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The Sparta Strawberry.

The Wisconsin Horticulturist.

VOL. VII.

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No. 11.

SOME NEW STRAWBERRIES.

Each year a goodly number of new varieties are placed upon the market by the originators or the dealers. The question has often been asked. Are these varieties given a thorough test before being introduced? Because a new variety does well one particular season, and in a favored locality, it should not be taken for granted that it will do well wherever it is planted. It is well enough to place them before the public, but the public should not procure too great an amount of them before thoroughly testing them. There are many of our old varieties still in the lead when it comes to productiveness. Mr. O. M. Taylor, who worked for two years under Prof. Goff at our experiment station at Madison, and is at the present time foreman in horticulture at the New York Agricultural Experiment station at Geneva, has been carrying on a variety test of strawberries. Out of fifty-three varieties tested, the old Crescent was still in the lead in yield. Riehl No. 29 was next best.

Riehl No. 29 (Per)—Medium to large, irregular, with the berries often divided by deep furrows into two or three segments, light scarlet, moderately firm, subacid, good. With one exception the most productive variety tested this season. Foliage light green, moderately vigorous, runners numerous. While some specimens of truit have good color many are too light to present an attractive appearance. Does not retain its size in later pickings.

A summary of Mr. Taylor's experiments is as follows: Taken from Bulletin No. 218 of the Geneva station.

The late frosts and cool moist weather doubtless modified the yield of many varieties of strawberries in the Station plats in 1902,

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Their relative productiveness might therefore be somewhat different in a normal season.

The most productive varieties were : Crescent, Riehl No. 29, Monitor, Manokin, Beder Wood, Howard No. 2, and Riehl No. 26, ranking in the order named.

Before growing any new variety extensively, it is best to try a few plants only. Among the newer varieties worthy of trial are: Bennett, Henry, Joe, Kansas, Monitor, Prof. Fisher, Riehl No. 26, Riehl No. 31 and Rough Rider. Marshall and Sample, though not new in some localities, could also be added to this list. All of these kinds except Bennett and Henry maintained their size to the close of the picking season.

Beder Wood and Crescent gave the largest early yield. Johnson Late was the latest variety to ripen. It lacks in color and firmness. At the last picking, Nettie gave larger berries than any other variety. Monitor has many desirable features, but lacks somewhat in firmness and quality. Prof. Fisher should be planted closer than other varieties, because it makes very few runners. Henry and Sample should be sprayed, because they are subject to leaf blight, commonly called "rust."

Oom Paul (Per) originated with I. S. Palmer, of New York. Origin on parentage Jessie and Bubach No. 5. It is very large and delicious in flayor, nice shape, elegant color, and fairly good shipper. The plant is a very rank grower and prolific. Color of foliage, dark glossy green and free from rust.

Senator Dunlap (Per) originated with J. R. Reasoner, of Ill. This is one of Geo. J. Kellog's favorites. J. C. Blair assistant professor in horticulture at Illinois University says: "I do not hesitate to say that it has greater merit than any other berry with which I am familiar. The plants are exceedingly vigorous with clean, healthy foliage, which has no tendency to rust. The berries are very large, roundish, conical, regular, with a slight neck. In color they are glossy crimson, with the meat firm and solid, deep crimson throughout and good in quality. It is a wonderfully productive strawberry. Although it is the most attractive strawberry I know of and I predict a promising future for it."

Monitor (Per) originated in Missouri. It is a close rival of

Senator Dunlap. The plant is large and healthy and so vigorous in growth that it will mature its last berries and continue such a nice dark green that it is a pleasure to walk among them. The bloom is perfect and one of the richest in pollen. Time of ripening is with the first Crescent and continues until nearly all others are gone. The berries are all of large size. The plant with its habits of growth, its productiveness and beauty, is without a peer. The fruit is bright, shiny red and uniformly large, firm and attractive. The flesh is firmer than most large berries and is of excellent flavor.

Sparta, (Per.) Originated by J. L. Herbst, of Wisconsin. It is a cross of the Warfield and Jessie. Foliage similar to Jessie, a light green, but quite heavy. A much better plant maker than Jessie but not as vigorous as Warfield. Fruit good size, very highly colored, being glossy and bright red. Quality of the best and a good shipper. Not as productive as Warfield but better than Jessie. It is a strong pollenizer and season medium. A good fertilizer to plant with the Warfield.

HOW TO GROW PANSIES.

WM. TOOLE, Baraboo, Wis.

WHEN TO SOW PANSY SEEDS.

From southern Illinois northward, if but one sowing is made, most satisfaction may be derived from planting out of doors early in spring. These plants will bloom from midsummer until snow flies and, if properly cared for, give the earliest flowers in spring and an abundance of bloom until summer heat has drawn the branches out so long that they had better give way to younger plants.

South of the latitude above mentioned, it is better to depend on spring flowers from plants started in late summer and early fall, or from seeds planted in the greenhouse or house in January.

Pansies commence to flower in from seventy to eighty days from the time of sowing, under reasonably favorable conditions, and my

customers in the extreme south and on the Pacific coast will thus see that with fall sowing they may have a long period of flowering before summer heat commences.

In the latitude of northern Illinois and Wisconsin, seeds for plants to winter over should not be planted later than the first of September. If plants are desired for winter blooming sow late in July. Flowers can be had nearly as early from plants started in the greenhouse from middle of January to middle of February, but in the house it would be better not to plant earlier than March, for it is necessary to give the young plants room as they grow, planting out in shallow boxes before they become drawn and slender. If seeds are sown out of doors just before winter sets in, they will come up early in spring and be in flower before July.

SOWING SEEDS.

The same care is required in sowing pansies as for other small seeds. They must not be covered too deeply, nor permitted to dry after they have commenced to germinate, for a dried plant is dead no matter how small it is.

Pansy seed should be sown thinly in shallow turrows not more than one-sixteenth of an inch deep, made with the sharpened edge of a piece of lath. The seed-bed should be mellow and rich, leveled smooth before the seeds are sown, and after sowing the seeds should be covered evenly, and the surface pressed with a piece of board. The seed-bed should be watered and shaded until the young plants are up, after which they should be gradually accustomed to full light. Shade for the seed-bed may be secured by laying over some kind of frame about a foot from the ground, laths or pieces of sheeting.

As soon as the plants are up, the shading must be gradually removed as there is always danger of "damping off" with any kind of small plants in close, warm and damp situations. Too high temperature in the seed-bed is fatal to pansy seeds, and those planted in midsummer will not germinate strongly if the thermometer in the shade ranges for a long time above seventy five degrees. If the seeds are permitted to dry after they have sprouted, their vitality is gone. If covered too deeply they cannot come up.

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WHERE TO GROW PANSIES.

In the house or greenhouse in winter, if young plants are had just commencing to flower late in the fall, if they are not kept too hot and dry and are protected from green fly and red spider. Old plants which have done service in the garden are not suitable for winter blooming. Several plants in a box are better than if grown in earthen pots. On the balcony, porch or window sill in summer, if not directly facing the south. Grown in this way no plant better repays the care given. In the garden anywhere, if not in too hot a place, directly facing the south; nor where they must struggle with larger plants and trees for nourishment.

GENERAL MANAGEMENT.

The plants which have flowered in the spring will do well again in the fall if the long branches are cut back late in June,

The ability of the pansy to stand hot weather depends greatly on its treatment. If the soil is rich enough, and not too dry, nor in too hot a situation, pansies, with frequent cultivation, will stand a long siege of hot weather, if no seeds are allowed to form. With this care one can have pansies from young plants in midsummer. A rich, sandy loam is best for pansies, and if not too stiff, a clay soil is better than that which is very sandy. But whatever its texture, the soil should be made rich with well-rotted manure, thoroughly incorporated with soil, and stirred several times while the plants are in the seed-bed. This thorough preparation of the soil before transplanting is very important.

Well-rotted manure, if to be had, is preferable to commercial tertilizers.

Transplant after the plants have attained the fourth or fifth leaf and before they have become drawn and slender with crowding. An eastern and northern slope is preferable. My own experience does not permit me to favor shade, although shade is preferable to too much heat, and the shade of trees is more objectionable than the shade of buildings. Temporary shade during the hottest portion of the day in extremely warm weather would be an advantage, but shade the whole season through will not acmit the brightest colors, or an abundance of flowers.

If watering is necessary and possible, the ground should be well soaked in the evening and thoroughly stirred, about two inches deep, next morning, as soon as the soil is dry enough.

Cultivation without watering, is better than watering without cultivation.

Keep the buds picked off after transplanting until the plants are well established, and also during very hot weather, for a good display of flowers in the tall.

When growing where they are to stay, about eight inches to a foot square of space should be allowed each plant. Frequent stirring of the soil is necessary between the plants until they are too large.

A crust should never be permitted to form on the surface-Frequent cultivation is, more than anything else, the secret of success in pansy growing.

WINTER PROTECTION,

The plants which have flowered through the summer and fall will usually winter over well if protected with a light covering of leaves or straw, which is better it a little brush has been placed over the plants first.

Young plants are quite hardy if protected from sharp winds, and not allowed to become too wet near the surface of the ground. The young plants should be transplanted from the seed-bed to winter quarters early enough to become well rooted before winter sets in.

Boards may be used instead of glass for cold frame covering; glass should be shaded if too warm, as it is desirable to keep the plants dormant, and they should be watered, if necessary, as the roots will sometimes freeze dry if not looked after.

A good way to protect pansy and other plants is to have a V trough of narrow boards to cover the plants with, and then throw on same coarse litter of leaves, straw, manure or shavings. In all cases thorough surface drainage must be provided to prevent water from accumulating about the plants and forming ice about them.

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PANSY PESTS.

Pansies, like many other flower plants, in hot, dry weather, are liable to be injured by the so-called "Red Spider," a minute insect which attacks the under surface of the leaves of many garden and field plants, causing them to wither, as if from dryness. Spraying of water from a garden pump directed forcibly against the plants will reach the under side of the leaves and destroy the insects. The addition of pyrethrum powder or else kerosene emulsion to the water makes the remedy still more effective.

As the red spider flourishes best in a dry atmosphere, it is often the case that plants in the shade of trees suffer because heavy dews are kept from the plants by the trees. Aphis or plant lice cause more injury in gardens than people are generally aware of. Apply, in any way to wet the plant lice, a solution of one teaspoon of nicotine to two quarts of water. The same may be used on house or other plants troubled with scale or shell louse, mealy bug or red spider. Also for vermin in the hen house or on animals.

RAISING APPLE TREES FROM SEED.

PROF. N. E. HANSEN, Brookings, S. D.

The Dakota Farmer recently contained an inquiry regarding apple trees from seed. The writer does not recommend this unless the planter clearly understands that it is an experiment and is prepared to meet with many disappointments. However, there is urgent need for much work of this kind in the northwest. Seeds from the hardiest kinds should be planted.

In the effort to raise thousands of apple seedlings at this station, the writer has in mind that some modification of the nursery methods used farther south is necessary for the best results.

The pomace from a cider mill is sometimes planted, seeds and all. This method is not recommended, as the termenting pulp contains an acid injurious to germination. Out of a row ten rods long, only three or four seedlings were the result. The experience of others also shows that the germinating capacity of apple seed is

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greatly injured if it stays in the pomace more than twenty-four hours, or until it begins to ferment. The pomace may be put in a barrel and water added; if the mass is now stirred, the seeds will gradually sink to the bottom, and the pulp may be poured off. Where large quantities are desired, a long trough with cross partitions may be used, through which the thin liquid pomace flows; the seeds are caught in the pockets between the partitions. With large apples it is most convenient to cut the fruit in halves crosswise until the core is reached, the halves are then broken apart, and the seeds removed with a knife or pointed stick.

As soon as clean, the seeds are spread out to dry for a day or two, and are then mixed with sand and buried in small boxes, with holes in the bottom for drainage, in a well drained spot in the garden. This is done in the fall before the ground freezes. The box is buried two or three inches below the surface, and if snow comes too early, it is removed so that the seeds will be thoroughly frozen during the winter. It the seeds are buried early in the fall, the ground should be mulched with straw, to prevent drying out.

As early in the spring as possible, the seeds should be planted. If tor any reason the planting is delayed, the sand should be stirred every day from the bottom to prevent uneven germination.

If the seeds are saved during the winter they may be kept in a dry, cool room until the latter part of February, when they are soaked for twenty-four hours, and then spread out on a board to freeze, when thawed out they are put in a box of sand as before. If it is not possible to bury the box, it should be put in a frame on the north side of a house, and surrounded with sand or coarse manure to prevent drying out by the wind.

Planting seeds in drills in the open fields is not a successful method here. The young seedlings are apt to "damp off," or rot, at the surface of the ground soon after germination and before the first true leaves are formed. All apple seedlings at this station are now raised in beds four feet wide and ten rods long. The bed is bounded by boards twelve inches high, held on edge by a stake at regular intervals. This makes a bed with a little wall or border one foot in height. The seeds are sown about one inch deep in drills ten inches apart and three or four seeds to the inch. This may be

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done in early spring, but fall planting is preferred, as spring is a busier season, and a few days' neglect causes premature sprouting. When planted in the faN, the bed is mulched with coarse, wellrotted manure, to prevent heaving by the frost in winter. This will happen especially on clay soil and protects it also from winter drouth when there is no snow on the ground. This mulch should be removed early in the spring, and if the ground appears baked, which will sometimes happen in spite of the mulch, the surface should be stirred lightly with a garden rake.

As soon as the young seedlings appear above the ground, it is found essential to shade them. This is best done by lath screens. The intervals between the laths should be the width of a lath, thus cutting off one half of the sunlight. The screens are made a little over four feet wide, and of length convenient for easy removal when necessary in long rainy spells. As soon as the second pair of true leaves form, and the crust has been broken between the rows with a small hand weeder, the amount of shade is gradually lessened, common lath fencing being found most convenient for this purpose. The young plants will soon be fully insured to the sun, and will make rapid growth, with proper care, which means the removal of all weeds and the breaking of the crust between plants as soon as the ground begins to bake after a rain.

Some plants seed very thickly in the bed, but this makes the seedlings too small the first year, and a year's growth is lost. On the other hand, if the seed is planted too thinly, too much space is required. In a dry season, water is essential at times, but a thorough soaking is then given. The amateur method of sprinkling every day is usually worse than no watering at all as it causes the surface to bake. In the nurseries of Europe, it is the common practice to transplant the seedlings the first season as soon as the first few leaves are formed. This practice is called "picking out," in English gardens, or "pikiren," in German gardens.

The great advantage of this method is the breaking up of the tap root. At this station it is tound that a much stronger root system is developed by this method, and hence is desirable, especially where it is intended to use young scedlings as stock for budding. However, in a dry season, it is not advisable, because the roots quite

often are crooked at the collar or point of union with the top, and this may easily be strained in digging.

For handling small lots of choice seed, my most recent method is to plant the seed in flats or shallow boxes in the fall. These flats are buried for winter freezing, and in the spring are placed in the frames and shaded with lath as already described. To prevent drying out, the flats are sunk even with the surface. When the true leaves are well developed, the seedlings with adhering earth are taken out in small blocks with a garden trowel, and transplanted into seed beds. These seedlings suffer practically no check in the removal, and a strong growth is secured the first year. The earth in the flats should be watered sufficiently just before transplanting, so that the earth will adhere to the roots and yet not be soggy.

In the fail the young seedlings are taken up and heeled in the cellar or outdoors. In the latter case, they are covered entirely with earth and then mulched with two feet of course manure. In the spring they are set in nursery rows four feet apart and the seedlings ten inches apart in the row. The first fall it is well to loosen the soil near the collar, then bend the top over, and then cover to prevent injury from rabbits, field mice and the winter. The seed-lings remain in nursery row for about two years, after which, the best seedlings, those with large leaves, free from thorns and of large vigorous growth, are transplanted to the orchard, or if not too thick, they are left in the nursery row to fruit. The fruiting may be hast-ened by cutting scions at the end of the first or second year, and top grafting the following spring into bearing trees.

SUGGESTIONS TO PURCHASERS OF NURSERY STOCK.

At this time of the year, many catalogues giving descriptions and prices of fruits, flowers, seeds and nursery stock in general, are sent out by dealers handling such. These should all be studied carefully by those receiving such. Look them over carefully and make your decisions early what you wish to purchase. There is no better time than the present to plan and map out your work for the coming season. If you contemplate going into some new

undertaking in the fruit or vegetable line you should study it well before doing so. After you have decided that there is money in a certain product, get all the available matter you can pretaining to this particular subject. Find out what soil is best adapted for its welfare. What is the best and most profitable variety. The best and surest methods to cultivate and care for it during the growing and matureing of the crop? How best to handle and dispose of the product to best advantage. Dealers will gladly give you any information on what stock they are handling. This is what they are in the business for.

By all means order your stock of roots and seeds early. Early orders are generally filled as ordered, but as the season for ordering advances, there are chances of the dealer not filling the order just as sent in, but to substitute with some other variety. There is always more demand for some varieties than others and the dealer is always sure to run short on some of his stock. They generally reserve the right to substitute if short of the variety ordered and this is liable to cause trouble with both concerned.

Never ask the dealer to send you an order C. O. D. They have to many chances to run in this case.

In most all the price lists it is plain enough, what and how to remit. Be sure to always give your name and address plainly and how and where to be shipped. A good many orders are delayed for this reason, some are missent, and a good many of these mistakes are made by the carlessness of the one ordering, Send to the firm who you know or have reason to know are reliable. Order close at home as possible and upon receiving the goods take care of them on arrival and give them immediate care and attention.

ANNUAL REPORT OF THE RUSHFORD HORTICULTURAL AND IM-PROVEMENT SOCIETY FOR 1902. EUREKA, WIS.

Our local society is still at the front, with a membership of eighty-six and transients enough to make one hundred during the year.

Our attendance is good on the average. The interest of the

members is unabated. The meetings are rendered attractive by their social nature.

We discuss assential "topics" and portions of our meetings are occupied with entertainments of a varied nature, which enlivens matters much.

This year we have had twelve stated meetings held on the first Saturday of each month and two special meetings.

Our extra efforts were first, a midsummer show and festival. Strawberries and flowers were greatly in evidence, and an excellent show was made, all were in abundance and of excellent character.

Second came the Astor show in early fall, which was a wonder. The display was enormous. The varieties were numerous indeed and most magnificent, and our numerous visitors pronounced it superior to any previously enjoyed anywhere, by them.

Our annual Chrysanthemum show proved most attractive, though the attendance was curtailed by a great downpour of rain, yet nothing could detract from the merit of the exhibit which was simply resplendent. In addition to the chrysanthemum all other plants were admitted for competition with fancy work, oil paintings, fruit and farm produce. The needle work of the ladies was of the most pronounced character, tastiness, design and perfection.

Of our apple crop the results of the blight has been quite disastrous. We had an unusually good promise of a crop, the bloom was great, but the long continued wet weather injured fruit and many farm crops.

The influence of our society is proving very beneficial to all classes, especially in the cultivation of flowers.

Very much credit is due the lady members of our society, and certainly without their great efforts in and out of season we would not be so successful.

Our officers are: President, W. H. Becker, Hepens Venn; Vice-Presidents, Mrs. E. E. Franklin, Rushford, and Mrs. J. H. Brewer, Hepens Venn; Treasurer, Mrs. M. E. Penriman, Eureka; Secretary, H. H. G. Bradt, Eureka; Assistant Secretary, Mrs. L. Bradt, Eureka. Executive committee: Mrs. Nancy Williams, Rushford; Mrs. Will Hall, Horo; Mrs. M. L. Bradt, Eureka.

THE CHERRY.

The cherry prefers high land, but grows well on lower ground and rich soils, but is not long lived. It needs good drainage, should have some protection from the west and it grows safer and better on slopes to the eastward. It will grow in most locations, but east slopes are preferred. The sour class is best to plant and does well all over the west, such as Early Richmond. Montmorency in the several types, Morrello, Wragg and Ostheim. They are all good in their places and have a place, and for the extreme north the Morrello type and Wra₅g are best and most hardy. A dwarf type known as the Vladimer is good for far north and is very hardy.

The sweet cherries of the east and from California are not adapted to the Mississippi valley, and they die before fruiting. The cherry thrives in neglect fairly well, but it is very satisfactory if grown in soil constantly in garden conditions. The fruit will be trom one-fifth to one-third larger in size. Very old compost is a good fertilizer. No pruning is advised that will leave gaping wounds or start sap to gumming on the trees. It is better to cut tips of limbs, head them back and make the tree grow thicker.

In case limbs show signs of being weak below, it is well to remove them when they are small. The trees should be planted fairly close together as they thrive better if they jostle each other some and the winds do not whip the fruit off so badly when ripening is in progress.

The Early Richmond and Montmorency are red and this class grows large in tree and can be planted 20x20. The Morrello and that class can be planted as close as 12x12. The cherry is, as a rule. grafted on a root that is non-sprouting which dwarfs the trees. The dwarfing process causes earlier bearing, heavier cropping and planters are spared the vexation of root sprouting. It is largely a subterranean feeder and its surface roots draw little, since they are but few. Experiments have been made showing that ground which is cropped with cherries is enriched and improved. Yet it has been found that a liberal feeding of the soil will help the crop.

The type of cherries here advocated are more vigorous and are better rustlers than is commonly supposed. They will stand ex-

treme drouth, cold, wet, dry, and will give results after severe tests more regularly than the apple and stand next to the plum as a hustler. The average life of the cherry tree in this class is about like that of the western plum that is under cultivation, from eighteen to twenty-six years. They come into bearing the third year and successional planting is advised to keep up the farm supply. It has few insect enemies and is not much bothered with fungus on leaf except at certain seasons with certain weather conditions and soils. Commercial cherry growing can be made to pay. There is a large demand for the fruit because at the time it is ready for the market the fruit jars are not yet filled.—National Fruit Grower.

FRUIT FOR THIS REGION.

F. C. Edwards read a paper before the recent 36th annual convention of the Northern Illinois Horticultural Association at Sterling, Ill.

The Evening Gazette of that city makes some valuable extracts therefrom which we take pleasure in reproducing. The Gazette says:

"Fruit for northern portion of Illinois and the southern part of Wisconsin was treated in a valuable paper by F. C. Edwards of Fort Atkinson, Wis. He admitted at the outset that what all the experts don't know about this subject would make a bigger book than what they do know. But they are, and have been, working hard along these lines, and are keeping a fair pace with this, the age of progress.

Apple growing needs the same scientific application to make the business a success as is required to make a success of the business of stock-breeding.

'Distance lends enchantment,' was given as the probable reason for so many farmers sending their orders to so far away nurseries, and to many that have no established reputation, and receiving for their money and years of toil and care trees of no vitality or worth.

Apple trees in northern Illinois grow and are better on upland

than on level or low land, and he advised selecting a northern slope when possible, so that when the trees go to sleep in the fall they will not wake up till spring.

Plant thrifty trees and till the ground well. Protect your trees against root killing by mulching, as most trees die from the roots being killed by the hard freezing. Do not crop your orchard and thus starve your trees to death, as thousands of farmers have done. The orchard, as a rule, is the most abused and neglected property the farmer possesses.

Mr. Edwards named the following varieties as the best and hardiest winter apples for this section: Northwestern Greening, Windsor Chief, 'fallman Sweet, Westfield's Seek No Further, Golden Russet, Scott's Winter and the Willow Twig.

SMALL NOTES ON SMALL FRUITS.

When it is decided where the small fruit plants are to be planted next year the ground should be well manured and plowed quite deeply this fall, when it will be in good condition next spring, when the planting should be done.

In the latitude of Minnesota grape vines may be set out in the fall and plant in the spring. Farther south fall planting is not at all hazardous. What is said of grapes will also apply to currants. In this little paragraph some correspondents will recognize an answer to their questions.

Laying down berry and grape vines for winter protection is often necessary this far north; and while it is not so considerably further south, it is said by those who have tried it to be beneficial even there.

Several successive mild winters in this region have made fruit growers careless about giving winter protection to vines and plants. But it is never safe to trust to the mildness of winters for protection.

Do not wait until after an order is given for nursery stock before inquiring about the reliability of the firm bought from. If the agent is believed long enough to secure an order he may as well be believed to the end,

A correspondent says that woven wire, 2 feet wide, cut into suitable lengths and placed around trees is the quickest, best and cheapest—all things considered—protection from rabbits he has ever used. Well cared for, the screens will last many years, he says.

An application of manure to the fruit and berry trees and vines this fall will "pay the shot" next season.

Where the berry garden is in the summer, is found the best family living in the winter.

HORTICULTURE.

There lives a man in every town Whose name is Peter Tumbledown, Of Horticulture he has heard And seems to hate the very word.

All garden work he tries to shun, And by his wife this work is done; At flowers he will never gaze, He likes the fruit his neighbors raise.

To GROW his fruit he does not try; Claims 'tis cheaper to buy. But when berries are in their prime, He's out of cash, just at that time.

Water melons are his son's delight, His neighbors fruit they "coon" at night The boys soon tire of a farmer's life And mingle in the city's strife.

Nor for his girls is there a charm About his gardenless old farm; They declare, if ever they wed, Their husbands must be city bred.

If, from his faults, you would be free; To Horticulture you should flee; Study it well and practice more; THERE'S happiness for you in store.

C. L. PEARSONS.

THE STORY OF AN APPLE.

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PROFESSOR H. L. HUTT.

One evening after tea, I had just settled down in my easy chair for a glance at the newspaper, when my trio of little folk pounced on me for a story. "A fairy story," said Jean "No, one about wild animals," said Fred. "I like to hear about what you did when you were a little boy," said Gordon. Here was too much of a variety to be given all at once; so I said, "Look at those beautiful red apples on the table." "Wouldn't you like to hear their story?" Fred was doubtful whether much of a story could be told just about apples; but I informed him that every apple has a history, and some have a very interesting one. "What variety of apple is that?" I asked. "A McIntosh," they all shouted in chorus, for they had been learning the names of apples, and were always pleased to be able to identify a variety correctly. "How do you suppose it got that name?" I next enquired; but as this was too much for them. I said, "Well, that is where we will begin our story.

"Once upon a time (for all good stories begin that way,) about thirty years ago, on a farm near Dundela, a little village in Dundas county, in the St. Lawrence Valley, lived a man by the name of Allen McIntosh. He was one of the early settlers in that section, and had cleared off most of the forest which once covered his fields, only a few acres of it having been left for bush. The bush was the favorite resort of the cows when the weather became warm and the flies were too troublesome in the adjoining pasture field.

"One evening, late in September, When Mr. McIntosh's little boys, Allen and Harvey, were hunting through the bush for the cows, they espied just on the edge of a clearing, a little tree bearing near its top a number of bright red apples. If they had discovered it sooner, they might have found many more on the lower branches. What do you suppose had become of them?" "The cows must have got them," suggested Fred. "Yes, the cows had found them first; but the boys were soon up the tree making sure, that the cows would get no more of them.

"The apples were at that time hardly mellow enough for eating, but that did not prevent the boys from sampling them; and they

declared that they were the finest wild apples they had ever tasted. Those not eaten at once were taken home and kept in the cellar till the family gathering at Christmas, when all present pronounced them finer than any of the named varieties grown in the little orchard near the house.

"Here then was a little tree growing wild without any care given it, yet it produced handsome apples of fine quality. How do you suppose it came to be growing there?" "Somebody must have planted it," declared Gordon. "No," I said "it was not planted, but grew there from the seed, and was, therefore, what is called a chance seedling." "The Brownies must have planted it," remarked Jean. "Well, probably they did," I said, "but I think the Brownies in this case were the men who helped to chop down the trees in the woods; for it is most likely that they had taken with them some Snow apples to eat when they telt hungry. They threw away the cores and when these rotted the seeds were left on the ground, and from one of these seeds this little tree may have grown."

"What makes you think they were Snow apples," inquired Jean. "Well," I said, "if you will fetch a few Snow apples from the cellar, to compare with those in the dish, you will probably find the reason yourself," In less time than it takes to tell, they were making comparisons, and they agreed that there was not much difference in appearance, except that the McIntoshes were, on the whole, a little larger and redder than the Snows. "What makes those black spots on the skin," asked Gordon, "they are on both kinds." "Those." I replied, "are caused by a fungous disease with which the Snow apple and its relatives are often troubled. Now cut an apple of each kind and compare the flesh." "Why, they are both nearly as white as snow, aren't they?" asked Jean. "That is still further proof," I said, "that they belong to the same family. Now taste After much tasting of one and the other, it was decided them." that they were both so good that it was hard to say which was the better; but when asked to shut their eyes and guess the name of the one they were given to taste, they found no difficulty in telling which was the McIntosh, because it had a "spicy flavor."

"Now," I said, "I think that you have sufficient proof that these two apples are related. In fact, there is little doubt that the

McIntosh, and a number of other varieties I might mention, are seedlings from the Snow, or, as it is more properly called, the *Fameuse*. None of these varieties, however, take their names from their parent. The McIntosh, as you may have already guessed, received its name from the man on whose farm the first tree of that kind was found."

"But how does it come there are so many trees of that kind now?" asked Fred. "We have them, and Grandpa has them, and lots of people have them." "Well," I said, "that is one of the interesting points in the story of nearly all cultivated fruit trees.

"All of the McIntosh trees now growing in all parts of the country have descended from that one little tree in Dundas county, not by planting seed from it, for that most likely would have produced other varieties, but by grafting and budding other trees with cuttings and buds taken from it.

"One of the remarkable things about nearly all of our cultivated fruit trees is, that trees grown from their seed show endless variations. If, for instance, you should plant roo McIntosh apple seeds, probably no two of the trees from them would bear apples just alike, and most likely none of them would bear as good fruit as the McIntosh, although it is just possible that even better fruit might be produced. Some day you may find this an interesting thing to investigate."

"But what do you mean by budding and grafting?" inquired Fred. "These," I replied, "are methods adopted by nurserymen who make a business of growing trees, whereby they can grow any number of trees that will bear the same kind of fruit, without varying, as they naturally would if the trees were grown from seed. These methods of propagating trees depend upon the fact that every perfect bud on a tree is capable, under favorable conditions, of producing another branch; or indeed, a whole tree of the same kind as that on which it grew.

"The McIntosh in our garden is a budded tree, which was obtained from Mr. Smith's nursery, where he grows thousands of other trees just like it. In growing these trees, Mr. Smith had in long rows in the nursery, thousands of little seedling apple trees (that is, little trees grown from apple seeds,) which, if allowed to

grow naturally would, he knew, bear a great variety of mostly inferior fruit, but he had heard of the excellence of the McIntosh apple, and intended to make them all bear McIntosh apples; so he wrote to Mr. McIntosh and got him to send all the young shoots he could spare from his McIntosh tree. From these shoots, which were obtained in July, Mr. Smith's men budded the little seedling trees in the nursery rows. The bark on each little tree was cut open near the ground, and one McIntosh bud was put in and bound firmly in place. By the end of the season, the bud showed by its plumpness that it had been adopted and nourished by its foster parent, and to all appearances it was much the same as any of the other buds, except for the scar around it showing where it had been inserted.

"Early next spring, however, each seedling tree was cut off just above the McIntosh bud, which was thus suddenly given the responsibility of making a new top for the tree, and that is just what each little McIntosh bud did. In three years, each had made a little tree, big enough to be sold for transplanting; and that year they were all taken up and sent to the purchasers throughout the country."

"In Grandpa's orchard you may have noticed that the tree which bears the McIntosh apples bears also a few yellow apples." "Yes, Talman Sweets," said Gordon. "Well. that tree once bore all Talmans; but one spring Grandpa cut off most of its branches and grafted into the stubs left a few scions, or bits of twigs, from a McIntosh tree. These scions united with the growing part of the Talman tree, and produced large branches which bear the McIntosh apples, while the branches which were not grafted still bear Talman Sweet apples."

"By grafting into a large bearing tree in this way, Grahdpa's tree was bearing McIntosh apples in three or four years; whereas our tree, being a young one, was nearly twice that old before it had apples on it."

"From the story of this particular apple, you will have learned how new varieties of fruit sometimes originate. Varieties found in this way are said to be of chance origin. All varieties, however, do not originate by chance. Some are the result of careful and

patient work on the part of men who not only gather and plant the seed, but contrive to have the new kind combine the good qualities of the two other varieties. If you will remind me of it next spring, when the trees are in bloom, I will show you how this may be done."

"From what has been said about budding and grafting you will also have learned how a new variety, once obtained, may be multiplied and scattered all over the country. If you would like to try what you can do at such work, you may begin next spring by planting a row of apple seeds in the garden; and when the little trees are big enough, I'll show you how to bud them, or how they may be made to bear fruit in two or three years by grafting them into a bearing tree. How many of you would like to try it?" "I, I, I," they all shouted; so we began operations at once by eating all the apples in the dish, to get the seeds for next spring's planting.— Bulletin No. 124, Ontario Agricultural College.

FINE FRUITS BY CHANCE.

ACCIDENTAL ORIGIN OF MANY VARIETIES.

For our best grapes, apples, pears, blackberries and for all finest potatoes, we are indebted to the merest chance. The Concord grape, the Sekel pear, the Early Rose potato, and a dozen others, whose names are familiar household words, might never have been known had it not been for the seemingly triffing circumstance which resulted in their discovery.

For instance, the Concord grape. In the city of that name, in New Hampshire, in the year 1840, some boys had been out in the woods and had picked some wild grapes. They were of the sour foxy sort usually found growing wild, but boys have a way of eating anything and enjoying it, and they came home munching the grapes and spitting the seeds in their wake. As it chanced they passed the grounds of one Ephraim Bull, a prominent resident of Concord, and they spat seeds over Bull's fence, without any suspicion that they were showering upon Mr. Bull and the country at large a great blessing.

But in the following spring, the seeds had germinated and the proprietor, looking about his grounds, found several promising looking young grape vines. He took them up and planted them in his garden, just to see what they would bear. Three years later one of the seedlings ripened fruit, and to the surprise of Mr. Bull, it ripened as early as August. Also to his surprize, the grapes were quite different from the sour foxy wild grape in the neighboring woods, and he decided to keep the seeds and try another generation. He obtained a number of seedlings which grew until 1849, when those also bore fruit, and, behold, one of them surpassed all that had gone before, and was named the Concord. At once it sprang into popularity, and has been the progenitor of millions of grape vines bearing tons of lucscious fruit.

To a very trifling circumstance the country is indebted for that common but delightful vegetable, the potato, in its present form. (For the potato of fifty years ago was a very different article, and a very inferior one, as compared with the tuber of to-day). This circircumstance was the giving of a seed-ball of a potato plant to Albert Breese, a farmer living in the southern part of Vermont. It was the gift of a neighbor whose name history has failed to record. But Mr. Breese took the potato ball and pinned it in the window where it hung for many moths, becoming old and dry. No one gave it any thought or attention, nor did it occur to them to set any value on the old potato-ball. So, in time, Mrs. Breese got tired having it around, and was about to throw it into the swill pail for the pigs, when farmer Breese allowed as now he guessed he would plant the seeds and see what they would grow.

As it happened, the potato-ball contained one of those magic seeds ever which a good fairy had passed her wand, and there grew from it a plant bearing the first "Early Rose" potato. By that one plant the potato industry of the United States was revolutionized. So much finer was the Early Rose than anything else in the potato line in this country, that all the other kinds were quickly displaced by the Early Rose and its variations. For Mr. Reese it was the making of a fortune.

Efforts were made afterwards to discover whence had come this potato-ball which had produced the Early Rose, but it was impossi-

ble to trace it farther than that it probably descended from a strain introduced fifteen years previously from Peru, the home of the potato. For the "Irish potato did not originate in Ireland". It is native to the American continent, where it was discovered first by the Spaniards, and later by Walter Raleigh, who took it to Ireland, where he had estates. But Hieronymous Cardan, a Spanish monk, is father of the potato. He first introduced it in Europe. To Peru it was therefore, that the horticulturists turned, fifty or sixty years ago, when they wanted to revive the breed of potatoes.

The magic apple seed-the one seed on which is builded all the orchard wealth of the northern Mississippi region-was not discovered so purely by chance. A valiant sir knight of the apple went in search of it. His name was Peter M. Gideon, and he lived in Minnesota. Peter found the search something of a holy grail affair in the way of discouragements, and at the end of ten years he seemed as far from his goal as when he set out. The problem was to get a breec of apple which would survive the rigorous climate of the northern prairies. He believed it possible to discover such, and in 1885 he began planting apple seeds. He planted a bushel of seeds, the first year, and set out thirty kinds of apple trees. The next year he planted a bushel more seeds, and did the same thing for ten years. At the end of that time he had started about 10,000 apple trees aad all but one had been killed by the winter weather. The one which remained was a sour little crab of no account. At this point Peter's neighbors encouragingly urged him to quit. They told him he was playing a losing game, that it was impossible to grow apples in that climate. But Peter was obstinately faithful and sent to Bangor, Me., for more seeds. His persistence was rewarded. One of the little trees that came up survived the hardships of ten more winters and bore him a good red apple of fine flavor and excellent keeping qualities. He named it the Wealthy, and he began the spread and multiplication of his new variety by grafting and budding, and today there are hundreds of thousand apple trees flourishing in the great northwest, all descended from Peter Gideon's Wealthy seedling.

In the east, the Baldwin is regarded as the foundation of the apple growert' wealth, and the spot where grew the original Baldwin

tree has lately been marked by a handsome monument erected by its lovers. Unlike the Wealthy, the Baldwin came unsought. The seedling sprung up in 1742 on the farm of John Ball, in eastern Massachusetts, By chance it escaped the scythe and the prunning knife, and when it came to muturity it bore fruit which filled the owner with astonishment and joy. But it was a certain Colonel Baldwin who took it upon himself to boom the apple and to introduce it to the world, that gave the variety its name. Other familiar varieties which sprung up from chance seeds are the Northern Spy, the Summer Bellflower, the Jonathan and the Newtown Pippin.

The blackberry is a distinctly American fruit. It was found growing wild, and has been little altered by cultivation. The most familiar and important variety was a find, like the Concord grape. A Mr. Lawton, of New Rochelle, N. Y., was walking along the roadside near town, when he noticed a bush which bore exceptionally fine berries. He took it up and planted it in his garden, and later put it on the market, where it displaced all others until another wild find, the Wilson's Early, came along and displaced it. Another find (returning to grapes) was the Delaware, which never had anything to do with Delaware, having been found in a garden in New Jersey. and put upon a market from a small town in Ohio. But that town was named Delaware, hence the inappropriate name. The Catawba is a wild American variety of grape, found in North Carolina in 1802, and brought into prominence by John Adlum, of Georgetown, D. C.

So much of value having come to the world by chance, growers of fruit and vegetables have begun to question whether it would not pay to prospect this field of plant-wealth. As the nuggets of mineral suggest the presence of mines so these finds indicate an unexploited and unexplored realm open to the plant-breeder. Only within a briet hundred years has any serious effort been made to go into this subject scientifically. But now the government, through the department of agriculture, is carrying on a systematic search for these magic seeds. They are looking for the grain of wheat, the orange seed, the flax and timothy germ which will contain within itself the possibility of wealth.—Rural World.

SOME GOOD SHRUBS.

25

Buffalo Berry: A hardy shrub and can readily be grown where the more desirable bush fruits will not thrive. A good drought resister. Its fruit is frequently used for jelly, but is small and with a single large seed, borne among numerous thorns, and is far less promising than most of our garden bush fruits. Recently it is being planted extensively for hedge purposes, throughout the northwest. There are two forms, one producing bright red and the other yellow fruit. It propagates readily by seeds or cuttings. If planted for the fruit both the pistillate and staminate plants must be grown together. If to be used as an ornamental shrub or hedge purposes, either can be planted without the other.

In bulletin No. 72, of the Agricultural Experiment Station, of Minnesota, we find the following ornamental shrubs described.

Siberian Artemesia—(Artemesia abrotans.)—A form of "Old Man" that grows to the height of six feet. It is recommended as a hedge for protection on account ot its great hardiness and the ease with which it grows from cuttings. While it may be valuable for making a beginning in seyere situations, yet it is so unsightly and low that it is far better to use Box Elder or White Willow, which are larger and better in every way.

Caragana, or Siberian Pea Tree: A rather large shrub belonging to the pea family, but never making a tree. It has very pretty foliage and yellow flowers in early spring, which are followed by an abundance of bean like pods. Later in the season the foliage turns brown, and by the middle of August it is very rusty in appearance. It is also liable to fail and die near the ground from the attacks of borers. It is useful in giving variety to shrubberies and perhaps in some cases might do for a hedge plant, but it is so unsightly in the autumn months as to make it rather undesirable for such a purpose, especially as we have so many more desirable plants for this purpose, such as Buckthorn and Buffalo Berry. Both of which take on a much better hedge form and are ornamental throughout the whole growing season. Easily grown from seed which ripens in July.

Dogwood or Red Osier : This is common along the borders of

our woods, and is a shrub that stands shade very well. It seems to be especially adapted for growing in forest plantations for the purpose of securing a good ground cover. It grows easily from cuttings made up in the ordinary way, as for White Willow cuttings. The Siberian form, which has dark red bark, seems to be fully as well adapted for planting, as our native kind, which has bright red bark.

Snowbail: Perfectly hardy here and producing its snowballlike clusters of flowers in abundance each year.

Redberry Elder: Our native elder, and very satisfactory in places where a large, coarse shrub can be usec. It produces an abundance of white, snowball-like flowers very early in the spring, and these are followed by clusters of scarlet berries.

Hydrangea: The hardy Hydrangea has proven a great success in this section, although in some portions of western Minnesota, where it is rather exposed to the wind, it is liable to kill in our severe winters when the ground is bare of snow. It is easily protected, however, by a little mulch in winter, and the great white panicles of flowers which it produces in August will well repay any little extra trouble of this sort.

Missouri Currant: An old favorite shrub, producing yellow flowers in early spring. Perfectly hardy here.

Van Houtte Spirea: Probably the most popular shrub offered in our nurseries. Of graceful habits at all times, but especially delicate and pretty when loaded with its abundance of white flowers, as it is every spring,

Tartarian Honeysuckle: The many varieties of this are among the most hardy and vigorous of the ornamental shrubs, and a general favorite.

Lilacs: These are perfectly hardy everywhere and need no description here of their value. The common forms have been greatly improved upon in some of the newer varieties. The nurserymen now offer a large number of named sorts; some of

which bloom fully a month later than these; among these may be mentioned the Josikea Lilac, which is exceedingly hardy.

Rosa rugosa: This is a single rose from Japan. The most remarkable thing about it is its fine, vigorous foliage, which is ornamental throughout the growing season and is seldom injured by insects. The flowers are produced in considerable abundance in June, and then at intervals throughout the growing season, and again abundantly in autumn, and are followed by bright scarlet heps (fruit). Perfectly hardy without protection.

Tamarix amurensis: This is a plant of very pretty, delicate habit, and well adapted to giving graceful effects to shrubbery. At the University Farm it general kills back a little every winter, and occasionally kills nearly to the ground, but as it is the new growth that is most beautiful this killing back rather improves it than otherwise. It has blue flowers in catkin-like clusters and these are produced more or less all summer. In this section of the State it is not quite hardy, but this has probably been due to its being exposed to drying winds and to severe weather without snow protection. It should have a little extra mulch put around its roots for winter protection, when it will be very satisfactory.

Ornamental Vines: The best of these for porches is the common Virginia Creeper, but the climbing Bitter Sweet does well. For a coarse vine the wild native grape is excellent. For covering walls the form of the Virginia Creeper known as the Englemann is excellent and clings to rough stones or bricks without much care.

PROGRAM OF ANNUAL AGRICULTURAL CONVENTION.

IN CAPITOL, MADISON, WIS., FEBRUARY 4TH AND 5TH, 1903. Under the Auspices of the Wisconsin State Board of Agriculture. GEORGE MCKERROW, President. JOHN M. TRUE, Secretary.

Wednesday, February 4th, 10 o'clock, A. M.

"Wisconsin-a Live Stock State".....C. H. Everett, Racine.

"The Dairy Cow for Wisconsin".....F. H. Scribner, Rosendale "Sheep for Wisconsin Breeders and Feeders"....

.... Prof. W. L. Carlyle, Madison

2 o'clock, P. M.

"Fashion in Pedigree—Its Use and Abuse"..... C. D. Rosa, Beloit "The Importance of the Silo in Steer-feeding Operations,"

"Live Stock Sanitation in Wisconsin"...Dr. H. L. Russell, Madison

Thursday, February 5th, 9 o'clock, A. M.

"Selection and Care of Breeding Swine"....

....L. P. Martiny, North Freedom "Sheep-breeding"......William F. Renk, Sun Prairie "Farm Poultry"......J. L. Herbst, Sparta

2 o'clock, P. M.

"The County Agricultural Schools of Wisconsin,"....

....J. C. McDowell, College of Agriculture, Madison "Agriculture of the East compared with that of the West,"

....George Sprague, College of Agriculture, Madison "The Fakir and the Fair".....O. F. Roessler, Jefferson

PROGRAM AND PREMIUM LIST

Wisconsin State Horticultural Society

TO BE HELD AT MADISON, WIS.,

Feb. 2, 3, 4, 5, at Capitol Building.

SPECIAL ANNOUNCEMENT.

The officers of the three societies which meet the week of Feb. 2-6, at Madison, have done all in their power to make this week be one of the most pleasant and profitable joint sessions ever held. Some very able speakers have been secured from our own and neighboring states, and all interested in Agriculture and Horticultural lines of work should make special efforts to attend.

A special rate of fare and one-third has been secured on all railroads.

Tickets will be sold the 2d, 3d and 4th of February, from all points in the State where regular fare is \$6.00 or less. At more remote points, they will only be sold on the 3d. Tickets good for return until and including the 7th.

Headquarters of the Horticulturist's at Capital Hotel.

Program of Horticultural Society.

Monday Evening, Feb. 2.

Meeting of the Executive Committee to attend to business of importance. All having accounts against the Society are requested to send them to the Secretary prior to this meeting.

Tuesday Feb. 3-9:00 A. M.

Historical Chamber Rooms, Capitol Building.

1-Invocation.

2-President's Greeting.

3-Appointment of Committees.

4—"New Varieties of Apples".....F. H. CHAPPEL, Oregon. 5—"Apples Safe to Plant in Wisconsin".....A. CLARK TUTTLE, Baraboo. 6—"Crab Seedlings for Apple Root Grafts".....A. D. BARNES, Waupaca

Tuesday Afternoon, 1:30 o'clock.

1-"Commercial Orcharding in Wisconsin"J. G. BUEHLER, Ithac 2-"Commercial Orcharding"GEO. T. TIPPIN, Nichols, M	-
	0.
a unit time of Apples at Part of the State. New and Uld Valicus	
3-"Failure of Apples at 1 at of the States	n.

4-"Seedlings to Grow and Test".....F. K. PHOENIX, Delevan, 5-"Reports of Trial Orchards"-Wausaw, Eagle River, Medford.

Tuesday Evening, 7:30 o'clock.

Session under the direction of the Department of Agriculture, University 'of Wisconsin-Long Course Students.

1-"Pollination"	C. L. MILLER.
2—"Vegetable Growing Under Glass"	A. C. MCLEAN.
3—"Horticultural Education"	H. BRECKENSTRATER.

SHORT COURSE STUDENTS.

4-"Horticulture as an Industry for Women" M	ISS M. E. BENSON.
5—"Care of the Farm Orchard"	I. C. SHOTTLER.
5-"Care of the Farm Orchard on the Farm"	I. P. BONZELET.
6—"Starting a Young Orchard on the Faim	FRANK STARK.
7-"Onr Native Plums"	the second s

Wednesday Morning, 8:00 o'clock.

1-Reception of delegates from loc	al and other State Societies.
2-Reports of delegates to other S	
3—"Blight"	FREDERIC CRANEFIELD
4-"Plant Breeding"	A. T. IRWIN, Ames, Iowa.
6—"Growing Vegetables"	JOHN VAULOON, La Crosse.

Renew your Membership.

Wednesday Afternoon, 1:00 o'clock.

1-Reports of Committee on Observ	ration.
2-" Plum Culture"	
3—" Plums "	S. H. MARSHALL, Madison.
4-" Cover Crops "	E. P. SANDSTEN, Madison.
5-" Marketing Fruits"	CHAS. F. HALE, Shelby, Mich.
	J. A. GAYNOR, Grand Rapids.

Wednesday, Evening 7:30 o'clock.

Joint meeting of Agricultural Experiment Association, Horticultural Society and State Board of Agriculture.

1-Music	SHORT COURSE BAND.
2-Remarks	PRES. GEORGE MCKERROW.
3-Music	
4-Selection	Miss R. E. BARCE.
5-Address	C. P. CARY, State Supt.
6-Solo	
7-Address. "Relation of Horticulture	to Public Schools."
	J. W. LIVINGSTON.
8-Music	SHORT COURSE BAND.

Thursday Morning, 9:00 o'clock.

President's Address.
Report of Secretary.
Report of Treasurer.
Election of Officers.
"Strawberry Culture".

Thurspay Afternoon, 1:30 o'clock. 1—Report of Committees. 2—"How to Grow Pears in Central Wisconsin"... J. L. SCHULTZ,.... Lake, Mills. 3—"Hardy Parenials".....W. J. MOYLE, Yorkville.

6-" The New Strawberries "..... GEO. J. KELLOGG, Lake Mills.

4—"The Open Road"......Mrs. FANNIE EARLE, Lake Mills. 5—"Ideal Citizenship"......Mrs. S. G. FLOYD, Eureka. 6—"Horticultural Work for Women".....Mrs. MAE. L. BRADT, Eureka.

Tuursday Evening, 7:30 o'clock.

Memorial Session-E. S. GOFF.

Addresses by Rev. E. G. Updike, W. A. Henry, C. F. Cronk and A. J. Philips.

Premium List.

A list of each collection exhibited, correctly named and labeled, must be furnished to the Secretary on or before Tuesday noon, the first day of the meeting. Exhibits must be in place at this time.

The Society will distribute ten dollars pro rata to the exhibitor showing the largest and best exhibit of named varieties of apples. Not less than ten varieties to be shown.

2019			IST	20
Dec	+ 6	varieties, quality, hardiness and productiveness.	\$2.00	\$1.00
Des	+ three	varieties long keepers	2.00	1.00
Des	"	Russians	2.00	1.00
"	"	Crab Apples	2.00	1.00
	Single	Seedling	2.00	1.00
1. S		. co. It'me ec oo to be divided pro rata.		

" Collection of Seedlings, \$6.00, to be divided pro rata. Persons drawing premiums must be or become members of the Society.

For further information regarding program. or premium list, address, I. L. HERBST, Secretary.

Sparta, Wis.

ASSOCIATIONS HOLDING MEETINGS IN MADISON DURING WEEK OF FEBRUARY 2nd TO 7th,

Wisconsin State Board of Agriculture. Wisconsin Agricultural Experimental Association. Society of Veterinary Graduates of Wisconsin. Wisconsin Live Stock Breeders' Association. Wisconsin Shorthorn Breeders' Association. Wisconsin Jersey Breeders' Association. Western Guernsey Breeders' Association. Wisconsin Association of Town Insurance Officers.

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