of mushrooms a special business, having cellars, pits or houses constructed particularly for this business.

THE DANGER OF OVERPRODUCTION OF APPLES

LEWIS K. WILSON, STUDENT, MADISON.

Nowadays we so often hear the question "What are we going to do with all of our fruit when the vast western areas planted to apples come into bearing?" Nineteen years ago that same question was asked by Mr. J. H. Stewart, then a skilled orchardist and successful businessman of the Rogue River Valley, in a paper which he delivered before the Farmers' Institute of Medford, Oregon. He was thoroughly convinced at the time that the apple growers were on the verge of an over production. But Rogue River apples have never since been lower than they were at that time.

The whole issue is dependent upon supply and demand. Let us then glance at the census estimates of the Department of Agriculture and see what the supply has been between the years 1895 and 1910.

Yr.	Barrels.	maximum	production
1895	60,540,000	maximum	production
1896	69,070,000	maximum	production
1909	25,415,000	maximum	production
1910	23,825,000	maximum	production

As the apple crop varies considerably from year to year the estimates have been grouped into periods of five years. During the five years ending

with 1899 the yearly production in barrels averaged

Ending with 1904.....	42,570,000
Ending with 1907.....	26,000,000

These records clearly show a diminishing supply. But what of all the trees that have been set out in the past ten years? Again we have a few statistics: In 1899 the U. S. had 120,152,795 apple trees of bearing age which produced 143,105,689 bushels or about 11-6 bushels per tree. In 1899 there were 201,794,642 bearing trees, and they produced 175,397,600 bushels or 3-4 of a bushel per tree. It is estimated that the number of bearing trees for 1910 had increased to 300,000,000, and the census shows that the production for 1909 was 76,245,000 bushels or an average of one quarter bushel per tree. It is evident from these statistics that great areas which have been set out to apple trees are losing propositions. It all points to the fact that successful apple culture is confined to limited favorable areas.

It is interesting to note here that the former high producing states of New York and Pennsylvania have declined steadily for the past twenty-two years, while Wisconsin and the far West have steadily increased of late years. Wisconsin has come up from thirty-third place in 1899 to twenty-seventh place in 1909, and will soon stand better than that.

But we must be careful with our supply and not crowd it all on to a few markets. We must have active, co-operative fruit growers associations to intelligently handle our product.

In the past the demand for our apples has been almost wholly dependent upon the population of the United States, and while our supply has decreased, the population and hence the demand has increased. At present we have about 90,000,000 of people in this country. It is estimated that our population will reach 117,000,000 by 1920, 142,000,000 by 1930, 170,000,000 by 1940, and 200,000,000 or more by 1950. This would mean practically a doubling of the population of the United States within forty years. The outlook for domestic trade certainly looks encouraging, and here it must be remembered that

only a very small per cent of our consumers have been educated up to the value of perfect fruit, but they are rapidly learning.

The public demands a certain amount of fruit, but if there is a shortage in one kind they will buy the other. During recent years the supply of citrous fruits has diminished steadily:—the apple, the American fruit, will take its place.

But what if the supply *should* exceed the demand, we of Wisconsin are very well taken care of, for we have markets for our apples where the West and the East cannot afford to compete after paying their high transportation charges. And as for these neighbors of ours, they can well take care of themselves, for have they not the ever-increasing export trade? Europe has long been one of our best customers, and now Australia, China, Japan, and Siberia, have come to realize the high quality of the American apple. The Panama Canal will also be a strong factor, for it will open up many new avenues of export for the Pacific coast apples.

But why all this talk about danger of over production? GOOD fruit will *always* have a *good* market, so let us produce only first-class fruit in Wisconsin.

BUREAUS OF MARKETS PROPOSED FOR THE STATE AND FEDERAL GOVERNMENTS

One of the problems before the State Board of Public Affairs is that of securing better facilities for the distribution of farm products. The wastefulness of the present system of marketing has long been recognized, but until recently there has been no result other than an unreasoning outcry against the middleman. The State Board of Public Affairs is attempting to attack the problem scientifically and to this end it is considering the establishment of a bureau of investigation, in co-operation with the agricultural college of the University of Wisconsin, whose function would be to study methods of marketing in use in Wisconsin with a view to suggesting and aiding in the introduction of improved methods. It would be one of the duties of the

bureau to investigate the systems of co-operative marketing, municipal markets, and public warehouses in use in other states and in other countries and be prepared to advise for or against the establishment of similar agencies in Wisconsin.

In connection with the plan under consideration by the State Board of Public Affairs, it is important to note that a bill has been introduced into Congress to provide for the creation of a federal bureau of markets in the Department of Agriculture. This bill, H. R. 16310 is fathered by Representative Beall of Texas. It represents the ideas of such men as Mr. B. F. Yoakum, chairman of the St. Louis and San Francisco Railroad Company, and others who see the necessity of better organization in our methods of bringing the necessities of life from the farmer to the consumer. The function of the proposed bureau would be to investigate marketing conditions in the United States and the plans suggested for improving them and to supply information to farmers and others who apply for it.

The bureau of markets contemplated by the State Board of Public Affairs would do work for the State similar to that to be done for the nation by the proposed federal bureau.

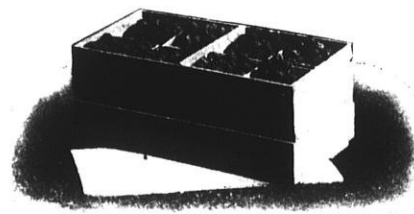
A state bureau is necessary because the federal bureau would be unable to give the detailed study to Wisconsin conditions that it needed if any great improvement in the marketing conditions within the State is to be accomplished. The State bureau, however, could make use of the information gathered by the federal bureau and could co-operate with it in investigations of conditions in Wisconsin.

Representative Beall's bill provides that the proposed federal bureau shall be managed by a Director of Markets appointed by the President, by and with the advice and consent of the Senate.

It is to be the duty of the bureau to investigate systems of marketing farm products, including those used by co-operative associations, in this and other countries and to supply the data gathered to any person or or-

ganization requesting it. Information is to be circulated through bulletins or given personally by special agents of the bureau.

It is also to be the duty of the bureau to investigate the demand for farm products in the trade centers of the country and publish information from time to time as to the current supply of these commodities and the best markets available for their disposal.



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WHY I PREFER A COUNTRY LIFE

ANNA L. RASMUSSEN.

After having lived about an equal number of years both in the city and in the country I have drawn conclusions and resolved that the remainder of my life shall be spent in the country. Not for one reason only, but for a great many, a few of which I shall mention.

I love the Country which God made rather than the City which man made. Nature holds for me a charm which is almost lost to sight in the City. I shall not attempt to describe the beauties of Nature as the poets and artists have taken care of that, but I think you will all agree that no poem nor painting however beautiful was half so inspiring as Nature herself. I shall read a little poem, which I think very fitting, entitled "Summer in the Country" by Louis E. Thayer.

SUMMER IN THE COUNTRY.

Oh, Summer in the Country,
Everywhere a fellow sees
Things as glad and lively
As a swarm of new-fledged bees;
There are flowers in the pastures,
There are leaves upon each tree.
Oh, Summer in the Country—say,
That's the time for me.

Oh, Summer in the Country,
With its blue, clear summer skies,
With its beauties from day's dawn
'Til the lingerin' sunshine dies;
Sometimes I think that man can catch
A glimpse of Paradise.
When the rays of cheerful sunshine
Come a sifting to his eyes.

Oh, yes, I've tried the city,
But I couldn't take no rest;
I longed so for the pillow,
That my head at home had pressed,
And my heart for me decided
That the Country was the best.

Oh, Summer in the Country,
With the flowers and the birds,
With babblin' brooks and butterflies,
With bees and lovin' herds;
Oh, the feller may be happy,
Jes' as happy as can be
In the city, but the Country,
Say—that's good enough for me.

There are a great many children in the cities who have actually never seen the sun rise nor set and have gotten only mere glimpses of a rainbow. In the Country one may listen some fine spring evening to the concert of the birds and truthfully say it surpasses the band concerts of the cities. One is constantly in close touch with Nature, not only at every glance of the eye, but also at every turn of the hand and it is certainly more interesting and inspiring to work with Nature than with the most intricate machinery. Plant a few

tiny seeds, watch them spring from the ground and quickly but steadily grow into beautiful flower crested plants or perchance into fine juicy fruit fit for a king's table.

And let me add right here that to anyone whose stomach is his best friend and who has a reasonably good digestive apparatus, the Country affords fine opportunities. One is spared the expense and embarrassment of buying a dozen of fresh eggs to find that half of them were fresh about six months ago; neither will you have trouble with sour milk for the Country can give a good supply of clean sweet milk.

The vegetables, with which you are served, go almost directly from garden to kettle and are not dry, wilted and shopworn. The country housewife is also given the privilege of getting them from the field thereby taking a little needed out of door exercise and also creating an appetite for dinner. And best of all are the berries. A great many city people fairly turn green with envy at sight of the bountiful dishes of berries and the pitchers of rich cream which adorn the tables of their country hosts and they ask, "Why don't you bring such berries to town," and the host smiles and answers, "Why?"

One advantage the country woman has over her city sisters is that she can, to a certain extent, choose her profession. Should she dislike certain duties about the house she can find plenty of pleasant employment out of doors and thereby earn more than enough to pay for hiring help in the house. Remember a man always receives greater compensation for his labor even though he may accomplish less than a woman. Who would not rather sit in a cool shady spot and prepare vegetables for market, or rather take care of a fine lot of chicks, than to fry a steak or bake bread on an average July day. Often my city sisters remark "You are always so busy, why don't you do this way or that?" I really do not believe I am as busy as they with their receptions, luncheons and afternoons at Bridge although, perhaps, I accomplish fully as much and I firmly believe in the old saying, "Let not

the cost of your keep be wasted, but worth something."

Most country housewives can be somewhat independent. They need not necessarily depend on their husband's salary or dividends. They may have an income of their own. A small area may be devoted to the raising of some crops, which a woman can care for. She may have a profitable flower-bed, or she may raise a fine flock of fowls, which will net her a neat sum. At any rate she will not be accused of going through man's pockets at night.

There again the farmer's wife is a business woman. She is interested in a firm and should be able at all times to intelligently discuss business matters with her husband. If ever you had the idea that "any woman is fit for a farmer's wife," change that idea to this "a farmer's wife is fit for almost any other occupation." She should know the various trees, plants and flowers, the different breeds of animals and fowls; she should know how, when and where to plant all kinds of seeds, how to care for the plants and harvest the crops and in these days of scientific and progressive farming she is also expected to have some knowledge of book keeping and stenography. She must attain the ability of being an efficient sales lady and besides this and a host of other knowledge she must be a good housekeeper. Having mastered all these arts, she may some day aspire to assume the position of Manager pro tem. while her husband is in some distant part of the state attending the meetings of the State Horticultural Society. She will gladly be given the title Junior partner but would, perhaps, by the stronger sex not so willingly be termed silent partner.

Then there comes one of the most important duties in life,—rearing of children. Children require fresh air, out of door exercise and plenty of room in which to play and opportunities to make themselves useful. All these are found in the country. Children are full of energy and are constantly looking for some way to use it. The country child has a dozen ways of carrying out his ambitions where the city child has per-

haps only one. Country children may be given a little plot to care for and get proceeds derived therefrom or they may be given pennies in compensation for their help or they may have a choice domestic animal all their very own—thus teaching them to help themselves and become good business men and women. The increasing effort now is to teach children that country life intelligently and skillfully directed offers health, independence and more of comfort and even luxury than most city people ever attain. Life is larger, freer and happier on the farm. Opportunities come to a child on the farm as often as to a child in the city. Statistics show that over 70 per cent of the really great men were born and brought up on the farm, including such men as Abraham Lincoln, Robert M. La Follette and President D. E. Bingham.

TRAINING YOUNG TREES

An explanation of training young apple trees, so simple that a child could do it, is given in *The Fruit Grower*. Starting with a yearling "whip," trim off all buds up to twenty inches from the ground with a sharp pruning knife. Then count six buds up and leave them. These six buds are in a spiral around the "whip," the first being directly below the sixth which is to be the vertical leader. All buds are removed above the sixth, for about six inches. The top will die back to the sixth bud and all but a six inch stub is cut off later in the season. The branch growing from the top bud will be tied to the stub so as to make it grow vertical. The other buds develop into the main branches of the tree in a whorl about the trunk, which will give maximum access to air and sun, while making the maximum tree surface. There will be a tendency for the upper buds to develop at the expense of the lower ones. To avoid this, cut a half moon notch just above each of the lower buds. This will divert some sap to the bud and help it along. To keep the tree symmetrical and well balanced, the faster growing shoots should be pinched back even.

In the second year, measure about

fifteen inches up on the central branch, from the last lateral, and count six more buds leaving them as before for the second set of primary branches. Now work on the lateral branches. Figure on cutting off two-thirds of last year's growth and select a strong bud pointing to the outside for next year's lateral branch, but leave a six inch stub as before, for the purpose of training the limb in



Just an ordinary Crawford Co. apple tree at 4 years.

the desired direction. The buds below the new lateral may be changed into fruit buds by pinching back the growth. When their shoots are four or five inches long, pinch them off, leaving only two or three leaves. From each of these pinched shoots will come a new shoot, which must be pinched back to two or three leaves when it has become four or five inches long. In a favorable season they may require the third pinching back. This operation will have transformed the lower buds into fruit buds which can be distinguished by the rounder shape. They are located down on the stocky part of the branch, where the burden of fruit can best be carried. This would not be the case if more of the new growth were left, for the fruit would be borne farther out on the limb and might break it.

The future of fruit raising in Wisconsin depends on the "men behind the trees."

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WHAT WOMEN CAN DO TO BOYS ON THE FARM

MRS. L. H. PALMER, BARABOO, WIS.

I sometimes think we don't half realize how large a part the boy plays in the lives of the most of us, or how dull and commonplace the country would be without his jolly, fun-loving, mischievous presence. The country is certainly the best place for him as it is little less than a calamity for a healthy boy to be obliged to confine his activities, or work off his surplus energies within the narrow confines of a city.

The subject of how to keep the boy on the farm is being much discussed, but no one can do more to solve that problem than his mother. It is said that a child's education should begin with his grandparents. Certain it is that it should begin very early in life.

Take him to help you make garden that he may early become interested in growing plants. Show him the seed germ as it starts, and encourage him to watch for it to push its way up through the soil. Call attention to the beauties of the unfolding leaves and watch with him the growth and development from the tiny shoot to the fully matured plant. Show him the relation the blossom bears as it opens, as it opens and closes, to the fruit and get him interested in hunting for the varied forms of plant life in the home surroundings. Explain the necessity for thorough cultivation and the eradication of all weeds that the plants may receive the full benefit of the fertility of the soil. Point out the beauty of a well cultivated garden over one that has been neglected. It will help him when he has passed out to the larger realm of farm work, to understand why father insists that the fields be properly cultivated, and having learned the reason will not feel that, "Father is an old crank, just wants to keep a fellow at work." Give the boy a reason for what you expect him to do, and as a rule you will have no difficulty.

Help him to understand that though he is small, there is much he can do to help, and from the first exact instant and unquestioning obedience from him. Don't allow your-

self to be coaxed or bullied into giving up to his whims. A boy soon loses all respect for a mother he can coax into granting his wishes against her better judgment, and with utterable contempt in his voice will explain to his chum, "Oh, she is easy. I can coax her over in a minute." Be honest with him in all things, fulfilling all promises to the letter. We have no more relentless critics than our children, and a boy can receive no greater injury than to have his mother fail to measure up to what he has a right to expect of her. "Thou shalt not bear false witness," means infinitely more to a boy worked out in the family life than hung as a motto over the door. Teach him to be interested in and gentle with all live things. Show him the difference between a butterfly and moth, and help him observe the changes in animal and vegetable life as the season advances. Help him to watch for the first birds and flowers of spring and tell him something of each. Make your home beautiful with trees and flowers that he may early learn to love the beautiful and form high ideals. Study his characteristics and guide him in his work. If he brings a bug or other insect to show you, don't give a shriek of terror and tell him to take the horrid thing away, but examine it with him, point out the beauty of its coloring, or the peculiarity of its formation and should he bring a pebble or some curious form of plant life, be interested with him, fix up a shelf in his room, if you can't afford a cabinet, that he may have a place for his treasures. Don't throw them away as trash. They mean much to your boy.

His room should be his to use as his needs require, and if shared with another, each should be taught to respect the rights of the other. In many homes there is a great difference in the furnishings of the boys and girls rooms. That is not just to either. Encourage the sister to make pretty and convenient things for her brother's room and also to keep it in order, and note with what pride he will call his chum's attention to the "gimcrack" that sis made or "see the handy contraption that mother gave me for birthday." Help

FIRST CLASS NURSERY STOCK IN GREAT VARIETY

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Ornamental and Flowering Shrubs, Vines and Perennials. Roses, Evergreens, etc.

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both to understand how much they may be to each other in many ways. A sister is the best of modifiers for a boy, and a brother is the best anchor (except father) a girl can cling to.

Give your boy the best education you can, not with the idea that many do; that you want to fit him so he can make a living easier than drudging on the farm. That mistaken fallacy is fast vanishing into thin air, thanks to greater knowledge of business conditions. There is no class of men today, that needs to be educated along so many lines as does the farmer. Supplement his schooling with readings from the wide open book of nature, as the broader and more complete his education, the greater will be his success as a farmer and a man. Keep in touch with his school, be a friend to his teacher, inviting her to your home that she may feel that you are interested in her and the work she is doing. Many times she is little more than a child and will be glad of your sympathy and help.

There is a general move all along the line to have agriculture taught in all schools, which is a fine thing, but while we are teaching farming to the boys, if we would go a step farther and teach our daughters to be efficient, contented, home makers on the farm, we would do much toward making our boys contented farmers. If I were asked to tell in one sentence, how to keep the boys on the farm, my reply would be, Keep the girls there. Just as long as mothers bemoan over the hard life of a farmer's wife and educate their daughters to think they will be happier any where than on the farm, just so long will the majority of the boys seek some occupation in the city. Teach your boys to be courteous, self-respecting gentlemen and they will be in no way inferior to anyone whom they meet.

Take your boy to church and Sunday-school, and be an active, loyal worker yourself that he may early become interested and enlisted on the side of right and justice. A boy has an inherited right to a dog, gun and fishing tackle. Give them to him and the opportunity to frequently use

them and when he brings home a bag of game or string of fish, rejoice with him. Get up a family fishing party occasionally, inviting a neighboring family to join. It will do you all good and make the boys happy.

Make a red letter day of each passing birthday and all holidays. Invite his friends and give them the best room in the house, yes, all the rooms. You don't entertain your friends in the barn or on the woodpile. Why should your boy? Furnish plenty of games such as children delight in and have a dish of apples, nuts or popcorn for them to munch. Mingle with and be one with them. Don't worry about your dignity, it won't get lost. It is time parents, teachers and preachers ceased to perch themselves on a pedestal so high as to be out of the reach of the boy they are trying to guide. You must come down to your boy's capabilities for a time, if you wish to keep pace with him as he develops and, according as you bind your boy to you, with loving sympathy and keep in touch with his mind and heart, so will you be able to guide and control him when he most needs you. If your boy has not perfect trust and confidence in your love and judgment, at the age of ten or twelve years, you will not be able to influence him at the most critical time in his life, the adolescence period.

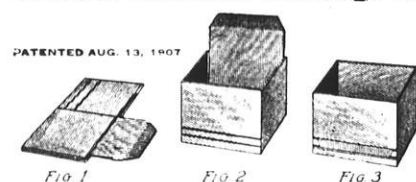
The boy should be kept busy with a judicious mixture of work and play. I would like to emphasize, let the work come first. Idleness is the mother of nearly all the discontent and mischief of boyhood. He should understand that he must work, as regularly as his father, that he is a part of the firm and that he is not only working for his father, but for himself also. The farm business should be an open book to him, that he may know, as much as his father, the value of the stock and products of the farm, also what it costs to conduct the business. He will then be able to see the necessity for reasonable economy and be better satisfied if he knows what the proceeds from the farm are used for.

He should be encouraged to purchase some good stock for himself

and care for it along with the other farm animals. Take special notice of it occasionally. Note improvements, if any, but don't be afraid to criticize if there be need. You must be brave and strong enough to help your boy see his faults and insist on betterment.

When the stock is sold, advise him about investing the money to the best

EWALDS FOLDING BERRY BOX



The only folding berry box made of wood veneer that

GIVES SATISFACTION

Made in Wisconsin style, Standard dry measure quarts and pints. Neat and strong, is all ready for business, needs no tacks nor stapling. Write us today and we will tell you more about this box and how to get it nearer home at manufacturer's prices. Do it now.

We also manufacture crates and old style quarts and pints in K. D. for crate makers and large growers who have stapling machines and make up their own crates and boxes, big reduction in price on carload lots. Our material and prices will please you.

Cumberland Fruit Package Company
Cumberland, Wisconsin

THE HAWKS NURSERY CO.

are in a position to furnish high grade Nursery Stock of all kinds and varieties suitable to Wisconsin and other northern districts.

Will be glad to figure on your wants either in large or small quantities.

WAUWATOSA, WISCONSIN

advantage,—thus teaching him business methods and increasing his property interests and responsibilities at the same time. In short, give the boy a square deal all around. It may seem to many that these points were better left to the father, but in most cases the father is so busy supplying the needs of the family and farm, that he leaves the family affairs to the mother, believing that in all things pertaining to the home that "It is woman's hand that rocks the world."

While busy making a good farmer of your boy, don't neglect the social side of life. Fill your home with flowers, music and laughter. Keep up your personal appearance. In the hurry and stress of work, you are apt to grow careless in dress. You may not always be able to have elegant clothing, but you can always be carefully and tastefully dressed with hair becomingly arranged. When you go out with your boy, be especially careful in dressing, making the most of any beauty you may possess. He may not tell you, you look fine, but the quick glad look he will give you is worth working for. A boy is more sensitive than he appears to be and should never have cause to blush for his mother's personal appearance.

Get him interested in organizing the neighbors into a social and culture club in which both old and young can take part. Hold regular meetings and have programs that will be instructive and entertaining. The head of the house may not be very enthusiastic about going out evenings, but he will go to please you if you present the subject in the right manner. Go with your boy to lectures and concerts. Give him the benefit of the best that comes your way. Patronize the public library, if there be one, if not get a movement started to provide one in some way. Furnish games of all kinds and a good supply of the best reading. Magazines that discuss all up-to-date subjects. Good stories of travel and adventure written by men and women who are alive with good red blood in their veins and know something of what they're writing. Have parties. Work, read, sing and dance with your boy. Don't be shocked, care-

ful mother, but invite in such young people as you wish your boy to associate with and let them dance or play as they wish. They may take a little polish off the floor, better than having him out in the streets looking for a place where he can have a good time, and he will find it, too. He will be a much better boy, dancing with a few select friends in his home, than he will be with heart and brain hot with rebellion because you have denied him the privilege.

You may not lay up a large bank account, but you are doing something far better. You are working to build up and complete the best finished product of the age; a broadminded, well educated, honorable farmer.

All this may sound rather strenuous, but when God gave us the privilege of motherhood, it was the greatest honor he could bestow. We should put forth every effort to live up to its requirements. In a few years, when your boys have gone out to farms of their own and some other boy comes to help with the work, be good to him, give him a pleasant home and you will not only have kept your boys on the farm, but you will do much to solve the problem of farm help.

OBSERVATIONS ON APPLE GROWING IN NORTHERN WISCONSIN

By G. H. TOWNSEND.

So much has been claimed for the Lake Superior country as an apple growing region, it may be of interest to the members of the State Horticultural Society to know how it looks to a disinterested observer who has personal knowledge of nearly all the apple growing regions of the United States.

In my address before the State Society at the January meeting I tried to point out and emphasize the relationship of soil, climate and elevation or water protection to successful orcharding. Apple trees require essentially three years to produce a crop and continuous favorable conditions. By this I mean that any extreme in water supply or lack of it, frost, cold beyond the endurance of the trees, lack of plant food such as

humus, potash and other elements, has a tendency to break the cycle of the tree. Great excess of water makes a tree sick while a wet season may only make an excess of wood growth and few or no fruit spurs. Lack of sufficient moisture may arrest the growth of branch, fruit spur or fruit, and lack of humus too little growth of all three and lack of mineral element makes trees shorter lived and the fruit deficient in color.

Applying these principles to Northern Wisconsin, the heavy red or clay lands hold too much water which forces the air out of the soil and an unhealthy growth in wet seasons.

The jack pine lands hold too little water. The rich loamy lands on porous clay will raise apple trees adapted to the region. Proximity to the lake undoubtedly gives some frost protection by holding the blooming period back and by air currents, but late blooming means short seasons and short seasons necessitate the growing of early varieties, and short season apples are never long keepers, though some may be kept till mid-winter.

On suitable soils and favorable locations apples such as the Duchess may be profitably grown for local or near markets. The Wealthy can be grown successfully but in wet, cold seasons would lack color, and it is doubtful whether it could be sold extensively in competition with apples from Michigan and the standard commercial varieties grown where the seasons are longer and warmer. Growing Duchess and Wealthy in the Lake Superior country to compete in the Chicago market or with the regions supplying the Chicago market is a dream that never will be realized except when the crop is a general failure elsewhere. Apple growing should not be extensively undertaken further north than where the McIntosh Red and Snow are a proven success.

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WISCONSIN NURSERIES,
Union Grove, Wis. W. S. Moyle, Prop.

SOCIETY BUSINESS AND AFFAIRS

*Read at the Annual Convention,
Madison, January, 1912.*

The reports of the Secretary under this head from year to year show a marked similarity for the reason that the work of the Society during past years has been alike. You must not understand from this, however, that we stand where we did one year

ago for we have grown immensely in a year. The membership now numbers close to the two thousand mark, showing a steady and healthy increase over last year. While the increase has not been all that was hoped for it has been steady and lapsed memberships are few. We have lost very few during the year. While there has been a steady increasing effort through the office of the Secretary to increase the member-

ship among those whom it would benefit, no mad efforts have been made to add names merely for the sake of size. We hope some day to have at least five thousand members, but we want at least 4990 of them to be horticulturists at heart.

A marked improvement is evident from year to year in attendance and interest at our meetings. In the

eral interest many are received daily that require an immediate reply.

The Information Bureau still remains an important feature of our work.

Our main features, Trial Orchards and School Grounds have progressed

REPORT OF LOCAL SOCIETIES FOR 1911

Name of Society	No. Members	Increase Over 1910	Membership Fee	No. of Meetings	Average Attend.	No. of Exhibitions
Washburn	57	1st year	1.00	8	22	None
Bayfield	125	10	.50	2	50	Store Window Exh.
Madison	35	12	1.00	6	12	None
Manitowoc Co.	44	8	.50	2	50	One
Lake Geneva	40		2.00	18	15	Three
Oshkosh	29	16	1.00	12	20	None
Poyssippi	14	1	.25	3	17	None

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early days of our Society the Conventions comprised about all of the work but are now merely an incidental feature. They furnish, however, an accurate index of the success of our work and still constitute a valuable part of our efforts in horticultural uplift.

The exhibit staged by our Society at the State Fair was the first real apple show ever held in Wisconsin and was a splendid success from every point of view. A detailed description of this exhibit is neither necessary nor expedient at this time. Over one hundred and fifty bushels of apples were shown that excelled in size, coloring and quality any ever before shown in Wisconsin. Twelve thousand people by actual count passed through our tent on Thursday and for the week at least 60,000 visitors enjoyed the privilege for once of seeing good apples.

While the exhibit was expensive it is generally agreed by all of our members who saw it that it was worth many times its cost.

Our infant, WISCONSIN HORTICULTURE, is now nearly a year and a half old, has passed safely through all ills incident to childhood and is pronounced by its many admirers a healthy and likeable child with a promising future.

We still answer questions, thousands of them during the year. While the magazine provides a medium for answering questions of gen-

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Fruit Growers**

We have land for sale in the Bayfield Peninsula Fruit Zone. Good location, good soil—suitable for apples, cherries and small fruits.

Also grass lands for stock and dairies.

Prices are cheap and terms easy.

We will also clear and plant to orchards for you, and cultivate and care for them for five years.

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(Established in 1861)

Make a specialty of **Cherry Trees**. They strongly recommend **One Year Cherry Trees** because they are stocky, well headed, well rooted thrifty and vigorous. Plenty of **Two Year** for those who prefer the larger trees. They also have a nice lot of Apple in northern sorts.

**A trial order will convince
any one of their quality.**

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*Our Specialties are Small Fruits
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Apples singly or by the 1000.
Currants by the doz. or 25,000.
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Door County Lands

ARE THE BEST IN THE STATE OF WISCONSIN

For Fruit Culture. Door County Orchards Pay a Revenue of from Five Hundred to Eight Hundred Dollars per Acre Annually. For Particulars Write : : : : : :

**DOOR COUNTY LAND CO.,
STURGEON BAY, WIS.**

with satisfaction and success during the year. As a more or less complete discussion of the School problem appears in the January number of WISCONSIN HORTICULTURE it will be unnecessary to go into details at this time.

The status of our trial orchards will also be reported by the chairman of the Trial Orchard Committee.

In conclusion I desire to extend my sincere thanks to the officers, the members of the Executive Committee and the members of the Society for their hearty good will and continued support during the year. Our Society is doing a splendid work and whatever results we have attained have been due wholly to the loyalty and cohesion of the membership

body. United we stand, two thousand earnest, active members and we must and will make things move in good old Wisconsin. We still have much to do, many problems to face but we are not afraid. Nature has bestowed on us the soils and the climate, all we need is the "man behind the tree." We have a few of them now and they are putting Wisconsin on the map as a fruit state, when we get a few hundred more, each with his fruit farm of 10 to 100 acres, and we have them right here at home if we can only find them, when these men get under way the prophecy of your Secretary that Wisconsin will one day rank first of all the states in the production of fruit will not seem such an idle dream.

BELIEVES IN DYNAMITE

I was interested in the paragraph on dynamite in the May issue, as I have been doing some work along this line myself. From what I have seen the past two seasons, I am sure that dynamite is beneficial in a great many soils, where they have neither hard pan nor an impervious subsoil. It should be used to break up the subsoil and loosen it just the same way cultivation is used on the surface soil. However, there is a tendency in the present advertising literature to make it a cure-all, using it at any time, etc., etc., at least, this is what the enthusiastic convert is apt to do.

Dynamiting should be done only when the subsoil is in condition to be plowed if you could reach it. This is usually late in the summer and the best plan would be to dynamite in the fall and allow the holes to stand over all winter. Another point in the west where we have been dynamiting in the spring is they have blown too large holes, and some cases have had pot holes under where they set the trees. This tendency should be watched and crow bar poked down in the holes to see that no air pockets are left to cause the death of the tree the first dry spell.

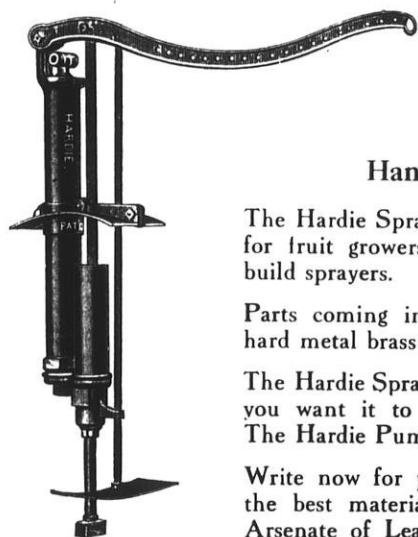
WILLIAM H. STARK.

ANNUAL REPORT OF SECRETARY

*Read at the Annual Convention,
Madison, January, 1912.*

The outlook for horticulture in all its branches in this state is decidedly encouraging at the present time. We were sixty years laying the foundations for commercial horticulture in this state and on such foundations we should build an industry that will rank with stock-raising, dairying and other branches of agricultural endeavor.

Wisconsin ranks first in the output of dairy products, why not in fruit? Of those who will smile indulgently at this and perhaps doubt the sanity of the questioner I will ask another question; why is Wisconsin the leading dairy state? Wisconsin soils are no better if as good as those of Illinois, Indiana, Ohio, Iowa or a dozen other states. Our grasses and grains are not more nu-



THE HARDIE SPRAYERS

Hand and Power Outfits

The Hardie Sprayer is built by a practical fruit grower for fruit growers and by a man who knows how to build sprayers.

Parts coming in contact with spraying fluid made of hard metal brass and cannot wear out.

The Hardie Sprayer is the Sprayer that will work when you want it to work and will do your spraying right. The Hardie Pump is guaranteed.

Write now for prices and catalog. We can give you the best material, prices consistent with quality on

Arsenate of Lead, Sulphur Lime, Bordeaux, Bordeaux Lead, Powdered Arsenate of Lead, Scale Killer, Sulfur. We have a complete line. Do not delay. Send for booklets and prices.

M. ROHLINGER & SON

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WISCONSIN

trifling nor our seasons as favorable as those of many other states and only one half of the state in area is developed agriculturally.

No Solomon is needed to answer the question, every one who has observed knows that it is due to the "men behind the cows," due to the wide-awake, progressive, seeking-to-know, spirit of our dairymen. Hoard, Henry, Smith and other leaders pointed the way, urged without ceasing the improvement of dairy breeds, better housing and care of stock and above all the establishment of co-operative creameries and cheese factories.

For thirty years these men labored along these lines and with what results we know. The College of Agriculture, the Dairymen's Association, and the farm press of the state sought first to make dairymen, then success followed as night follows day.

In extent of territory adapted to fruit growing Wisconsin leads many if not all of the states of the upper Mississippi valley.

We have millions of acres of apple land, of cherry land and of small fruit land; we have the varieties adapted to our climate; we have the market at our doors, why should not Wisconsin rank high in the production of fruit? And yet in spite of these advantages it is not long since horticulture in Wisconsin was considered a huge joke.

Strange to relate we have even now in Wisconsin, otherwise sane men, who really and truly believe that the only place where apples can be grown with profit is some remote point west of the Rockies, some fabled land of sunshine, just at the foot of the rainbow. For it is a fact, which we cannot dispute, a fact which I am compelled to state, although reluctantly, that we actually have thousands of people in this state who have sent, and are still sending, good hard money to the far west for investment in "Unit Shares" in Colorado, in Washington, in Oregon and even in the Bitter Root Valley; money for investment in so-called irrigated lands where the water-rights belong to someone else than the land owner and in salaries to so-called managers.

Fortunately not all of our people are rainbow chasers for we have and have had for some time a few earnest, progressive men who have demonstrated conclusively that;—fruit raising is quite as profitable in Wisconsin as in any other state east or west; that more money can be made from fall apples in Wisconsin than from oranges or lemons in California or Oregon, or peaches in Connecticut or Georgia; that there is more profit in raising Duchess and McMahan apples in Wisconsin at \$1.00 a bushel than in Winesaps in Oregon at \$1.50 a bushel; that the McIntosh apple can be grown to a higher state of perfection in Wisconsin than in the west; that the Wisconsin grower can buy an acre of land and plant it to fruit trees and bring it to profitable bearing for less than it costs to ship a carload of western apples to Chicago; that the cost of producing a bushel of apples in Wisconsin is less than the freight charges on a bushel of apples from Washington or Oregon to Chicago; that there are cheap lands

McKay Nursery Company

PARDEEVILLE, WIS.

Offer a Complete line of

HARDY NURSERY STOCK

FOR SPRING 1912

If interested in planting **FRUIT TREES, SMALL FRUITS** or **ORNAMENTALS**, write us for **CATALOGUE** and **PRICES**. You will find our prices consistent with quality of stock offered.

**NURSERIES AT
WATERLOO, WISCONSIN**

ARSENATE OF LEAD, LIME— SULPHUR SOLUTION

Fully Comply with most rigid requirements of Insecticide Act of 1910



Grasselli Arsenate of Lead is being successfully used to destroy all leaf-eating insects, such as Codling Moth, Potato Beetle, Curculio, etc.

The Grand Sweepstake prize of \$1000 for the best carload of apples shown at the National Apple Show, Spokane, Washington, has been won by users of Grasselli Arsenate of Lead for the last three years.

Grasselli Lime Sulphur Solution is the Standard remedy for San Jose Scale. It has also come into prominence as a summer spray to replace Bordeaux Mixture.

For Further Information Write

The Grasselli Chemical Company,

The Grasselli Chemical Company, Established 1839

Milwaukee, Wis.

Main Office Cleveland, Ohio

in Wisconsin; that the state is 350 miles from north to south and covers nearly five degrees of latitude; that the Wealthy apple ripens in southern Illinois in July, in southern Wisconsin in August, in central Wisconsin in September, and in northern Wisconsin in October; that fruit growing is not a question of latitude but of isotherms, of local conditions.

All of this and "much more than twice all of this" have we learned within a few years and we are taking the lesson to heart.

These men have placed Wisconsin on the map, may their tribe increase!

Turning now from generalities to specific facts we note that the 1911 fruit crop in the state, especially the apple crop, was an abundant one and judging from all facts obtainable exceeded that of any year since 1896.

The total production of apples in Wisconsin is a very difficult matter to determine but an estimate of 100,000 barrels for 1911 seems to be quite conservative.

Probably one-half of the crop was from farm orchards which averaged less than 50 cents a bushel on the market. That the farm orchard as now conducted is the greatest drawback to the successful marketing of tree fruits in this state there can be no doubt and it is the duty of every one interested in this business to discourage the planting of fruit trees in farm orchards beyond the actual needs of the home. The fact that farm orchard fruit does not rank with that from the commercial orchard is not necessarily a reproach to the farmer. If he attends to his business as a farmer he cannot give the attention to fruit that it requires to produce first class quality. Nor need our attentions all be directed to the elimination of the farm orchard. We have as yet too few growers who give to the growing, picking and packing of apples the care needed.

Progress in orchard planting has been marked in three sections during the past year, viz., Door, Bayfield and Crawford counties..

Door county now has about 2000 acres of cherries, to be exact 1998½ acres and fully as much more will be planted during the next two years. Twenty-two cars of cherries

averaging 512 cases and 48 carloads of strawberries of 512 cases each were handled by the Sturgeon Bay Fruit Exchange this year. This, it can readily be seen, is but a beginning. It has been estimated that the shipments of cherries from Door county in 1920 will amount to 200 carloads a day for 20 days, requiring an army of 25,000 pickers. It is evident that grave problems face the peninsula growers.

One of the encouraging features of the situation in Door county is the steady development of the district north of Sturgeon Bay. Orchards of considerable size are now being planted at Egg Harbor, Fish Creek, Sister Bay and Ellison Bay, all on the Green Bay shore, and in addition

a company of our leading fruit men has acquired a tract of 400 acres near Ellison Bay 200 of which will be planted to apples next year. This with the purchase of a 300-acre tract by Profs. Jones and Moore of the Agricultural College insures permanent development of this section.

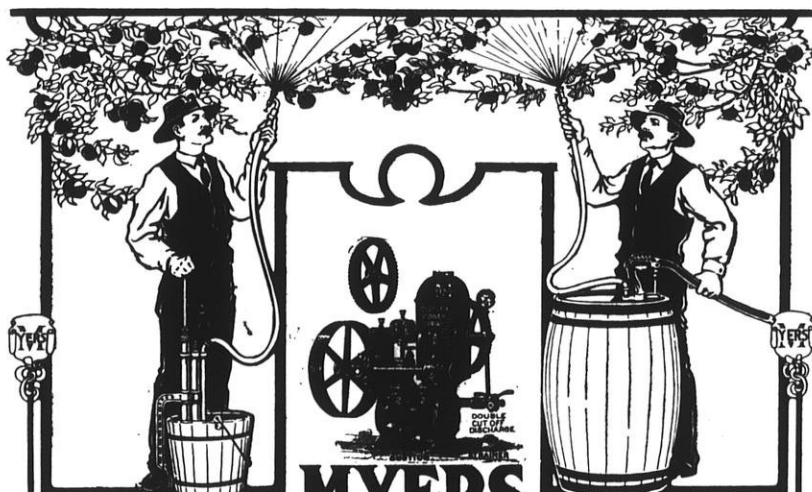
Either cultivate the young orchard or dig out the trees and burn them; they hinder mowing and reaping.

Door County Fruit Lands FOR SALE

Also Cottages and Bay Shore Lots
BARGAINS

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Volume II

Madison, Wisconsin, July, 1912

Number 11

FLOWERS IN THE SCHOOL AND HOME

By William Toole, Pansy Heights,
Baraboo, Wis.

It seems as if it is not necessary to give reasons why flowers should be grown in the schools or on the grounds surrounding them, and yet there are schools in which there is no attempt made to grow flowers or plants, and school grounds which are destitute of ornamental plants, shrubs and vines. Important factors in determining to what extent efforts shall be made to beautify the school and its surroundings are the teacher and scholars, parents and other taxpayers, and the school board. Teachers are rarely deficient in appreciation of the beautiful, and children almost without exception, love the beautiful flowers which the Heavenly Father has created for our pleasure.

If the teacher makes a beginning, aid from the scholars may be depended on, and if buildings or grounds are in unfit condition, the interest of parents may be awakened by the scholar. The influence of scholars in directing home sentiment is often very potent, as many a teacher has learned with sorrow. May we not hope to secure their influence in the line of helpfulness if their interest is secured?

For decoration of schoolrooms we may make selection from those plants which bear flowers and also from those which are grown only for the

beauty of their foliage. Of the flowering kinds we can use some of those which usually blossom in the summer, yet with preparation will bear flowers through early winter, and others which are specially adapted to winter blooming.

be kept bright until after the holidays.

Even if plants cannot be kept through severe winter weather, it is worth while to have them through the fall, and the necessity for giving them up may hasten the time when



Arrow Head,—*Sagittaria variabilis*. The Arrow Head is the companion of water lilies. Plentiful in ponds and streams in July.

Of the first class, we may quite early in the fall or late summer, take up geraniums which have been pinched back, also heliotrope, double feverfew, Paris daisy, double alysum, salvia and others, which may

better conditions shall be provided. For fall blooming, we may add to our list chrysanthemum and cosmos. If cuttings of the late varieties of cosmos are placed in wet sand as soon as buds begin to show, they will take

root readily, and can be easily grown into nice, shapely plants, adapted to window culture.

Of the class of plants which have a special tendency to blossom in the winter, are several begonias, the Chinese primrose, and other primulas, Christmas cactus, cyclamen, and bulbous plants in variety. Some of the begonias are such persistent bloom-

they enjoy plenty of light, they must not be scorched with sunshine through the windows. Of bulbs we may grow oxalis in variety; the various narcissi, hyacinths, tulips and others. The three last named kinds need special care to have roots formed before the leafy growth begins to start. Others might be added to this list, but only a portion of

and starting them into growth after they have had a slight freezing. In this class we may use the ornamental species of the asparagus, especially the kind commonly called asparagus fern, also the scented geraniums, vineas, joint plant, dracenas, palms, and many others.

Space cannot be spared for cultural directions in a brief paper like this, but it is well to caution the novice, and the unlucky ones, against careless watering. Always water thoroughly and not again until the surface of the soil begins to show dryness. Injury as often results from keeping the ground too wet, as from watering too seldom. When choosing varieties of plants for outdoor flowering, leading thought should be given to such kinds as are in bloom while school is in session; in spring until early in June, and during autumn from early in September until the weather is too cold for them. Preference might be given to hardy perennials, and there are a few natives which can be made use of, such as shooting star, the wood phlox, Jacob's ladder, wild columbine, the wood lily and others. When shrub planting is established good use can be made of some of our native ferns and such early flowering plants as spring beauty, blood root, hepaticas, wood anemone, and many others. These may be planted as undergrowth among the shrubs.

Of perennials which may be had in flower before school closes, we can make use of the mossy phloxes, hardy June pinks, pyrethrum, columbines, iris, valerian, the earlier paeonies, Iceland poppies, the light yellow day lily, lily of the valley, and perennial gaillardias. Among perennials which blossom in the fall are the later varieties of perennial phloxes, a second blooming of perennial larkspurs, which have been cut back after the first blooming period, giant daisies and gaillardias. Some of our native asters and perennial sunflowers are fine.

Among the plants which are grown as annuals although not strictly such by nature, nothing fills the requirements equal to the pansy. It is in flower with the earliest, and continues through the spring and into summer.



Common Milkweed.—*Asclepias Cornuti*. Grows everywhere, therefore we pass it by without notice. The milkweeds are all striking and handsome. Give them a chance in a rich soil with plenty of moisture.

ers, that we may have them in flower summer and winter. We have in our home a begonia plant which blossomed all summer, and was cut back early in November. Now early in December the new growth is full of flowers. Some begonias seem to choose winter for the blooming period, and keep up their beautiful flowers for a long time.

The primulas and cyclamen must not be kept too warm, and although

these should be attempted at one time.

From plants grown for the beauty of their foliage we may choose several kinds of ferns, always including some of the sword ferns, of which the Boston fern is a typical form, and the ostrich plume and other divided forms are extreme variations. An interesting addition to these may be had, by taking up late in the fall some varieties of our native ferns,

Young plants may be set out early in spring, and after yielding their beautiful flowers until school has closed, may be cut back that the young growth may give another lot of flowers, from early September until the ground freezes. With winter protection, these plants will yield early spring flowers, while the new lot is being started.

Most of our annual flowers cannot be of much service before early mid-summer, so we can set them in the school grounds leisurely. Asters, verbenas, cosmos, petunias, annual phlox, mourning bride, annual pinks, and many others are not injured by the lighter autumn frosts, and afford much pleasure before being spoiled by the later killing frosts.

In the fall is the time for bulb planting, and their beauty the following spring will well repay the outlay of money and labor.

For decorating our school grounds, we must not be content with herbaceous plants. Ornamental shrubs are more enduring and if judiciously placed, they give a finish to the grounds which nothing else can. I would give first choice to our native shrubs, and so many of them are so very good, that if all desirable kinds are planted there would be little space for others. But we like variety, and would not have all school grounds planted alike, so we are glad to have such a wealth of variety to choose from. As a class, perhaps, none are more striking than the viburnums. The nanny berry with its glossy black fruit almost good enough to eat, being a strong contrast to the high bush cranberry, with its drooping clusters of crimson fruit. Smaller than these, and also attractive with blossom and fruit, are the maple leaved viburnum, the wythe rod, and the dentatum species. The shrub commonly known as nine back spirea is very desirable. Its abundant blossoms are as showy as those of the bridal wreath spirea, and these are succeeded by clusters of seed vessels which are very noticeable.

Then we have the cornels, which are sometimes called dogwood. They also are showy in fruit as well as in flowers. Some have fruits of rich blue or purple, while the panicked

species makes a striking contrast to the others with its white fruit and bright red fruit stems. The true honeysuckles—the *Loniceras*—may be trained as shrubs, and the Douglas species is noticeable for its dark red flowers at a time when nearly all other shrub flowers are white. The different species of wild roses are early bloomers, and the flowers are followed by showy fruits. I find this paper will be too long if time is taken to only briefly describe the beauties of all the desirable kinds of our na-

trees for ornament, with little regard to shade, and the birches, poplars, catalpa, mountain ash, willows, honey locust, tamarack, hackberry and the various evergreens give a pleasing variety to choose from.

Yes! we have a wonderful variety of plants, shrubs and trees from which to choose, and the situations are so varied, that each school yard might be made beautiful, and yet have an individuality of its own. As it is there is a disappointing sameness showing neglect and indifference



Poison Sumac or Poison Elder,—*Rhus venenata*. A good one to let alone. Grows mostly in swamps and can be distinguished from its harmless neighbors by its broad, shiny leaves. First cousin to poison ivy and more dangerous.

tive shrubs, but the hawthorn must not be overlooked, and our native apple flowers are worthy of our preference.

For beauty and fragrance the flowers are such general favorites, that our native apple would receive many votes to name it the state flower of Wisconsin. Oh, for time to describe the beauties of the elders, sumachs, witch hazel, black alder, Wahoo, bladdernut, Juneberry, prickly ash, Jersey tea and others. All are worthy of being planted.

Ornamental climbers we can choose from in abundance, including the various climbing roses.

Of trees for shade we of course first think of the elms, oaks, maples and basswood, but we like to have some

to the appearance of the places which should be the bright spots in each community.

We read of the time and money spent on some lines of railroad to beautify their depot grounds with flowers and shrubs and trees, and we think it is well. A not very distant city is proud of its beautiful drives, extending well into the country, and they have been secured through the efforts of a few persons enlisting the interests of the many, who have contributed to the expense fund.

I would that missionaries might go forth to awaken an interest in beautifying our country school grounds, that our teachers might be roused up to more interest in the subject by its frequent presentation at

Summer Meeting, Bayfield, Aug. 21-22

their institutes. Teachers might stir up enthusiasm among the scholars, which would lead to practical object lessons in an important part of agricultural education in our district schools.

To know how to properly plant a tree or shrub seems like a simple thing, but the knowledge is almost rare with many. Love for the school and grounds should be a pleasant memory in after life, to those who had helped create and care for their



Tall Meadow Rue.—*Thalictrum Cornuti*. Very graceful but not showy. Look for it in low meadows in Wisconsin in July. The early Meadow Rue will be found on higher ground and along the borders of woods.

beauty. More desire to beautify home surroundings would be stimulated, and through this influence would go forth an important one of the many factors which have a share in holding our young people to farm life.

I would that the subject of redeeming our school grounds from the neglect and indifference which prevails, might forcibly and often be presented before our farmers' institutes and horticultural meetings until such an interest might be awakened that there would be need for the state to provide an inspector of school grounds, whose duty should be when called upon to inspect the school

grounds of those districts desiring his assistance, and furnishing a working plan of the grounds, indicating the best arrangement of trees and shrubs adapted to each particular site and its surroundings. These hoped for results are no more impossible than much that has been accomplished in other directions, and the benefits which would follow would be as important as road improvement, or acquisition of state parks, and not proportionately more expensive for the amount of good which might be accomplished.

There is so much literature on the subject of flowers for the home that this paper may well be closed with saying that whatever is suitable for improvement of the school and grounds, is available to even a greater extent for the home.

SUMMER MEETING

The summer meeting will be held at Bayfield, August 21 and 22. No need to say that it will be the "best ever."

The Bayfield local has 127 members and each and every one of their number will use his best efforts to make the meeting one to be remembered. Also the Society is acting as a unit in making plans for our comfort and entertainment.

The program will not be announced in full this month, nor is there need that it should be. There will be good things in plenty about berries, bushes and bugs, but Bayfield itself will be the very best part. Listen:—

"Our Society held a meeting recently to consider the subject of entertainment of the summer meeting of the State Society. It was resolved that we ask the board of managers to make the program of work so it may be gotten through with in two morning and one evening sessions, leaving us two afternoons and one evening to give you a good time.

"Our program will be to take the visiting members on a ride and showing them something of the horticultural development in the district on one afternoon, and on the other after-

noon take them on an excursion by boat out among the islands and probably to Cornucopia, returning to Bayfield at night in time for a banquet and possibly a dance for those who would enjoy it. These excursions, banquet and dance will be free to all visiting members. Now what we want to ask of you as secretary of the State Society is to ascertain soon approximately how many we may expect to attend the summer meeting, so we can make our preparations accordingly. At that time of the year our hotels will likely be all full, and we will have to secure sleeping accommodations for visiting members among our local members, for which there will be no charge. The hotels will charge about fifty cents per meal for their board.

"Some of the sleeping accommodations may not be very stylish, but they will be comfortable.

O. FLANDERS, *Secy.*"

First a delightful drive through the fruit farms and orchards, then a boat trip through the islands, a banquet and a dance! With all of this in addition to two half-day sessions and one evening illustrated lecture, no coaxing should be needed to get members to attend.

IT NEEDS A MAN BEHIND THE TREE

Apple raising is not a holiday entertainment. Poetry and romance have woven their charm around the apple, but those who cultivate their orchards in dreamland and irrigate them from the springs of their imagination, will find their fruit to be apples of Sodom. Horticulture is a science, not a guess or makeshift and should not be a side issue. It was the business of the first pair in Eden, and will be the pursuit of the angels in Paradise. It is not a trade for those afflicted with the hook-worm. Eternal vigilance is the price. Industry and sense are imperative. The apple that grows of itself and falls into the open mouth of the loafer under the tree is always a wormy windfall.

HON. ALVA ADAMS.

Free Excursions by Land and Water

Gardens

A department conducted by practical women who really have gardens. Contributions are solicited. The editorial staff consists of all who contribute an article each month. If you know about flowers, home making or home keeping, write it down. The next best help is to ask questions. Send all contributions and questions to this office.

A CAUTION

The old rule that melons and cucumbers shall be planted in hills, well enriched by old manure must be cautiously followed by the amateur. The writer planted cucumbers in hills enriched with hen manure and not well rotted at that. When the cucumbers failed to come up more seed was procured, some being planted in the hills which had failed, some in hills enriched by horse manure and very little of it, the latter germinated, the former did not. Resulting in the conclusion that the poultry manure was too strong and burned up the seeds before they germinated.

CAUTION NUMBER TWO

Many years ago our esteemed editor, Mr. Cranefield, in donating some *tamarix Siberica* to an amateur starting a new home remarked that they required severe pruning. At the same time he slashed into a large specimen nearby and cut out vigorously. The poor amateur, believing that imitation is the sincerest flattery, slashed at the specimens received each year in what seemed to his ignorance, the same way and then wondered why his bushes were so scanty and thin. This year circumstances accidentally prevented the annual pruning, and lo and behold the result is a thing of beauty and a joy not merely to the artistic flower loving eye but to the perfume loving nose of mankind and the honey bees are busily at work on them all day. The bushes are loaded with pink plumes of tiny bell shaped flowers and the perfume floats on the gentle breeze giving a delicate delight to each passing friend. Caution:—Interpret Mr. Cranefield's "prune

and cut back severely," with great moderation. This tamarix combines delightfully when in bloom with the Russian olive. There is an artistic group nearby, where a crabtree and a Russian olive stand on a hilltop with blue sky for a background, behind a tamarix in full bloom of delicate pink and feathery gray green. Try the combination and let us hear your opinion.

The coral red stemmed dog wood affords a delightful color contrast against the winter snow, but care in planting it must be observed because it loves the shady nooks and cannot live in a sunny dry exposed situation.

The elders both common and golden, have an objectionable habit in that their branches die out from year to year, making it impossible to tell from one year to the next in what size or shape or condition a bush will be.

There are two varieties of beans which are little planted and yet should be in every home garden. The first is Thorburn or Dreer's Dwarf Bush Lima, a rich thick buttery bean, which when fresh cooks in twenty minutes and keeps well for winter use either dried or canned. It is one of the most delicious beans listed. It occupies the ground a full season and bears from August until everything freezes in the fall.

Another little known variety among home gardeners is the Black Turtle Soup Bean. It retails dried in the groceries in Madison for fifteen cents per lb. It's a bush bean, which is shelled and dried to be used in soup. The soup is extremely rich and nourishing and is made as follows: Soak the beans over night after washing them and the next day cook slowly in the water in which they were soaked, until they are tender enough to mash first through a culinder and secondly through a puree sieve. Add an equal quantity of soup stock or a little beef extract

if you have it. Make a roue of two level tablespoonfuls of bacon or ham fat or salt pork dried out (the salt and smoky taste of the bacon or ham is desirable) and two level tablespoonfuls of flour, then add a bay leaf, onion and a little celery seed or tops, salt and pepper to taste and boil. Just before serving add slices of hard boiled egg and a lemon sliced thin. It is particularly nice for a winter night supper or noonday luncheon in the absence of meat and is very filling and satisfying. Use more beans or less water than in making white or navy bean soup.

When green peas are young steaming for twenty minutes and not boiling is the most delicate way to cook them, but as the season advances and the peas toughen boiling for some time in water is better than steaming.

Cut worms are more numerous and vicious than usual this year about Madison. Are other localities in the state also suffering? Let us hear from them.

So many perennials were winter killed this year that those who love them should plant them in the seed bed now to set out in September. It is not too late to start them if the bed is kept shaded and watered until they are well started. Try fox glove, gaillardia grandiflora, columbine, coreopsis, Canterbury bells, oriental poppies and Scotch pinks. But remember it is essential to keep the bed well shaded and moist, using burlap or cheese cloth for a screen.

NO POKER GAME

The apple orchard is no place for the man who believes that the god of luck rules human destiny. Good fruit is not a chance, luck may sometimes win a prize in a lottery—a bob-tail flush and nerve may sometimes win a good pot in a poker game, but no prize box of apples was ever raised without work and brains.

HON. ALVA ADAMS.

Break Loose for Once, go to Bayfield

Reviews

Under this head will be found the best from horticultural papers and experiment station bulletins; not merely scraps of information but the live topics of the period put in readable and attractive shape. Mr. R. E. Hodges, of the Agricultural College School of Journalism, editor.

From The Fruit Grower.—"Hood River apples sell at 25 cents apiece, not because of their superior quality, but because of organized advertising that has educated a certain class of consumers to demand such apples at any price." Manufacturers regulate styles and popularize them by advertising, but most fruit growers have this lesson to learn. "It must be made stylish for the city people to walk down the street munching an apple or a bunch of grapes. Apple eating can be made just as popular as breakfast foods... Advertising will do it. It is time your association, your community, your horticultural society is getting busy at creating styles in fruit."

If you see a mower in South Africa you know who made it and where it was made. The only place its label counts for nothing is in the junk heap where it is worth about \$2.00. Too much of our fruit is sold as junk. If you are ashamed of your fruit, sell it for junk. If you are proud of it, label the package with your name and the variety and grade of the fruit. The confidence you inspire that way will sell more fruit at better prices.

Currants grow better than most fruit in the shade. This makes them valuable for interplanting with young fruit trees, where four or five rows of currants may be grown between cherry, plum, or pear trees, where the trees are twenty to thirty feet apart.

If you haven't thinned your apples four to six inches apart, do it now, leaving only the best shaped, disease-

free fruit. It means larger fruit of fancy quality, less likelihood of perpetuation of disease, a chance to get rid of wormy apples, and a help for the tree to bear well next year.

There is a live and growing demand for small packages for fruit. A neat small package of graded fruit, labeled with the grower's name, will bring the fancy price. Now is the time to supply yourself, for the makers of fruit packages are likely to be behind their orders when the packing time comes.

From Miss. Expt. Sta. Bul. 147.—"The bulk of apples found on our local markets are No. 2's or culls. These have sold at times for two dollars or more per bushel... and the demand at these prices was greater than the supply." The author thinks that "apple growing may never be of great commercial importance in Mississippi," but that enough should be grown for home use. "There is only a limited number of varieties of apples adapted to the South" and very little work has been done on them in Mississippi.

Here is an opportunity to develop a great apple trade in the Southern states where the climate is not favorable to apples, but where the people could be made to like them as well as in the North.

To set trees exactly where the stake was, use a board strip three feet long with a notch in the center, and a hole at each end. Slip the notch over the stake, drive pegs through the holes at the ends, remove the board, dig the hole, replace the board on the pegs, set the tree in the notch and fill the hole. If another man digs while you are setting the trees, he can carry a similar board and you can keep yours for use on the pegs which he sets.

In selecting the orchard site, choose a north or northwest slope in order to retard the opening of the blossoms till after frost. Plant on high ground, because the colder air settles into the lower areas and causes later frosts

there. If the land is so steep as to cause washing of the soil, it should be terraced before planting.

In 1896 United States produced 69,000,000 barrels of apples; in 1908, about 23,000,000. "The rapid spread of destructive insects and diseases of fruit within recent years" has forced the abandonment of the large farm orchards. "The market apples of the future will be produced by specialists."

THE TREE SHARK

About this time of the year nursery agents are abroad in the land. Once a year, at least, we give warning and supply a list of "don't's," but victims of the fake nursery agent still come to us with their pathetic stories.

Conditions in this state are much better than five years ago, but are bad enough now. The very first bump given to swindlers selling nursery stock in this state was administered by agents of the State Horticultural Society in 1908, when an agent of the Farmers' Nursery Company of Tippecanoe City, Ohio, was arrested and fined for fraudulent practices. Among other things this agent represented that he was employed by the State Society to teach farmers how to prune, etc.

The next merry chase was after agents of the Home Nursery Company of Bloomington, Illinois. One B. N. Bowman was the chief high priest. We gave him and his contract orchard plan several pages of free advertising in WISCONSIN HORTICULTURE and finally turned him over to the tender care of Prof. Sanders. Bowman is now said to be fully halter-broke and guaranteed to stand without hitching, which is most remarkable. In the beginning you might chase him over a county and when you were sure you had him in a corner he would serenely appear somewhere else with a bunch of contracts for Ostheim and Northwest cherry at \$1.10 each. Bowman and his agents actually sold thousands of cherry trees at that price!

And See the *Big Bayfield Berries*

We next encountered agents of the Spaulding Nursery and Orchard Company of Springfield, Illinois, selling a collection of fruit trees and Catalpa seedlings worth about fifty dollars for one hundred and forty dollars cash on delivery and claiming to be employed by the Forestry Department of the United States Department of Agriculture.

A number of other schemes were exposed until for a time the state was comparatively free from these pests, but there is good reason to believe that some of them will return. With the publicity we have given this business and with the class of advertising we carry in this paper of reliable home firms there is not the slightest excuse for any reader being swindled. In spite of this, just as sure as sunrise will come tomorrow morning, before next September some member will send in a "contract orchard" order for varieties that no one ever heard of at a dollar apiece or more, for inspection and "what do you think about it?"

Such is the way of the world. Here are three "don't's" that may or may not help.

Don't buy fruit trees on the "contract orchard" plan. If you lack confidence in yourself sufficient to enter into a straightforward bargain for trees to be delivered next spring and paid for on delivery without any worthless guarantee to "trim and care for" the trees for five years don't buy trees.

Don't buy, except for trial, in lots of two or three, trees of any variety unless named in the Fruit Lists of the annual report of this society. There are enough poor ones listed there without going outside for trouble.

Don't pay a dollar apiece for cherry or apple trees; they are not worth it.

Save time, trouble and money by buying of firms which advertise in WISCONSIN HORTICULTURE.

A WORD TO READERS

If you want to buy or sell advertise in WISCONSIN HORTICULTURE.

TREES AND SHRUBS, LAKE GENEVA

Conditions among perennials, trees and shrubs are disheartening to say the least. Of most interest to you, perhaps, is to know how your trial orchard stands. I took a walk over there a week ago and I am glad to report to you that the trees look fine, practically no damage to speak of. Your orchard has a somewhat southern exposure, is also sheltered from the north and west winds. Not so with my orchard; that slopes to the north, lays high and is exposed to the west winds from the lake. Here the results are that about one-quarter of all trees (planted as two year old in 1908) are dead. I am speaking now of apples and pears, for plums and cherries are all right. The remaining ones lost all their fruit spurs, whereas the tips of last year's growth are producing the only flowers to be seen with very few exceptions. Fruit spurs, apples and pears, are killed mostly all around here. Peach trees also all winter killed. My peaches were Elbertas. Apples on the death list: Fameuse, Bellflower, Wealthy, Yellow Transparent, Northwestern Greening, McIntosh; all good hardy varieties and especially recommended for our climate. Cause? Very dry summer with plenty rain in fall and very hard frost with still more and then some. Trees were overcharged with sap. This explains leaves remaining on trees in the orchard all winter. Grapes and raspberries carried over all right where they had been buried with soil. Where covered with manure only they are badly frozen.

Strawberries on dry ground all right, in fact anything that was in a perfectly dry place did not suffer so much.

Of perennials Hollyhocks and Marshmallows all gone. Digitalis, Phlox, Gaillardias, Delphiniums suffered bad.

Shrubs: Symphoria racemosa and Vulgaris (Snowberry and Indian currant) half frozen. Golden Bells or Forsythia flowerball frozen and some plants entirely dead. Privets all

gone. Have lost also all Cercis or Judas trees. Weigelas also suffered bad. Snowballs look as if they would rather go to sleep than grow. Barberries suffered much.

Trees: I have in my nursery Ailanthus or "Tree of Heaven" 20 feet high that are only fit for kindling wood for the other place. English walnuts are dead and so are some hardwood maple seedlings six years old that have never been transplanted for four years. Conifers are badly scalded in places.

Roses severely frozen back, even such hardy ones as Ramblers, that we never think of covering. Ampelopsis Veitchii or Boston Ivy killed to the root. Kudzu Vine also dead.

Bulbs: Hyacinths and many other Narcissus frozen, as are Lilium auratum, rubrum, etc., where no covering was given.

Taraxacum officinale is in beautiful bloom all over, whether covered or not the Dandelion is always with us.

A. MARTINI.

Everyone is busy making hay, not much time to work in the garden, but we must stop long enough this dewy morning to dust the melon, cucumber, squash and pie-pumpkin vines with land-plaster to which a little Paris green has been added. Later watch for the large hard-shelled gray bugs. They will be found piled up under the leaves near the base of the plants early in the morning and can then be gathered and destroyed.

Lime sulphur prepared at the rate of 1-30 with one pound of arsenate of lead added sprayed on the early potatoes will shorten the bug crop.

Spray pansies, sweet peas and Clematis with a weak solution of Bordeaux to prevent mildew.

Burn over the old strawberry bed, then plow, harrow thoroughly and sow to turnips. They will keep down the weeds and furnish a welcome addition to the winter supply of vegetables, and the surplus can be fed to the chickens. Mrs. Biddie enjoys a "biled" dinner about once a week.

MRS. L. H. PALMER.

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Remit to Secretary W. S. H. S.
Madison, Wis.

Bayfield, August 21 and 22.

Don't forget about Bayfield.

You will never forget nor ever regret the trip to Bayfield.

Overflow tents will be pitched in the shade of Mr. Knight's Perfection currants on the hill back of the city.

Notify the secretary on or before August 1 if you want a place to sleep at Bayfield. Just state your intentions, and if later something pre-

vents you from going no serious obligation is incurred.

First berries Dunlap. Best showing, Dunlap. Crop one-half to two-thirds a full yield. Cold weather holding back the fruit and making quality poor. Acreage below average in southern counties. Our heaviest picking will be June 24 to 28 on account of not uncovering beds till late.

M. S. KELLOGG.

OUR SCHOOL GROUNDS

Along about the middle of July the school yard is apt to be the worst looking spot in the district. Somebody ought to cut the weeds and grass at least once during vacation. Who will do it?

Hepatica, bloodroot, anemone, Dutchman's breeches and many other early flowering native plants may be transplanted from the woods to the schoolyard in vacation time with entire success if watered and shaded for a few days.

This is the season when Arbor Day trees and shrubs die for want of a little attention. I know it is really nobody's business in particular but really someone ought to see that the weeds are kept down around the newly planted bushes, the soil stirred, and a heavy mulch applied.

The secretary of the Missouri State Board of Horticulture reports an unusually large apple crop for that state. The crop is estimated at 72 per cent as compared with 35 to 40 per cent last year.

Winter varieties are reported best with summer and fall varieties poor. Wisconsin is the only state that can raise fall apples and do it right. The market is all our own and will be for all time.

A WORD TO ADVERTISERS

"Be not misled by circulation claims, but put your trust in the vigorous character of the publication that has a policy and stands for something—not your policy, perhaps, but nevertheless an earnest appeal to a living constituency." T. FRISBIE.

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Real Estate and Fruit Growers

We have land for sale in the Bayfield Peninsula Fruit Zone. Good location, good soil—suitable for apples, cherries and small fruits.

Also grass lands for stock and dairies.

Prices are cheap and terms easy.

We will also clear and plant to orchards for you, and cultivate and care for them for five years.

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Our stock is grown right, dug right, packed right, and by no means least, the

PRICES ARE RIGHT

*Our Specialties are Small Fruits
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Apples singly or by the 1000
Currants by the doz. or 25,000
Strawberries by doz. or 500,000

FIFTY-EIGHTH YEAR

Get our price list before you place your order and save money.

Address Box 77

KELLOGG'S NURSERY

Janesville, Wisconsin

WISCONSIN NURSERIES

Grow and handle all kinds of nursery stock. We employ no agents but sell direct. If in the market you can save money by buying of us. Get our prices.

WISCONSIN NURSERIES,

Union Grove, Wis. W. S. Moyle, Prop.

SPRAY CALENDAR

What?	Why?	How?	When?			Remarks
			1st spraying	2d Spraying	3d spraying	
Apple	Scab and bitter rot	Bordeaux Mixture or Lime-Sulphur	Before growth begins (1 to 10 L. S.)	Just after blossoms drop (1 to 30 or 35 L. S.)	10 days after 2d spraying (1 to 30 or 35 L. S.)	1st and 2nd spraying same as 2d and 3d for scab; merely add arsenate of lead to Bordeaux. Do not use Commercial Lime-sulphur on growing plants at less dilution than 1 to 30.
	Codling moth	Arsenate of Lead combined with Bordeaux	Just after blossoms drop	10 days later	Last week of July or 1st week of August for 2d brood	
	Oyster shell scale	Lime Sulphur 1 to 9	March or early April but before growth starts			
	Oyster shell scale	Kerosene Emulsion	When young are active	10 to 12 days later	10 to 12 days later	
Cherry and Plum	Mildew and shot-hole fungus	Bordeaux Mixture 3-4-50	When leaves are about 1-3 grown	2 weeks later	After fruit harvest	Add arsenate of lead for slug and other biting insects, 2 lbs. to 50 gals.
Currant and Gooseberry	Mildew, blight and Currant worm	Bordeaux and Arsenate of Lead	When leaves are fully developed	2 to 3 weeks later		
Grapes	Mildew and anthracnose	Bordeaux	Before leaf buds open	2 to 3 weeks later	3d, 4th and 5th applications at intervals of 2 weeks if required	
Strawberry	Leaf-spot or blight and leaf-eating insects	Bordeaux and Arsenate of Lead	When first leaves appear	After blossoms fall		
Raspberry and Blackberry	Anthracnose and fungous diseases	Bordeaux	As above	2 weeks later		Spray new growth after fruit harvest.

WHEN THE COWS DIDN'T COME HOME

In March, 1907, I purchased the Joseph Pearson dairy farm consisting of about one hundred and thirty acres, situate two miles west of the Madison city limits. With the farm I purchased the dairy herd of thirty-three head of milch cows and heifers. I could not buy the cows subject to the tuberculin test and so after satisfying myself as well as I could from the history of the herd and its physical appearance of its reasonably healthy condition I purchased and took my own chances. Within forty-eight hours after taking possession of the herd, upon a tuberculin test being made, I found my dairy herd wiped out. Only seven animals failed to react and of this number only three were milch cows, the remaining four being young stock.

I went at the disinfecting and cleansing of the barns and stables and proceeded slowly to rebuild my dairy herd with tuberculin tested cows.

The loss of the dairy herd and its anticipated income fell very heavily on me and compelled me to prove every resource for income to carry my investment. Necessity forced my

attention upon the farm orchard. Some two acres adjoining the house had been planted to orchard trees. About fifteen trees were old ones. Some fifty trees were thrifty seven- or ten-year-old trees nicely coming into bearing. As many more were young trees not in bearing that had been recently set to fill in vacant spaces in the orchard. I knew practically nothing about the care or treatment of trees and positively nothing of orchards or orchard trees. The orchard ground was covered with dead branches and a mat of dead grass. My first venture to improve conditions in the orchard was to burn it over. A neighbor discovering what I was about, hastened to me and pointing out how I was ruining the trees by burning, helped me to keep the fire away from and save most of them. A few died because entirely girdled by fire. Many show great scars that were left after that burning. All are making valiant efforts to heal and cover over the scars. Some yet will probably give up and die. I have learned my lesson on the treatment of orchard trees and am making every effort to heal the trees and to save and conserve their

strength where I can. I want to do all things possible to make reparation to that orchard.

In 1907, the orchard yielded 200 bushels of exceedingly defective apples. Our grocers took them for cooking apples, however, and we had much use of them for sauce on our own table. But none of the fruit was perfect. It was wormy and defective in shape, stung by the curculio, and much fruit fell prematurely from the trees. We cut excellent crops of hay from the orchard in 1907 and in 1908, but our apple crop in 1908 was below the crop of 1907 both in quantity and quality. When we learned that we should not expect both a crop of apples and a crop of hay from the orchard we tried to make up to the orchard so far as we could by returning a liberal covering of fertilizer. Three times, I believe, since the spring of 1907 have we covered the orchard with barn yard manure.

It was on Washington's birthday, 1909, that our secretary, Mr. Fred Cranefield, went out home to lunch with me and going through the orchard with me pointed out what ought to be done. Some trees were

suffering from blight, others from canker, all from the necessity of pruning and from a binding matted sod of many years standing.

We set about pruning the trees, cutting out the canker, bridging over the scars from the burning and covering all large cuts and bruises with the grafting wax preparation for which Mr. Cranefield gave us the formula. In the spring of 1909 at his suggestion we plowed up the sod, pulverized it with the disk harrow and have kept the orchard cultivated ever since. Commencing in 1908 we have sprayed twice each spring pursuant to instructions and have each year since pruned with vigor.

Our first substantial improvement in quantity and quality of fruit was in 1909 and in that year our sales amounted to about \$200. The frost destroyed all fruit buds in 1910 and we had scarcely an apple. Our results for 1911 are as follows: on July 23, I made as careful a canvass of the apples as I could and in our orchard book in which is listed every tree, its variety, condition, etc., I set down my estimate, which aggregated 400 bushels. On September 10, 1911, Mrs. Warner made a similar canvass and herein follows her estimate:

Variety	No. Trees	No. Bushels
N. W. Greening	36	180
Wealthy	12	120
Red Astrachan	2	20
Whitney No. 20	3	8
Walbridge	2	16
Seek No Further	4	2
Gano	1	10
Hibernal	1	2
McMahon	5	12
Plumb's Cider	8	80
Snow	6	35
Russet	1	8
Peerless	1	7
Total	82	500

This estimate included sundry small sales that had been made as well as apples used since about the middle of July. The estimate was significantly accurate. The apples were almost uniformly perfect, of good size and every one sound clear through. The wind-falls last year were not offered on the market. Only hand-picked apples were brought to the city. Owing to the abundant crop, the price we received for perfect hand-picked fall apples averaged only about seventy-five cents per bushel. Our winter varieties later sold as high as \$1.50 per bushel. A hand

cider press of about two bushels capacity was gotten and all wind-falls or imperfect apples were used for cider. Sweet cider in small quantities was marketed quite readily in Madison at thirty-five cents per gallon. We found that ordinarily a two bushel cheese of apples would press out four gallons of cider, so that as cider our wind-fall and surplus apples were bringing us about seventy cents per bushel.

The work of harvesting the apples and making the cider was practically all done by members of the family, our son John, who is in his sixteenth year, having entire charge of the marketing. His records show the sale of:

300 bus. apples at	\$266.47
200 gals. cider at	70.00

\$336.47

Total sales approximately 400 bushels.

We have in our cellar at this date, April 13, 1912, several bushels of apples, approximately 120 gallons of cider for vinegar and have used and given away apples freely for nine months from the 1911 crop.

We have each spring since 1908 planted in new trees to take the place of such as have died out. All told we have on a two acre plat 123 trees, 39 of which are young and 84 of which are in bearing. Of the fourteen varieties there were but one or two that we could name. Samples of the apples were submitted to our secretary who furnished the names for them.

Our Northwestern Greening, Plumb's Cider and Gano have been awarded premiums in stiff competition at the Horticultural Society exhibits and at the Dane County Fair. Our financial exigencies led us to explore the value of this old orchard. No similar area of our farm has approached in net receipts this two acre plat. We have been getting lessons in tree culture that are well worth the effort expended and additional to that our cash receipts are proving significantly attractive.

ERNEST N. WARNER.

Mr. Warner is a lawyer but was reared on a large dairy and stock farm. When the lure of the land finally could be resisted no longer, what more natural than to turn to

JEWELL MINNESOTA GROWN Nursery Stock

Complete assortment of Fruit and Ornamental stock in all varieties suited to northern culture. A specialty of Hardy Shade Trees, Windbreak Stock, Evergreens (Coniferous), Deciduous Shrubs, Apples and Native Plums.

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FIRST CLASS NURSERY STOCK IN GREAT VARIETY

Consisting of

FRUIT, SHADE AND ORNAMENTAL TREES

Strawberries, Raspberries, Blackberries, Currants, Gooseberries, Grape Vines, Asparagus, Rhubarb, etc.

Ornamental and Flowering Shrubs, Vines and Perennials. Roses, Evergreens, etc.

If you would like to see a *really good Catalogue* we would be glad to send you ours. It has more than fifty pages and describes everything in the plainest language without any extravagant or overdrawn descriptions.

The Coe, Converse & Edwards Co.
FORT ATKINSON, WISCONSIN
Wisconsin's Largest Nursery

dairying as a recreation? Considered that old orchard by the roadside as an incumbrance on an otherwise perfectly good pasture.

Some day, and soon, the light of reason and understanding will penetrate the buttermilk brains of some of our 160 acre farmers who are actually making about two per cent on their investment, when they will see that the apple tree plus the man behind the tree is a combination bound to win.

EDITOR.

GEMS

At the First American Apple Congress, which met in Denver in 1910, Hon. Alva Adams delivered a remarkable address. It naturally contained much about Colorado orchards and Colorado box apples, but here and there are to be found some old truths beautifully expressed. You will find some of them in odd corners this month. Here is one:

"The apple is an asset financially, morally and politically. It is a mortgage payer, a character builder, a conservator of home and a patriotic incentive. Apple orchards mean intensive cultivation of small tracts of land. It means a maximum of production and a minimum of waste. It is a business in which every member of the household can take an intelligent and a useful interest. It centralizes the family and creates a home in which all may have a part. In an orchard land fireside altars are everywhere reared and everywhere sacred."

GARDEN BOOKS

The gardener should read good books, books on pruning, books on insects, etc., and thus keep abreast of the times. It is also a good idea to read a "story" book occasionally. Here are two, both well worth reading: "The Garden of a Commuter's Wife" and "The Secret Garden."

Not a single, solitary word about gardening in either one, that is, not a word about how to do gardening, but delightful stories about gardens. Just the thing for a Sunday afternoon in summer. There are many things in life besides cows and dollars and apples; don't let them all slip by. Read "The Secret Garden."

Questions and Answers

Q. I would like to see in our paper all that is known about canker on apple and pear trees. What is the matter with Windsor apple for prairie soil?

G. R. Mc.

Rock County.

A. To tell all that is known about the blight canker of the apple would require all of several issues of this paper. An excellent description of the disease and suggestions for control may be found in the annual report of this Society for 1906.

In general terms canker is merely fire blight attacking the crotches, main limbs and trunks of the tree instead of the new growth of twigs. The remedy lies in gouging out all affected bark with a sharp knife or chisel and disinfecting the wound with a strong solution of copper sulfate.

The Windsor is probably as good as any other for prairie soils. No place for apples.

Q. 1. If one is to have but one, two or three apple trees on this light soil, which kind or kinds are best?

2. Is there any truth in the statement that trees trimmed in March produce wood growth, while if trimmed in June they will bear more fruit?

Waupaca.

S. S. C.

A. 1. Any of the kinds named in "General List" in Annual Report.

2. Yes; these statements are mainly correct; that is, the tendency is in the direction indicated.

Q. 1. Is interplanting in orchards of apple trees advised? If so, what crop would you advise?

2. Is alfalfa advantageous or detrimental to apple orchards?

Sauk County.

C. A. H.

A. 1. Catch crops may be grown in an orchard for the first three or four years if common sense is used at the same time. Both grass and grain must positively be kept out of the orchard and only such crops grown as require cultivation. Beans

Door County Fruit Lands FOR SALE

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BARGAINS

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PARDEEVILLE, WIS.

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HARDY NURSERY STOCK

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If interested in planting FRUIT TREES, SMALL FRUITS or ORNAMENTALS, write us for CATALOGUE and PRICES. You will find our prices consistent with quality of stock offered.

**NURSERIES AT
WATERLOO, WISCONSIN**

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**W. C. REED,
PROPRIETOR**

**Cherry Trees by the
100 or 100000**

The Growing of Cherry Trees has been our Specialty for Years. Our soil and method of growing produces a Tree that is not excelled by any one. Splendid blocks of two-year 5 to 7 foot trees and one-year 4 to 5 foot trees. Early Richmond, Montmorency and other leading varieties by the 100 or car load. We also grow a general line of other Nursery stock. Personal inspection invited. Correspondence solicited

and potatoes are favorites with the Sturgeon Bay cherry growers.

2. Alfalfa should never be planted in an orchard.

Q. Some people whitewash their fruit trees in fall. Is this a good practice? Why? Would it be of any benefit to trees if they were whitewashed in the spring also? Should any other substance be added to the whitewash?

A. The best we can say for the European practice of whitewashing the trunks of trees is that it will do no harm. It may even help a little, but it must not be considered a cure-all. It cannot replace spraying with lime-sulphur or Bordeaux.

THE APPLE CROP

A preliminary statement of the general results of the thirteenth census relative to the number of farms reporting apple trees of bearing age and those not yet of bearing age, together with the number of trees in each class as of April 15, 1910, and giving the number of bushels of apples produced in 1909 and the value of the crop has been issued by Director Durand of the bureau of the census.

At the census of 1900 there were reported 201,794,000 apple trees of bearing age, as against 151,323,000 trees in 1910, a decrease of 50,471,000 trees, or 33.4 per cent.

The present census shows that in 1909 there were produced in the United States 147,522,000 bushels of apples, having a total value of \$83,231,000.

Production by States.

Missouri, New York and Illinois together contained in 1910 almost 25 per cent of all apple trees of bearing age in the United States. The number of trees of bearing age in Missouri at the census of 1910 was 14,360,000, this being a decrease since 1900 of 5,680,000 trees. The production of apples in 1909 amounted to 9,969,000 bushels while in 1900 it was 6,496,000 bushels, a gain of 3,473,000 bushels. The value of the 1909 crop was \$4,886,000.

New York reported 11,248,000 trees of bearing age in 1910 against 15,055,-

000 trees in 1900. This state alone produced 25,409,000 bushels, valued at \$13,343,000. In 1899, a crop of 24,111,000 bushels was gathered.

Wisconsin has 2,430,000 trees—slightly fewer than 1900, and apple product is worth \$2,232,000. Iowa's is about three times as much and Illinois one-third more. The Washington crop is worth \$2,672,000, Oregon's \$1,931,000 and California's \$6,335,000.

CONSERVATION

The two fundamental wants of humanity are food and shelter, and until these are supplied the higher developments of our race is hardly practicable. The work of domesticating and developing into varieties, the wild plants and wild animals of the Eastern hemisphere laid the foundation for modern civilization.

Notwithstanding the fact that we have found on the Western hemisphere vast varieties of plants and animals well fitted to supply the wants of humanity,—plants and animals that under proper cultivation and domestication could be developed into varieties that would serve humanity even better than the varieties imported from the East, yet we have done but very little in this work of conservation.

Wisconsin has taken the leading part in progressive movements, and it seems to me that you are in a position to call public attention to our woeful neglect in this matter, and would ask you to prepare an article on that subject to be read at the next meeting of the Horticulture Society.

I have been trying to do this kind of work for the cranberry. I collected together from all parts of the globe 183 so called varieties of the cranberry and have turned them over to the State Cranberry Experiment Station. Our late Professor Goff, about one year before his death told me in a letter that he hoped to be able to do for the blue berry what I have been trying to do for the cranberry. I regard his early death as a great loss to the Horticulture interests of Wisconsin and I have seen nobody since who is quite able to fill his place.

It might be worth while to make a list of the native wild plants and wild animals found on this continent that might be cultivated and domesticated to advantage, and although most of these in a wild state may appear crude and of little value they will nevertheless compare very favorably with the wild plants and animals that have been cultivated and domesticated in the Eastern hemisphere upon which we now mainly depend for food and shelter.

I hope and trust that you may be able to do something in the near future along these lines.

JOHN A. GAYNOR.

**"We have a Fine Lot of
Plants for the Garden."**

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J. E. MATHEWSON

Sheboygan, Wisconsin

**The Great
Northern
Nursery Co.**

Sells First-Class

Wisconsin Grown Trees

Our Trees Live. We had an opportunity to compare 500 of our Wisconsin grown trees with a similar lot of an Eastern Nursery. At the end of the season only 52 per cent of the eastern grown stock was alive, while 95 per cent of ours lived and grew. Moral: buy home grown stock and avoid loss. Our trees are **HARDY**, and our stock is **HEALTHY**. A comparison will prove that our stock has not the willowy and watery soft growth of southern or eastern grown stock.

Every tree and shrub is packed entirely under cover, free from exposure to sun and wind.

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Write for Catalogue and Price - List.

SOME THINGS A GIRL CAN DO

By Mrs. L. H. Palmer, Baraboo.

There is no one who can do more to help in the Country Life movement than our girls. Do we fully realize what it means to have so many of the brightest of our country girls drawn into the already overflowing sea of clerks, stenographers and factory workers?

God created man first but woman came a close second, not as a home-maker or bread-winner but as a help-mate, a home-keeper, endowed with a natural instinct to cling to and perfect the home that man, when tired from a hard day's work, might find a haven of rest.

Girls are born with the homing instinct. There may be some inclined to deny this, but if they search down into that wee small corner of their hearts, kept for their sweetest, innermost thoughts, they will know I am right.

Girls, you can do much to make country life what it should be if you will open your bright eyes to the possibilities that are all around.

The freedom for spontaneous and individual action, the opportunity to create an environment congenial with your tastes.

The city girl has no copyright on the use of brains and there is no accomplishment, no form of amusement at her command that may not be yours if you will but put forth the requisite effort. But, says someone, there is so much work. Sure, there is work, but the country has no monopoly of work and you do have the privilege of working for yourself subject to no dictation but your own needs surrounded by an environment far more beautiful than that of the city.

It is only that familiarity breeds indifference that makes us so unappreciative of the beauty of rural life. The greatest poets of all ages have composed many of their most beautiful poems on country life and noted artists have done their best work portraying rural home scenes.

There are no two words that stand for more in modern life than woman and home and it is hard to understand why many mothers give so

little thought to the future happiness of their daughters that they neglect teaching them the common details of home-keeping. Who has not heard young married women exclaim, "I wish mother had taught me to cook. I could make candy and angel-food, but I never did any plain cooking and it is so hard to learn when there is no one to show me."

I had the pleasure not long ago of visiting the school of home economics at Madison and a busier, happier lot of girls I never met. They were washing dishes after the noon lunch and were learning that even dish-washing can be made less unpleasant by a liberal use of good will mixed with hot suds and clean cloths.

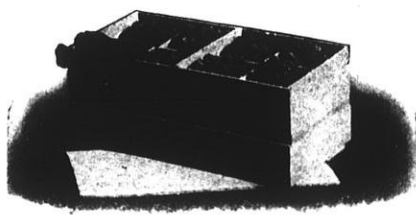
I hear some girl exclaim, "That all sounds very fine but I can't attend the school of home economics." You don't need to. Just go into the kitchen with mother and insist that she allow you to help her. Mother don't turn away her daughter's offer of help and desire for knowledge. The prize winning answer to the question, who is or ever was the greatest woman? sent out among two hundred teachers was: "The wife of a farmer of moderate means who does her own washing, ironing, cooking, sewing and brings up a family of boys and girls to be useful members of society and finds time for intellectual improvement." Help your daughter to become such a woman. Help her to understand that home keeping is a happy blending of art and science and that a girl never looks lovelier than with sleeves rolled from dimpled arms and hands plunged into a snowy, floury, bowl of bread-sponge that by her skillful management, will soon evolve into delicious, beautifully browned loaves of bread, or bending with intent interest and glowing cheeks over some culinary preparation that when placed on the dinner table will make father and the boys happy.

That is modern evolution and of far more importance to present and future generations than the discovery of the missing link.

Not long ago I heard a bright little woman remark that not all the washing machines or bread-mixers in the world would cook out the lard or

pick the chickens on the farm. I think many city women will agree with me that it is very convenient to have jars of sweet, home-cooked lard stored for family use, and to be able to serve chicken for dinner just for the picking. That is real luxury.

Girls, acquire all the accomplishments your talents and tastes require, but don't neglect the art of home-keeping. If there were more good home-keepers there would be far less divorce cases based on the charge of inhuman treatment. It is enough to



BERRY CRATES BOXES

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Other Fruit Packages

We furnish full dry quart and pint berry boxes and all other packages to comply with the new Wisconsin law.

Medford Veneer Co.
Medford, Wis.

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Make a specialty of Cherry Trees. They strongly recommend **One Year Cherry Trees** because they are stocky, well headed, well rooted thrifty and vigorous. Plenty of **Two Year** for those who prefer the larger trees. They also have a nice lot of Apple in northern sorts.

A trial order will convince any one of their quality.

H. M. SIMPSON & SONS
Vincennes, Indiana.

make a man inhuman to come home tired from a hard day's work, to find an untidy wife, a disorderly home, a badly prepared dinner of dry tasteless bread, soggy potatoes, poorly cooked meat and pie that would make your venerable grandmother hold up her hands in horror.

Better organize a neighborhood cooking class, using the government bulletins and good cook-books as helps, keeping up a pleasant rivalry to see who can become the best all around home keeper, and when you have perfected yourself so that the hands that dance so gracefully over the piano keys, can with equal skill prepare and daintily serve a dinner, or do the family mending with the same patient interest that you work out the intricate patterns of modern fancy work, then you will be truly accomplished, ready to form a happy union with some royal young farmer who will gladly, proudly crown you queen of his heart and home.—*Parabeo Daily News.*

NEW METHODS IN COMBATING THE HOUSE FLY

By F. L. Washburn, Minnesota State Entomologist; Delegate from Minn. State Horticultural Society.

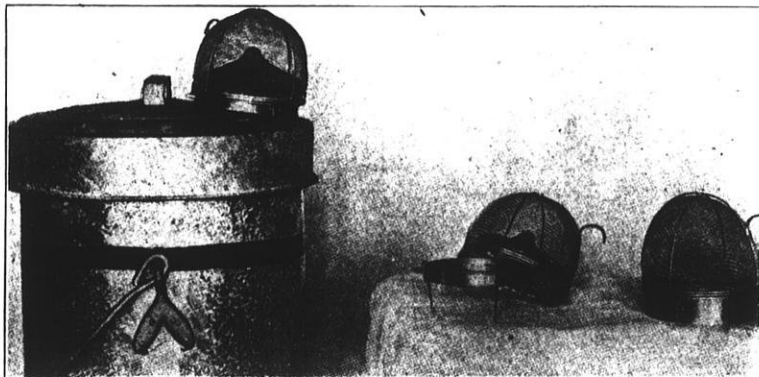
In our efforts to protect ourselves from houseflies, which have resulted in screened windows and doors and screened porches, it has not occurred to us that we are making prisoners of ourselves and leaving the flies free to multiply in enormous numbers, thereby increasing the dangers of infection from typhoid and other diseases. The thought first occurred to a member of the family of Dr. Hodge of Clark College, Worcester, Mass., that we were working on a wrong principle, and this thought, emanating from a boy, was put into practice in our fight against these dangerous insects. As the boy said, "Why not put the flies in jail, and let ourselves out?"

There is quite a revolution in our campaign against the house-fly. Its efficacy is based upon the fact that there elapse somewhere from nine to fourteen days from the time that the female fly emerges from the pupal

case, and the time it lays its eggs. It is evident that if a systematic trapping is carried on in this period before the first brood lay their eggs, and there is co-operation upon the part of the people in the neighborhood, the number of flies in that vicinity would be appreciably decreased. This theory works out in practice.

Two firms in Worcester are manufacturing approved forms of fly traps, which can be used in a variety of

once of other protective methods, and we will still screen our houses, at least, for some time to come, and cover our garbage pails carefully, get away with all filth as far as possible, and cover or remove the waste from the stable. Sticky fly paper and the use of formalin and water as a poison drink, with numerous other remedies, will still continue to be practiced, and should be made use of if we wish to keep our children, as well as ourselves, out of danger.



ways with great success. They can be suspended from a hook; they can be attached to a garbage can, to stable window screens, or screens in slaughter houses, and so arranged as to catch flies going and coming out.

It is strange that this did not occur to us before, for it appears to be the most sensible thing in the fight.

The offering of prizes to children for bringing in the greatest number of flies between certain dates, a proceeding which has been very popular in various cities recently, while it may reduce the number of flies in a certain district of any town where the campaign is waged vigorously, fails in its ultimate object, and is based upon an entirely wrong principle, for it is to the interest of children and others collecting for prizes to increase the number of flies rather than decrease them, in order that they may get more prize bringing material. Not only that, but it has resulted in sending children into districts more or less contaminated with disease germs, and into the neighborhood of filth, with which they would not ordinarily come in contact.

All hail, then, to this new method of fighting the house fly! It does not mean, by any means the abolishing at

We illustrate herewith this new fly trap, which sells, we believe, for about 25 cents. The reader will note the large, generous bait box. The best bait apparently is a mixture of bread and milk.

Costs a dollar now.

THE HAWKS NURSERY CO.

are in a position to furnish high grade Nursery Stock of all kinds and varieties suitable to Wisconsin and other northern districts.

Will be glad to figure on your wants either in large or small quantities.

WAUWATOSA, WISCONSIN

WHY BACTERIAL DISEASES CANNOT BE CONTROLLED BY SPRAYING

Geo. F. Potter; Students' Contest Annual Convention.

It is a well known fact that bacterial diseases cannot be controlled by spraying, and it is one which every horticulturalist should be able to explain. I doubt, however, if there are many who could give the correct reasons without hesitation.

It is necessary first to understand the nature of bacteria. They are exceedingly small plants. There are many different kinds, sizes and shapes, but on the average it would take about 20,000 of them placed side by side to make a line one inch in length. Under normal conditions they are not present inside the tissue of a plant, and it is the invasion of the plant by great numbers of these small organisms which causes the condition called disease.

The common mistake is to think that the reason that they cannot be controlled by spraying is because they are inside the plant when they are producing the disease, and for this reason cannot be touched by a spray. But if we stop to think we remember that a fungus is also inside the plant tissue when it causes disease, yet we can control fungus diseases by spraying. The more important difference lies in their methods of reproduction, of spreading from plant to plant, and of entering the host.

A fungus reproduces for the most part by tiny organs known as spores which serve the same purpose as seeds. These are born on tiny branches of the fungus plant standing out from the diseased host. They are usually carried by wind to new branches. There they germinate on the outside, starting a new fungus plant which bores through the skin of the host into the inside tissues again. It is a simple matter to cover the plants with spray so that when the wind brings the spore it will be killed before it can germinate.

Bacteria have a more convenient method of reproducing. When one gets too large it simply splits into two and as they get too large every half hour under favorable conditions

this may be quite a rapid method of increase. The important point is that it is all done inside the tissues of the host. Their method of entering new hosts is also different from that followed by fungi. They cannot bore through the healthy skin, but must enter in at an open breathing pore, at naked cells such as those which secrete the nectar in a flower, or in wounds. They are not carried to these places by wind, for it is worth while to note that the bacteria which produce plant disease die if dried out for even a couple of minutes. In moist weather it is possible that they may drop through the air for short distances, alight in a drop of moisture and swim about until they find an open breathing pore. But in the orchard it is more usual that they be carried by some mechanical means such as insects. It is easy to imagine a sucking insect thrusting its beak into an infested spot and drawing forth several thousand bacteria upon it. Some of these will be left in the puncture which

it makes in the next branch it feeds upon, and there already inside the tissues they start a new colony.

Thus it can be seen that the real reason that bacterial diseases cannot be controlled by spraying is because they not only live beneath the surface, but also reproduce there, and when carried from plant to plant enter at places which it is impossible to cover with a protecting layer of spray.

BETTER THAN BEAR MEAT

The apple should be the emblem of salvation and not of sin as it has the virtue and power that brings redemption to the physical and financial man. Diet has much to do with character. Apples would have made a better world. Had there been apple orchards along the brook of Kedron, Elijah the terrible, could have dropped his meat diet of locust and lived on apples and honey—had he done so, he would have been less fierce, he would have preached tolerance rather than judgment and fire.

NO HOT AIR

AT BAYFIELD

Only Cool Breezes from Lake Superior

AUGUST 21 AND 22

EVERYBODY GOING

Write Secretary F. Cranefield, Madison, Wis., for reservations.

baptism to a generation of vipers. Had Napoleon dined on apples a week before Waterloo he might have died a king in Versailles. I would rather trust a judge that loves apples than one that hankers after bear meat.

HON. ALVA ADAMS.

EARLY STRAWBERRIES

First berries on the market here were the Excelsior. The two best early kinds for our soil and climate are Excelsior and Bederwood. The Dunlap has not been entirely satisfactory.

Sparta. E. A. RICHARDSON.

My first sale of the strawberry this year was made June 8. For the first seven days the selling price was ten cents per pint box. Marketed in pint boxes for twelve days, then changed to the quart box. Bederwood and Dunlap—3 best—Warfield, Dunlap, Brandywine. Rain needed to develop the green berries. G. W. REIGLE.

"The threadbare story of Greeley's buttermilk that cost the same as his champagne is the refuge and defense of the shiftless farmer. It is a good story, but it is not true."

HON. ALVA ADAMS.

SOMETHING DOING IN ORCHARDS

"The Co-Operative Co. now has 522 acres set out to cherries, which means 56,376 trees, of which number 32,400 have been set out this spring. Of the 23,976 trees which were set out a year ago, not a tree was lost, although the winter was the severest known here. Manager Martin states that the good condition the trees are in this spring is due to the elegant cover crop which was put in the orchard last year.

R. J. Coe and Dr. W. T. Clark, of Fort Atkinson, who are interested in the Ellison Bay Orchard Co., together with D. E. Bingham and A. W. Lawrence, were here from Monday to Wednesday and were taken to the orchard by the local members of the firm. This company have set out 200 acres of cherries, apples and plums at Ellison Bay this spring

and in time will have one of the most picturesque orchards in the state as it is on a high elevation overlooking the harbor at Ellison Bay and the islands out in Green Bay. Besides the work done at Ellison Bay Bingham & Lawrence have set out about 300 acres to cherries, apples and plums on their land near this city as well as for other parties.

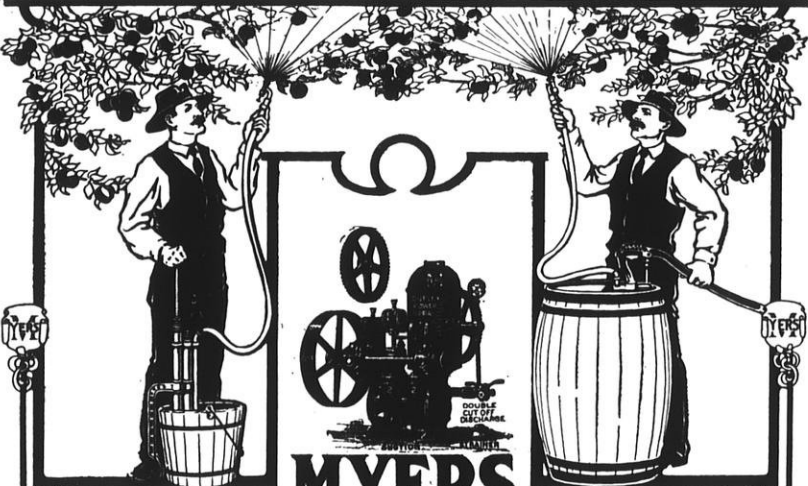
The Reynolds preserving Co. has set out 80 acres of cherries on what was formerly the Ferris farm in the western part of Sevastopol besides 10 acres of apples in another tract. This work together with the seeding of peas for the canning factory has kept a large force of men busy."—*Sturgeon Bay Democrat*.

Orchard Land in Dunn County, Wis.

Surface rolling; soil, rich clay loam underlaid with limestone. The orchards of adjoining farms show the adaptability of this part of Wisconsin to apple growing. Near railroads and markets. Prices reasonable. Write for particulars.

William J. Starr

Eau Claire, - - - Wis.



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WISCONSIN HORTICULTURE

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Volume II

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Number 12

SENTIMENT IN HORTICULTURE

MARCIA H. HOWLETT, HAZENHOLT FARM,
OSHKOSH, WIS.

Those who have more skill and a wider experience may tell you how to engage in horticulture for financial gain. I, an unskilled amateur, who studies and cultivates flowers for the love of them alone, will present the sentimental side of horticulture.

Since an all-wise Creator placed man in a garden to keep and to dress it, there has been more or less sentiment attached to trees, flowers, etc. Deep in our hearts, though often unconfessed, we all know that life without sentiment would not be worth living and the sentimental side of our nature may be likened to a golden thread that runs through the warp and woof of human lives, making bright the dark places.

When man journeyed out into the world to subdue and people it, and build for himself a home, this sentimental side of his nature prompted him to adorn that home with carvings of fruit, foliage and flowers. When he built him a sanctuary, a house of worship, the hangings and priestly garments were dyed the color of the flowers—blue and purple and scarlet. The priestly

robes were bordered with Pomegranates of finely interwoven needlework. The golden candlesticks, used in the sacred services, were ornamented with curiously wrought almond branches, with fruit and flower.

The first attempts to reproduce the beauties of nature were no doubt crude; but as time passed man progressed and became more expert, until now both fruit and flowers almost perfectly reproduced in form and

growing, ever changing plant or flower that arrests our attention and appeals to our better nature, our souls, if I may so speak, increasing our happiness and drawing us nearer the high and kindly Power that promotes the mystic growth, from the tiny seed to the mature plant. A mysterious something speaks to us from the rustling leaf, the quickening germ and the unfolding petals of the flowers and bids us trust in

Him who clothes the lilies of the field.

One who has been reared in the country never loses his sentimental love of nature. Though time and circumstances may establish him in the city, there are times when in his secret heart he longs for the quiet companionship of trees and flowers. A babe in arms will pleadingly reach forth a tiny fluttering hand to grasp a flower and show unmistakable signs of pleasure in its possession, even before the lips have learned

to lisp the name of the flower. This love grows with their growth and in most cases goes with them until they, like the tiny seed, are laid to rest in the bosom of Mother Earth, to awake in God's own time, even as the tiny seed, to a life of renewed beauty and grace.



Hazenholt Farm House.

coloring and designs of fruit, flowers and foliage occupy an important place in the arts and crafts of today. However nearly we copy their form and color, human skill alone cannot construct the marvelous living tissue of plant or flower.

There is something in the ever

No flowers are fraught with such fragrance as the flowers we plucked in childhood and their graceful forms and exquisite colors bloom again in the memory garden of old age. This thought is illustrated in the following verse:

"Though far away in a foreign land,
My wandering feet now roam,
Ever and aye my thoughts will turn
To the friends and flowers of home.
Oh, winds of the ocean waft to me
The breath of my native flowers!
I long for the friends and flowers I knew
In childhood's happy hours.
As leaves that are tossed on ocean's wave
Are scattered by spray and foam,
Tonight those friends are scattered wide
From their childhood's lowly home.
But in fancy now, in the gloaming dim,
Loved faces I see and know.
In fancy, again, I cull the flowers
That bloomed in the long ago."

The flowers that are closely associated with fond friends and happy days become very dear to us, even though others may think them commonplace and coarse.

"And what a world of dreamy thought
The sight of them doth bring,
Like birds who've wandered far from hence,
And come again we know not whence
At the first call of spring."

Burns also illustrates this in the following:

"Their groves of sweet myrtle let foreign
lands reckon
When bright, beaming summer exalts the
perfume.
Far dearer to me is yon glen or green
bracken
W' the burn stealing under the lang
yellow broom.
Far dearer to me all you humble brown
bowers
Where the bluebell and Gowan lurk lowly
unseen.
For there lightly tripping among the wild
flowers,
Allstening the linnet, aft wandered my
Jean."

Because of the real or imagined resemblance to something else, fanciful sentiment has given unique names to some of the flowers. For instance, Jack-in-the-Pulpit, Foxglove, Lady-slipper, Grandfather's Whiskers, Bleeding Heart, Butter-and-Eggs, Shooting Star, Larkspur, Snapdragon, etc.

Ancient literature abounds in fantastic myths and legends of flowers. Mythology tells us that "Daphne was pursued by Apollo, who was in love with her. When she found that he was gaining upon her, she prayed to the River God to help

her, and she was changed into a Laurel tree."

"Baucis and Philemon were visited by Jupiter and Mercury, and they alone were saved when their home city was turned into a lake. They were given two wishes. They asked but one; 'not to be separated even in death,' and they were changed into a Linden and an Oak tree."

"Narcissus was a beautiful youth, graceful in form and feature, and he



Mrs. Marcia H. Howlett, Hazenholt Farm,
Oshkosh, Wis.
(Published without permission.—Ed.)

became enamored of his own image when seen in the water, and he was changed into the flower Narcissus."

"Hyacinthus was accidentally slain by Apollo. Wherever the bright hued life blood rained upon the earth there sprang into being the beautiful flower Hyacinth."

"Ceres was a goddess who presided over sowing, reaping and harvest festivals. Flora was a goddess who presided over flowers and Pomona presided over fruit."

"The beautiful goddess Hebe sprang from immortal bloom."

Venus was the goddess of gardens, flowers and love, and according to Greek mythology, "everywhere at the touch of her feet, the herbage quivered into bloom. The Houris and Graces accompanied her, twining odorous garlands and weaving robes for her that reflected the hues and breathed the odors of Crocus, Hya-

cinth, Narcissus, Lily, Violet and Rose. Cupid, the God of Love, was her son, and though blind, he was always closely associated with flowers."

Even in the practical, hustling life of today, flowers have a language all their own. Thus, Pink Carnation means woman's love; Pigeon-berry, indifference; Red Rose, love; Yellow Rose, jealousy; Snapdragon, no; Pansy, thought; Heliotrope, devotion, etc.

Bashful swains have been wont to make use of this language to convey a silent message of love to their lady fair. The poet puts it thus:

"An exquisite invention this,
Worthy of love's most honeyed kiss,
This art of writing billet doux
In buds and odors and bright hues:
In saying all one feels or thinks
In blooming Daffodils or Pinks,
Uttering as well as silence may
The sweetest words the sweetest way."

Flowers are closely associated with love and poetry, and many poets have compared the lady of their love to a flower. I will close with one illustration by an Oshkosh poet:

My love is not the Red Rose
Of passion and thorn.
She's the whitest of those
That the wayside adorn.
She's the Wild Columbine:
She's the sweet Eglantine:
This dear one of mine
That nobody knows.

She's Arbutus pure,
And she springs from the snows
Where no others endure.
She was trained by the hand
Of the Gardener grand,
Who planted and planned
That garden of yore.

My love is the bloom on the thorn,
She's not the Red Rose of fashion and
scorn.

She's the vein in my torn
Heart, where gladness flows.
She's the sweet Lavender
That age cannot blur.
And my sighing for her
Is the breath of repose.

With limited capital, cane berries offer a better opening than strawberries. But few acres and little equipment are needed. "There are many markets like ours, with a plentiful supply of strawberries, that do not get nearly enough of cane berries."

Can you think of a more delightful vacation than a trip to Bayfield?

THREE OF A KIND

Alike and yet different,—three more Wisconsin “men behind the trees.” In the course of time our readers will have an opportunity to get acquainted with about fifty of the men who are making Wisconsin in the fruit line, steadily pushing the name from near the bottom of the list to the top. That’s where we are going to land in just a few years right up at the top just opposite “Wisconsin” in the dairy column.

It won’t be our superior climate or soils that will put us in the top notch



James W. Melville, Chippewa Falls.

more than men and methods, these are the main factors always.

Now please get the right understanding of this situation, the pictures and the more or less libelous articles under each are merely for the purpose of introduction, so that you may know them when you get around to attend the conventions of the Society, that and the hope that some of our young men may glean from these disjointed yarns something of the secret of success.

JAMES W. MELVILLE.

Lives on the edge of Melville Settlement which is in Chippewa County.

Travel ten miles southeast from Chippewa Falls and four miles uphill and you will come to a school house on a hill and a flag pole in front of the school house. From this hill you may view the prettiest farming region in all of Wisconsin but as farming and landscape beauties

are not in our line we will go just a little further down the hill this time to the Melville orchard in a valley. That’s one of the things in the books; that an orchard must be on a hill and never in a valley. Well here is one in a valley and a mighty good orchard too. Fifty acres mostly Wealthy and Northwestern. Just back of the house are three or four Duchess forty years old, next to these a block of Wealthy twenty years old and then another block and another and another and if you don’t look out you will get lost, its all orchard, and all good orchard. No telling how many thousands of barrels of apples have been hauled down those hills to Eau Claire and Chippewa Falls. This is a great deal about the orchard and not much about Melville but somehow it is impossible to separate Melville and the orchard. You see the orchard, clean, sturdy, vigorous and all an orchard ought to be and then you say, “That’s Jas. Melville’s orchard, it couldn’t belong to anybody else.” You can’t imagine him whining about “luck” and “bad weather and the trees don’t grow or bear.” The trees *do* grow and bear. In brief that’s Jas. W. Melville, a man behind 4,000 apple trees. The trees bear simply because he has willed it so.

JOHN A. HAYS.

GAYS MILLS, WIS., U. S. A.

If you are yearning for the picturesque, if you really want to see the most beautiful region in Wisconsin, bar none, go to Wauzeka and then take the M. S. R. line up the Kickapoo Valley. The Kickapoo is immortalized in song and story. You know the joke about the river so crooked that a bird in trying to fly across it landed on the same side it started from? Well it isn’t any joke at all. It’s true and the Kickapoo is the river. The M. S. R. line follows the river, when the river behaves itself, and whenever the engineer runs out of tobacco he waits for one of the curves, reaches back to the caboose and borrows a chew from the conductor. Boys frequently hinder traffic by pulling the spikes from the ties to throw at jack rabbits. M. S. R. means Meandering Streak of

Rust. This line is supposed to be a part of the X. Y. & St. O. system but once on a time when the dispatchers and other officials were making out new train schedules for the system the Kickapoo line train sheet was lost and forgotten and ever since trains on this division have run by guess and to suit the convenience of the trainmen.

The Kickapoo region must not be blamed for the railroad, neither should John A. Hays. There will be a better road some day. If the M. S. R. company don’t build one Hays



John A. Hays, Gays Mills.

will build a line across lots somewhere. That’s the kind of man he is. He was born in the Valley at Gays Mills, some years ago, at any rate before the railroad was built and that’s sixteen years ago.

The clay ridges along the border of the Kickapoo rise 450 feet above the valley; just rise, there is no preliminary nonsense about it, just rise right straight UP and on the top is the finest apple land in all creation. Mr. Hays spent most of his spare time for a number of years in picking up parcels of this land and in farming it. Farmed it very successfully in the intervals between running a hotel, a butcher shop, store, etc., etc., etc.

Some eight or six years ago a footsore pilgrim sent out by this Society landed in Gays Mills, shook the mud from his sandals and discovered it to be of the kind in which apple trees grow.

The Time and the Place

Mere mention of this fact was enough. J. A. Hays of Gays Mills set about planting apple trees. Set about it in spite of the advice, suggestions, protests, tears and ridicule of the native Kickapoogians. Planted our trial orchard, went to Milwaukee and found some men and money and planted sixty acres more, found some other men who have planted twenty acres on another ridge and now has found some more men who will plant one hundred acres more and nobody but John A. Hays knows what else will happen before next spring.

Nothing bustling or hustling or bragging or slambang about J. A.



H. C. Melcher, Oconomowoc.

H. but things keep happening when he gets started, happen with such persistence and regularity that you recognize that there is a *force* at work that must make things *go*. Quiet, unobtrusive, confident, sincere, his personality begets confidence and inspires respect. Take my word for it all of those beautiful clay ridge farms where the natives chased jack rabbits through the stumps for fifty years will soon all be planted to apples and cherries and grapes. For a long time it was thought advisable in addressing mail to write as at the beginning of this Lamb's Tale, Gays Mills, Crawford Co., Wisconsin, U. S. A. but now Gays Mills is on the map.

You young fellow! if you are beginning to hanker after a city job first go out and take a look at the Kickapoo ridges and have a talk with John A. Hays.

H. C. MELCHER.

We will be brief. Proximity vexes the soul of the busy horticulturist and we have already wandered far. Really, though you *must* know H. C. Melcher of Oconomowoc. He is a likable man, a home loving man. Believes in home influences as the most potent factor in the lives of the boys and girls. Don't preach it but practices it for he is not of the preaching kind. The home orchard, the home garden, flowers and trees and shrubs about his home all proclaim the manner of the man. We need him, and others of his kind to keep us from becoming wholly money mad. Quotes Goldsmith and lives a life of peaceful contentment on his home acres. The home orchard is the best spot on the farm and it pays too when decently cared for; so does the berry field and the garden. After all life is not full and complete without the charm and comfort and beauty of flowers. The dollar chasing fiends will work their fool heads off trying to pile up a fortune and may succeed but after it is all done will realize that they have missed something. A competence, a philosophic state of mind and a home with as orchard, a fruit field and a garden.

"How blest is he who crowns in shades like these
A youth of labor with an age of ease."

THAT TWENTY ACRE FARM

In reply to questions asked by brother Melcher and others as to how much it costs me to get an income of \$4,200 from 20 acres and how it is done, I will say I am glad these questions came up and I think our WISCONSIN HORTICULTURE a fine paper in which to exchange as well as get new ideas especially if they will help one in his work.

One member asked if on account of the income tax law I did not publish expense account or net balance to which question I sorrowfully answer, No.

We raise almost every vegetable known in this section thus having something to market almost the entire year.

We raise thoroughbred poultry and get fancy prices for eggs during hatching season, also for fowls for breeding purposes.

Our milk is bottled and contracted to one dealer at not less than five cents per quart. Thus far most of our calves have been sold for veal but we are gradually working into registered Guernsey stock and occasionally get a good price for one of these and in this way we expect to swell the income somewhat.

We also sell a great many berry and bush fruit plants, although last year our strawberry returns were largely from fruit. We also sell hot bed plants.

We make a specialty of musk melons and tomatoes and realize good sums from these. We are also raising apples, cherries and plums and expect to add just one drop to the Door Co. ocean.

Besides horses and automobile truck we have an interurban car passing our door to help accommodate our patrons who by the way are commission men, retail dealers, hotel keepers, also dealers in other cities to whom we ship in large quantities. We are situated four miles from Oshkosh which is as fine a market as one can find and are connected with it by telephone so we can ship via interurban car at all hours of the day.

One of our mottoes is, "The early bird catches the worm" and we find that by having our goods ready for market just a few days before the other fellow does, we can land a good fat worm.

We keep at least one man the entire year and usually from three to six as the season and work demand for the busier months. Last year we

Bayfield, August 21 and 22

paid for hired help in money \$920.00 besides furnishing board.

I shall be glad to answer questions at any time either through WISCONSIN HORTICULTURE or personally.

N. A. RASMUSSEN.

THE HIMALAYA BERRY

Many readers have asked about the Himalaya Berry, a novelty sent out by "Wizard" Burbank many years ago. Burbank may be a wizard but fruit growers in the upper Mississippi valley are beginning to doubt it.

It must be that his "magic" is exerted wholly for the benefit of other sections of the country for with the exception of the Burbank potato not a single Burbank "creation" has been adopted as standard in the Northwest and the real history of the potato if published might prove disconcerting to Burbank admirers.

Prof. A. T. Erwin of the Iowa Experiment Station submits the following in Press Bulletin 31:

"In response to numerous inquiries, the Horticultural Section of the Iowa Experiment Station submits the following information regarding the value of the Himalaya berry for Iowa conditions.

This plant is of Asiatic origin and seems to have been introduced by Mr. Luther Burbank of California, in the early nineties, the seed being received by him from an English traveler, who reported that it had come from the Himalaya mountains.

The vine is of the general type of the evergreen blackberries and of a trailing habit of growth, like the dewberry. The vine is a perennial, but heavily thorned. It is a strong grower, making from fifteen to twenty feet of growth on a single branch in one season and continuing to grow until cold weather.

Where hardy it is reported as being quite productive. The fruit begins to ripen late in the summer and gradually matures during a long period. As fruited in this section, the berries are medium, or below medium in size, decidedly tart, un-

less dead ripe, and with a more tender core than is found in most blackberries. The quality of the fruit is fair, though it has not a delicate flavor. Its texture is firm and on the Pacific coast it is reported as being a good shipper.

The one paramount question to the Iowa planter is hardiness. The Himalaya berry being of the evergreen class continues to grow until late in the season and does not ripen up its wood properly for winter. In our investigations we have had numerous reports from this and adjoining states that it winter-kills badly, in some sections killing back to the ground. Whatever its value may be for other sections, the evidence so far available points strongly to its being not sufficiently hardy for Iowa and until more conclusive evidence to the contrary is available the Iowa grower is advised to restrict his planting to experimental purposes."

REPORTS FROM GROWERS.

Washington County, Iowa.—"We have tried the Himalaya berry for the past three years but have not seen the fruit yet. It kills back within a few inches of the ground where not protected. We think that it is not hardy in this part of the State."

Bremer County, Iowa.—"Have had the Himalaya berry for the past three years. The plants came to me from California and were recommended as perfectly hardy, but it proves to be too tender to live through freezing weather. The vine resembles the dewberry and will grow twenty to thirty feet each season and freezes back to the ground each winter, whether covered or not. Have tried light and heavy covering with earth but have not saved the wood over winter. Have had a few fruits late in the fall that resembled dewberry but they have not matured. The Himalaya berry is too tender to be of any value here. It is an evergreen and does not stop growth to prepare for winter."

Johnson County, Nebraska.—"I secured three hundred plants of the

Himalaya berry in 1907. They told at the time that there were some seedlings extant that were of no value but that the originals were without equal and would bear two crates of berries to a single vine. My three hundred have not produced three hundred quarts in the five years I have been growing them. Although they do well on the Western slope, the berry is not equal to any of our blackberries. I consider it a rank failure for this section."



Common Milkweed. *Asclepias Cornuti*. Grows everywhere, therefore we pass it by without notice. The milkweeds are all striking and handsome.

New York Experiment Station, Geneva, N. Y.—"Plants of a blackberry under the name Himalaya (Himalaya Giant, syn.) were received at this Station through the Department of Agriculture, Washington, D. C., early in 1906. Some winter injury was observed in the winter of 1907 and the spring of 1908; 75 per cent or more injury to the canes. The growth during the following season of 1908 was very rank and rampant. Some bloom developed that year and the plants appeared to be productive. In November the canes were removed from the trellis and given winter protection. In 1909 the plants developed in good shape. The crop, however, was not

large. The berries ripen during a long season. The fruit was of good size and color but was not equal in flavor and quality to several of the best standard commercial blackberries with which they were compared."

Central Experimental Farm, Ottawa, Canada.—"We have been unsuccessful in establishing the Himalaya berry and judging by reports from the United States, I under-

stand sorts of combinations have been created ostensibly for the purpose of allowing the stranger with a few dollars to invest, enjoy the benefits of this golden harvest.

Propositions of all kinds are submitted. The investor is offered shares in orchard stock, "units" in syndicated orchards—anything that could be desired in the way of speculation.

The propositions all call for con-

dividends from orchards property would have much more fun, and get quicker satisfaction betting on the hundred-to-one horse at the races.

Wausau Record-Herald.

FRUIT GROWING IN NORTHERN WISCONSIN

By T. N. OKERSTROM, PORT WING, WISCONSIN.

Editor HORTICULTURE:—In your June issue I noticed an article under the heading "Observations on Apple Growing in Northern Wisconsin" and to those who read the article I desire to state how it looks to one who has personal knowledge of nearly every acre and who has lived in the Lake Superior region for the past twenty-five years.

Practical experience in the growing of apple trees for the past fifteen years has demonstrated that we are in a favored locality and that the soil contains a sufficient amount of humus, potash and other elements has been proven. We have a sufficient amount of moisture and there is no lack of mineral elements, hence apple trees grown in the Lake Superior country are longer lived and the fruit is better in color and flavor than in many other districts.

That our district is favored as to protection against frosts is an established fact. By referring to Wisconsin State Bulletin No. 290, Vol. 1, you will find that we have 143 growing days between killing frosts. Government reports show that in the fruit belt of Montana, in the vicinity of Missoula, there are 97 growing days and in the fruit belt around Ivan, Michigan, there are 113 growing days. During the summer of 1910 when much of the fruit was injured in the middle west by frosts, the fruit of the Lake Superior region was unharmed.

So especially adapted is the Lake Superior region for apple growing that many summer varieties become fall apples and fall varieties become winter apples when grown in our region, that is, the same variety grown here will keep from four to eight weeks longer than those grown in southern Wisconsin and elsewhere. This coupled with the fact that our



Wild Ginger, *Asarum Canadense*. "A curious woodland plant whose odd flower is half concealed by its low position and its sober color which not infrequently resembles the leaf-mold just beneath it."—Mathews.

stand it is not supposed to be hardy north of Philadelphia, so that I do not think it is going to be of value here."

APPLE GROWING

Much needed warnings against syndicated orcharding are being published in a number of periodicals.

Within the last few years apple growing has attracted wide attention. New areas have been added to the old fruit regions. The result is that the public has, to a slight extent, lost its head and come to imagine that common sense rules do not apply to this business.

Companies have been formed, prospectuses prepared, figures compiled showing that apple growing makes gold mining look like thirty cents, and corporations, syndicates and all

siderable expenditures. It is figured that an acre of orchard in bearing is worth a thousand dollars. The promoters entirely overlook the fact that constant yearly attention is required, and that good yields can only be expected once in two or three years.

It is hardly worth while to analyze the average orchard proposition, however, because it belongs in the well marked gold-brick category. Put together with infinite industry business is to understand it and retain control of all the elements. The man who understands fruit growing, has a moderate amount of capital together with infinite industry and patience, can raise apples and other fruits successfully. Lacking all these qualities, or any of them, the man who puts money into somebody else's hands and expects to draw

apples are so highly colored makes it no idle dream to consider that we will be able to compete in the Chicago market and at other points with apples grown elsewhere.

No commercial orchards were planted in this locality until it had been carefully demonstrated and proven without a doubt that fruit was a success. We have watched very carefully the small orchards planted some years ago; have noticed the condition of the trees from year to year and the quality and quantity of fruit picked each season and therefore feel that we have a fair knowledge of this region as an apple growing district.

In a country where drought is a stranger, irrigation unnecessary and crop failure unknown, and where soil and climate conditions have been proven to be right I can see no reason why apple growing should not be extensively undertaken. These favorable conditions referred to above exist in what has been justly styled "The frost-proof, fruit belt of Lake Superior."

PROPAGATING RASPBERRIES AND BLACKBERRIES

The black raspberry is propagated by stolons. A stolon is a shoot or branch growing above ground which forms roots when it reaches the ground. The new canes of black raspberries do not shoot up like those of the reds but curve downward. When the tips of the shoots touch the ground which will be in September or late in August cover them with earth and each will form a mass of fine roots with numerous buds at the center. These are the "tip" plants sold by nurserymen. The tips may be left where they rooted until next spring or may be taken up and heeled in. The stem may be cut six or eight inches from the ground as there is no need of leaving more.

Red raspberries are propagated by suckers. These are always abundant and no particular directions are needed, just dig as many as you need. Blackberries sucker to some extent but the nurseryman usually propagates from root cuttings. The roots

are dug in the fall and cut into sections of about two inches and stored in damp sand in a cellar. In the spring these are planted in shallow drills and from each will spring a plant. Considerable difficulty is experienced in storing the root cuttings and still more in getting a good

THE JOE-PYE "MILKWEED"

Last month readers of WISCONSIN HORTICULTURE were treated to a double column cut of Joe-Pye Weed, sometimes called Boneset and labeled Milkweed. Explanations are not pleasant, but here is the how of it in short words: The right legend got



Jack-in-the-Pulpit or Indian Turnip.—*Arisaema triphyllum*. Our old friend Jack is to be found in the woods these days. Every boy and girl should make his acquaintance. It is not well, however, to become too intimate with the turnip-like root, a slight acquaintance is sufficient.

stand as shallow planting is demanded and even a short drought will cut down the stand of plants very materially. For the home garden sufficient sucker plants can usually be secured for the new plantation.

Trapping codling moths with sweet poisoned bait seems to have little effect for, so far as anyone knows, it eats very little food. It lives only a few days, seemingly only to lay eggs.

under the wrong picture, or the wrong legend under the right picture, or the right picture over the right legend, or,—oh, pickles! anyway, Joe-Pye was a New England Indian doctor who preferred the weed, not the Milkweed, but the other one, to Cascarets and the ungrateful New Englanders named the weed for him, and we printed a picture of it and called it Milkweed! The editor knows now for certain that some people read the paper. See page 5.

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7th Dist., Fred Muehlenkamp.....Sparta
8th Dist., N. A. Rasmussen.....Oshkosh
9th Dist., A. W. Lawrence.....Sturgeon Bay
10th Dist., Irving Smith.....Ashland
11th Dist., O. Flanders.....Bayfield

BOARD OF MANAGERS

D. E. Bingham.....F. Cranfield
L. G. Kellogg

Annual Membership.....\$1 00
Life Membership.....10 00
Remit to Secretary W. S. H. S.
Madison, Wis.

NOTICE TO MEMBERS.

Members of the State Horticul-
tural Society are hereby notified
that a meeting of the Society will
be held at Bayfield August 21 and
22, 1912, the first session to be
called at 9:00 A. M. at the Opera
House.

The meeting is called for a dis-
cussion of the different topics
named in the program, printed
elsewhere in this issue, and for an
exhibit of fruit, flowers and vege-
tables.

FREDERIC CRANFIELD,
Secretary.
For the Executive Committee.

FRUIT AND FLOWER EXHIBIT

If you are very sure you cannot go
to Bayfield, and take your family, do
the next best thing and send an ex-
hibit. The premiums are attractive.

Articles intended for exhibit, sent
to Secretary Cranfield, Bayfield,
Wisconsin, will be entered and
staged. Please prepay charges.

The hotels at Bayfield are apt to
be pretty well filled during August
with hay-fever victims, but that need
cause no concern. Every member
attending the meeting as well as his
family and guests will be taken care
of by the local Society. Rooms have
been engaged for us in the city and
"surrounding country."

You can go if you want to; the
world will go around just the same
while you are away. It will give you
a chance to forget some of the petty
troubles that you have, perhaps,
magnified. Just get away for a few
days with the family for a delightful
trip. You will be just as rich two
hundred years from now. Try it.

THE PROGRAM

Only a part of the program is
given in this issue, the remainder
will be announced at Bayfield. Con-
cerning that which is here written,
it may be said that it is all good.

The topics assigned Prof. Sanders
and Prof. Jones originated wholly in
the brain of the editor, as these gen-
tlemen insist that they attend our
meetings to learn rather than to
teach and that they desire to confer
with the growers as to the best meth-
ods of controlling insect and plant
troubles. Members will therefore
come prepared to keep them busy with
questions.

Mr. W. A. Toole knows lots about
perennials and will tell how we may
propagate them.

Bayfield is keen on civic improve-
ments and will soon be known as the
most beautiful city on Lake Supe-
rior. The best proof lies in the fact
that the ladies are interested and
two of them, Mrs. Carver and Mrs.
Weber, will tell how it will be done.

Mr. Morell, a landscape gardener,
will outline plans and give principles
that may be applied right at home.

All of the others on the program,
including Prof. Burrill, are so well
known that there is no need of com-
ment.

THE SUMMER MEETING

The summer meeting will be held
at Bayfield August 21 and 22. Mem-
bers of the Society need no invita-
tion to attend. You have heard
much about Bayfield: now is your
chance to see the country and see
the Bayfield growers on their own
farms.

Evidently the Bayfield fruit men
are not ashamed of their country or
else they would not have been so
active last winter in working for the
meeting nor so anxious now to have
people attend. The local Society has
raised a large sum of money for en-
tertainment, members have offered
their homes to guests, and are doing
everything possible to make our stay
pleasant and profitable. They are
doing their share; we ought to do
ours. Let's go!

CARING FOR PERENNIALS

The question of plan as regards
the labor of caring for perennials in
a flower garden becomes a serious
one for an ambitious home gardener
who does all the work unassisted.
Where lawns must be trimmed, flower
borders cultivated, while peas and
vegetables must be gathered daily
before the gardener is called to store
or office it often becomes a question
of a proper plan or complete aban-
donment of the perennials. Of course,
the following suggestions are made
with a full realization that they are
merely labor saving and that a more
informal arrangement would be more
artistic. After trying a combined
arrangement of lines of iris or orien-
tal poppies, on one border and shrubs
on the other as a background, with
an irregular arrangement of clumps
or oblongs of columbine, larkspur,
Scotch pink, gaillardia maxima, cam-
panula and Shasta daisies in front,
the whole arrangement is now aban-
doned and the new planting is to be
strictly in rows, far enough apart to

permit of a rapid cultivation by a wheel hoe. Hand hoeing under former conditions was always crowded out for want of time, and unless done when necessary the grass once started in soon ran riot and became murderous, but with the rows wide enough apart to admit the wheel hoe, and the plants close enough in the row to make a continuous line, the matter becomes simplified, the cultivating becomes merely an extension of the routine work. B. H.

HILLING POTATOES.

How many amateurs hill the potatoes correctly? The majority hill them



Wild Geranium. Cranesbill. *Geranium Maculatum*.

so that the earth slopes from the plant as a center and so forms a perfect device for shedding the rain, instead of forming the hill so that the plant rises from a small depression or cup like center on the top of a flattened hill, so shaped that the depression will catch and hold the rain about the plant instead of shedding it. B. H.

Cut worms played havoc with the late cabbage plants, about fifty to sixty per cent being destroyed within two or three days of setting until the paper collar method was recalled and no more trouble followed. Each cabbage plant was rolled around the stem above the bunch of fine roots, with a strip three to four inches wide torn from a page from a seed or mail order catalog, as that paper is thin and flexible. The paper after being wound around the plant was pinched close to the stem above the roots and then the plant was puddled in setting out. There was almost no loss in this method. B. H.

REPLANTING OF PERENNIALS

MRS. R. G. THWAITES.

Authorities differ greatly as to how often perennials need resetting. The necessity of course must vary with the kind of perennial, the soil and situation in which it is grown and the needs of the grower.

Some kinds take several years to reach their fullest perfection, while others will give better results if reset every year. In very rich soil some will grow too vigorously and will require frequent thinning out or complete resetting, while if you are growing the flowers merely for cutting, more transplanting will be required than if they are grown only for the beauty of the perennial border.

August and September are the best months in which to reset most of the perennials. The great Oriental Poppies are then completely at rest and should be moved during August before they begin their fall growth. Iris of all sorts, most of the Campanulas, the Aquilegias, Pyrethrums, Phlox and all of the early Daisies may be moved in August so that they may become well established during the cool fall months. Peonies can be divided and reset any time during September.

SPRING BULBS.

Now is the time to order the bulbs that will bloom next spring, or in the house during the winter. September is the best month for planting the bulbs in the garden. If you wish to move any that are now in the garden dig them in August, keep them dry and you can reset them at any time before the end of September.

Remember that they need to make their root growth before the ground freezes. For the house, plant them in pots at intervals of a week or two during October and November.

The large Paper White Narcissus forces well in water by keeping it for the first week or two in a dark place.

Do not crowd your perennial border so full of different kinds that none of them will do well. Give each variety plenty of room to develop in, to show its individuality and to grow to its full size and beauty. It

will give the grower more satisfaction to raise a few kinds well than to have a large variety of poor quality.

A well known dealer gives excellent directions for the planting of perennials in his garden book for 1912. He says the nearest approach to a rule that may be followed in planting is to set out those plants that grow to a height of two feet or less, twelve inches apart, and to give all others space equal to one-half of their height when developed.

Avoid putting bright colored flowers close together, for your border will be more pleasing if mostly white with delicate shades of pink and some of the blues. White can always be used in large quantities amongst the other colors.

**"We have a Fine Lot of
Plants for the Garden."**

SEND FOR LIST

J. E. MATHEWSON

Sheboygan,

Wisconsin

WM. KNIGHT & SON

**Real Estate and
Fruit Growers**

We have land for sale in the Bayfield Peninsula Fruit Zone. Good location, good soil—suitable for apples, cherries and small fruits.

Also grass lands for stock and dairies.

Prices are cheap and terms easy.

We will also clear and plant to orchards for you, and cultivate and care for them for five years.

Write us for prices and terms at

BAYFIELD, WIS.

Reviews

Under this head will be found the best from horticultural papers and experiment station bulletins; not merely scraps of information but the live topics of the period put in readable and attractive shape. Mr. R. E. Hodges, of the Agricultural College School of Journalism, editor.

Cut Dahlias in early morning or after sundown, placing them immediately in water in a cool place.

Clematis often dies for want of support. A stick the size of a cane is only an aggravation, for the leaf stalks cannot wind around it, and the vine exhausts a large part of its strength trying.

The place now for Genistas is in a shady place out of doors with the pots sunk in the ground to the rims to avoid drying. Trim them lightly and often, watering the tops and roots every day.

To protect trees from mice, cinders are better than gravel. Make a mound around the tree a foot and a half in diameter and eight or ten inches high; then tamp it tight. It will not become hard enough to injure the tree, as gravel may; and mice do not burrow in it, and not much beneath it.

"Trees are absent from the prairies because they could not compete with the grasses. These having their roots nearer the surface would have the first chance at the moisture." So says a bulletin of the North Dakota Experiment Station. Here is a reason why a sodded orchard is wrong. Not only does sod get first chance at moisture, but it evaporates moisture much faster than tilled ground, from the greatly increased evaporating surface of the grass leaves.

"When the cane berries begin to ripen, we have about six feet of new cane on the reds, and about seven or eight feet on the black berries. With this new growth to support as well as the bearing canes, and the fruit to mature and ripen, all in the hottest, driest time of the year, the plant

needs every bit of moisture we can save. We cultivate right through the picking season and aim to stir up the surface right after each picking." If the canes begin to suffer for moisture, the late blossoms drop off and much of the fruit already set dries up. Blackberries ripen under dry conditions, but are small, hard and seedy.

Azaleas often flower better in the second and succeeding years if a little effort is taken to keep them over, says Julius Erdman of the Colorado Experiment Station in The Household Journal. After the flowers have dropped, clip off the seed pods and trim the plant, avoiding the loss of much old wood. Set the pot in the ground in a half shady place and give the plant nitrogenous fertilizer and plenty of water, both on the roots and as a wash to keep the leaves green and free from dust. Take it up in September, putting it in a light, airy place for winter quarters, where the flowers will probably come earlier and better than at first bloom.

FROM THE RURAL NEW YORKER.

A handy raspberry carrier for eight boxes is made of two half-inch boards 6 inches by 24 and five plastering lath. Nail one lath around one board to prevent boxes slipping off, then nail four laths on it for legs about 28 inches long. Nail two horizontal pieces across the end legs, spreading them a little, and fasten the other board on them. Put a basket handle on the top board, and your carrier will be at the most convenient height for cane fruits.

FROM THE FLORISTS' EXCHANGE.

Watering the flowers in hot, dry weather *without* cultivating them afterward is worse than no water at all *with* cultivation, especially on heavy soils. The ground bakes hard with capillary spaces which evaporate the water rapidly; and gets so hot that the roots of the plants, especially sweet peas, gladioli, etc., suffer and the plant is weakened for its battle with the heat. Watering carnations in the hot months tends to make them grow soft and long jointed.

FIRST CLASS NURSERY STOCK IN GREAT VARIETY

Consisting of

FRUIT, SHADE AND ORNAMENTAL TREES

Strawberries, Raspberries, Blackberries, Currants, Gooseberries, Grape Vines, Asparagus, Rhubarb, etc.

Ornamental and Flowering Shrubs, Vines and Perennials. Roses, Evergreens, etc.

If you would like to see a *really good Catalogue* we would be glad to send you ours. It has more than fifty pages and describes everything in the plainest language without any extravagant or overdrawn descriptions.

The Coe, Converse & Edwards Co.

FORT ATKINSON,

WISCONSIN

Wisconsin's Largest Nursery

JEWELL MINNESOTA GROWN Nursery Stock

Complete assortment of Fruit and Ornamental stock in all varieties suited to northern culture. A specialty of Hardy Shade Trees, Windbreak Stock, Evergreens (Coniferous), Deciduous Shrubs, Apples and Native Plums.

THE JEWELL NURSERY CO.
LAKE CITY, MINN.

1500 Acres

Established 1868

Peonies are making growth beneath the surface and require cultivation now for the best development of the eyes that will make plants next year. A top dressing of short manure worked into the soil about three inches will help as much with peonies as with less hardy plants.

FROM THE MARKET GROWERS JOURNAL.

The cost of growing onions in the north is about \$80 per acre and the sales amount to \$120 to \$240 per acre, depending partly on ability to store them for a time, according to W. R. Beattie of the United States Department of Agriculture. Cleanliness of vegetables exposed for sale counts much in getting prices.

IMPORTATION OF PINES PROHIBITED.

"Horticulture" prints the order of the Massachusetts nursery inspector prohibiting the importation of all five-leaved pines from Europe to Massachusetts. This is on account of a disease prevalent in Europe which kills young trees of this class and renders worthless the old ones. It is known as the White Pine Blister Rust. Though it is not established here, the inspector warns all to watch for it.

FROM THE CANADIAN HORTICULTURIST.

"Valotta and Amaryllis may stand outdoors in partial shade from June until the end of August." If repotted at all, this should be done about the end of July, but "a top dressing or mulching with good rich soil is often better than repotting these plants."

MULCHING GIVES LUSCIOUS FRUIT.

"How well we remember the large luscious blackberries we have gathered from canes that grew on the north side of some old rotten log where Nature had mulched their roots a foot deep!" Green's Fruit Grower urges mulching of small fruits with vegetable matter free from weed seeds, especially in the bearing season. A mulch holds moisture in dry weather, and pre-

vents compacting the soil by the pounding of rain which aggregates thousands of tons per year on an acre. It prevents overheating of the roots on hot days; and in its decay, adds humus to the soil. In the absence of a vegetable mulch, a few inches of dirt kept loose by cultivation will serve most of these purposes. But remember that any sort of a mulch encourages the roots to come near the surface where they would be destroyed by deep cultivation.

TWO GOOD ONES

Two grand winter apples suitable for Wisconsin planting, Jewell's Winter and Yahnske. The former has been added to the list for Minnesota planting and the latter in my opinion should be. I planted twenty-five trees of each four years ago and they are all still alive, vigorous and healthy. Thompson's seedling No. 24 renamed Jewell's Winter from the famous seedling orchard of the late J. S. B. Thompson of Grundy county, northern Iowa. The tree is one of the most vigorous growers with me. I have found it perfectly hardy and early bearer and exceedingly prolific. It stands our rigid winters and does not kill back an inch. It bore last season with me after the third season of planting. It resembles the Wealthy in its bearing habit, only it is a longer keeper and bears in clusters and hangs on the tree better. In shape it is somewhat elongated and in color it is striped with crimson blush on the sunny side. Flesh is white, crisp, pleasant flavor, sub-acid and a fairly good keeper.

Yahnske Origin at Winona, Minnesota, by Frank Yahnske, Winona. The tree is perfectly hardy with me and is a vigorous upright grower and fruited last season after three years of planting. The fruit resembles Tomkin's King. It is large and exceedingly handsome in color, is rich yellow heavily striped with dark crimson. The flesh is white, firm, tender and juicy sub-acid and fine quality. Skin tough and a good shipper and good keeper and stands handling. E. G. TULLEDGE.

Gardens

A department conducted by practical women who really have gardens. Contributions are solicited. The editorial staff consists of all who contribute an article each month. If you know about flowers, home making or home keeping, write it down. The next best help is to ask questions. Send all contributions and questions to this office.

Spade up a plat of rich mellow ground and sow to pansies for early blossoms next spring. The plants should be thinned to six inches apart and the soil kept from forming a crust. They should be covered with some coarse litter after the ground freezes.

Give the asparagus a liberal sprinkling of salt at this time. It will kill the weeds and act as a tonic to the asparagus.

Look over all the currant and gooseberry bushes and cut out all broken or diseased branches, thus avoiding all danger from borers.

Cut out the old wood from the rose bushes and burn it. Don't forget to take a few cuttings from healthy year-old growth canes and lay them down in a moist sheltered place to take root. You will be able to keep a supply of your favorites and have some to exchange with your friends.

MRS. L. H. PALMER.

Orchard Land in Dunn County, Wis.

Surface rolling; soil, rich clay loam underlaid with limestone. The orchards of adjoining farms show the adaptability of this part of Wisconsin to apple growing. Near railroads and markets. Prices reasonable. Write for particulars.

William J. Starr
Eau Claire, - - - Wis.

PROGRAM

Summer Meeting, Bayfield, August 21 and 22

Regular Sessions at the Opera House.

Members on arrival will be met by members of the Bayfield Society who will assign rooms.

MORNING SESSION.

Wednesday, August 21, 9:00 A. M.

Address of Welcome Hon. Wm. Knight
The Season of 1912 in Bugland..... Prof. J. G. Sanders
Plant Welfare in 1912 Prof. L. R. Jones
Transplanting Herbaceous Plants W. A. Toole, Baraboo
Birds—An illustrated lecture by Ass't. Prof. A. C. Burrill, Dept. of Entomology, Agricultural College

WEDNESDAY AFTERNOON.

Excursions to orchards and berry farms in vicinity of Bayfield.
Free transportation for all.

WEDNESDAY EVENING.

"The Importance of Modern Civic Planning," an illustrated address by Mr. A. U. Morell, of Morell & Nichols, landscape architects and engineers, Minneapolis

THURSDAY MORNING, 9:00 A. M.

A CHERRY SYMPOSIUM

The Tree R. J. Coe, Ft. Atkinson
Planting and Pruning the First Season..... A. W. Lawrence, Sturgeon Bay
Pruning the Second Season Pres. D. E. Bingham
Pruning the Bearing Tree A. L. Hatch, Sturgeon Bay
Cultivation and Cover Crops.....
Picking and Marketing E. A. Richardson, Sparta

THURSDAY AFTERNOON.

Boat Excursion, Apostle Islands and along the South Shore to Cornucopia.
Free to all members and their guests.

THURSDAY EVENING.

Visiting members and delegates will be the guests of the Bayfield Horticultural Society at a banquet. The old folks will dance later in the evening.

Note.—Any member attempting to leave Bayfield before 2:00 A. M. Friday will be arrested and fined. Bayfield local laws (social) are very strict and penalties severe.

AMATEUR IRRIGATION

BLANCHARD HARPER.

Summer after summer as the long, dry seasons came, one woman toiled wearily night after night in the twilight pumping and carrying water through the thirsty garden. Last winter in a forgotten magazine she found a tale of a man whose tomatoes grew successfully because he watered them by sinking into the ground near each plant until the top of the can was level with the ground,

tin cans which had holes punched in their bottoms. When the plants needed water these cans were filled, and the tale proceeded to relate how this method conveyed the water directly to the roots where it was needed, and minimized the evaporation, and the labor of cultivating the soil to prevent baking after each watering. So this lazy woman pondered on this story and when her tomato plants failed to grow for want of water, she sank a five-inch flower

pot in the earth between every alternate two tomato plants (the plants were set to stakes two feet apart) and proceeded to fill the pots with water. The improvement was instant and rapid. Later on some of the plants had a little chicken manure put in the pots for fertilizer.

Last month an account was given of some cucumber hills which had been treated to too heavy a dose of poultry manure. These cucumbers were growing slowly and making so little promise that the lazy woman was in despair. The experiment of irrigating with pots was now tried. A four-inch flower pot sunk in the middle of each hill was filled with water nightly when rain was lacking. The result has been marvelous. The cucumbers have grown rapidly and are full of blossoms. The same system was tried with backward egg plants, a three-inch pot sunk beside each plant, and as a result the fruit set soon after beginning treatment.

In the July planting of lettuce before the seed was sowed three-inch pots were sunk in the row three feet apart; the seedlings are coming up well, but it is yet too early to predict results.

The one place where the pots seemed unsuccessful was when placed between two rows, one of Bermuda and the other pickling onions. There were only two pots three feet apart sunk, but they interfered with cultivation and appeared to make but little improvement in the onions. The amount of water pumped is about one-half or two-thirds of the amount required for a minimum sprinkling and the result appears much more effective when applied in this way than in sprinkling. There is no baking of the cultivated surface and fertilizers are so simply applied that the method promises well for an experiment in amateur irrigation.

A HINT

The Missouri State Board of Horticulture reports a heavy crop of winter apples but summer and fall apples shy. Ought to be a good year for Wisconsin Duchess and McMahan's.

PREMIUM LIST

THE FOLLOWING CASH PREMIUMS ARE OFFERED FOR EXHIBITS OF FRUITS AND FLOWERS.

	1st	2nd
Best Display Asters	\$1.00	\$0.50
Best Display Cosmos	1.00	.50
Best Display Coxcomb	1.00	.50
Best Display Single Dahlias	1.00	.50
Best Display Double or Show Dahlias	1.00	.50
Best Display Cactus Dahlias	1.00	.50
Best Display Delphiniums	1.00	.50
Best Display Gaillardia	1.00	.50
Best Display Gladioli	1.00	.50
Best Display Nasturtiums	1.00	.50
Best Display Pansies	1.00	.50
Best Display Petunias	1.00	.50
Best Display Phlox (Annual)	1.00	.50
Best Display Phlox (Perennial)	1.00	.50
Best Display Roses	1.00	.50
Best Display Snapdragon	1.00	.50
Best Display Sunflowers	1.00	.50
Best Display Sweetpeas	1.00	.50
Best Display Stocks	1.00	.50
Best Display Verbenas	1.00	.50
Best Display Herbaceous Perennials	1.00	.50
Best Display Annual Garden Flowers not enumerated in above list, (collection)	1.00	.50
Best bouquet of garden flowers in vase not over six inches in diameter	1.00	.50

FOR AMATEURS ONLY.

POTTED PLANTS.

Best Fuchsia	1.00	.50
Best Rex Begonia	1.00	.50
Best Tuberous Begonia	1.00	.50
Best Begonia other than above	1.00	.50
Best Gloxinia	1.00	.50
Best Sword Fern	1.00	.50
Best Fern other than above	1.00	.50
Best Asparagus Plumosus	1.00	.50
Best Asparagus Sprengerii	1.00	.50
Best Display Geraniums	1.00	.50
Best Display Coleus	1.00	.50
Best Display Golden Rod	1.00	.50

WILD FLOWERS.

Best Display Asters (native)	1.00	.50
Best Display Lobelias (native)	1.00	.50
Best Display Native Ferns	1.00	.50
Best, most artistically arranged bouquet of Wild Flowers	1.00	.50
Best Display Ornamental Wild Fruits	1.00	.50
Best Display Native Fungi	1.00	.50
Best collection of Wild Flowers in arrangement and variety; the different varieties to be shown separately each with common and botanical name	3.00	2.00
Sweepstakes to be awarded to the exhibitor receiving the largest number of first premiums on flowers and potted plants, amateurs only	5.00	3.00
	2.00	

FOR PROFESSIONAL GROWERS ONLY.

	1st	2nd
Display ornamental potted plants	10.00	5.00
Display cut flowers	6.00	4.00

FRUIT.

APPLES.

Best Plate Alexander	1.00	.50
Best Plate Astrachan	1.00	.50
Best Plate Autumn Strawberry	1.00	.50
Best Plate Duchess	1.00	.50

Door County Fruit Lands FOR SALE

Also Cottages and Bay Shore Lots
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PARDEEVILLE, WIS.

Offer a Complete line of

HARDY NURSERY STOCK

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Vincennes, Indiana

W. C. REED,
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Cherry Trees by the
100 or 100000

The Growing of Cherry Trees has been our Specialty for Years. Our soil and method of growing produces a Tree that is not excelled by any one. Splendid blocks of two-year 5 to 7 foot trees and one-year 4 to 5 foot trees. Early Richmond, Montmorency and other leading varieties by the 100 or car load. We also grow a general line of other Nursery stock. Personal inspection invited. Correspondence solicited

	1st	2nd
Best Plate Dudley	1.00	.50
Best Plate Early Harvest	1.00	.50
Best Plate Fameuse	1.00	.50
Best Plate Lowland Raspberry	1.00	.50
Best Plate Longfield	1.00	.50
Best Plate McMahan	1.00	.50
Best Plate McIntosh	1.00	.50
Best Plate Lubsk Queen	1.00	.50
Best Plate Patten Greening	1.00	.50
Best Plate Plumb Cider	1.00	.50
Best Plate Switzer	1.00	.50
Best Plate Tetofski	1.00	.50
Best Plate Utter	1.00	.50
Best Plate Wealthy	1.00	.50
Best Plate Seek-no-Further	1.00	.50
Best Plate Wolf River	1.00	.50
Best Plate Yellow Transparent	1.00	.50
Best Display Crabs	1.00	.50
Best Display Pears	1.00	.50
Best Display Japanese Plums	1.00	.50
Best Display European Plums	1.00	.50
Best Display Native Plums	1.00	.50
Best Display Cherries	1.00	.50

BUSH FRUITS.

Best Red Currants, 1 quart	1.00	.50
Best White Currants, 1 quart	1.00	.50
Best Black Currants, 1 quart	1.00	.50
Best Gooseberries, 1 quart	1.00	.50
Best Red Raspberries, 1 pint	1.00	.50
Best Black Raspberries, 1 pint	1.00	.50
Best Blackberries, 1 pint	1.00	.50

Specimens of plums must be fully colored and ripe enough for culinary use.
Five apples to be shown for a plate.—In plums and crabs not less than six specimens will be considered a plate.

	1st	2nd	3rd
Sweepstakes for largest number of first premiums for fruit	5.00	3.00	2.00

VEGETABLES.

	1st	2nd
Best quart Snap Beans	1.00	.50
Best quart Bush Lima Beans	1.00	.50
Best quart Pole Lima Beans	1.00	.50
Best six Turnip Beets	1.00	.50
Best three heads Drumhead Cabbage	1.00	.50
Best three heads Cabbage any other variety	1.00	.50
Best three heads Cauliflower	1.00	.50
Best Celery, six heads	1.00	.50
Best twelve ears Sweet Corn	1.00	.50
Best six Cucumbers	1.00	.50
Best Head Lettuce, three heads	1.00	.50
Best three Musk Melons	1.00	.50
Best three Watermelons	1.00	.50
Best six Parsnips	1.00	.50
Best twelve Tomatoes	1.00	.50
Best Turnips, one-half peck	1.00	.50
Best White Onion, one-half peck	1.00	.50
Best Yellow Onion, one-half peck	1.00	.50
Best twelve Carrots	1.00	.50
Best three Egg Plant	1.00	.50
Best six Peppers	1.00	.50
Best three Summer Squash	1.00	.50
Best three Winter Squash	1.00	.50
Best Display Radishes	1.00	.50
Best Display Novelties	1.00	.50

	1st	2nd	3rd
Sweepstakes for largest number 1st premiums, Vegetables	5.00	3.00	2.00

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Grow and handle all kinds of nursery stock. We employ no agents but sell direct. If in the market you can save money by buying of us. Get our prices.

WISCONSIN NURSERIES,

Union Grove, Wis. W. S. Moyle, Prop.

**THE HAWKS
NURSERY CO.**

are in a position to furnish high grade Nursery Stock of all kinds and varieties suitable to Wisconsin and other northern districts.

Will be glad to figure on your wants either in large or small quantities.

WAUWATOSA, WISCONSIN**The Great
Northern
Nursery Co.****Sells First-Class****Wisconsin Grown Trees**

Our Trees Live. We had an opportunity to compare 500 of our Wisconsin grown trees with a similar lot of an Eastern Nursery. At the end of the season only 52 per cent of the eastern grown stock was alive, while 95 per cent of ours lived and grew. Moral: buy home grown stock and avoid loss. Our trees are **HARDY**, and our stock is **HEALTHY**. A comparison will prove that our stock has not the willowy and watery soft growth of southern or eastern grown stock.

Every tree and shrub is packed entirely under cover, free from exposure to sun and wind.

**Great Northern Nursery
Company, Baraboo, Wis.**

Write for Catalogue and Price - List.

Don't Forget Bayfield, August 21 and 22

Questions and Answers

Q. Please give directions for raising horseradish. A. B.

A. Horseradish may be made a profitable crop when grown on deep loose soil that is well drained and fertilized. Early in spring plant in rows three feet apart, six inches in the row. Use small roots three to four inches long and plant three to four inches below the surface. Cultivate twice a week. In July remove soil to the depth of ten inches, break off all side roots and return to the soil. Roots grown in this way will weigh from one to five pounds, valued at from six to ten cents per pound.

J. W. ROE.

Q. What causes plums to take form of enclosed samples and remedy for same. W. W.

(Half grown fruit puffed and swollen to abnormal size, spongy and wrinkled.)

A. A condition caused by a fungous disease known as Plum Pocket or Bladder Plum. Attacks fruits of the native plum and very common on wild plums. Later in the season, August or September these malformed fruits will be covered with a gray or bluish coating, spores which serve to spread the disease. Therefore collect and burn all affected fruits at once. Little good will be accomplished by spraying now but the trees should be sprayed with Bordeaux before the buds start next spring and at least twice later in the season. This will also take care of shot-hole fungus on the leaves and all other fungous diseases. Add arsenate of lead and control the curculio.

Q. Please give directions for care of Tuberose, time of planting, etc.

How shall I treat some that were planted last spring, and are now four or five inches high?

M. B.

A. Tuberose may be grown in the garden but the spikes will not approach in size or quality the green-

house grown stock. The bulbs may be had from florists any time after midwinter and for early bloom in the garden should be started in the house about March 15th to April 1st.

If satisfied with late bloom the bulbs may be planted in the open ground May 1st although some difficulty will be experienced in holding back the bulbs until this time.

For house culture fair success may be had if a high temperature can be maintained for three or four weeks after the bulbs are potted. Tuberose are heat loving plants and require a temperature of 75 to 80 degrees until in bloom. The bulbs should be potted in January for bloom in April or May.

Q. A member, name and address lost, asks how to raise Brussels Sprouts.

A. Brussels Sprouts is a great favorite in England but is rarely grown in American gardens. It belongs to the cabbage family, the edible part consisting of "sprouts" or diminutive cabbages which grow in the axils of the leaves along an elongated stalk.

The culture is in all respects like that of cabbage. For early "sprouts" sow seed in April, for late crop sow in the field in May or June. The late crop will prove most satisfactory. The field culture is the same as for cabbage.

When the sprouts or rosettes are well formed break off all leaves except a tuft at the top to allow room for growth of the sprouts.

TRESPASSING, DEPREDAATION, THEFT

When this applies to an orchard in bearing public morality seems horribly slack.

I say this from an experience through thirty years. Out of a crop of possibly one thousand bushels of apples some years I got just about one-half. The other half thieves got and the best half too. And not only the best half of the crop stolen, carried and hauled away but often times trees broken down.

I have complained to the mayor of the city, I have complained to the

sheriff of the county, and, last year, having a good apple crop, I even complained to the governor of our state without that high official even as much as making an answer there-to.

The constitution of our nation and our state guarantees to every in-

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Currants by the doz. or 25,000
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A trial order will convince
any one of their quality.

H. M. SIMPSON & SONS
Vincennes, Indiana.

habitant thereof the right of property and equal protection of the same. It does not seem to apply to apples in orchard. If \$300.00 or \$400.00 worth of goods in a store or of currency in a bank was stolen and carried away the police, sheriffs and detectives would be busy hunting down the depredators, but if that amount in apples is stolen in an orchard these same officials to the governor will not even listen to or recognize your complaint and your right under this same constitution and which we all pay for to uphold without fear and without favor and equal to each and all, whether possessed of much or only of an orchard. Can it be the recollection in us of the small boy in that period of life, wherein even a green, sour apple tasted mighty good?

If the small boy would content himself to satisfy this craving only, it would not be so bad, but he will carry off all he can carry and a whole army of small boys can carry off a lot.

But it is not only small boys. It is big boys and full grown people as well and they have horses and wagons and some make a practice and a living that way, upon the forethought and labor of others.

I think our society should take up for consideration seriously this matter and work for more just laws for the orchardist. I could not just say if same conditions obtain here as in other parts, but I am inclined to think it is the same all over our state, and it is certainly a most regrettable state of affairs.

Menomonie. S. RUNNING.

"One hundred and twenty quarts of strawberries was my first crop from a patch 25 feet square containing about 200 Marshall plants," says S. T. Lyon in the Garden Magazine. He cultivated and watered them often through the first season after planting, pinching off the blossoms to make good plant growth, and cutting all runners between the rows. He mulched them in the fall with stable sweepings and straw. Shortly after this was removed in the spring, the bed was abloom and bore a tremendous crop of highly colored, uniformly large size berries. As soon

as they were gone, he mowed the vines close to the ground and burned them to prevent fungous diseases. He cut the roots to about a foot and a half apart, cultivated, watered and fertilized them with nitrate of soda.

Surplus Apple Trees to Sell or Exchange

Owing to the difficulty of securing reliable stock we are growing apple trees for our own planting and will have a surplus of one and two year old Wisconsin grown trees to sell or exchange for cherry trees, grape vines, black berry, red and black raspberry and strawberry plants.

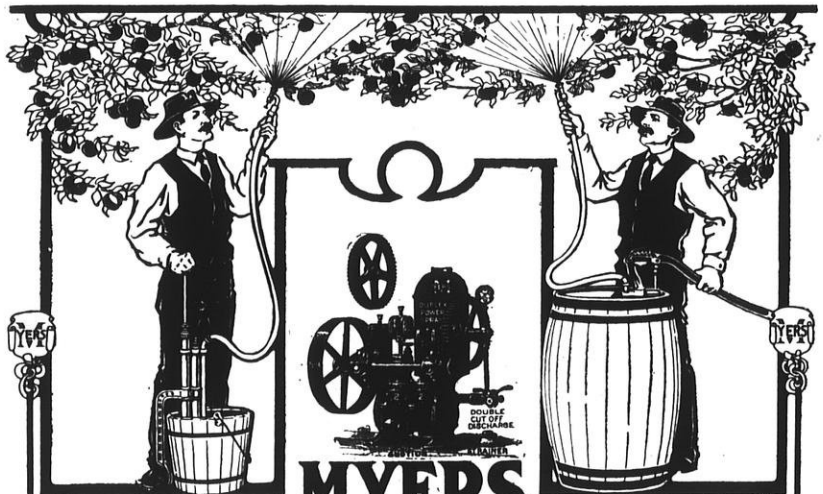
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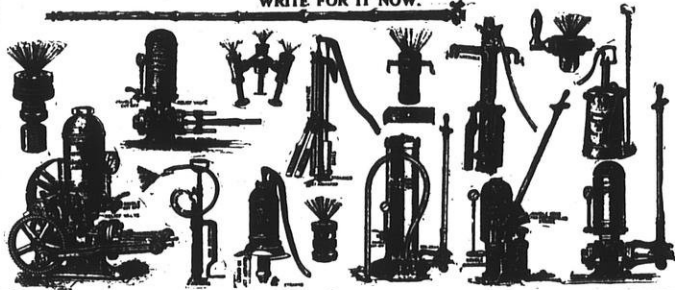
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