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The Wisconsin horticulturist...issued monthly, under the management of the Wisconsin State Horticultural Society, for the purpose of disseminating horticultural information. Vol. II, No. 9 November 18...

Wisconsin State Horticultural Society

Baraboo, Wisconsin: Republic Print, November 1897

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VOL. II.

NOVEMBER, 1897.

NO. 9.

The Wisconsin Horticulturist...

Issued Monthly,

Under the Management of the

Wisconsin

State Horticultural Society,

for the purpose of

Disseminating Horticultural

Information.

* Subscription Price Fifty Cents Per Annum. *

The Wisconsin Horticulturist.

[Entered as second class matter in the Post Office at Baraboo, Wis.]

A monthly magazine published under the management of the State Horticultural Society.

Terms: 50 cts. per annum.

Payment of \$1.00 per annum entitles one to the magazine for a year, and to a year's membership in the State Horticultural Society.

All business communications should be addressed to the Business Manager,

W. J. MOYLE,

Madison, Wis.

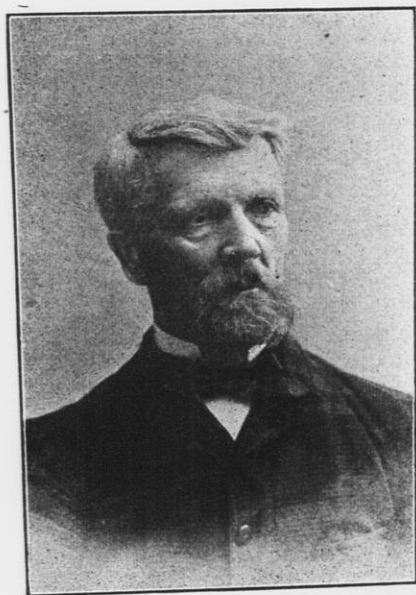
All matter for publication should be sent to the Editor,

MRS. FRANKLIN JOHNSON,

Baraboo, Wis.

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MR. DANIEL HUNTLEY, Appleton, Wis.

The Wisconsin Horticulturist.

VOL. II.

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IN MEMORY OF MR. DANIEL HUNTLEY.

Gone,—another Pioneer Horticulturist. Mr. Daniel Huntley, one of the most widely known and highly esteemed pioneers of Outagamie County, a prominent member of the Wisconsin State Horticultural Society and one of the most honored members of the Grand Chute Horticultural Society, died at his residence near Appleton, Oct. 6, 1897.

After a night of suffering with labored breathing caused by an attack of asthma, he became unconscious, and at 7:30 P. M. passed away as quietly as a child sleeping in its mother's arms.

Just before becoming unconscious, he said, "I have reached the three score and ten mark and if a man lives longer than that it is a struggle for existence," then added with a characteristic flash of humor, "What do you think of seven hundred years?"

Mr. Huntley suffered a stroke of paralysis four years ago, and has since been in very frail health. But his sufferings have been borne with patience and cheerfulness.

His mind has been ever bright and active, and for some time he took great comfort in reading. His interest in horticulture and all the topics of the times was as unbounded as in his most energetic days.

It was a great grief to him when his eyes failed so that he could not read a word. But he was not allowed to suffer from this affliction, for through the tender sympathy and loving ministrations of his devoted companion, he kept

in touch with events of the outside world and was far better posted on horticulture, politics and the literature of the times than many a one with good eye-sight. "Helen reads everything to me," he remarked one day.

Mr. Huntley was a native of New England. His early days were spent in Weybridge, Addison County, Vermont. Left alone when quite young he found a protector and benefactor whom he always held in grateful remembrance. Who of his friends has not heard him mention Mr. and Mrs. Stowe and the assistance they gave him in procuring an education?

In a paper written by Mr. Huntley and read before the Outagamie Pioneer Association, he said: "I came to Wisconsin in 1849. Stopped in Dodge County. But hearing much of Lawrence University decided to visit Appleton. *

* * We found a few shanties in the woods and a building in process of erection which was the germ of Lawrence University. We returned to Dodge County and I taught school that winter. * * * In the meantime I thought often of the new town with its college and fine water power, and as soon as school closed I went back to Appleton. The next winter I taught the first public school in Appleton. In the fall of 1852 I returned to Vermont and was married."

He married Helen M. Bretell, and to this union was due a great measure of his success in life. For she has proved a helpmeet and companion in the truest and tenderest sense of the words.

For eight years he lived at Appleton, teaching in the public schools, conducting singing schools and assisting in every social work for the improvement of the pioneer society of the town. In that time he was elected City Marshal, the town not having arrived at the dignity of Mayor.

In 1860 he purchased a farm in the town of Grand Chute, of which he says: "Here I have lived and done what I could to subdue and cultivate the soil and beautify my home." How well he succeeded those of you who have been privileged to visit the Huntley homestead know, and will appreciate his efforts in that direction. He has

done more and better work than any other member of our society.

Five children have gone out into the world with pleasant memories of a beautiful home, educated and fitted to bear their burdens in life. Jerome B. is a fruit grower in Marion, Indiana; Herbert B., a lawyer in Seattle, Washington; Arthur O., a ranchman in Idaho; Mrs. Fleta Howe lives at Lake Mills, Wis.; and Miss Flora is a successful teacher at Oconomowoc, Wis.

Lately Mr. Huntley had given much thought to a future life, studying and reading as was his wont when interested in any topic. For, as he remarked, "When a man nears his journey's end he wants to know something of the country to which he is going." His son sent him "Scientific Demonstration of a Future Life," by Hudson, with which he was greatly delighted. "It makes everything so plain," he said.

"I am tired, so tired," were almost his last words; and there came to him "God's rest, so deep, so sweet,"—the rest that will sometime come to us all.

"Though it may be delayed,
Yet never can it be stayed,
That trip on the Grand Old Death Route."

MRS. FRANK H. WOLCOTT.

Appleton, Wis.

Be careful to go strewing in and out
Thy way with good deeds, lest it come about
That when thou shalt depart,
No low, lamenting tongue be found to say,
The world is poorer since thou went'st away.

But make so fair and sweet
Thy house of clay, some dusk shall spread about
When death unlocks the door and lets thee out.

—Alice Cary.

SUMMER DROUTH.

The chief drawback to country life in this section is the deficiency of rainfall in July, August and September, or during some portion of this period. Midwinter is far less gloomy, and the farm far less forlorn in appearance than at the end of a dry spell in midsummer or fall. The appearance of the place is more injured, and its attractiveness as a home more marred than by any other conditions.

As a rule we are helpless. Artificial watering, as a rule, is impracticable even for the dooryard, or lawn, and flower beds. It takes too much time, even when the water is at hand. It is irritating to read in seed and nursery catalogues, "Give plenty of water while blooming," or "See that the soil does not become dry." For most of us they might as well say, "See to it that the sun shines."

Those who have water in a spring or brook, which could be arranged to irrigate the lawn and flower beds, or even a portion of them, without the use of a pump and hand sprinkler, are very fortunate. They should improve their opportunities to the utmost. Such an irrigating plant, in many cases, would add greatly to the money value of a farm, and increase greatly its attractions as a home.



The above wail of despair, clipped from an Ohio paper, will find an echo in the heart of many a Wisconsin Horticulturist. To more than one hard-working young farmer, this succession of dry summers and autumns has seemed to sound the death-knell of all hope of a beautiful home.

Compelled to see his cherished plants and trees, even the very grass upon his lawn, die of thirst, what wonder that the buoyant young enthusiast should become somber and discouraged?

To such an one the practical and suggestive article on our next page will be most timely, showing how Mr. Hoxie wrestled with the problem of a Water Supply and how at last he solved it.

THE WATER SUPPLY.

B. S. Hoxie, Ex-Sec'y Wis. State Horticultural Society.

It is safe to say that nothing is of more importance to the gardener and florist than an abundant supply of water, and his supply always under his control.

The man or woman who wishes to cultivate flowers and plants and who gives them a fine chance in spring and early summer, of late years suddenly awakes in midsummer to the fact that they begin to wither and die. Resort is at once had to the watering-pot, and pailful after pailful from the well or cistern pump is used. The earth constantly drinks it in and every day calls for more, and we bend our energies to supply the want, but finally give up in despair while we mourn the loss of our flowers and hope that next year may be better.

My memory recalls when one year I had as fine a growth of Dahlias as ever I saw, and the next spring I planted out fifty hills which promised a fine show of autumn bloom, but alas! not a dozen blossoms appeared, and in the fall the bulbs were weak and puny. Result,—but few (and those of inferior varieties) were fit to plant the next spring. The Gladiolus beds showed but imperfect bloom and so on to the end of the chapter, for out-door plants.

So the question had but two alternatives, either a permanent water-supply or no garden and lawn. The right end of the question for me was a supply of water with wind-mill and elevated tank, so that now by aid of gravitation and rubber hose I never have a lack of water when I need it, though I have sometimes lacked time to use it. Our city does not boast a system of water works and even if it did my own independent fountain supply is cheaper than a "water tax," and there is no "shut off" when wanted, for the winds of heaven blow and the lower fountains yield up their treasure at call.

There are wind-mills on almost every farm in the country, but not one elevated tank in a hundred. A small tank

holding thirty, forty or fifty barrels, placed on a tower of trestle-work, say ten or twelve feet high, would in most cases afford an ample supply.

The overflow from this could as well supply the yard tank as it now does, or it could be taken direct to the house and then distributed. Of course a force pump would have to be used instead of the common lifting pump, but it costs only a few dollars more, and what a convenience!

Evansville, Wis.

THE POTATO CROP.

New York, Oct. 20.—Not since 1892 has the potato crop of the United States proved so nearly a failure, says the American Agriculturist in its final report of the yield of 1897. Compared with the liberal crop of last year, there is an apparent falling off of nearly 30 per cent. in tonnage and the quality of the whole is greatly deficient. County and township returns from all the leading potato growing states show the yield to be 174,000,000 bushels against 245,000,000 in 1896. The average rate of yield per acre is placed at sixty-four bushels, taking the country at large, against eighty-six bushels in 1896. The principal reasons for disaster to the crop are blight and rot, as a result of extremes of weather conditions.

Beech nuts, acorns, etc., as soon as they are gathered should be packed in sand, muck or some other material that will prevent their getting too dry. In this way they are kept fresh till they are planted. They should be covered about two inches deep in rows sufficiently wide apart to allow of running a cultivator between the rows. If the young trees are transplanted once or twice in the nursery they will develop more fibrous roots and will stand transplanting better when they are large enough to move to a permanent position. Fall planting of the nuts is usually preferred.

TWO FAMOUS OLD APPLE TREES.

The decayed stump is all that remains of the famous "mother tree," the oldest known specimen of the Rhode Island Greening. A few rods southwest of the old lime kiln, on the northern verge of Fruit Hill, R. I., on Frederick W. Winsor's farm, stands a younger tree. The history is thus given in *Am. Cider and Vinegar Maker*: Mrs. Winsor's great-great-grandfather, Nehemiah Smith, planted the mother tree, of which the other is a limb, wrenched while loaded with fruit, from the parent stock, during King George II's reign, in 1748, and was therefore 141 years old when it was cut down in 1889-90, and its life from the seed must be nearly 150 years. The present tree, the "daughter tree," so-called, is a limb of the mother trunk, which was broken off in the September gale of 1815, and from an elbow thrust into the moist, rich soil, took root and became independent. F. M. Perry, of Canandaigua, N. Y., a famous nurseryman and pomologist, pronounced the fruit of these trees the finest of the Greening family, and procured hundreds of cions from the stock to introduce into New York and the Middle states. Last year the younger tree bore about ten bushels of apples, and bids fair to breast the storms of many a winter yet to come.



TRAPPING (?) APPLE WORMS.

Editor of Wis. Horticulturist:—

At the meeting of the State Horticultural Society in Madison last February we were very much pleased to meet Prof. Otto Lugger, the State Entomologist of Minnesota. From him we learned of a very interesting way to trap the codlin moth larvæ or apple worms. With the advent of spraying we had expected to clear out this pest which has given us so much trouble, especially in our late apples like the Golden Russett, Tallman Sweet and Fameuse. On summer apples like the Tetofsky and Duchess, marketed in July or August, spraying seems to be all right, but the

worms keep coming all summer and get in their work on our winter apples when it is too late to spray them.

Prof. Luggar advised banding the trees with common wrapping-paper, folding it back and forth to make a band of several folds, which should be put around the tree-trunks and held in place by a single tack. He said the worms would go into the folds of the paper band to spin their cocoons and change to moths. Then he said remove the bands, say every ten days or two weeks, beginning in June or July, and run the bands through an old clothes-wringer mounted on a wheel-barrow to be handy, and that would crush the worms.

When I heard this plan I was greatly pleased as I felt that at last we had a sensible way to supplement spraying and do what it had failed to do for us.

I had the wheelbarrow, I had the old clothes-wringer, I had the apple-trees, and I had the worms in the apples, yes, lots of them. So I got the bands, and I folded and wrapped and tacked and waited! But alas! the worms wouldn't go into them—scarcely any. Out of thirty under one band only two were in the folds of the band; the rest were stuck on the bark between the band and the tree and when the band came off most of them stuck to the tree, some fell to the ground and but few were on the band.

Now I am very much disgusted with these worms; they do not seem to be well educated. Of course they have no right to act so. They ought to crawl into the bands and not go fooling around on the bark. If they want to be well flattened they ought to have sense enough to get into the bands so I can use the clothes-wringer. Now if Prof. Luggar comes to Wisconsin again I want him to tell how to educate the worms here at my place so I can paralyze them in the wringer. I can't very well run the trees through the wringer.

I tried putting straws in the folds to tempt the worms to go into the right place, but they wouldn't, although thirty years ago Mr. D. B. Weir, then of Illinois, told us that

was the way to do it. At that time some practical orchardists hoped a great deal from Ruhlman's patent moth-bands. These were poisoned cloth, supposed to kill the worms without the clothes-wringer process. Mr. A. R. Whitney, of Franklin Grove, Illinois, told me the last time I saw him that he expected to use them. Whether the plan was successful or not I have never learned. Can't Mr. Philips or some one else tell us through the pages of the "Horticulturist" how it turned out? Also something about Mr. Whitney and his orchard?

Surely if we expect to grow winter apples free from worms, we must do something more than spray.

If we could have a complete failure of the apple crop—not an apple grown in our vicinity for one season—we might starve the worms out. But we have never had such a failure here yet.

Yours cordially,

A. L. HATCH.

Ithaca, Wis.

We wonder if bands of soft cloth, very much wrinkled, like a lady's "crush collar," would not be a better trap than the smooth folds of paper. On page 487 of Harris's "Insects Injurious to Vegetation" is this statement: "If any old cloth is wound around or hung in the crotches of the trees, the apple-worms will conceal themselves therein; and by this means thousands of them may be obtained and destroyed, from the time when they first begin to leave the apples until the fruit is gathered. By carefully scraping off the loose and ragged bark of the trees, in the spring, many chrysalids will be destroyed."

A year or two ago Mr. A. G. Tuttle showed us an old grain-bag which had hung in the fork of an apple-tree. It was a revolting spectacle, fairly alive with the worms; there must have been hundreds of them.

We append another novel remedy for the codlin moth,

found in one of our exchanges; it reads like a tale from the Arabian Nights, or like a Wonder Story:

A NATURAL ENEMY OF THE CODLIN MOTH.

The question presents itself: Is there a natural enemy of the codlin moth operating in nature, capable of being utilized by the orchardists of this country under conditions offering reasonable promise of ultimate success? With considerable confidence in the soundness of my position I answer, Yes!

The codlin moth was originally imported with the apple from Europe and there if at all we may hope to find its natural enemies. In certain districts of Germany apples are extensively grown, but in no part of those districts is spraying found necessary to protect them against the moth.

While in that country not long ago I made close inquiry into the subject and learned that the injury from these pests was reduced to a minimum by the operation of a little bird known locally as the "Kohle Meysen." It is exceedingly active, even the minutest, discovering with unerring certainty the existence of larvæ, on which it subsists.

I took pains to verify my information by inquiry of scientific men there, specialists in matters of horticulture, among others the Imperial Horticultural Inspector for Northern Germany. He told me that the little bird spoken of was, for the purpose of producing the commercial apple, second in importance only to the tree itself, because without the one the product of the other would be unfit for market. From him I learned that the bird is not migratory in its habits. That its craw or stomach is so constructed that it can subsist on seeds and kindred food during the winter months, but at the first sign of a thaw its capacity to assimilate these foods ceases, and larvæ becomes its sole diet during the spring, summer and autumn, until frost again notifies it that its season's work is over. The bird is hardy and plentiful and can be procured of bird dealers in Bremen at a very light cost. Unlike other winged enemies of the

orchard pests, it commits no depredations itself, because of its physical make up.

Midwinter is the only time during which they can be conveniently and quite safely transported, as otherwise they must be fed on meal worms.—N. A. Jacobsen in Payette Independent.

A VISIT TO OUR TRIAL ORCHARD AT WAUSAU.

Prof. E. S. Goff.

On one of those "beauteous golden autumn days" with which we were favored during the latter part of October, I had the pleasure of visiting our young trial orchard at Wausau. It was a day calculated to inspire poetry into the prosiest mind, and as I recall it, I am as much inclined to write of the day as the orchard, though I was very well pleased with the latter. Secretary Philips met me at the morning train in Wausau, and the ride out to the home of Mr. Single, on whose grounds the orchard is located, was delightful. Overcoats were superfluous, and but for the nearly leafless trees, we might have forgotten that it was late October. The magic haze that whispers Indian summer effaced the outlines of the more distant woodlands, and gave to the landscape that peculiar dreamy aspect that belongs to lovely October days. We rode past some extensive lumber mills in which busy saws were humming the tune of prosperity.

Here and there, over the rolling landscape, stumpless fields and fine farm buildings early announced that Wausau lies in an excellent agricultural region that only needs development to make it one of the wealthiest sections of our state. The soil appears to be a rather heavy clay loam mingled with heterogeneous quartz and granite pebbles that rarely attain the size of bowlders, and of which the almost infinite variety shows contributions from many regions in its glacial formation. Such soils are sure to be fertile, and

with a propitious climate, are almost always well adapted to the apple and other *Pyrus* fruits.

Mr. Single's place lies on one of the rounded, low hillocks that, with the shallow intervening valleys, make up the topography of this region. It is about three miles from the center of Wausau city, a little to the north of west. The homestead, which is a monument to the industry and thrift of the father of the present Mr. Single, is of more than average pretensions. The dwelling is attractive and commodious. The barn is one of the largest in the county, and was built in the days when the virtue of construction was thought to lie in the size of the timbers.

It is said that, back in the forties, when the heavy pine and hard wood forests of this section could only be safely penetrated by following up the streamlets, a bear attacked the dog of the elder Mr. Single as he was making his way up the valley of a brook toward a saw mill that he was operating some distance to the south. The dog ran back into the forest, pursued by the bear, and Mr. Single followed, anxious for the fate of the dog. Reaching the top of the hillock where our trial orchard now stands, he found it heavily timbered with hard maple, which assured him of a strong and well-drained soil, of which he was quick to realize the value. Later, when the saw mill broke down, and it was necessary to send to St. Louis for repairs—for the overland commerce from Chicago way had not yet been opened—Mr. Single brought the mill hands over to this ridge and set them to chopping out what afterward became his farm.

Our trial orchard occupies part of a large field that joins the Single homestead on three sides. The orchard extends to the highway on the side looking toward the city, and reaches around to the rear of the house. It stands on a gentle northward slope that becomes almost a level near the road. In the corner of the field toward the city, is a neat, white school house, of which I at first feared that the occupants might one day be a menace to some of the rosy apples that I picture in the not-far-distant future, but a brighter thought reminded me that the whole purpose of

the orchard is educational. What more fitting way of disseminating a knowledge of fruit than through the eager minds and keen appetites of boys and girls who always learn of the ripe apples before their parents? Indeed I am not sure but our trial orchard may be an early prophecy of the golden age when every country school shall have a little orchard and garden in connection with it to furnish object lessons for the elementary study of plant culture.

The orchard has two departments, which friend Phillips has named the "experiment orchard" and the "commercial orchard" respectively. Of course both are in a sense experimental, but the so-called commercial orchard is made up of standard varieties which are intended to demonstrate that apple growing can be made commercially profitable in Marathon county. A planting experiment is included in it, viz., each of the varieties contains sample trees from several different nurseries of our state and Minnesota. If there is a difference in the intrinsic qualities of trees of the same variety grown in different sections, these plantings will very likely give an indication of the fact.

The experiment orchard includes more than a simple test of varieties. Root grafts of many varieties have been planted in the place where they are expected to grow to bearing size, and nursery trees of the same varieties are planted by their side for comparison. A tree of the Virginia crab has also been planted for each variety, which will be top grafted in the spring. Thus we shall have, of quite a large number of varieties, one tree grown from a root graft without transplanting, one grown from a root graft in a nursery and transplanted to the orchard at the usual age, and one top worked on the Virginia crab. The results of this experiment will undoubtedly prove very valuable, for they will not only teach us which of the varieties planted will prove sufficiently hardy for Marathon county, but they may be expected to teach us the relative merits of the three kinds of planting.

The trees are now looking very nicely, with the exception of the root grafts, which have thus far grown very

slowly. They will doubtless grow rapidly when they become well rooted, for the larger trees have, with a few exceptions, made a fine growth the past season. The ground of the orchard is free from weeds, and in a fine condition of culture. The only change I would suggest would be to cover the soil in autumn with a green crop to prevent deep freezing of the ground in case of an "open" winter. The orchard at present covers nearly ten acres, and contains about 750 trees. Twenty-seven trees died the past season, and have been removed. The trees have been staked wherever they require it, and are protected with lath protectors. The different rows are designated by neat numbered stakes, and the varieties by labels attached to the trees. Mr. Philips has also prepared a substantial map of the orchard on which the name and source of each tree are plainly written. On the whole, we have reason to feel proud of our trial orchard, which is certain to prove of great value to this part of the state. Already many visitors have been to see it. Some of the cherry and plum trees have flower-buds for next year, and a few of the more precocious apples are forming fruit-spurs.

Mr. Philips proposes to plant the greater part of the remainder of the plat next spring, the planting to include a small "commercial" orchard of the more successful cherries and native plums. The plan is an excellent one and I hope he will carry it out.

Judging from such indications as I could see, there is no reason to doubt that the hardiest apples may be grown successfully in Marathon county. No blight appeared in the trial orchard the past season, and some trees several years old in the vicinity have suffered very little from blight or any other cause. Some Tetofski trees just across the way from Mr. Single's house are nearly or quite twenty years old, and look very well, considering the care they have received. Their branches are wreathed in fruit-spurs, that reveal a fruitful history.

I see much of promise in the country about Wausau. The strong clay soil and gentle rolling surface are sure to develop agricultural, if not horticultural wealth.

University of Wisconsin.

WINTERING GRAPES WITHOUT LAYING DOWN.

Editor of Wisconsin Horticulturist:—

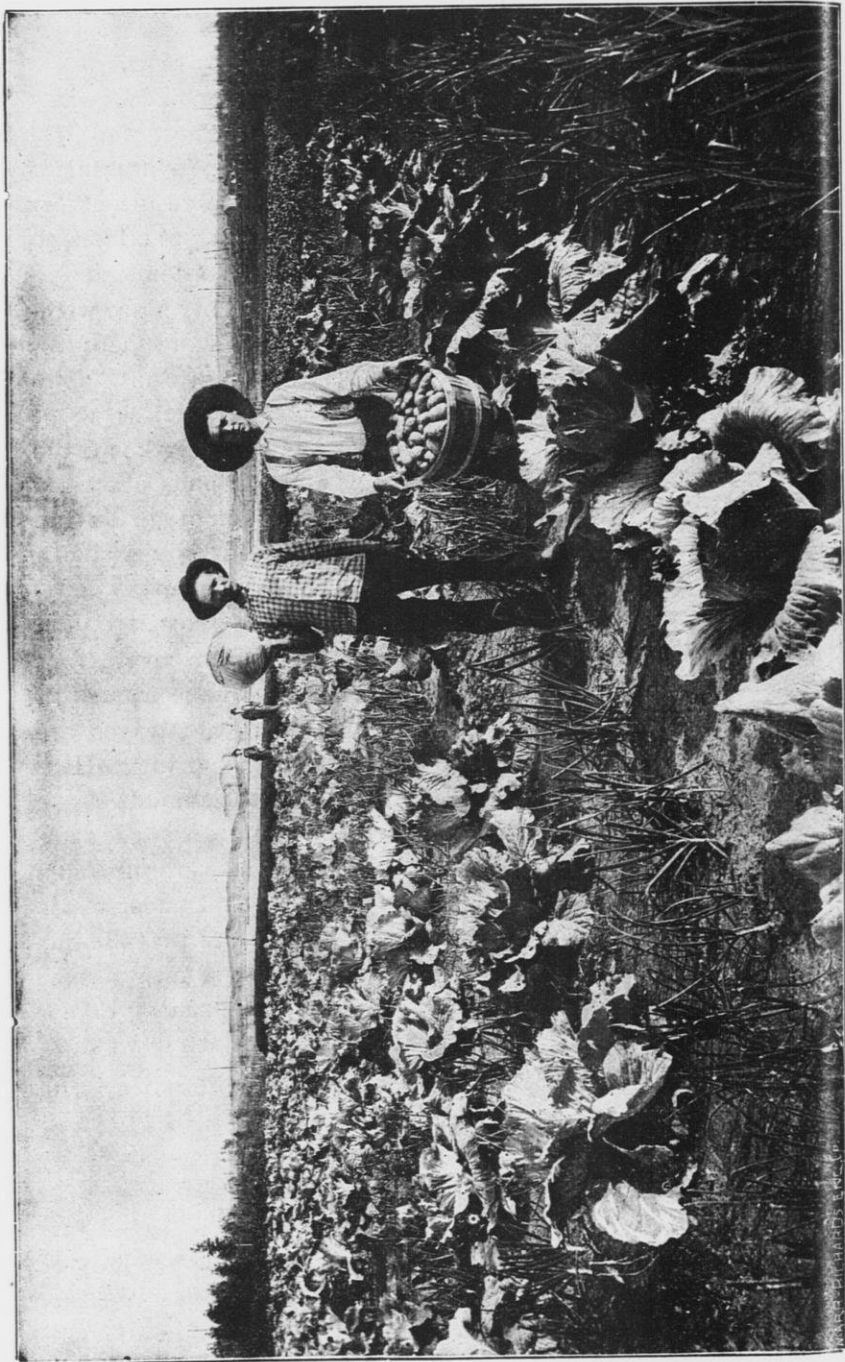
In reply to your question in regard to the winter management of grape vines, I will give you the result of my own experience in this State. The first thing to be considered is variety. Concord, Moore's Early, Worden and Niagara are all hardy and have all wintered on my place without killing as yet, hanging on the wires with the mercury, at one time, as low as 40 degrees below zero. The Brighton was killed at that time, but the four varieties above mentioned were not. Laying down and covering keeps the vine and bud too soft all the winter and the buds start too early in the spring. When the vines are kept up on the wires the sap in the bud and vine dries out, giving both vine and bud a chance to harden, and they keep so until permanent warm weather arrives, when the growth of vine and bud is more rapid than if they had been covered. I speak only of those hardy varieties which I have tried.

Pruning can be done at any time after the leaves are all off in the fall until the buds start in the spring. How to trim is a matter that generally decides the amount of the crop if the grower will only let them alone after they are put up on the wires. The practice of summer pruning is a thing never allowed on my place. I think God understands grape growing as well as any man living, and that He has placed the foliage just as it should be to ripen and perfect the fruit. If you want a sample of summer pruning take a trip to the Devil's Lake valley and you can see what summer pruning does for grapes and the vine.

J. B. RISLEY.

Merrimack, Wis.

A minister made an interminable call upon a lady of his acquaintance. Her little daughter, who was present, grew weary of his conversation, and whispered in an audible key: "Don't he bring his amen with him, mamma?"



A SCENE ON THE THAYER FRUIT FARM IN PHILLIPS.

The picture on the opposite page represents a bit of the garden as it looked Sept. 4, 1895, showing vegetables growing between the rows of young currant and raspberry sprouts. Six or seven months before this picture was taken the lands of this garden were covered with stumps and logs. Now, two years later, we hear it spoken of as a productive and valuable young fruit farm. It is under the management of M. A. Thayer of Sparta, a well-known horticulturist, whose "Berry Bulletins," issued monthly, are studied by fruit-growers throughout the United States.

For the engraving our thanks are due to the Dean of the Agricultural Experiment Station, University of Wisconsin.

CABBAGE ROT.

B. R. Bones.

This destructive disease has wrought great havoc with the growers of this very important crop in my immediate vicinity during the past season, "the actual loss being estimated at \$75,000." It is a bacterial disease, "*Bacillus Tempestes*." The bacilli are so small and packed so closely that a cubic inch of cabbage can contain five thousand million.

It happened to be my discovery that the most fatal dissemination of this disease was by a snout beetle one eighteenth of an inch long, and unless identified with an European species, he will get *Bonesii* attached to his already long name, "*Centorynchus rapae*." Although the larvæ of this beetle live wholly on cabbage heart it does comparatively little harm, but in puncturing to lay eggs and going from sick plants to well ones, performs immense inoculation. Conditions for the successful multiplication of this beetle this year were very poor, while on the other hand everything was favorable for growth of the cabbage, thus we find that this season the crop has grown away from the disease as introduced in a less direct way than by the beetle.

Racine, Wis.

WINTER PROTECTION.

W. J. Moyle.

If a man is growing blackberries or raspberries for pleasure or as a side issue, he can afford to run the chances of letting his berry canes stand the exposure of a Wisconsin winter, and they may come through all right, as they did last winter. But when it comes down to a matter of dollars and cents a sensible man will not run the chances, but will proceed immediately, when the cold blasts of November begin to blow, to cover up everything that he thinks of any value.

Ah! I hear you say, "It is such an awful job." But mark me, brother horticulturist, what may appear to be a mountain before you undertake the task will turn out to be a mere molehill. However there are some disagreeable features that we have come in contact with in covering the canes. Some writers will tell you that it does not hurt the cane the least particle to dig around it to such an extent that the roots will become so loose that it will readily tip over. Common sense will teach any one that it does hurt the plant; for be as careful as you will, a great many of the feeding roots will become detached, while large roots will often split down and some canes be broken. The larger the cane, the more likely it is to suffer while undergoing the operation.

This is one reason why the Ancient Briton blackberry is so popular with our northern brethren, while the Snyder, on the other hand, is a very ungainly thing to handle. For this reason we feel that the Columbia raspberry will never become popular with the fruit growers of our state, as it is not uncommon for the canes to have a diameter of one inch at the base, with very unwieldy tops; and it is fully as tender as Shaffer's Colossal, which frequently kills to the ground in Racine County. It is however a beautiful berry. The season of ripening extended over thirty days at the Experiment Station this summer.

What we want is a berry with the qualities of the Co-

lumbia, with a cane as easy to cover as the Cuthbert. This is possible, and let's see who will be the first man to produce it. We want a blackberry, also, that will compare with the Briton, with a more slender growth of cane.

Cover? Yes, cover everything; and there is nothing so good as good clean dirt, for rubbish is likely to bring mice. Later, however, when everything is frozen up tight, an extra covering of litter can be put on. Don't forget the wife's rose-bushes or her flower beds.



Editor of Wisconsin Horticulturist:—

Will you please insert in your paper the accompanying article clipped from the Florists' Exchange? Perhaps it is as well that we have made haste slowly in regard to enacting laws against insects and other pests.

WILLIAM TOOLE.

THE SAN JOSE SCALE SCARE.

Professor John B. Smith of the New Jersey Experiment Station, writes to the American Agriculturist that "it has been charged, and not without some show of reason, that entomologists and some others are losing their heads in the matter of dealing with this insect and that there is an unnecessary and somewhat hysterical excitement created by an overabundance of lurid talk, accompanied by an absence of careful study and work. The charge is not without some show of reason, for, after all, what basis is there for all the fuss that has been made? It is about time that the subject was considered carefully and without excitement; lest the reaction, when it comes, as it inevitably must, destroys confidence in the warnings of the entomologist altogether.

"Thus far, the results of the agitation have been restrictive laws of doubtful constitutional value in some states, the imposition of license fees on the nursery business in others, and rules and regulations and examination in some more, so that the nurseryman shipping outside his own state

has not the least idea of what will happen to his stock before it reaches his customer; if indeed, it ever reach him. Sometimes he must have a certificate of inspection, and in one case must file it in another state in exchange for printed permits to ship into that state. All these are vexatious restrictions that are only admissible under stress of the clearest necessity.

“Does such a necessity exist?”

He points out that the San Jose scale is not a particle more destructive than many of our native species or than those to which we have become used; and that other insects have offered problems apparently as difficult which have been mastered.

This is sound logic and we hope the authorities in those states where restrictive and seemingly unnecessary measures have been enacted, will see the force of it, and abolish the discriminative legislation.



THE COSMOS.

By “Primrose.”

On our desk at this writing is a beautiful vase of this noble autumn flower, white, pink and red, some of them with a diameter of two inches. They remind one of the single dahlias. Our plants have been in bloom but a few days, and we expect every morning to find them frozen. This has been the great drawback to the growing of this flower at the north, so we are correspondingly pleased to note C. L. Allen's success with northern-grown seed, as given in the following from the Florists' Exchange:

THE COSMOS.

That this plant will adapt itself to its environments is generally understood, that is, when a plant has the whole year to grow and perfect its seed, it is quite apt to take it, and frequently it will become perennial in habit. While perennials taken from the tropics to temperate climes, will

become annuals, this is not generally, but frequently, the case. In Sweden they have nine weeks of Spring, Summer, and Autumn, yet so rapid is the growth of vegetation that they get two crops of hay in a season, and the vegetables that require most of our Summer to reach perfection, can be as easily grown there.

Four years ago we put out a few plants of cosmos, in rather a protected situation. To our surprise, the next Spring the young plants came up freely from self-sown seeds. These plants perfected their seeds, and we did not attempt to save them, but let them seed themselves, which came near being a costly experiment, as we found the birds very fond of them. However, we secured a few plants, and from them saved seeds which were sown as soon as the soil was in a fit condition to work. They came on quickly, and showed their first flowers the last week in July. At the present writing, September 10, the plants are six feet high, and a mass of bloom, both the white and crimson varieties. Besides that, they are seeding very freely. Our first picking was made this day, and we shall have sufficient for a number of acres the coming season.

This will be a decided acquisition, as the plants come into flower fully two months earlier than those from seeds grown in California or the south of Europe. We think if the seeds were sown on moderately light and poor soil they could be had in flower by the first week in July, thus extending their period of usefulness very nearly three months.

C. L. ALLEN.

The presence of gum on cherry and other trees is not necessarily an indication of the presence or work of insects, although in many cases it is. Sudden changes of temperature cause a stoppage of the sap and a consequent breaking of the bark and exudation of the gum. In localities where such sudden changes are likely to occur it will pay to wrap the trees.

—Exchange.

HARD WOOD ROSE CUTTINGS.

If I understand you rightly, your inquiry is concerning cuttings taken from hybrid perpetuals or other hardy roses that have grown outdoors, being taken when in a dormant state. Not knowing your address, I'll surmise you are in our Northern States, or rather, the state of New York, and will give you the most successful method in vogue. The best time to take the cuttings is from the second week in October until about the middle of November, according to the season, making them with a sharp knife, and from five to six inches long. A well-sheltered cold frame is by far the best place to put them in. Dig up the soil, making it as fine as possible, and level off the surface evenly. Trenches should then be cut, and the cuttings placed therein, about two inches apart, and six inches between the rows. The trenches should be cut quite four inches deep, and the cuttings placed therein so that only two or three eyes are above the surface. Great care must be exercised that the cuttings are firmed in well so as to exclude the air. The best way is to tread them in with the foot. Hard wood rose cuttings so treated will be rooted by the beginning of April, and will be nicely growing by the first of May, when they should be potted, and later on, when established, transferred to the field.

I have tried every conceivable way to successfully root hard wood rose cuttings in greenhouses, but the failures have been so numerous that it was anything but a profitable undertaking. The great trouble with propagating such cuttings in a house is to keep it cold long enough, as a temperature of forty degrees, or even a little lower, should be maintained for three or four months to root them. A few degrees of frost once in a while during winter time will do the cuttings no harm, while artificial heat above forty degrees for a few days is almost certain to turn them black and destroy them. By using a well-sheltered cold frame, not so much covering has to be done to keep out the frost.

—Florists' Exchange.

WILL BEES DESTROY GRAPES?

There has been in the past, and still is, and I suppose always will be, a difference of opinion among well informed fruit-growers as to whether the honey bee actually destroys ripe grapes without any outside assistance. At almost every meeting of the State Horticultural Society this question comes up, and like the old notion of wheat turning to cheat, one man is positive that it will and another is equally certain that it will not. Neither has any positive information on the subject. In order that we might have some reliable data on this question some careful observations were made during the past season.

A Worden grape vine, well loaded with fruit, was selected, and when the fruit was ripe all defective berries and surplus leaves were removed, so as to allow of the free movements of the bees. A colony of Italian bees was then placed close to the vine, and the whole enclosed with mosquito netting, giving the bees about 300 cubic feet of space in which to work. They were kept confined with the grapes just 21 days, and in the meantime were not allowed to get any other food to eat except the grapes, and what they already had stored in the hive. At the end of the three weeks they were removed and the grapes carefully examined, but it could not be discovered that a single grape had been injured.

The natural inference is that if the bees could not be induced to eat the grapes when kept in close confinement with them, they are not liable to injure them when at liberty to seek such food as they like best.

We all know that certain wasps will cut the skin of grapes, and I have always held to the opinion that the wasp was the culprit which first opened the door for the bees to get in. This opinion has been confirmed the past season by seeing two species of the genus *Polistes* light on the grapes and with their sharp jaws tear open the skin and suck the juice. After this was done the honey bees would usually finish the work. In fact it would be a very stupid bee that would not avail itself of such an opportunity.

J. TROOP in American Gardening.

THE FIRST THANKSGIVING DINNER.

The first Thanksgiving dinner was celebrated in this country two hundred and seventy-six years ago, at Plymouth, Massachusetts, writes Clifford Howard in the November number of the Ladies' Home Journal. The whole American army was present—it numbered twenty men. Miles Standish, the backward lover of Priscilla, sat at the feast, while Priscilla served at the tables.

“Notwithstanding that the kitchens of these wilderness homes were sadly wanting in many of the most common essentials of cookery, there was no lack of good things nor of appetizing dishes at this great feast. The earth, the air and the water had yielded of their bountiful supplies, and the good dames had done honor to their skill and ingenuity by setting before their hungry guests and companions a repast as sumptuous and tempting as it was varied and delightful. Foremost of all there was roast turkey, dressed with beechnuts; then came rare venison pasties, savory meat stews with dumplings of barley flour, delicious oysters (the gift of the Indians, and the first ever tasted by the white man,) great bowls of clam chowder with sea biscuit floating on the steaming broth, roasts of all kinds, broiled fish, salads, cakes and plum porridge; while the center of each of the long tables was adorned with a large basket overflowing with wild grapes and plums and nuts of every variety.

“It was the time of the Indian summer. The soft mellow sunlight shone warmly through the drowsy haze, illumining the sombre woodland with a rich golden light, while the gentle winds of the South, laden with the sweet perfumes of the forest, came as a lingering dream of summer to add to the joy and brightness of this Thanksgiving feast. Upon the balmy air arose the hum of many voices and the merry music of laughter, as the Pilgrims with their Indian guests partook of the feast that the Provider of all things had given them.”

✽

“Full many a day forever is lost
By delaying its work till tomorrow.”

GENUINE PUMPKIN PIES.

These are to be really pumpkin and neither squash nor custard. The pumpkin should be of dark yellow skin and heavy in proportion to its size—the flesh fine grained. Pare and cut in inch cubes and cook in a little water until soft, being careful that it does not burn. Then press through a colander, put it in the kettle with some molasses or sugar and spice, and let it mull away until it is a rich red amber marmalade. This must be done a day or two before the pies are made, for it is a work of time. One cupful of such pumpkin is ample for a deep pie, and real pumpkin pie is never baked in a shallow plate. A good proportion for a pie is a cup of pumpkin, an egg, three to four cups of milk, a half a cupful of sugar, a little salt, half teaspoonful of ginger, a fourth teaspoonful of cinnamon and a little nutmeg. Bake rather slowly.—Selected.

Pumpkin Pie, No. 2.—Here is “our” rule for pumpkin pie, given us by a New England lady famed for her cuisine: Select a rich, sweet, fine-grained pumpkin, wash clean but do not pare it; cut into large pieces and bake in the oven, skin side up as you bake Hubbard squash. When done scrape from the skin and rub through a colander; if the sifted pumpkin seems watery put it in a kettle and let it simmer on the back of the stove until dry. For a large pie take one cup of the prepared pumpkin, stir into it a level teaspoonful of salt, a level teaspoonful of cinnamon, a fourth teaspoonful of allspice, three fourths of a cup of sugar and four tablespoonfuls of sweet cream, then add, a little at a time, stirring to avoid lumping, two and a half cups of new milk; lastly stir in a beaten egg. Bake slowly in not too rich a crust.

“Mrs. Blimber has put up 400 cans of fruit.” “Scotch, isn’t she?” “Why?” “So canny!”

CHICKEN PIE.

We thought that everybody knew how to make chicken pie, until we assisted at a "chicken pie sociable," then we concluded that nearly everybody didn't know how!

To begin with you are supposed to have two "good, fat hens," properly cleaned and cut up. After washing the pieces well, rub a very little salt onto them, place them into a kettle and cover well with warm, not boiling, water. To permit the escape of gases, leave the kettle uncovered for awhile, or else use a perforated cover, (we turn the colander upside down over ours). Skim carefully and boil until tender, but no longer. Better cook your chickens the day before you make your pie, unless you know they are young. Use a granite-ware milk pan in which to bake your pie, as modern tin-ware is apt to be adulterated with lead. Make your crust as for baking-powder biscuit, only a little shorter; rub enough butter into the flour to make the crust deliciously tender, but not enough to make it heavy, for it should be of feathery lightness. After greasing your pan well with butter, roll out crust about half an inch thick and place around the sides of the pan but not on the bottom; next lay in your chicken leaving out the most ungainly pieces; slightly thicken part of the liquor in which the chicken was boiled, making a rich gravy, which pour over the chicken in the pan; season with pepper, with more salt if needed, and scatter small bits of butter over it. Roll out your upper-crust about three fourths of an inch thick and cut a hole in the middle; a simple gash will not do, for it will close when the crust rises; a piece must be cut out; we cut ours with a small biscuit cutter; wet the edge of the crust on your pan with cold water and press the upper crust firmly down all around; make a funnel of stiff paper and place in the hole in the top crust to permit the escape of steam. Bake in a quick oven, covering the top at first to prevent browning before it has risen. Be sure the crust is done through. I omitted to say that the chicken and gravy must be hot when the crust is put on. Make a rich gravy of the remainder of the chicken-broth to serve with the pie. If you have "good luck" this will make a Thanksgiving dinner fit for the President.

NORTHERN ILLINOIS HORTICULTURISTS.

The Horticultural Society of Northern Illinois will hold its annual meeting at De Kalb, Ill., the first and second of December, 1897. Among the papers to be read and discussed are: "Results of Plant Variation," "Ornamentation of Country Homes and Planting of Non-Fruit-Bearing Trees," "Small Fruits for the Farmer," "Shall the Orchard be Allowed to go to Grass?" "Gooseberries and Currants," "Spraying," "The Grocer's Idea of Marketing Fruits and Vegetables," "Vegetables for the Farmer," etc.

Among those having papers and leading in discussions are Jonathan Periam, Chicago; L. G. Kellogg, President Wisconsin State Horticultural Society, and J. L. Hartwell, President Northern Illinois Horticultural Society.

The Society offers cash premiums to the amount of \$25.00 for displays of fruits and vegetables. Leading agricultural and horticultural publications offer yearly subscriptions as premiums, and nurserymen nursery stock. A friend of the Society offers fifteen dollars for the best essay upon the subject, "Why and How Should Horticulture be Taught in our Rural Schools?" Essays should not exceed 2500 words, and must be in the hands of the Secretary not later than Nov. 28th.



WISCONSIN HORTICULTURISTS.

At the meeting of the Executive Committee held at the Capital House, Madison, Nov. 4, steps were taken to procure some of the best horticultural talent in the country for our winter meeting, viz., Prof. L. H. Bailey, of New York, and prominent horticulturists from the Western States, whom we expect to give us more light on the much-agitated question, our "native plums."

The matter of having an exhibit of Wisconsin fruits at the Trans-Continental Exposition of the Mississippi Valley to be held at Omaha next year, was brought up and discussed. This will no doubt be acted upon at the winter meeting, so be ready to render your opinion.

W. J. M.

ANNUAL EXHIBITION OF THE AUTUMN FLOWERS OPENS AT INDIANAPOLIS.

Indianapolis, Ind., Nov. 2.—The annual chrysanthemum show opened this evening with a very large attendance. Year after year this annual exhibit of the autumn flowers has grown to be more of a feature of the fall season in Indiana, and has attracted many visitors from beyond the limits of the state. This year the exhibit is more elaborate than usual, and promises to be a great artistic success.



NEW NURSERY IN ARLINGTON.

Editor of Wisconsin Horticulturist:—

Well, another delivery season is here. With other business prospering and prices of farm produce advancing the fall delivery is good with us, and agents report a favorable prospect of another old-time delivery season next spring.

• On account of not having enough land at De Forest I let my nursery to a competent nurseryman to run the same for me at De Forest, and I bought one hundred and fourteen acres of land within the village of Arlington, Columbia County. I have been engaged all summer in fitting up the place, having a well drilled for the purpose of irrigation if another dry season should come on, and making other improvements needed in a first class nursery. Next spring I shall set at least one million of apple and other grafts, besides a good strawberry, raspberry and blackberry plantation.

E. C. ALSMEYER.

Arlington, Wis.



Analyses of sugar beets by the Department of Agriculture at Washington show the product of New York and Pennsylvania to have a higher quality than those grown in the West. The light, friable soils of some of the western states produce a large crop, but the beets are not so rich in sugar. A good clay loam will probably be found the best soil.—Selected.

KEEPING GRAPES.

A recent bulletin of the school of agriculture of Scandicci, Italy, describes experiments made by Professor Marchi for the keeping of grapes fresh during the winter. A certain quantity of grapes (comprising different qualities) were hung up in a cool and dry place, all damaged berries having been previously removed. A second lot was packed in dry, pulverized peat in wooden boxes. At the end of four months the grapes that had been hung up had become decayed and had dropped off. On the other hand, those that had been packed in the boxes were found to be in fine condition. This is, therefore, a simple and economical method.

Another one consists in gathering the bunches with a good bit of stem attached and immersing their tips in bottles containing water and pulverized charcoal.

CANNOT SELL THEIR SUGAR BEETS.

Augusta, Wis., Oct. 29.—Farmers in this locality are very much wrought up because there is no market for the large acreage of sugar beets which are now being harvested. Last May a company organized and was to have a beet sugar factory at Merrillan Junction in operation in time to take care of this year's crop. A large number of contracts were made with farmers to that effect. The farmers have done their part, but there is no factory yet.

—Baraboo Republic.

The dust bath in a poultry house is as essential to the health of the poultry as the bath tub is to a human being; even the little English sparrow may often be seen on our roads enjoying a fluttering of wings and feathers in the road dust. Some men don't know any more than to "Wait until summer and go into the ribber;" yet hens and the small birds follow the dictates of instinct and crave for a dust bath every few days. The floor of both roosting room and shed should be dry enough for this purpose. It is not necessary to have sand; loam or road dust is better. If impossible to do this, put the dust in a shallow box where it is light and sunny during the day.

EDITORIAL COMMENT.

The State Horticultural Society mourns the loss of Mr. Daniel Huntley. We extend heartfelt sympathy to Mrs. Huntley in her great sorrow.

When the Y. M. C. A. State Convention was in session in Baraboo, in October, we had a pleasant call from E. C. Alsmeyer, who was a delegate to the convention. A letter telling of Mr. Alsmeyer's change of residence appears on another page.

Sweet peas in bloom out of doors, unprotected, on the first day of November! California and Florida stand aside; please, and let Wisconsin go to the head!

We had fresh strawberries and cream for dessert on the second day of November,—not just one or two berries, but a whole boxful of them. Delicious! They came from the fields of Wm. Rounds, a leading fruit grower of Baraboo.

Ex-secretary Hoxie has just built a green-house at his home in Evansville, to accommodate the plants and flowers, which he grows for the mere pleasure there is in growing them.

Mr. A. G. Tuttle is rejoicing over the termination of the lawsuit which has been hanging over his head like the sword of Damocles for the last six or seven years. The suit was regarding a water right at the cranberry marsh, and was decided in Mr. Tuttle's favor. It has been carried from one court to another and has cost thousands of dollars.

If any one knows of any change of residence among the Wisconsin horticulturists, or any other interesting news item or bit of personal mention, will he please send it to the editor of this magazine?

The new building of the Tuskegee, Alabama, Normal Institute will be formally opened next month. The dedicatory address is to be delivered by Mr. Wilson, Secretary of

Agriculture. The new building is to be devoted exclusively to agriculture, horticulture and dairying. This is the school of which Booker T. Washington is president.

Mr. Risley of Merrimack, whose interesting communication regarding the winter care of grape vines is on another page, has returned to his fruit farm, after trying city life for a year. He says he intends to stay on the farm until he is carried away to his eternal home.



APPLES KEPT BY COLD STORAGE.

Professor Craig, of the Experimental Farm, Ottawa, Canada, takes a hopeful view of the matter of keeping apples in cold storage. It may be questionable whether Professor Craig is wholly right in his optimistic views, but here is what he says:

“Before long you will see a revolution in the apple trade. Winter apples will not be a necessity. Cold storage will solve the difficulty. Probably before two years are over, you will see in every fruit-growing district cold storage houses on the co-operative plan, based on the cold storage buildings at the World’s Fair. Fall apples put into cold storage buildings, where the temperature is thirty-four degrees, may be kept an indefinite length of time. Thus, winter apples will not be necessary. When I was at the World’s Fair, in the middle of the hot season, I saw in good condition Duchess of Oldenburg apples which had ripened early the previous summer and been kept in cold storage. While in Montreal recently I noticed in the new cold storage building beautiful California pears.”

—Michigan Fruit Grower.



Mamma—Don’t you feel well enough to go to school?

Bobbie—No, mamma; I feel just well enough to ride my bicycle.—Harper’s Bazar.

WISCONSIN STATE HORTICULTURAL SOCIETY



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