

February, 1897.

Lake View Nurseries

Offer for coming Season:

SUPERB 2-YEAR STANDARD PEAR,

The largest and most complete assortment in the State.

Dwarf Pear, Cherry and Plum.

Surplus of CHAMPION QUINCE, 2-year, extra fine; special prices on 5,000 lots.

Houghton and Downing Gooseberries,

2-year, very strong.

INDUSTRY, CROWN BOB and WHITESMITH, 2 and 3 years.

NORWAY MAPLES, | EUROPEAN LINDENS, HORSE-CHESTNUTS, | CUT-LEAVED BIRCH,

Extra quality, and all sizes up to 18 feet.

A fine line of Imported STOCKS and SEEDLINGS, Now in cellar, and ready for immediate shipment.

Apple, Pear, Quince, Mahaleb, Mazzard, Myrobolan, Multiflora and Manetti Stocks.

RAFFIA, per lb., bale, or ton.

SEND LIST FOR PRICES.

IRVING ROUSE, ROCHESTER, N.Y.

Painesville 🧀 Nurseries

For coming season offer their usual large and complete assortment

of Fruit and Ornamental Trees, Small Fruits and Grape Vines,

Shrubs and Roses, Hardy and Tender Plants, Bulbs and Seeds. .

Invite especial attention to our fine two-year blocks of STANDARD and DWARF PEARS, QUINCES, PLUMS, CHERRIES and APRICOTS.

One of the largest, handsomest, healthiest and best grown blocks of PEACH TREES in the United States.

For Fall delivery strong three-year plants of Industry, Keepsake, Lancashire Lad and Crown Bob Gooseberries.

Small Fruits in large supply, all the leading old and best of the newer introductions, including extra fine strongly rooted Blackberries from root-cuttings—Gault, Loudon, Miller's and Eureka Raspberries.

Ornamentals.

TREES.—Carolina, Lombardy and Golden Poplars; Norway, Ashleaf and Silver Maple; European Linden, Purple Beech, Magnolias, Mountain Ash, Flowering Thorns Willows, Etc.

In Weeping forms, fine stock of Birch, Cut-leaf and Young's; Tea's Mulberry, Cornus, Camperdown Elm, Linden and Willows.

SHRUBS.—Thrifty, clean, young stock, in all the leading and rare varieties.

CLIMBING VINES—Ampelopsis, Clematis, Honeysuckle, Wistaria, etc., strong two year plants.

Our collection of Hardy Border Plants is one of the best.

French and Holland Bulbs direct from leading growers.

Roses.

Our strong two-year field-grown Hybrid Perpetual, Moss and Climbing Roses need no introduction; the best grown.

Orders stored in frost-proof cellars for early spring shipment, if desired.

It will pay you to see our stock and obtain our prices before placing your orders.

Trade List ready about September 1st. CATALOGUES FREE.

42nd YEAR. 1,200 ACRES. 29 GREENHOUSES

THE STORRS & HARRISON CO.

PAINESVILLE, OHIO.

Gooseberries

and

Currants.

Leading Varieties.

Extra Fine Plants.

ELLWANGER & BARRY.

Mount Hope Nurseries,

ROCHESTER, N. Y.

200.000 Peach Trees. 2,000,000 Strawberry Plants, 100.000 Blackberry. 500,000 Raspberries.

Eldorado, Maxwell, Leader Blackberries.

MILLER, LOUDON and COLUMBIAN . .

TRIUMPH. GREENSBORO.

Raspberries.

and a full assortment of

Wickson and Red June

Peaches

PLUMS.

. AND OTHER FRUITS

Our Catalogue will save you money.

BRIDGEVILLE, DELAWARE.

in quantities to suit-Single 100 or carload lots. Grown on new

land and good assortment. Splendid trees. Low prices.

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THE SAN JOSE SCALE

is not found on our labels, which make them INVALUABLE for NURSERYMEN.

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BENJAMIN CHASE, 15 Mill St., Derry, N H.

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THE NEW OLIMBING ROSE YELLOW RAMBLER (AGLAIA),

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QUINCY STAR NURSERIES

QUINCY, ILLINOIS,

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Correspondence solicited. Write for prices.

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Fruit, Forest and Ornamental Tree Stocks,

CONIFERAE, SHRUBS, ETC. AZALEAS, CAMELIAS, CLEMATIS LILAGS, MAGNOLIAS, RHODODENDRONS, ROSES, ETC., ETC.

Orders Now Booked at Low Prices. ★

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TEN MILLION STRAWBERRY PLANTS

800,000 Warfield. 850,000 Gandy, 800,000 Bubach,

250,000 Dayton,

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150,000 Greenville.

100,000 Ennance, 100,000 Meeks' Early, 900,000 Crescent, 40,000 Mary, 25,000 Marshall, 25,000 Splendid,

40,000 Capt. Jack, 50,000 Swindle.

150,000 Enhance

600,000 Lady Thompson, 100,000 Wilson, 200,000 Saunders, 300,000 Sharpless,

75,000 Cyclone, 800,000 Tenn. Prolific.

250,000 Brandywine (Late), 250,000 Ocean City, 150,000 Parker Earl, 600,000 Mitchel's Early,

40,000 Princess.

20,000 Edgar Queen, 600,000 Beeder Wood,

50,000 Rio, 125,000 Woolverton, 150,000 Berlin,

150,000 Jessie.

800,000 Lovett, 20,000 Timbrell,

25,000 Belle,

150,000 Barton's Eclipse, 20,000 Tennyson, 100,000 Beverly,

20,000 Bismark.

10,000 Arrow, 100,000 Tubbs,

20,000 Shuster's Gem.

5,000 Glen Mary,

10,000 Sunrise, 20,000 Gandy Belle,

15.000 Eleanor.

25,000 Van Deman. 20,000 Giant, 15,000 Weston, 10,000 Murray, 50,000 Henry Ward Beecher,

6,000 Bouncer, 9,000 Brunette

10,000 Holland.

One Hundred Thousand Peach Trees-one year. One Hundred Thousand Peach—June Budded,

Five Hundred Thousand Asparagus Roots. Plum and Apple Trees.

Send list of wants. Catalogue free.

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BERLIN.

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BARGAINS IN ..Currants and Gooseberries...

Cherry, Fay's, North Star. Versaillaise, Victoria, White Grape.

Downing, Smith's Improved.

2-year, strong, and medium.

MAGNOLIAS.

500 Accuminata, 4 to 6 feet.

1,000 Speciosa, 2-year, 4 to 5 feet, and 9 to 12 feet.

POPLAR-Carolina and Lombardy.

ALSO,

Std. Pear, Plum, Cherry and Peach Trees. CHAMPION AND ORANGE OUINCE.

DIAMOND AND POCKLINGTON GRAPE VINES.

H. E. HOOKER CO.,

ROCHESTER, N. Y.

American White Spruce

And other Fvergreens.

ALL SIZES.

Also Hardy Apples, Grape Vines, Blackberries from Root Cuttings, Currants, Raspberries, Strawberries, Shade Trees, Forest Tree Seedlings, Flowering Shrubs And Roses.

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THE POMONA CURRANT.



The BEST SPECI-ALTY for the AGENTS for 1897 and

WHY? Because it is the best MONEY MAKER for the people to plant.

It is BEST in QUALITY.

Its returns come in the quickest and surest.

These being the qualities the planter is after, he

Introduced and for sale by us. Send for circulars, plates, terms, &c. Not only have we a good stock of POMONA CURRANTS

But also a COMPLETE GEN-ERAL ASSORTMENT of TREES, PLANTS, ORNAMENTALS, VINES, &c., in CAR-LOAD LOTS, especially APPLE, PEAR, CHER-RY, PLUM; with good assortment of PEACH and other fruit trees

Also CAROLINA POPLAR, SOFT MAPLE, ELM, &c.

APPLE STOCKS. IMPORTED FRENCH PEARS,

MAHALEB, MYROBOLAN and QUINCE stocks.

ORDER SPADES EARLY. A limited quantity of Natural PEACH PITS to offer.

> Address, ALBERTSON & HOBBS, BRIDGEPORT, MARION CO., INDIANA.

BUY TREES AT WILLIS NURSERY, OTTAWA, KANS.

The following choice stock is offered at

WILLIS NURSERIES.

OTTAWA. KAS.

25,000 CHOICE NO. 1 APPLE AND CRABS.

1,500 St. PBAR, 5 to 6 ft.

2,000 Dr. PEAR, 81 to 41 ft.

1,000 CHERRIES, 41 to 6 ft.

1,500 PLUMB, 44 to 6 ft. 400 QUINCE, 8 to 4 ft.

100,000 GRAPES, No. 1, 1-yr. A choice general assortment.

8,000 HOUGHTON GOOSEBERRIES, 2 yr., No. 1.

4,000 Downing

1,000 FAT CURRANTS,

5,000 CURRANTS, leading sorts.

50 KILMARNOCK WILLOWS, 2-yr. heads.

100,000 No. 1 HEDGE.

The above is all choice, thrifty, well-grown stock of best varieties, and will be sold at prices to suit the times. We have the best facilities for packing and handling stock, and all correspondence and orders will receive prompt and careful attention.

A. WILLIS.

OTTAWA, KAS.

BUY TREES AT WILLIS NURSERY, DTTAWA, KAMS.

When writing to Advertisers mention The National Nurseryman.

BUY TREES 4 WILLIS NURSERY, OTTAWA,

The National Nurseryman.

FOR GROWERS AND DEALERS IN NURSERY STOCK.

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Vol. V.

ROCHESTER, N. Y., FEBRUARY, 1897.

No. 1.

THE TARIFF.

OFFICIAL REPORT NATIONAL COMMITTEE —SCHEDULE OF RATES—PROMPT ACTION IS IMPERATIVE.

The most important subject before the nurserymen of the United States at present is the tariff. After an experience under the Wilson bill by which nursery stock was placed on the free list, the national organization, the American Association of Nurserymen, at its annual convention in Chicago last June after a discussion of the subject as the most important in hand, appointed a committee to visit Washington and to present to the ways and means committee of the House of Representatives a schedule of rates for duty on imported nursery stock which would protect American growers and dealers.

This committee, appointed by President Silas Wilson, was composed of William C. Barry, Rochester, N. Y.; N. H. Albaugh, Tadmor, O., and J. H. Hale, South Glastonbury, Conn. Mr. Hale who was not at the convention, said that on account of private business interests he could not serve on the committee. When the time came to visit Washington last month Mr. Albaugh was detained at home by sickness in his family.

Chairman Barry, President Wilson, J. J. Harrison of Painesville, O., and Irving Rouse, of Rochester, met at Washington January 11th, Mr. Harrison by invitation of President Wilson, Mr. Rouse as chairman of the tariff committee appointed by the Eastern Nurserymen's Association, of which committee Mr. Barry and William Pitkin, secretary of the Chase Brothers' Co., Rochester, were members. In the absence of Messrs. Hale and Albaugh, President Wilson appointed Messrs. Rouse and Harrison members of the national committee.

This committee succeeded in obtaining two hearings before the ways and means committee at Washington, presenting strong arguments in favor of a protective duty on nursery stock. In additional to this the members of the national committee conversed with members of the ways and means committee outside of the committee room and it is believed produced a favorable impression as to the necessity for a tariff schedule.

The committee makes the following report, to the suggestion in which regarding prompt action on the part of all nurserymen, special attention is called:

OFFICIAL REPORT.

ROCHESTER, N. Y., January 15, 1897.

The American Association of Nurserymen, Gentlemen:—

In accordance with instructions received at the last annual meeting of the Association, your committee went

to Washington and had a hearing before the Ways and Means Committee on the tariff question, January 11th, 1897.

The following schedule was presented and filed with the Committee:—

FIRST—Stocks, cuttings or seedlings of Myrobolan plum, Mahaleb and Mazzard cherry, 3 years old v or less, \$1.00 per thousand plants.

SECOND—Stocks, cuttings or seedlings of pear, apple, quince, and St. Julien plum, 3 years old or less, \$2.00 per thousand plants.

THIRD—Rose plants, budded, grafted, or grown on their own roots, 3 cents each.

FOURTH—Stocks, cuttings and seedlings of all fruit and ornamental trees, deciduous and evergreen, shrubs and vines, Manetti, Multiflora and Briar rose, and all trees, shrubs, plants and vines, commonly known as nursery stock, unless otherwise specified, 30 per cent. ad valorem.

We desire now to have all the influence brought to bear on the Committee that is possible.

Appended you will find a few points which may be used if desired in drafting a letter. We also give the names of the Ways and Means Committee and the states from which they come, so you may select from the number your representative, to whom please address the letter, asking him to exert his influence in favor of the schedule filed. It is important to act promptly so that the letter may reach your member of the committee as soon as possible.

Any information you may receive, please communicate to the chairman of the nurserymen's committee.

Yours truly,

W. C. BARRY, SILAS WILSON, IRVING ROUSE, J. J. HARRISON.

THE CONGRESSMEN.

Committee of Ways and Means, Fifty-Fourth Congress:— NELSON DINGLEY, JR., Chairman, Me.

SERENO E. PAYNE, N. Y.
ALBERT J. HOPKINS, Ills.
CHAS. A. RUSSELL, Conn.
GEO. W. STEELE, Ind.
WCHAS. F. CRISP, Ga.
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JAMES A. TAWNEY, Minn.
BENTON MCMILLIN, Tenn.
JOHN. C. TARSNEY, Mo.
JOHN L. MCLAURIN, S. Car.

HERBERT M. LORD, Clerk.

SUGGESTIONS.

It is a matter of vital importance to the nursery interests, and there is not a grower in the country who does not desire this tariff.

All of the articles contained in paragraphs first and second, were grown in this country formerly; to-day absolutely nothing is grown here except apple seedlings, all being imported from France, Germany and Belgium.

Under the Wilson bill immense quantities of roses have been brought into New York, Boston, Philadelphia, and other large cities and sold at auction, for what they would bring. This stock while greatly inferior in quality, has of course hurt the legitimate nursery trade extremely. The large dry-goods houses of Wanamaker of Philadelphia, Marshall Field of Chicago, and others have bought the stock, practically giving it as a premium on purchases. These plants are worth 4 cents to 6 cents in France when purchased there, but the surplus stock sent over to be sold at auction frequently nets much less than this amount.

It is absolutely necessary that we have a specific duty on the first three paragraphs.

OCEAN CITY STRAWBERRY.

This variety originated in Worcester county, Md. It was first discovered in a patch of Sharpless and Wilson, ten years ago, and shows parentage of both varieties. The plant is vigorous; large broad green leaf, fruit as large as Bubach, and ripens all over at once; berries have been kept one week and then found in good eating condition. For five years the fruit has sold in Boston and New York for from 2 to 8 cents per quart more than many others shipped from this county. Special care has been taken to look after the fruit and account of sales, and these can be produced.

It is a good yielder and is adapted to stiff rich soil for best results. It is highly recommended by commission men. J. G. Harrison & Sons, Berlin, Md., are the introducers.

Lord & Spicer, commission merchants, Boston, writing to J. G. Harrison & Sons under date of Nov. 13, 1896, say: "We have handled the Ocean City strawberry which you speak of in your letter of the 6th inst, for several years and consider it a very fine shipping berry. We remember that two years ago it sold here from 4 to 6 cents per quart above the average of other varieties, but this lest year the weather conditions were very unfavorable all through the shipping season, and consequently they did not do so well."

Isaac Locke & Co., Boston, under date of Nov. 11, 1896, say: Answering your inquiry in regard to the Ocean City strawberry for the past few years we have to say that it has been one of the most satisfactory berries we handle from Maryland. It seems to be larger than most of the berries grown in that section, is firm so that it has the best carrying qualities, and its size and evenness are also very much in its favor. As it has been sent to us we consider it one of the most satisfactory berries we know of, and should be glad to see them grown more largely by the farmers of Eastern Maryland.

J. W. Melick & Co., New York, under date of Nov. 13, 1896, say: "In answer to your favor we will say, we have handled the berry now called Ocean City for some three or four years and it has sold better with us than most other varieties, at considerably better prices, carries better than nearly all other varieties, is sought by buyers both for city trade and shipping trade, yields well and continues to yield to a later period in the season"

CAN YOU afford to be without THE NATIONAL NURSERY-MAN, the only journal in which you obtain nursery news exclusively, when it is only \$1 per year?

HOW TO RUN A NURSERY.

The following paper, appearing in the "Minnesota Horticulturist," was read by J. Cole Doughty, secretary of the Jewell Nursery Co., Lake City, Minn., at the recent meeting of the Minnesota Horticultural Society:

Take a fool's advice and don't do it. You will never even make a fourth rate nurseryman unless you are content to get up at 4 A. M., put in sixteen hours hard work, and after supper just run down to the office and put in five or six hours, and then, if you have not forgotten anything or can't find any other little job, take a nap and be ready for breakfast.

As to what to grow, that is the easiest part of the business. Don't trouble yourself about that. Just look over the State Horticultural Society reports and plant what is recommended there. I don't think you can name many varieties that stand a ghost of a show of living in this climate that don't find a friend in the society—some one to say a good word for them. This, of course, only goes to show that jolly good feeling that animates those horticultural fellows. When they meet up there in Minneapolis and get to swapping stories, they have a mellow spot in their hearts for everybody unless it is the guileless "tree peddler." For him they always have the marble heart and the stony glare of the eye that means a shot gun and bull dog reception.

But to return to the subject of planting. By all means keep "up to date." If John Smith discovers a new strawberry that is not a runner, but grows upright, just like a bush, get the exclusive control of it. It may be a grand good thing and you would hate awfully to have some other nurseryman walk off with a bonanza. Keep your eye open for all the new things. Hop onto every new seedling apple you see. It may be another Wealthy—the grandest apple of the last decade—waiting for some one to "bring it out." It is true, there are some failures and disappointments in "fathering" new things. It is wonderful, the infant mortality of seedling apples. Like the "ships that pass in the night," they gently fade away, and "the places that knew them know them no more."

But "there are others"—the Tree Blackberry, the Everlasting, Everbearing Raspberry, the Japan Wineberry etc., etc. Until you have something to do with all of these, your education as a nurseryman is incomplete. It is much like the measles; if you follow the business you have got to have them some time; hence, I would recommend that you take them in allopathic doses and, better still, if you can take them all at once. If you survive and the above does not spoil a right good fellow, it is liable to make a fairly decent nurseryman of you.

Above all, you must be public spirited. To do this, you may beg, borrow (but never steal) all the money you can get and pay it out for labor, freights, printing, etc., and thus build up your town. True, your fellow townsmen may not buy trees or plants enough to enable you to pay your taxes, and they generally don't, but that doesn't count. Before you get through you will command their sympathy if you don't see their dollars.

By all means, you must entertain. When the "advanced horticulturist" visits you, give him the best there is in the larder. He deserves it for several reasons. He is something of a martyr himself, working for glory, just like you, and as such he does not live any too high at home. Of course, you do not expect to sell him anything, nor do you expect him to give you any great big puff in the newspapers. In fact, you

are most anxious about what he doesn't say. He is generally a pretty good fellow and not given to shying stones at glass houses, so give him the warm hand and a kindly greeting. Show him all the good things you have and cover your weak spots as best you can. It will not take you long to learn what to hide. He will tell you before you lose him and you will be loaded for the "other fellow."

Be a little shy of the tree dealer, the man who buys your best trees at the price of culls, who borrows your money to conduct his business, who uses your name to give you a shady reputation, and whose balance is almost sure to be on the wrong side of the ledger. He is generally a smooth duck with a vivid imagination, an adamantine cheek, and very fertile in resources. He is designed by Providence to hold the progressive nurseryman in check and prevent his getting rich too fast. The regular salesman who handles your goods under your direction, and who is sometimes known as the "tree peddler," is a blessing, sometimes faintly disguised, 'tis true, but still a blessing to the nurseryman and also the farmer. Without him there would be but one tree growing in this state to-day where are now fifty. Kick him, to be sure, and lay the blame of unsatisfactory deals upon him; he is generally irresponsible and always away, so it is safe to abuse him; besides, he expects it. Everybody, from the most honored member of the horticultural society to the humblest tree puller on the Mississippi sand bars, has a whack at him and yet he survives and goes bravely on with the good work. There ought to be a sunny corner for him somewhere in Heaven, "Where the wicked cease from troubling and the weary are at rest."

There are some drawbacks to the business and you will meet with some queer people and many funny experiences that will have a tendency to expand your mind and make a broad gauge man of you. You will realize how little force there is in an iron-clad tree contract and how "No countermands accepted" simply invites countermands. You will also be surprised how your little notice of the delivery of your nursery stock will stimulate the real estate business. I have known of a dozen farmers selling their places within ten days of the date for delivering their orders. At least, that is what they write, and, of course, it is gospel truth. True, the registrar of deeds knows nothing of these transfers, nor do the man's neighbors, and if you ship the goods, he is generally the first man to pay cash and no complaints. once in a while a man dies and his dear wife or daughter will write you that he is dead and cannot pay. Well, sometimes he will fool you and die sure enough, but if you ship the goods with a second notice, he generally sends his son with the cash and no comments. The men who have "sold out" or who have "died" are almost always on hand to get their goods early in the A. M., and invariably pay cash.

If a man writes that he is "hailed out," it is always well to investigate, but if he simply sells his farm or dies, don't worry; nine times out of ten he will be there with money to pay and generally with plenty of blankets to protect his trees. Such are always careful, prudent men.

We have known a "tree delivery" to produce—well, not a famine, but a terrible failure of crops in that locality. After a time you will view these little peculiarities with charity. They are but blemishes on the human character, which once understood can be easily forgiven.

In conclusion, when you can make 98 per cent of your grafts "catch" and make the slow growers keep up with the faster ones; when you can dig nothing but straight, smooth trees, all six feet high without scar or blemish; when you can give every man the pick of your stock and have enough of that to go around; when you can pack each man's goods first; in fact when you can obtain perfect control of the laborer, the salesman, the transportation companies and the elements, and can command a favorable dispensation of Providence occasionally as to the seasons, etc., then you will know "how to run a nursery" and not before.

SOME CUSTOMS CRITICISED.

Henry Schroeder, the well-known proprietor of the Sigourney, Ia., Nursery, believes with others, in the guarding of wholesale prices. Indeed he is very much in earnest in his views. He has been receiving postal cards bearing wholesale prices. He says: "How easy can any mail carrier learn those low prices and the deputy postmasters changing every once in a while! How much better to use envelopes with the same amount of postage. I had rather buy of those who follow the latter course and give them a better price for good stock. Nurserymen who do their delivering at the livery stables and such places will do well not to instruct their agents to sell their stock at any price or give it away upon refusal of a customer to take it.

"Some mention their prices F. O. B., and others do not mention boxing. Why cannot nurserymen agree more generally to include boxing in their prices. As it is now, when at a livery stable the delivery agent will sell the large boxes to farmers for 50 cents. This practice makes farmers wonder why nurserymen say boxes cost from one to three dollars

"I see that in the January number of the journal it is announced that our Southern Iowa Horticultural Society has appointed a committee to consider the teachings-of horticulture in the public schools. The plan is well enough in some respects, yet such teaching should not be general. Of what use is it to teach horticulture to those who will never have ground to live upon, but who will seek work in the mines, in factories and on railroads? Instead of much teaching of horticulture in public schools it would be better to have one experiment station in every county to prove the new varieties."

NUT CULTURE IN NEW JERSEY.

A gentleman of large means, living in Philadelphia, and owning a large farm adjoining the beautiful town of Riverton, N J., last fall completed the planting of a chestnut orchard containing 4000 trees of improved varieties. The trees stand about 30 feet apart each way and present the appearance of a fine apple orchard. The trees are very uniform in size and 5 to 7 feet in height. It is said that the owner has spent several years in Europe where the business is assuming large proportions.

SUBSCRIPTIONS FOR 1897 begin with this issue. Send \$1 and secure the entire volume.

NEW JERSEY.

STATE HORTICULTURISTS CONDEMN THE FREE DISTRIBUTION OF SEED— DAMAGE BY SAN JOSE SCALE.

The twenty-second annual meeting of the New Jersey Horticultural Society was held at Trenton on January 6-7. Secretary Henry I. Budd, of Mt. Holly, in his report referred to the fact of the great destruction of various fruit trees in the past summer. The California scale had been particularly destructive, despite all the efforts to eliminate it.

I. W. Nicholson read the report of the legislative committee, and referred to the appearance of the committee before the legislature last year to secure the appropriation for the destruction of the San Jose scale.

David Baird, of Manalapan, introduced a resolution declaring that seed distributed by congress is a waste of money, as the seed is not demanded by the people, and in most cases is not planted; also that a copy of the resolution, under the seal of the society, be transmitted to the New Jersey representatives. S. S. De Cou, of Ewing, said that a great deal of good had been done by the distribution. He himself had been helped by seeds furnished by the government. L. J. Farmer, of Pulaski, N. Y., said that the theory of distribution was wrong. The government might as well distribute fruit trees. The resolution was adopted by a two-thirds vote.

Ira J. Blackwell, Titusville, reviewed the history of fruit growing in New Jersey. He advocates spraying of all fruit trees.

J. W. Kerr, Denton, Mo., read a paper on "Plums and Their Improvement." He said the bright colored natives are the best sellers. Inferior plums, but good looking, generally sell better than superior plums not so handsome. Plums can be planted wherever peaches will grow, and will bear double the number of crops that the peaches will bear in a period of twenty years.

State Entomologist John B. Smith read a paper on "Insect Depredations of the Past Year." The San Jose scale has aroused great attention in the East, and it has done wide-spread damage. Some persons say they have successfully exterminated it with spraying kerosene, but the speaker was not prepared to advise its use. He suggested that the state ought to compel a certificate to be given with the sale of trees coming into the state, to show their freedom from scale. The borer has done great damage. The season of 1896 was not marked by any new pest of importance. The San Jose scale had appeared during the year in new localities in Passaic, Hudson and Monmouth counties.

W. A. Manda, of South Orange, read a paper on ornamental flowers, Charles A. Green, Rochester, N. Y., discussed helps and hinderances to fruit culture, J. S. Farmer, Pulaski, N. Y., strawberry culture, and Samuel A. Miller, Deckertown, N. J., peach growing. Professor Voorhees of the New York Experiment Station said statistics left in doubt the question as to whether it paid to grow apples in New Jersey.

SUBSCRIPTIONS FOR 1897 begin with this issue. Send \$1 and secure the entire volume.

Among Growers and Dealers.

Flemer & Felmly's address is now Springfield, N. J.

Fay's currants are a specialty of F.H.Burdett, Clifton, N. Y.

L. C. Bobbink, Rutherford, N. J., visited Rochester nurserymen last month.

D. H. Patty, Geneva, N. Y., wants a man to run agents and share in the profits.

Michigan grown strawberry plants are on the surplus list of C. H. Whitten, Bridgman, Mich.

W. W. Anthony, Union Springs, N. Y., makes a specialty of quinces, gooseberries and currants.

Bryant's Nurseries, Princeton, Ill., Arthur Bryant & Sons, proprietors, was established in 1845.

Mr. and Mrs. George Ellwanger, Rochester, celebrated their golden wedding on December 20th.

C. F. McNair & Co., Dansville, N. Y., have a general line of nursery stock in good assortment.

Apple seedlings in all grades at low prices to close out are offered by J. A. Gage, Fairbury, Neb.

Thomas B. Meehan of Germantown, Pa., visited Western New York nurserymen late last month.

Searchers for choice nursery stock will be interested in the list presented by A. Willis, Ottawa, Kan,

George Brothers, Penfield, N. Y, have Clematis Jackmanii, strong 1 and 2 year plants, for spring delivery.

Rocky Mountain dwarf cherry and two-year asparagus are specialties at the Whiting Nursery Co's, Boston.

Pear, plum, cherry and peach, quinces, currants, etc., are leaders with E. Moody & Sons, Lockport, N. Y.

Alexander Pullen, Milford, Del., has an official certificate declaring all his stock free from insects or disease.

D. Hill, Dundee, Ill., presents for the coming season his usual attractive list of evergreens of the best class.

The H. E. Hooker Co., Rochester, N. Y., reports. Capital stock \$15,000; assets \$20,026.30; debts \$4,233.36.

The largest stock of Viburnum plicatum in the world is held by Thomas Meehan & Sons, Germantown, Pa.

The Pajaro Valley Nurseries, Watsonville, Cal., of which James Waters is proprietor, were established in 1868.

T. T. Ramsey, Austin, Tex., succeeded to the business of Ramsey & Son, upon the death of his father December 30.

In another column Morris, Stone & Wellington, Welland, Ontario, present a list which will supply many wants.

R. S. Johnston, Stockley, Del., has a large stock of peach trees, one year from bud, the largest stock in Delaware.

The California Nursery Co. of Niles, will open an agency on Market street, San José, Cal., opposite the postoffice.

The last call on apple seedlings is made by Youngers & Co., Geneva, Neb, who also have a large stock of shade trees.

M. E. Hinkley, Marcus, Ia., grows Prunus Pumilla by the acre and has Black Hills Spruce seedlings in any quantity.

Eugene Covey, Penfield, N. Y., offers a large stock of apple, cherry, peach and plum and Wilson strawberry plants. Peach and apple trees in particular and a general line of nursery stock are offered by George Achelis, West Chester, Pa.

Hiram T. Jones, Elizabeth, N. J., has an assortment of imported fruit and ornamental seedlings which have just arrived.

Small evergreen plants by the million, the best sizes for stocking nurseries, are offered by C. I. Whitney, Warren, Ohio.

The Georgia Experiment Station publishes as a bulletin a paper read by G. H. Miller, Rome, Ga., on the subject of peach culture.

Raffia, direct from the packers in Madagascar, of the best white quality, braided, is offered by Andre L. Causse, New York city.

Kieffer pear trees in car lots or less, native plum trees and French fruit tree stocks are offered by W. A. Watson & Co., Normal, Ill.

The Spaulding Nursery Co., Spaulding, Ill., offer a general line of nursery stock. Their line of fruit trees and plants is especially complete.

In exchange for 10,000 raspberries and 1,000 Wachusetts blackberries, D. H. Patty, Geneva, N. Y., will exchange standard and dwarf pears.

Spraying is becoming more and more popular as its advantages are known. The Deming Co., Salem, Ohio, offer pumps for all spraying purposes.

The Jackson County Nursery Co., Lee Summit, Mo., has been incorporated; capital, \$5,000. Incorporators are Frank K. Graves, N. C. Cowherd and E. H. Graves.

Bargains in currants and gooseberries, magnolias, poplars, Diamond and Pocklington grapes and other fruit stock are offered by the H. E. Hooker Co., Rochester, N. Y.

Albertson & Hobbs, Bridgeport, Ind, cites many reasons why the Pomona currant is the best specialty for agents for 1897 and 1898. They have a large stock.

Francis Fell, who was at the head of the Hale Farm Nurseries, Tottenham, England, died December 27th. He was a member of the well-known Hexham family of nurserymen.

The heavy blocks of shrubbery of Hoopes Bro. & Thomas, West Chester, Pa., are second to none in this country, both in extent and variety, and the quality is above the average.

A splendid stock of roses, clematis, rhododendrons, Ampelopsis Veitchii, Industry Gooseberries, Columbian raspberries, quinces and peaches is offered by W. & T. Smith Co., Geneva, N. Y.

T. C. Thurlow, of the Cherry Hill Nursery, West Newbury, Mass., is spending the winter with his friend, J. Van Lindley at the famous Van Lindley peach orchard of 400 acres, at Southern Pines, N. C.

The well-known Andre Leroy Nurseries, Angers, France, represented by Andre L. Causse, New York city, offer as usual a fine line of Myrobolans, Mahalebs, Manetti rose stocks, pear, quince, etc.

Japan plums and June-budded peach are specialties which the Griffin Brothers Co., Macclenny, Fla., are handling in large quantities for the coming spring. The stock will be in Philadelphia this month.

D. Hill, Dundee, Ill., has secured the services of O. W. Rich of Atlantic, Iowa, to manage his retail department. Mr. Rich is well-known among western nurserymen, and very successful in the growing and handling of evergreens.

An enviable position is that of Ellwanger & Barry, Roch-

ester, which needs no endorsement other than that long accorded by the entire nursery trade. Their stock of fruit and ornamental trees and shrubbery includes the entire list.

The Storrs & Harrison Co., Painesville, Ohio, in its 41st year, with 1,000 acres and 29 greenhouses is equipped in the fullest extent to handle orders of any size for any kind of nursery stock. In extent, variety and quality their stock cannot be excelled.

A H. Griesa, Lawrence, Kan., is in the thirtieth year of his career as a nurseryman in Kansas. He would like from all who have grown the Kansas raspberry, which was introduced by him, a postal card containing a statement of its merits and a comparison with other blackcaps.

Wallace Mackay, who recently completed the twenty-fifth year of his service as manager of the Royal Nurseries, Exeter, England, was presented an illustrated address and and a silver cigar box by his fellow employees, and a silver salver and a check for £25 by P. Veitch.

For ornamental stock the well-known firm of Thomas Meehan & Sons, Germantown, Pa., has an enviable reputation. Their stock is of the highest quality and it includes everything that can be desired. At present they have an especially large stock of shrubs in sizes suitable for lining out in nursery rows or for shipping direct to the retail trade.

The precise varieties to plant depend largely upon locality, but the general principles of fruit growing are the same everywhere. They are being ably presented at horticultural conventions this winter by S. D. Willard, one of the most experienced and intelligent horticulturists for which Western New York is famous, says the *Orange Judd Farmer*.

The famous nursery and seed business known all over the world as "Veitch's" is following the example of many other large commercial houses and will shortly be floated as a limited liability company, says W. Watson of London, in *Garden and Forest*. Harry Veitch will act as director-chairman, and his nephew, James H. Veitch, will be managing director.

The largest and most complete assortment of two-year standard pear trees in the state is offered this season by Irving Rouse, proprietor of the Lake View Nurseries, Rochester. In addition Mr. Rouse has a large stock of dwarf pear, cherry and plum and a surplus of Champion quince; also gooseberries of the popular kinds, ornamental stock and a fine line of imported stocks and seedlings ready for immediate shipment.

IF it is worth anything to keep in touch with your fellow nurserymen from coast to coast and from gulf to lakes, to see their faces, to read their records, and to hear their opinions, is it not worth \$1? Subscribe now for The National Nurseryman.

DO NOT WANT TO MISS AN ISSUE.

J. Bagby & Sons' Co., New Haven Nurseries, New Haven, Mo.

—"Enclosed find \$1 to pay for The National Nurseryman. We do not want to miss a single issue."

CANNOT DO WITHOUT IT.

G. H. MILLER & SON EXCELSIOR NURSERIES, ROME, GA.—"We enclose \$1 for The National Nurseryman for 1897. We cannot do without it."

WHAT THIS ADVERTISEMENT DID.

E. C. WILLIAMS, ZANESFIELD, O.—"My advertisement was to run two months. It sold all my trees on the first insertion."

PENINSULAR.

THREE STATES JOIN IN ONE SOCIETY—VAN DEMAN PRESIDES — YELLOWS ON NURSERY STOCK—SHORT ROOTS

The tenth annual meeting of the Peninsular Horticultural Society (Delaware, Maryland and Virginia) was held at Milford, January 6-8. The society was called to order by President Van Deman, Parksley, Va. Representative Willis paid the society the compliment of leaving congress, in session at Washington, to deliver the address of welcome. Professor James S. Robinson, of the Maryland Agricultural College, made the response.

President Van Deman in his annual address said there was an apparent lack of local horticultural societies. In some states there were many county and other horticultural societies. In Ohio as many as 300 persons belonged to a society where there was only a fraction of the investment in fruit that there is in Delaware. The year 1896 was one of disaster to the fruit and vegetable growers of the peninsula. Crops were good but the net profits were almost nothing. Peaches were dying from yellows and other diseases. What should succeed them? Success would come to the wise and vigilant.

The question box started a discussion of the Columbian raspberry. A. W. Slaymaker said it was strong growing plant, but the berry was in poor demand because of its color.

"What new varieties of early pears of recent introduction were worthy of culture?" Professor Heiges said that the Lawson or Comet was chiefly responsible for the introduction of the San Jose scale on the peninsula. This pear was very handsome, but its flavor was not first-class. The Manning, an old pear, was good. Mr. Harris objected to the Lawson as the slowest in growth he ever saw. Charles Wright said the tree grew slowly, but he had obtained good crops in three years on top-grafted dwarfs. The fruit was of fair quality and large as a Bartlett. President Van Deman said that the Koonce was promising in the West; was early and handsome.

"Do yellows appear on nursery stock?" was a question asked.

R. S. Johnson of Stockley said that yellows had not made its appearance in his section, and he has never seen a case. Charles Barker of Milford raised a laugh by saying he persumed that no nurseryman would acknowledge having yellows in his trees. W. T. Case of Felton said that it could not be expected that a man should hang himself; but candidly, he had never seen a tree with yellows before it had blossomed.

J. J. Ross of Seaford thought that yellows sometimes existed in nurseries. He has seen a tree with yellows that had been planted only one year.

Mr. Slaymaker has seen trees in nursery rows that had yellows. Mr. Derby has seen the same trees and he doubted that they were so diseased.

Prof. Powell said that several states had passed laws requiring the examination of nursery stock. Maryland was one. Conditions different from the ordinary might give young trees the appearance of having yellows when such was really not the case. When trees were budded in a dry time, and warm rains soon followed, a willowy growth started in the

young trees near their base; but this was not an indication of yellows, though pronounced such by many persons. In this view other members agreed.

When the question was asked "How short should the roots of a tree be pruned when it is set?" the chairman expressed the opinion that the discussion might last three days.

Mr. Derby succeeded with pear trees from which all the roots had been cut. Colonel C. J. Monroe said it was now a practice in Michigan to reduce the tree to a whip when planting. Professor White said it was the practice of Mr. Hale and others to cut off the roots; that pears can be grown from cuttings. Mr. Case will plant deep; the more roots the better. If it was available to cut off all the roots when planting, why not dig the tree up every year and so prune it. Captain Emory believed in plenty of roots. Mr. Wright said that trees without roots would live in a rich, moist soil, closely compacted, when they would die under conditions the reverse.

Professor Heiges has planted chestnut trees both ways. Those set by the Stringfellow method (cutting off the roots) have died; the others lived.

Professor Powell said that trees planted by the Stringfellow method often grew onesided.

HORTICULTURAL SOCIETY OFFICERS.

COLUMBUS (OHIO).—President, Professor W. R. Lazenby; vice president, H. M. Sessions; secretary, Professor J. S. Hine; treasurer, George W. Sinks.

ILLINOIS.—President, T. E. Goodrich, Cobden; vice president, F. D. Voris, Neoga; secretary, H. M. Dunlap, Savoy; treasurer, Arthur Bryant, Princeton.

NORTHEASTERN IOWA.—President, Eugene Secor, Forest City; vice president, C. F. Gardner; secretary, C. H. True, Edgewood; treasurer, G. A. Ivins, Iowa Falls.

CENTRAL ILLINOIS.—President, H. Augustine, Normal; vice presidents, C. G. Winn, Griggsville, and Samuel Black, Clayton; secretary, H. L. Doan, Jacksonville; treasurer, J. T. Johnson.

New Jersey.—President, Dr. J. B. Ward, Lyons Farm, Essex county; vice president, I. W. Nicholson, Camden; secretary. Henry I. Budd, Mount Holly; treasurer, Charles L. Jones, Newark.

Missouri.—President, J. C. Evans, North Kansas City; first vice president, N. F. Murray, Oregon; second vice president, Samuel Miller, Bluffton; secretary, L. A. Goodman, Westport; treasurer, A. Nelson, Lebanon.

PENNSYLVANIA.—President, S. B. Heiges; vice-presidents, H. M. Engle, Marietta; H. S. Rupp, Shiremanstown; Gabriel Heister, Harrisburg; recording secretary, Cyrus T. Fox, Reading; corresponding secretary, William P. Brinton, Christiana; treasurer, J. Hibbard Bartram, Milltown.

Nebraska.—President, G. A. Marshall, Arlington; first vice president, J. H. Hadkinson, Lincoln; second vice president, J. W. Hesser, Plattsmouth; secretary, C. A. Barnard, Table Rock; treasurer, Peter Youngers, Jr, Geneva; directors, E. F. Stephens, Crete; J.W. Stevenson, North Bend, J. P. Dunlap, Dwight. The terms of the new officers begin in June.

Western New York.—President, William C. Barry, Rochester; vice presidents, S. D. Willard, Geneva; Wing R. Smith, Syracuse; George A. Sweet, Dansville; Claudius L. Hoag, Lockport; secretary and treasurer; John Hall, Rochester; executive committee, C. M. Hooker, Rochester; C. W. Stuart, Newark; Nelson Bogue, Batavia; E. A. Powell, Syracuse; H. S. Wiley, Cayuga.

THEY LIKE IT.

ALABAMA NURSERY Co., HUNTSVILLE, ALA.—"We enclose money order for \$1 to pay for your valuable journal. We like it and wish you the best success."

D. HILL.

D. Hill was born in Hertfordshire, England, in 1852, almost in the very heart of the largest and most prosperous nursery center of the world, 30 miles from the city of London. He came to the United States in 1873. After spending one summer in a small nursery and fruit farm owned at that time by George W. Spaulding in South Woodstock, Windham county, Conn., he went west to Dundee, Ill., his present home. He engaged with his uncle, William Hill, in the nursery business, principally in the growing of evergreens. Owing to the failing health of his uncle, Mr. Hill in 1875 took possession of the small evergreen nursery, which at that time did not exceed two acres and with a debt of \$2,000, started out as an evergreen specialist with a determination to establish a nursery that would be a credit to the state of Illinois. Those who have visited Mr. Hill's home nursery within the last few years can judge

whether his great undertaking has been a success. In the summer of 1878 Mr. Hill married Miss Maggie Grant, who was an active assistant, having been born and educated in the nursery business, near Aberdeen, Scotland. Mr. and Mrs. Hill now have a family of three boys and three girls.

The Dundee Hawkeye says:

"Through the kindness of Mr. Hill, the evergreen specialist, we were to-day shown through his nurseries adjoining the city. It is not generally known, even in this vicinity, that Dundee has the largest evergreen nursery in the United States, if not in the world; this, however, is true. Mr. Hill being very conservative as to his own personal prosperity, would not talk freely on that subject. We succeeded in learning that at the present time his nursery contained seventy-five to

one hundred millions of evergreens

of all ages and sies, representing a

value of \$200,000. Mr. Hill gives

employment at the present time to sixty-five men. Dundee may well feel proud of such an industry that has grown from a very small institution to its present prosperous condition. There are about one hundred acres, every foot of which is owned by Mr. Hill and covered with evergreens of all colors, shades and tints, from the beautiful Blue Spruce that Mr. Hill tells us is a native of the Rocky Mountains of Colorado, at the sight of which the writer was struck with amazement, down to the glossy dark green of the mountain pines.

"Evergreens in all stages of growth are seen, from the tiny plants which are grown in beds and shaded with frames. Many of these beds contain hundreds of thousand little trees, representing an annual seed investment of several thousand dollars.

"On these grounds are several tenant houses, large packing sheds, besides his large, handsome residence.

"Personally, Mr. Hill is a genial gentleman, as well as a

keen and progressive business man; is popular in the community and greatly respected by all who have business dealings with him. We attribute much of his success to the fact that he never does things by halves. He loves the occupation in which he is engaged. He knows how to advertise his goods and studies well what is for the best interest of his patrons, as well as himself. One other special feature in Mr. Hill's business is his method of packing his evergreens for distant shipment, many being sent to foreign countries, especially of the new and better varieties. Dundee has great reasons for congratulation in possessing Hill's evergreen nursery with the many benefits occurring therefrom."

A COMPREHENSIVE TITLE.

The recently formed American Gardeners' Society has taken a new name, the American Horticultural Society. It was

formed at Mott Memorial hall, New York city on January 11th. Sixty persons were present. Those who participated in the discussion of a constitution and by-laws were delegates from Pittsfield, Mass., Morris county and Monmouth county, N. J., and Dutchess county, N. Y.

The society bears a compreensive name. It is doubtful that its scope will merit it. The officers are: President, John M. Hunter; vice-president, Wallace G. Gomersall; secretary, James I. Donlan; treasurer, Nicholas Butterbach.

A National Horticultural Society is needed, but it will hardly result from the mere application of the name to a local gardeners' society.



D. HILL.

IN AFRICA.

A well known Cape Colony nurseryman has recently written a letter, says the *Fruit Grower*, London, stating that in the season of 1894 he sold 2,000 young trees; in 1895, 25,000, and in 1896, 70,000.

He expects to dispose of quite 200,000 during the next season and will have nearly half a million for sale the season after. No less than 25,000 trees were bought by bona fide Afrikander orchardists, orders coming even from such distant places as Blantyre, British Central Africa and Bulawayo. Another nurseryman sold 3,000 young trees in 1894; 4,000 in 1895, and 4,200 in 1896. It is estimated that fully 200,000 young trees were bought and planted by orchardists in South Africa during the last three years.

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MANY magazines are of interest in a general way. The trade journal discusses only a specialty. It is a business aid, not an entertainer. Subscribe and note the benefit derived.

The National Nurseryman.

C. L. YATES, Proprietor.

RALPH T. OLCOTT, Editor.

PUBLISHED MONTHLY BY

THE NATIONAL NURSERYMAN PUBLISHING CO., 305 COX BUILDING, ROCHESTER, N. Y.

The only trade journal issued for Growers and Dealers in Nursery Stock of all kinds. It circulates throughout the United States and Canada.

OFFICIAL JOURNAL OF THE AMERICAN ASSOCIATION OF NURSERYMEN.

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Payment in advance required for foreign advertisements.

Drafts on New York or postal orders, instead of checks, are requested.

Correspondence from all points and articles of interest to nurserymen and horticulturists are cordially solicited.

Entered in the Post Office at Rochester, as second-class matter.

ROCHESTER, N. Y., FEBRUARY, 1897.

THE TARIFF.

In common with nearly every trade, the nurserymen are looking to the adoption of a revised tariff as a means of improving conditions which have reduced business interests to a low ebb. Almost without exception, the nurserymen of America are for protection. And well they may be. They have seen the present condition of low prices brought about by the removal of the duty upon nursery stock. Foreign nurserymen have flooded the American market with their surplus stocks and something must be done to save the industry.

In another column we present the report of the committee appointed at the annual convention of the American Association of Nurserymen to urge before the ways and means committee of the House of Representatives at Washington, the necessity for a protective duty on nursery stock. That committee found a disposition on the part of the congressional committee to seek data upon which might be founded a tariff that, while protecting American industries, should at the same time be sufficiently conservative to stand. Much as an ample protective tariff is desired, it is essential that the schedules shall be such as to appeal to the wisdom of all parties and be as permanent as possible. Frequent changes in tariff schedules upset business calculations.

Therefore, while the schedule as fixed by the committee of nurserymen may not be as high as many would desire, it should be borne in mind that the schedule as prepared is much more likely to receive favorable action on the part of the congressional committee than if it were higher.

This time the nurserymen of the country are determined to be properly represented before congress on the tariff question. When the matter was in the senate before, the nurserymen were ably represented by Mr. Lamb of Syracuse. But when the time for the final hearing came Mr. Lamb was assured by Senator Hiscock that the latter knew the situation thoroughly and that he would attend to it in Washington; that Mr. Lamb need not be present at the hearing. The result was that other matters occupied Senator Hiscock's attention to the exclusion of this and when the committee asked what the nurserymen wanted there were only florists present and they said, "O, about the same rate, 20 per cent."

One experience of that kind is sufficient. This time the great nursery interests of the country, which half a decade ago had reached a valuation of \$100,000,000, are to be looked after independent of any other interests. What the florists and the seedsmen and the importers want has nothing to do with this case. The welfare of American growers and dealers in nursery stock is the subject under discussion, and the American Association of Nurserymen, represented by a committee of foremost nurserymen of the land proposes to have what the nurserymen of the country want in the way of a tariff. It is for this purpose, among others, that members of congress were sent by the people to Washington. The request made by the nurserymen affects only the nurserymen. Why should it not be granted? Members of the committee of the American Association received requests from seedsmen and florists to intercede in their behalf, but the committee proceeded with an eve single to the nursery interests.

Every live nurseryman will see at once the necessity for securing what is asked in this matter and will be anxious to do what he can to aid in accomplishing the result. And this is how he may aid: Let every nurseryman call upon or write at once to the congressman from his district and urge the claims of the nurserymen to recognition in the tariff schedules according to the plan which the wisest counsel has devised. This plan is embodied in the report of the committee published in this issue, the details of which should be studied.

Here is an opportunity for all to join hands and secure legislation which is sure to bring benefit of a very practical kind.

AFTER FOUR YEARS.

There is hardly a legitimate calling that is not well represented in the curriculum of the high schools or colleges of the country. Yet the close of the nineteenth century sees only a beginning in the study of horticulture in the schools. True, some of the colleges, of which Cornell is a shining example, have for some time been devoting attention to horticulture and with such success that the example promises to be followed.

Education is the watchword of the day. And it is education of the most practical kind, education in special lines as demanded by commercial relations, that is needed. Up to four years ago the nurserymen were without a representative trade journal, while all other lines of trade were supplied. It was the unanimous verdict that the time was ripe for such a journal, and the success of The National Nurseryman has been proved by the active interest taken in it from the start by the nurserymen of the country.

But all this is well known to those who have followed its career and we advert to it at the beginning of the fifth volume to show the increasing interest in matters of trade education. From every quarter come voluntary expressions of approval of this journal's course. It has been the aim of the publishers to make it worthy of the field it so fully occupies.

OPPOSING VIEWS.

It is important that while the subject of the tariff is under discussion the views of all who seek to influence the result should be studied. The press reports state that at the hearing before the ways and means committee Frederick W. Kelsey, chairman of a committee of the Florists Club of New York, presented a resolution asking for a duty of 10 per cent. ad valorem on plants, bulbs, cut flowers and clippings.

In another column we present Mr. Kelsey's views on the tariff question. In several of his statements we cordially acquiesce. His first paragraph is just as we would state it. And there is great variation in value of trees and plants and seedlings. It is because of this variation that an ad valorem duty would undoubtedly fail to be effective and would open up a whole field of possibilities of fraud and incorrect classification; for the customs officer would not be likely to detect in many cases stock billed as second or third quality, which was really first quality. In other words, there is a possibility of fraud under either a specific or an ad valorem duty. And it seems to us that the schedule prepared by the American Association committee, combining as it does both the specific and the ad valorem form of duty, is so adjusted as to conduce to the interests of the American nurseryman.

It was prepared by gentlemen who are eminently qualified for the work, having long been among the largest growers of nursery stock in this country, and at the same time heavy importers. One member of the committee has been for years the heaviest importer of pear seedlings in this country. Another member of the committee was long a grower in this country of plum, cherry and quince seedlings, his stock amounting to 5,000,000 annually at one time. But the entire seedling industry in America, with the exception of the apple seedlings now grown in the West, has been wiped out by foreign competition under free trade.

These facts ought to have great weight in a consideration of the subject.

RENEWAL NOTICE.

Subscriptions to The National Nurseryman for 1897 begin with this issue. Renew at once and secure the complete volume for the year—\$1 to February 1898! Volume V will be of unusual interest.

VIEWS OF AN IMPORTER.

EDITOR NATIONAL NURSERYMAN:

"Replying to your inquiry as to my views on the tariff, I am in favor of conservative, consistent action that will give permanency and stability to the nursery and plant industry of the country, but am radically opposed to any haphazard method of extreme measures that can only result in continued controversy, alike injurious and unsatisfactory to all interests.

"I do not believe in a specific duty on anything, owing to the enormous variation in values of all trees and plants. A specific rate of \$2.00 per 1000, as has been suggested for fruit stocks, seedlings, etc.,—the raw material in this business—is equivalent to about-200 per cent. on the average price, say \$1.00 per 1000; while trained fruit trees, that are worth from \$1.00 to \$2.00 each, would under the same clause be subject to a duty of one-fifth to one-tenth of one per cent. Three cents each on roses is equivalent to 600 per cent on Manetti, Multi-flora and Dog rose stocks, at \$5.00 per 1000; while roses worth \$25 per 100 would pay 12 per cent under the same classification.

"This enormous variation in value of trees and plants, according to size, age and other conditions, applies to all nursery and plant materials; and such a variation in rates of duty would be so unjust and inequitable, as to make a travesty of the whole question of tariff revision.

"Under any specific duty that can be named, this inequitable per centage of tariff would exist; and under any specification as to age of plants would open up a whole field of possibilities of fraud and incorrect classification. The lack of correct and uniform classification has caused more trouble and injustice at the various custom houses of the country the past seven years than probably any one feature of the last two tariff acts.

"For these reasons, a tariff law based upon a simple uniform ad valorem rate, applying to all classes of nursery and plant material, is in my judgment the only possible solution of the question either for securing equity, permanency or proper classification.

"As to the rate of duty, I do not believe the mass of producers and consumers of the country will tolerate a return to the high rates imposed as a war measure at the time of the Rebellion, or even the rate that was considered by many excessive under the tariff act of 1890. The McKinley tariff law has once been before the country, and a return to the extreme measures of this act will, I believe, produce a similar reaction of the future.

"The depressed condition of the nursery and plant industry, as with other commercial and industrial interests, is not, in my judgment, owing in any material measure to the present tariff law, but to the unsuitable financial and monetary conditions that have prevailed since the panic of 1893. And the tariff remedy proposed is, I believe, one that will tend to aggravate rather than ameliorate the conditions.

"The freight alone on most nursery material is of itself equivalent to a high duty, and when it comes to a rate of 100 per cent. to 200 per cent or 500 per cent, from ten to twenty times higher than was ever favored even in times of war or the high rates of the McKinley bill, I do not believe any such measure can be sustained.

"Personally I have no objection to these rates, but as a question of public policy I believe their enactment would be a vital mistake and the question arises: Who would be benefited? Will the small producers that make up the mass of people engage in the industry all over this country, who do not attempt to produce this material, favor such rates; such an enormous tax? Would it benefit the mass of people, the consumers, all over the country? Or can it be justly claimed that such a measure would restrict production, drive out of business the smaller producers and benefit the comparatively few at the expense alike of the many small producers and the people generally?"

FREDK. W. KELSEY.

New York City, Jan. 18.

SUBSCRIPTIONS FOR 1897 begin with this issue. Send \$1 and secure the entire volume.

WESTERN NEW YORK.

PROMINENT NURSERYMEN AND PROFES-SORS AT THE ANNUAL MEETING—THE ADDRESS OF PRESIDENT BARRY.

The forty-second annual meeting of the Western New York Horticultural Society was held at Rochester on January 27-28. Among those present were the following: Irving Rouse, Lewis Chase, Rochester; S. D. Willard, Geneva; Wing R. Smith, Syracuse; H. S. Wiley, Cayuga; Theodore S. Hubbard, Geneva; George A. Sweet, Dansville; E. C. Pierson, Waterloo; C. L. Hoag, Lockport; J. J. Harrison, Painesville, Ohio; C. F. McNair, Moorestown, N. J.; Nelson Bogue, Batavia, N. Y.; George Ellwanger, Robert Ades, John Charlton, C. M. Hooker, Rochester; C. H. Perkins, C. W. Stuart, Newark, N. Y.; George G. Atwood, E. A. Bronson, Geneva, N. Y.; Virgil Bogue, Albion; D. Bogue, Medina; W. P. Rupert, Seneca.

Also M. B. Waite, pathologist department of agriculture, at Washington, D. C.; Professor Isaac P. Roberts, director of the College of Agriculture at Cornell University; Professor M. V. Slingerland, assistant entomologist of Cornell University Experiment Station; Dr. G. C. Caldwell, chemist of Cornell University; Professor W. H. Jordan, director of the New York State Agricultural Experiment Station, Geneva; Professor W. R. Lazenry, dean of the Department of Horticulture and Forestry, Ohio State University Columbus, Ohio, and Professor Victor H. Lowe, entomologist of the New York State Experiment Station, Geneva.

The fruit exhibit was exceptionally good. The best two exhibits were those of the Geneva Experiment Station and the exhibit of the Ellwanger & Barry nurseries. The first included 114 varieties of apples, pears and quinces. The Ellwanger & Barry exhibit showed 150 varieties of grapes, apples, pears, quinces and plums.

President William C. Barry, in his annual address, referred to the importance of fruit growing and to the successful societies in Boston and Philadelphia, which own horticultural halls and to the state societies throughout the country. He hoped to see the membership of the Western New York Society reach a total of 500 soon. President Barry reviewed the fruit season of 1896 in Western New York—a favorable season for apples and an enormous crop resulting in discouraging prices. The lessons resulting were the necessity for greater care in packing and marketing the crops, the need of storage houses and a diversity of fruit. He endorsed the Jonathan apple and the recently introduced varieties of the plum raised by Luther Burbank, of California.

The crop of pears was unusually small and the fruit commanded good prices; the plum and cherry crops were almost failures. Peaches, northern grown, were very scarce. Prices were low in consequence of a large supply and the inability to market it advantageously. As the years pass and experience increases it becomes evident that a greater variety of products is necessary and the planter should cultivate fruits for the various seasons of the year, thus giving employment to a regular force of hands who on account of their proficiency become indispensable on the fruit farm.

President Barry reviewed the weather conditions of 1896, which veterans in the fruit growing business declare was ex-

traordinary and abnormal in all respects. Reference was made to the death of William Brown Smith, the veteran nurseryman of Syracuse; Professor Albert Nelson Prentiss, of Ithaca; John K. Beckwith, of the nursery firm of H. and J. R. Beckwith Brighton, N. Y., and Ernest Gustavus Lodeman of Ithaca, who committed suicide.

A long and varied programme was presented amid lively discussion, in which many of the 400 in attendance participated. Discussing the newer varieties of plums, S. D. Willard, of Geneva, traced the progress of many varieties of plums which had been introduced into this country from Japan and the countries of Europe. He prophesied plums in the next ten years which will be far superior to any known variety of the present time.

A resolution was introduced by G. C. Snow, of Penn Yan, to the effect that an effort be made by the society to secure national legislation in placing a high duty on fruit imports. The resolution was aimed especially at Canadian gardeners, whose products are admitted to the United States free of duty. The decision promised to be more political than horticultural, and at President Barry's request the resolution was withdrawn.

EASTERN APPLE ORCHARDS.

To get a proper respect for the apple one should take a trip through New York and New England in apple blossom time, says the Fruit Grower's Journal. A hundred acres of apple blossoms is a sight one may see in duplicate many and many a time in the Empire State; and in New England one will be surprised to see apple trees planted before King George III was big enough to even think of taxing tea or even of drinking it. Apple trees from seventy-five to two hundred years old may be seen flourishing around in stray fence corners (stone fence corners) or blooming and bearing in the woods that cover the hills and hollows of the land of our pilgrim fathers. If you ask how these apple trees came to stray out into the woods, the people if they know will tell you that the woods strayed into the apple orchards; that the land was once all under cultivation, and that the woods now cover abandoned farms. The inhabitants fled to better soil, but the apple trees stayed by the old farm.

A New Jersery nurseryman says: "In connection with Japanese plums, I am reminded of words of caution spoken by Professor Bailey as to the probability of these plums developing some weakness. I know of some four or five hundred trees which have been growing for some seasons on the sandy soil of this state and are thoroughly infested with black knot. Although young and growing thrifty, and with smooth healthy bark, the knot is breaking out on most of the trees in from one to four or five places.

"This is the only case of the kind I am aware of, but it seems to prove the Japan plum is not proof against the enemy. It will be of interest to watch the development and see if the tree will be able to overcome the difficulty."

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NEBRASKA.

SEVERAL PAPERS OF STATE INTEREST READ AT THE SOCIETY MEETING—GENERAL TALKS ON FOREST AND FRUIT.

The twenty-eighth annual meeting of the Nebraska Horticultural Society was held at the State University, at Lincoln, on January 12-14. Several hundred plates of choice apples were exhibited. President E. F. Stephens, of Crete, in his annual address mentioned, as needful for horticultural success, cold storage, railroad facilities, the building of good business reputations, freer planting, strong efforts for local organization.

Papers were read by Peter Youngers, Jr., Geneva, on "Forest Trees in Nebraska;" Rev. C. S. Harrison, of Weeping Water, on "The Beautiful Home;" H. F. McIntosh, Omaha, on "The Press: Its Relation to Horticulture;" A. F. Coleman, Corning, Ia., on "Crossing of Fruits;" Prof. Lawrence Bruner, of the University, on "Insects Injurious to Trees."

Silas Wilson, Atlantic, Ia., sent a letter giving practical instruction on the growing of grapes.

In his paper Mr. Youngers favored in the order named ash, elm, honey locust, black walnut and Russian Mulberry, and of the everngreens, red cedar, Scotch pine, Austrian pine, Black Hills spruce, Silver fir and Blue Spruce. He recommends ash for general planting everywhere, and elm as the best for shade.

Prof. C. E. Bessey of the University gave one of his interesting papers on "Varieties and Distribution of Forest Trees in Nebraska." He showed that the treeless plains of Nebraska had been partially wooded at one time. From the east came such trees as could stand the climatic conditions creeping along the water courses or being dropped as seed by birds. From the west the mountain trees seeds came down the streams. Nebraska thus has a greater variety of native trees than Iowa for instance. The trees found in the northwest corner of Nebraska are often those which have even reached Iowa. The total number of varieties now growing in the state is between sixty and seventy. Dr. Bessey urged the re-foresting of the sand hills of the state. In connection with this topic he wished people to understand that the sand hills are not all sand. The soil of these sand hills is better than that of Michigan on which heavy pine forests grow. He would begin by planting the trees in the valleys and creeping up and over the hills beginning at the southeastern portion of the Sand Hill District. He thought this a work worthy of governmental assistance.

Prof. E. T. Hartley urged the planting of the wild cherry which grows in some form or other all over the state. Prof. H. B. Ward of the University gave beautiful word paintings of the "Forest Gardens of the Harz Mountains" in Germany.

A number of potted palms graced the desk and the seats were all filled as amid fragrant scent of apples and pines the society met Wednesday morning for the second day's session. J. A. Hogg of Shelton read the first paper on "Essentials of Successful Orcharding in Western Nebraska." He found that two old trees headed from four to six inches from the ground were the most likely to grow. He gave five reasons: branching out protects the trunk from injury, it prevents sun scald, it keeps the ground moist and prevents evaporation, wind

does not injure the fruit so readily, and the fruit is easier to piek. The branches also tend to guard the trunk against hail. He uses Honey Locust and Russian Mulberry for wind break and finds for success with grapes sub-irrigation is necessary.

C. A. Barnard discussed "Methods and Varieties of Apples for Commercial Orcharding,," recommending Early Harvest and Red Astrachan for early varieties, Fall Winesap and Maiden Blush ripening next in order, and for winter use Winter Winesap, Jonathan, Genitan, and Missouri Pippin. G. A. Marshall of Arlington in his talk on "Profitable Orcharding" said that Early Harvest and Maiden Blush which succeed well in Southeastern Nebraska will not do well north of the Platte. Walbridge and Iowa Blush take their place. Whitney also is good. J. M. Russell of Wymore was absent, but his son talked for him on "The Peach: Our Experience With it in '96." They head the tree to the ground and prune freely. The crop was large, quality not so good as in former years, prices low, 60,000 baskets selling at from 20 to 40 cents per basket, wholesale.

The report of the treasurer showed that the society has \$1,178.25 on hand.

EASTERN NURSERYMEN'S ASSOCIATION.

At a meeting last month of the Eastern Nurserymen's Association, Chairman Irving Rouse presented the report of the committee appointed to present a schedule to the ways and means committee at Washington. The report included the schedule which appears on the first page of this issue of The National Nurseryman. A resolution was adopted to the effect that the nurserymen of the country ask this schedule of tariff rates or none at all.

Obituary.

Wakefield M. Samuels, of the firm of W. M. Samuels & Co., Clinton, Ky., died Jan. 8, aged 76. Mr. Samuels engaged in the hotel and mercantile business until 1858. After serving two terms as sheriff he entered the nursery business, establishing the Mississippi Valley Nurseries. At the organization at St. Louis, in 1880 of the American Horticultural Society he was a charter member, was made vice-president for his own state, and also for the American Pomological Society. He was elected an honorary member of the various state societies, attended the principal meetings of the organization and furnished articles so highly esteemed as to be copied in the leading papers in the United States. He was for 50 years a Free Mason and was highly respected in the community. He leaves two sons and three daughters.

William L. Smith died at Johnston, R. I., on January 13. He was born at Warwick, R. I., in 1816.

GREAT HELP TO THE BUSINESS.

EDWARD BACON, DANSVILLE, N. Y.—"I enclose \$1 for subscription. I appreciate your journal very much and think it a great help to the business."

COULD NOT DO WITHOUT IT.

JAMES W Brown, CANTON, PA.--"Enclosed find \$1 to renew subscription to the NATIONAL NURSERYMAN. I would not do without it."

PENNSYLVANIA.

THIRTY-EIGHTH HORTICULTURAL SOCIETY MEETING—REVIEW AND PROSPECT OF THE CONDITION OF FRUIT.

The thirty-eighth annual meeting of the Pennsylvania Horticultural Society was held at Allentown, January 19-20. The report of the general fruit committee, prepared by Chairman Cyrus T. Fox showed that in three-fourths of the counties the apple crop was large. In some sections thousands of bushels went to waste. Pears had an "off year," as there were barely more than half a crop. Fire blight affected many varieties which heretofore escaped. The value of spraying was demonstrated during the year, and where the trees were sprayed the crop was good.

In most sections peaches have been in decadence, there being no attempt at orchard culture. There is a likelihood of more attention being paid to this fruit hereafter, as orchards are being set out in many counties. The crop was hardly more than one-third. Very few plums are grown. The fungus diseases play havoc with the trees and the curculio does the rest.

More quince trees are being planted and good results obtained. The past season was not favorable for the quince, but occasionally a good report was received. There was a good crop of sweet cherries, but only half a crop of sour cherries. In some western counties cherries were a failure.

There was an unusually good crop of grapes. Mildew affected some crops. There was a fair yield of strawberries, but dry weather affected the crop in some eastern counties. There were heavy yields of raspberries and blackberries, currants and gooseberries.

President Moon delivered his annual address and there were papers by Professor H. E. Van Deman, Gabriel Heister, E. T. Ingram, Calvin Cooper, W. B. K. Johnson, F. N. Bartram and others.

Dr. G. G. Groff, Lewisburg, special agent of the state department for the San Josè scale, gave the number of nurseries in the different states infested with San Josè scale.

Howard Chase, Philadelphia, urged the necessity of legislation to prevent the dissemination of infested nursery stock, adding that a bill to this end was in preparation for presenting to the legislature.

A NATIONAL CONVENTION.

S. H. Cushman, president, and W. W. Farnsworth, secretary of the Ohio Horticultural Society, pursuant to a resolution adopted at the meeting in February 1896, have issued a call for a national convention of delegates from horticultural and agricultural societies, experiment stations and kindred organizations, at the Ebbett House, Washington, D. C., at 10 a. m., March 5th, to consider the best measures to be taken in securing such national legislation and supplementary, uniform, state legislation as may be necessary to prevent the dissemination of noxious insects and fungi and prevent their introduction into the United States from other countries.

ILLINOIS HORTICULTURISTS.

The fortieth annual meeting of the Illinois Horticultural Society, was held at Springfield, Dec. 30-31. Among those present from other states were Secretary J. Cole Doughty of the Jewell Nursery Co., Lake City, Minn.; J. Bradley, New Haven, Mo.; R. Morrill, Benton Harbor, Mich. The treasurer of the society is Arthur Bryant, of Princeton. He with Henry Augustine of Normal, and E. A. Riehl of Alton, are the directors. They reported upon the work at experiment stations. C. H. Webster, of Centralia, took three first premiums on apples and pears exhibited.

Professor F. A Forbes of Champaign, state entomologist, presented the report of the committee on legislation, and strongly urged the enactment of a law providing for the extermination of the San Jose scale in Illinois.

As a business investment would it not pay you to read The National Nurseryman regularly at an outlay of \$1 per year? Read this issue before you answer.

Recent Publications.

Harrison's Nurseries, Berlin, Mo., are well represented by an attractive catalogue just issued, which gives due prominence to this firm's specialty, strawberries.

The California Fruit Grower has donned a new dress, which is in keeping with the progressive spirit which has long characterized this popular trade journal. The fruit interests, the most important in the Golden state, are well looked after by the California Fruit Grower.

In Bulletin 122 of the Cornell University Experiment Station Professor L. H. Bailey explains the extension work in horticulture provided for under a state appropriation. In Bulletin 123 Professor M. V. Slingerland of Cornell, describes green fruit worms which have recently caused considerable damage in New York state.

The thirty-ninth year of the Spaulding Nursery and Orchard Co.. Spaulding, Ill., finds that house in the enjoyment of a large and successful business, supplied through a nursery stock which includes all that is demanded in the line of fruit and ornamental trees and plants. Spaulding's "Manual of Favorites" is indeed a manual of good things in this line. It is well arranged, comprehensive and attractive. It consists of 70 pages and will be preserved for reference.

Greening Brothers, Monroe, Mich., are fully up to date in the matter of a catalogue. They have issued a copyrighted illustrated book that will attract attention anywhere. It cantains a comprehensive list of the varieties grown by this firm, an account of the firm's growth in thirteen years and a guide for planters, besides other features. Upon the back cover is an illustration of the entire nursery plant. The Messrs. Greening say the descriptions of sorts have been revised by Professor L. R. Taft and Hon. T. T. Lyon of Michigan.

The spring catalogue of the Storrs & Harrison Co., Painesville, Ohio, merits the attention it will receive in all quarters. It is neatly and attractively prepared, and within its 168 pages may be found mention of all that is worth growing in the nursery line. For forty-three years the stock grown by this firm has been going to the plant and tree planters of this country, and the members of the firm point with pride to the commercial orchards in all fruit-growing sections, to trees and plants in yards, to pleased customers in every state in the Union. Their nurseries stand second to none either in complete assortments of fruit and ornamental trees and shrubs, small fruits, grape vines, roses, hardy plants, bulbs, etc., in quality of stock produced, or in facilities for handling, packing and storing. They endeavor to test all new American and European introductions, offering only those they believe will be of value, and discarding old sorts only as they are superseded by better kinds. They make a special point of growing stock true to name and of strong vitality.

APHIS ON NURSERY TREES.

Replying to a question at the recent meeting of the Michigan Horticultural Society, Professor M. V. Slingerland of Cornell University, said that the black peach aphis, which has appeared in several places in Michigan, was probably brought on nursery trees from New Jersey or Maryland, where it has been quite troublesome for several years. The pests are found on roots during the winter, but are often seen upon the leaves and new branches during the summer. They may be scattered by ants, or by flying in case of those upon the leaves. He advised that all nursery trees be dipped in tobacco water or whale oil soap solution. No experiments have been conducted at Cornell, but of a number of remedies tried by the Michigan station, wood ashes seemed most effectual.

STUB-END TREE PLANTING.

A writer in the Rural New Yorker, referring to the photograph of H. M. Stringfellow exhibiting his root-pruned tree before and after a year's growth, says:

"At Galveston, with a semi-tropical climate, 92 days of rainfall, a precipitation of 62.56 inches per annum, and an open soil filled with vegetable matter, the conditions for plant life may be such that cuttings strike root readily, and trees will grow when cut back to an extent that would assuredly be fatal elsewhere. If this be so, few localities have thus favorable conditions, and trees must be given a reasonable chance of life under ordinary or adverse conditions, as well as in the best. Trees cut back as shown, planted in stiff clay soil with no rain for six weeks after planting, would no more grow than pea sticks. Nature would not use time and material in elaborating a system of roots for a young tree, if they are not needed, and he who thinks that he knows better than the Creator how to start young trees, will not make others believe it.

"As for the saving of freight by the sub-end system of pruning, one would better let the stubs alone, and save all the freight. There are 5,000 nurserymen in the United States, some of whom represent firms more than a century old, all of whom know something about trees. It is not to be supposed that they handle hundreds of cords of useless rubbish yearly, and fill their packing cases with a makeweight, to unload the trash on their customers. They know that trees will not grow without a healthy root system, and that the claim that all roots should be cut off before trees are planted, is an idle vagary."

"As for the correspondent who planted some closely-cut plum trees that unexpectedly lived, that only shows that trees will sometimes bear a great deal of neglect or abuse; it does not prove that such treatment is most congenial to them. When one plants a tree, let him get a well-rooted one, handle carefully and remember that Paul may plant and Apollos may water, but God alone giveth the increase."

Myrobolan Plum Stocks. We hold them for you in frost-proof We hold them for you in frost-proof

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PEACHES. CHERRIES (especially E. Richmond,)

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SEEDLINGS in any quantity for the trade. Very distinct from North-Eastern White Spruce.

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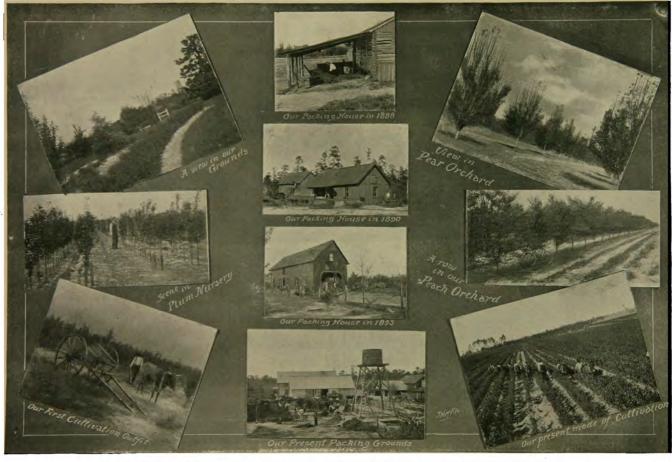
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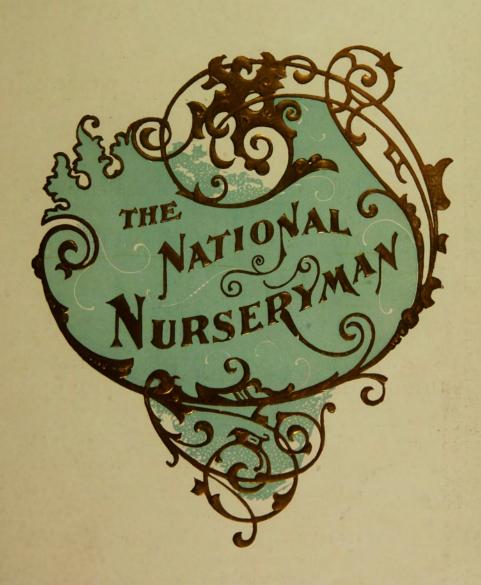


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FOR GROWERS AND DEALERS IN NURSERY STOCK.

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VOL. V.

ROCHESTER, N. Y., MARCH, 1897.

No. 2.

SCALE IN NURSERY.

EXPERIMENT STATION INVESTIGATION OF ONE OF THE MOST SERIOUS PESTS OF DECIDIOUS TREES—THE RESPONSIBILITY OF THE NURSERYMEN.

In his paper on "Three Important Insects Injurious to Nursery Stock," before the Western New York Horticultural Society, Victor H. Lowe, of the New York State Experiment Station at Geneva, said:

During the past season I have frequently been called upon to inspect nursery stock in the western part of the state. These inspections were made to enable the nurserymen interested to comply with the Maryland law regarding the inspection of nursery trees sold within that state. The three insects to which I wish to call your attention are the peach tree borer, the wooly louse of the apple, or wooly aphis as it is commonly called, and the San Jose scale."

Regarding the peach borer I suggest the burning of all unsalable stock would remove many breeding places for the moth. I think that if nurserymen would refuse to accept trees which show any sign of the peach tree borer the increase of this pest would be greatly lessened. Experiments showed that dendrolene cannot safely be used on nursery stock as a preventive of insect depredations, if such prevention requires the application of the dendrolene during the growing season to all parts of the trunks of young trees.

The woolly aphis spreads with remarkable rapidity, breeding by the million. An old neglected apple orchard or a few neglected apple trees in the vicinity of a nursery may be the cause of infected stock in that nursery. Observation has shown that trees grown on sandy soil are more likely to be infested than trees grown on heavier soil. Reliable writers on economic entomology say that strong kerosene emulsion sprayed on the infested trees during the summer, is fatal to all of the lice it touches; also that the same insecticide applied to the soil about the roots of the infested tree in sufficient quantity so that the soil becomes saturated with it, will free the roots of these pests. Some nurserymen have thought that "puddling" the infested roots will kill the lice, but this method is not to be depended upon, as the cottony covering which the lice always provide for th mselves is proof against mud and water as shown in the above experiment.

It may happen, and I think it does often happen even in the best regulated nurseries, that many of the apple trees when brought to the packing yard will be found harboring a few of the woolly lice in the scars on the trunk. It is unfortunate for the tree that the deep scars are there, for, in addition to other evils, they furnish excellent retreats for the lice. These trees are sound in other respects and hence are too good to throw away. Some quick, easy and inexpensive method of treating them is yet to be devised. At present we can only call atten-

tion to our experience last season which demonstrated than an average small boy with sharp eyes, a small dish of kerosene and is short stick with a wad of cheese cloth tied on the end, can, in a few hours and hence at a small cost to the dealer, transform hundreds of these infested trees from trees which should be thrown out as culls to salable stock. We found that it was only necessary to touch the infested spots with the oilsoaked rag to kill the lice. Fumigating with hydrocyanic acid, gas, or dipping the trees in a strong solution of soap suds may prove even more satisfactory, but experiments are wanting.

The San Jose scale belongs to the same order of insects as the woolly aphis and to the same family as the common oystershell bark louse. It differs from this insect in many respects, however. The covering which the insect provides for itself is in the form of a scale The scale of a full grown female insect is nearly circular and somewhat conical in shape The color is dark slate, with a dark spot on the slightly raised portion at the center. The scales are small when compared with those of many other species of scale insects, a single scale measuring only about one-eighth of an inch in diameter.

Unless occurring in large numbers, the scales do not readily attract attention because of their small size and dull color. As a rule, however, they cover a branch so completely that the natural color of the bark is obscured and at a little distance appears to have turned to an ash gray. The bark under the scales will be found in some instances to have turned red. In others it is darker colored and somewhat purplish. When attacking fruit, the scales are more conspicuous, as each scale is enclosed in a ring of bright red. This is especially true in the case of infested pears. When the scales occur in large numbers on the fruit, the rings of color will merge into each other forming blotches of red.

The scales infest all parts of the trunk and branches, from the crown of the root to the highest twig. The leaves, too, are infested and the fruit, as previously indicated. When infesting the leaves, the scales are found in the greatest abundance on the under surfaces along the midrib and larger veins. The male scale is oblong-oval in shape. It is usually darker in color than that of the female. The mature male is very small and frail, and is provided with a pair of delicate transparent wings.

At present the San Jose scale is doing its worst work in this state on Long Island. It has been found from one end of the island to the other. On two different occasions we found fruit exhibited at the Long Island fairs which was badly infested. Since that time we have observed it in the nurseries there, and have received specimens from both orchards and gardens. The most deplorable part of it all is that some of the fruit growers and nurserymen have notetaken the trouble to become familiar with this insect, while others seem to be indifferent to the whole matter. We have no good reason to expect success in our endeavors to eradicate this insect from our state or even to prevent its further spread unless every nurseryman and fruit grower will take the pains to become so familiar with

willing to take any measures necessary to hold it in check.

Among the questions which have been repeatedly asked me by nurserymen regarding this insect are the following: "Do you think that the San Jose scale can survive the winters of Western New York?" Also, "What precautions would you suggest to us to avoid danger of getting the scales in our nurseries?"

My only answer to the first question is that, judging from the history of certain other scale insects, we have no reason to doubt that the San Jose scale might in time become sufficiently acclimated to successfully resist our cold winters. This is already indicated by the fact that the San Jose scale has been found in three different places in Southern Michigan where the winters are fully as severe as here, with the exception perhaps of the severe cold winds which are equally common in Michigan only along the lake shores.

· As to the second question, certainly the most necessary precaution is constant watchfulness, both as to the condition of



SAN JOSE SCALE ON PEAR.

our trees and shrubs and also to such stock as may be received from other nurserymen. Dealers cannot be too careful about buying stock from infested districts, and should not receive it unless they have positive evidence that it is free from the scale. If, in addition to the precautions taken by the nurserymen, orchardists who are about to purchase young trees would insist that the trees be carefully inspected before shipment and then inspect them carefully when they arrive, this double precaution could not fail to be a decided check upon the spread of this pest.

Another precautionary measure which might be resorted to with good results is the prohibiting the sale of infested fruit within the state. As early as July of 1894, we found pears infested with the San Jose scale for sale on fruit stands in New York, Brooklyn and Jamaica, L. I. In the first two instances, all of the infested fruit observed were Bartlett pears from California, while at Jamaica, not only infested pears from California but also infested pears grown on the Island were found for sale in the market places. This together with the fact that infested fruit was sent around to the Long Island fairs not only that year and the year following, but this past year as well,

this test that he can recognize it on first sight, and then be indicates almost criminal carelessness on the part of those responsible.

> As to remedial measures, extensive experiments conducted by the Division of Entomology of the United States Department of Agriculture indicate that a solution of whale oil, soap and water, two pounds of soap being used to the gallon, will kill the scales. Experiments begun last year by F. A. Sirrine, the entomologist of the New York Experiment Station located at Jamaica, indicate that infested nursery stock may be successfully treated by being submitted for one hour to the fumes of hydrocyanic acid gas or by dipping in a solution of whale oil soap at the strength above indicated. However, such treatment as this is not always satisfactory as one or two fertile female insects might easily escape, and these would be sufficient to infest a whole orchard in time.

> Western New York nurserymen are to be congratulated upon the care which they have thus far exercised with regard to keeping this serious insect pest out of their nurseries, and it is to be hoped that the near future will find every dealer in nursery trees in this state sufficiently familiar with the insect to recognize it at once and also be willing to make any effort to stamp it out. It is highly important that this careful watch be kept up not only by nurserymen, but by every fruit grower, and especially those who are buying young trees, for, in so doing, we are resorting to the surest means of preventing the spread of one of the most serious pests of deciduous trees."

CONNECTICUT POMOLOGISTS.

The sixth annual meeting of the Connecticut Pomological Society was held at Hartford, February 10th and 11th. President Hale reviewed fruit crops, Professor C. G. Gully, of Storrs College, said he had visited all the fairs in the state and had found that in few instances was the fruit correctly named. State Pomologist N. S. Platt discussed "Spread of Black Knot," and H. E. Van Deman "Relations Between Nurseryman and Fruit Grower." The following officers were elected: President, J. H. Hale, South Glastonbury; vice-president, J. H. Merriam; secretary, H. C. Miles; treasurer, R. A. Moore.

WISCONSIN HORTICULTURISTS.

The annual meeting of the Wisconsin Horticultural Society was held at Madison, February 5-6. Among those present were F. C. Edwards and D. C. Converse, Fort Atkinson; George J. Kellogg, Janesville; A. D. Barnes, Waupaca. There was a general discussion of Wisconsin fruit interests. The following officers were elected: President, L. G. Kellogg, Ripon; vice-president, William Toole, Baraboo; secretary, A. J. Phillips, West Salem; treasurer, R. J. Coe, Fort Atkinson; corresponding secretary, W. J. Moyle, Yorkville.

Great preparations are being made for the international horticultural exhibition at Hamburg, Germany, from May to October. Cordial invitations have been issued to all countries to send exhibits. California is arranging to be well represented. An effort was made by the management to secure an exhibit from Western New York, but fruit growers of that section decided not to undertake it.

SOUTHERN PINES.

THE DELIGHTFUL WINTER RESORT SEEN FROM A NURSERYMAN'S STANDPOINT—THE GREAT VAN LINDLEY PEACH ORCHARD.

SOUTHERN PINES, MOORE Co., N. C., Feb. 12.—Thinking a few words from the "Sunny South" might be of interest at this season, when for the most part our northern states are covered with snow and ice, I take the opportunity to give you a description of this place, and tell how I happened to be here. Having suffered in the northern part of Massachusetts for a whole year, first with pneumonia, then with the grip and nervous prostration and finally the asthma, I decided to come here for the winter. Through our friend J. Van Lindley, who is interested in a large peach orchard at this place, I obtained from the superintendant of the orchard, E. B. Hodgin, very comfortable quarters.

The house is new and commodious, standing nearly in the centre of a 400 acre peach orchard, about three miles west of Southern Pines, with an electric road within 100 feet of the house, whose cars pass hourly to and from Pinehurst, which is situated three miles further west. Wood can be had here for the asking; as the company owns 1700 acres, which is being cleared of the timber as rapidly as possible, to prepare the land for orcharding. With an ample open fireplace in my room, and plenty of "black jack" and "fatty pine," we have such fires as were enjoyed by our ancestors, but which this generation at the North knows very little about. Suffice it to say that I have everywhere been received with that true southern hospitality, for which this section is so justly noted; and, with constantly improving health, I hope to return to Massachusetts before April 1st, and be prepared for a good spring trade.

Southern Pines is situated near the centre of a large sand-hill, called Shaw's Ridge, some 50 or 60 miles from east to west, and not quite so far from north to south. The surface is undulating, the sand varying in depth from 4 or 5 to 70 feet. Numerous small streams of pure water intersect it in all directions. The elevation is about 600 feet above sea level, and situated about half way between the mountains and the sea. No malaria has ever been known here. The land, except where cleared, is covered with a heavy growth of the long-leaved southern pine, Pinus palustris. The resinous smell of these pines is said to be very effective in the cure of all pulmonary diseases. This fact is well established in the case of hundreds from your own state and New England, who came here confirmed invalids, but who are now enjoying comfortable health, with a new lease of life.

LOCAL CHARACTERISTICS.

The town contains about 500 permanent inhabitants, with more than twice that number in winter. Some five or six hotels, with numerous boarding houses and cottages, are patronized by as social and intelligent a class of people as one could wish to see. Here are ministers, teachers, doctors and lawyers of good ability, who have come generally on account of the failing health of themselves or families; children are sent to school, and the churches are filled every Sunday with attentive and appreciative audiences. No intoxicating drinks are allowed to be sold in this or the neighboring towns. Pity

as much could not be said of some of our northern cities and towns.

There is one sad feature about this entire section; the noble forests of pine, grand old giants of centuries, running as straight as an arrow, 70, 100 and even 130 feet tall, have been mutilated, murdered, for their turpentine, and after being exposed to numerous forest fires, their blackened and decaying trunks stand with outstretched arms, as if pleading for protection until some friendly storm finishes the work of destruction, and they lie promiscuously, like fallen heroes, intercepting public travel and making what would otherwise be delightful woods rambles, both tiresome and disagreeable. Here may be found the beautiful trailing arbutus by the acre. It is just beginning to show the points of its pink and white petals. The white flowering dogwood, Cornus Florida, can be found everywhere, while in the brooks or "branches" can be found Holly trees 15 feet tall, the Magnolia glauca, the Andromeda arborea, and several other Andromedas; also the Tulip tree, which with us is a small tree, two or three feet in diameter with a straight trunk 50 to 75 feet in height. The high land, after the pines have been destroyed, is generally occupied by the "black jack" oak which is of very slow, stunted growth. The pines are trying hard to get a foothold again, and small ones can be found by the thousand. Away on the distant hills can be seen a medium growth of pines, which appears to have escaped the hand of the destroyer.

LAND AT 50 CENTS AN ACRE.

The land here, having been stripped of its original growth was considered as the darkey said "mighty poor ground" and sold in large quantities as low as 50 cents to \$2 per acre, and yet when certain fertilizers are applied, notably potash, very respectable crops can be raised. Peaches and grapes of fine quality are grown here by the hundred acres. Plums, apricots and small fruits generally are being raised in large quantities for the northern markets. In almost every garden one sees fine specimens of Magnolia grandiflora (the evergreen magnolia) while the English Ivy can be seen covering fences and buildings as fresh and green as in any lady's parlor. One advantage that this place will have in the future as a winter health resort, is its accessibility and nearness to the New England and eastern middle states. Twenty hours by rail from New York city, will land you in Southern Pines. The cost of the round trip is \$26.50-good from Nov. 1st to May 31st with the privilege of stopping over 15 days either way at the principal cities.

The first appearance of the place to a stranger is that it is rough and unfinished. But it is designed in the near future, to put in a perfect system of drainage, introduce water, and have the streets and rough places graded down. Less than two years ago James M. Tufts, a wealthy and benevolent Boston man, was so impressed with the place as a health resort, that he immediately purchased something over 5,000 acres of land, six miles west of this place at about \$2 per acre. He commenced by enclosing 100 acres with a Page's wire fence, to keep out stray animals; he employed the eminent landscape architects, Olmstead, Olmstead & Eliot, who made plans for a unique little village-sewerage, water works, electric power, all complete. Some 40 or 50 hotels and cottages have already been built; also a barn with its Jersey cows, deer park, garden and nursery; lawn tennis and croquet grounds are scattered about generally.

Warren H. Manning, landscape architect, of Boston, has had the general superintendency, laying out the ground, planting the trees, shrubery, &c. This new town has been christened Pinehurst (pine rest). An electric road has been built to it from the station at Southern Pines, and as I write cars pass my window to and from Pinehurst every hour.

THE VAN LINDLEY PEACH ORCHARD.

A few years ago J. Van Lindley, of Pomona, N. C., observed that peach trees growing in this sand, seldom failed to bear good crops of fruit of the finest quality. He immediately purchased 1700 acres of cheap land; formed a joint stock company, of which he is president and largest owner; and cleared and prepared the land for a commercial peach orchard. In 1892, 50,000 trees were planted, and more or less every year since. At the same time there were planted 5,000 Kieffer pears; 1,000 Japan plums (largely Abundance); 12,000 black-berries (mostly Early Wilson); 25 acres were planted to grapes, largely Niagara, Delaware and Concord, (planted 6 x 6 ft. and trained to a single stake). Apricots, figs, Japan persimmons, strawberries and raspberries, were tried on a small scale, making this really an experiment station.

The first lot of peach trees were planted 16 x 16 feet—but later they were planted 12 x 20 feet, the rows running nearly north and south, to protect each other from the hot sun. The trees are trained very low, 15 to 20 inches, and they are kept headed back, so that all the fruit can be reached by a person standing on the ground. The trees have the appearance of a lot of dwarf apple or quince trees. I am inclined to think this is the most economical way, as the breading branches protect the trunk from sunscald; and as the fruit is all thinned in order to obtain fine specimens, these low-branched trees are very convenient. The varieties preferred at present are for early peaches, Sneed and Alexander, which ripen early in June, though the new ones Greenboro and Triumph bid fair to rival. For the next picking, Mountain Rose, Lady Ingold, Crawford's Early and Stump have proved best; while Elbertae Old Mixon and Globe are fine for late varieties.

The unprecedented freeze of 1894, coming as it did after the trees had made a growth of several inches, was a great calamity. All the trees had to be cut back. Kieffers in some instances were killed to the ground, and no fruit was secured that year. In 1895 the trees had so far recovered that \$13,000 worth of fruit was shipped to northern markets—not so much last year on account of a late spring frost after the trees were in bloom. But this year the prospect now is good. Most of the trees in the first orchard are large enough to bear a half bushel each, but one-fourth of a bushel to a tree for an orchard of 50,000 trees means considerable fruit. The trees should be fertilized every spring, or in February.

THE PROFITS.

When I saw 100 tons of valuable fertilizer landed at the orchard, and learned that the cost of a re rigerator car (iced) to New York city was \$230, it looked doubtful. But when I learned that 700 crates could be packed into a car, making the cost 35 cents per crate, and that fine peaches sold readily at \$3 per crate, the prospect brightened.

But fruit growers have their troubles, just as do other people. The curculio, that dreaded little Turk, the enemy to all civilization, made its first appearance in this orchard last year; and that means protection, or the loss of fruit. The borer has

been troublesome to some extent, but nothing serious. Flocks of quail inhabit the orchard, during the summer and autumn months, and do an immense amount of good in destroying insects. The owners of the orchard would be glad to protect these and other insect destroying birds; but no; as soon as the "law is off" the birds are easily decoyed away and killed. Isn't it about time for farmers and horticulturists to have something to say in this matter? The game laws of this country favor the sportsman every time. With the greatly improved modern firearm, and public sentiment favoring sporting, it is a great temptation for any one who has the leisure to go out and kill something.

The robin, the joy of our homes in early spring is killed by the bushel to supply the hotels in Florida; and the happy bobolink of the North is killed for his imprudence when he becomes the rice bird of the South. The prairie hen and quail, which the western farmer is not allowed to kill on his own land, is quickly appropriated by the sportsman when the legalized season comes round. But, saddest of all, thousands, hundreds of thousands of our prettiest and smallest birds are slaughtered every year to supply ornaments for ladies hats! Certainly no nurseryman's wife or daughter will use birds for any such purpose. The time may come, and probably will come, when it will be necessary to have national laws to protect our insect destroying birds, as has been done in Germany and other European countries.

NORTH CAROLINA PROGRESSIVE.

The state of North Carolina has been very liberal in her appropriations for the promotion of agriculture and horticulture. I have just received a beautiful book of some four hundred pages, finely illustrated, issued by the State Board of Agriculture for 1896. The State Horticultural Society has a branch experiment station here at Southern Pines, comprising seventy acres under the efficient management of Professor Alexander Rhodes, a young man, native of Virginia. I have also met Professor W. F. Massey, of the State Horticultural Society at Raleigh, than whom probably no man North and South is better posted in horticulture or botany.

North Carolina to-day is one of the progressive states, and by her great variety of soil and productions, her wonderful water privileges, and her mild and healthful climate offers special inducements to the manufacturer, the farmer and the fruit grower. The old system of impoverishment has passed away forever, and the sober industrious settler with small means, is gladly welcomed, from whatever section or country he may come.

T. C. THURLOW.

EASTERN GRAPE CROP.

An estimate of the eastern grape crop for 1896 is made by *Fruit* as follows: Chautauqua section, 4,050 cars; Northern Ohio section, 2,050 cars; Central New York section, 2,480 cars.

The Chautauqua output for 1894 was about 3,600 cars; for 1895, year of the frost, 3,400 cars. The largest previous output of the Ohio section was that of 1894 when 1,150 carloads were shipped. The crop of 1895 was but 700 cars.

Fred Green, of Perry, O., called on Western New York nurserymen early last month.

THE NATIONAL NURSERYMAN.

JACOB W. MANNING.

William Manning arrived from England and was a real estate owner and freeman before 1634. Jacob W. Manning, the subject of this sketch is of the tenth generation from William, and was born in Bedford, N. H., February 20, 1826, on a hilly, rocky farm, noted for its stone walls, many of which were from six to twenty-five feet wide and four to six feet high. He took a handy part in all farm work, and the almost constant traffic in cutting and putting on the market cord wood, railroad sleepers, ship timber, white pine lumber and pine masts cut from trees sixty to one hundred and sixty feet tall and three to six feet in diameter. He has since seen the pine forests of New England, Canada and the Northwestern states and those South and West of the Great Lakes and has not found larger or more perfect White pines than grew on and in sight of the old homestead.

At the age of 21 years he went to Chelmsford, Mass., and worked on the farm of Amos Carlton at fifteen dollars per month and board. This farm at that time was one of the best in its vicinity, its stock and fruit taking many prizes at the neighboring agricultural and horticultural societies. Mr. Carlton exhibited fifty varieties of apples at the Lowell Horticultural Society in 1848, having a small nursery in which he propagated large and small fruits.

In 1849, Mr. Manning was foreman in the Winnisimmet Nursery at Chelsea, Mass., of which Samuel W. Cole was the proprietor, as well as editor of the Boston Cultivator. Ephraim W. Bull of Concord, Mass., a gold beater by occupation, was the originator of the Concord grape, and learning that Mr. Cole had all of the Diana grape vines then in the world, outside of the original vine, agreed to send the only layer he had of his promising seedling black grape for a Diana vine. By

order of Mr. Cole, Mr. Manning executed the exchange and planted the vine from Mr. Bull five years before it was named and put on the market as the Concord grape. The introduction of the Concord grape was one of the greatest factors in the American fruit growing industry, leading as it did to the extensive cultivation of this vine for the market in the ratio of one then to one million now.

He established the Reading Nursery in 1854. It now occupies some forty acres of land, mostly of sandy loam with portions of rich black loam especially adapted for the cultivation of rhododendrons and azaleas. The general character of the soil is such as to render the propagating of fruit stock un rofitable, for which reason most of this class of goods is purchased from the larger wholesale nurseries of New York and elsewhere For the propagation of shrubs, fruit and ornamental trees and hardy herbiceous perennials, however, the soil is admirably adapted, and in consequence these are

made specialties. A very extensive collection of ornamental stock is carried at all times, with large cultures of street and shade trees and evergreens. For more than forty years evergreens have been a leading feature, and as a result, purchasers of this class of stock turn to the Reading Nursery for the rarer forms to complete collections. Shrubs are grown in large quantities and constitute a large percentage of the trade. Hardy perennials have been grown for more than twenty years past, and no expense has been spared to make a representative collection in America at the present time both for variety and quality. The latter besides being sold in large quantities to the retail trade are supplied at wholesale to the leading nurserymen, seedsmen and landscape gardeners of the country. The wholesale trade is principally restricted to the hardy herbaceous perennials and shrubs, and there are few large parks, cemeteries and public institutions as well as private grounds of note that are not customers in this particular line.

The nurseries, although of comparatively small extent, are worked on the extensive plan, producing in consequence, probably quadruple the amount of stock that many nurseries of larger area may produce on the same acreage. Propagation of the rarer nursery stock is carried forward in a very complete propagating plant of some three thousand square feet of glass with accessory frames, etc. Among the introductions by Mr. Manning can be noted the Cutter's Seedling strawberry in 1858, the Dracut Amber grape in 1862, the Dartmouth crab in 1864. Smith's Seedling gooseberry in 1865, and he was active in the first dissemination of John's Sweet and Granite Beauty apples.

Mr. Manning has been an extensive traveler throughout the United States and Canada, and is a constant attendant at the conventions of nurserymen, pomological and horticultural societies. He has attended every meeting of the Amer-

ican Pomological Society since 1860. His five sons are all in active work in the nursery business or kindred lines. The oldest son, Warren H. Manning, is in business in Boston as a successful landscape gardener, having in charge many large planting operations. The second son, William S. Manning, has offices in New York as a landscape gardener and the third son, J. Woodward Manning has charge of the larger part of the details of the home business and has under his direct charge the landscape department of the business, which has become a very important branch. The two youngest sons, A. Chandler Manning and B. F. Manning, are actively engaged in the general work of the business.



JACOB W. MANNING.

The Rhode Island Horticultural Society has elected the following officers: President, Levi W. Russell; vice-presidents, R. H. I. Goddard, J. E. C. Farnham, Royal C. Taft; secretary and treasurer, C. W. Smith.

The National Nurseryman.

C. L. YATES, Proprietor.

RALPH T. OLCOTT, Editor.

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Drafts on New York or postal orders, instead of checks, are requested.

Correspondence from all points and articles of interest to nurserymen and horticulturists are cordially solicited.

Entered in the Post Office at Rochester, as second-class matter.

ROCHESTER, N. Y., MARCH, 1897.

THE SAN JOSE SCALE.

The production and sale of nursery stock has progressed through all the discussion of the danger of the spreading of the San Jose scale. There is not a horticultural publication, not an experiment station, that has not presented the case of this pest in more or less extended form. It has been illustrated and described in print and upon the horticultural platform from coast to coast, and to-day it occupies the chief place in the list of insects which threaten the fruit interests generally.

Until lately the nurserymen were content to look on and and take but a passing glance at the discussion which appeared to affect only those in certain sections of the country. Last year many articles were written in an endeavor to prove that the scale would not extend to the northern central states because of the climate, and that the inspection and treatment of nurseries on the Middle Atlantic coast where it had appeared had probably removed all danger.

At the Chicago meeting of the American Association of Nurserymen last June attention was called to the laws just passed by Virginia and Maryland and although there was a disposition to let the nurserymen of those states handle the question of repeal or modification of such laws by themselves, the developments of the fall packing season showed that the state entomologists of Virginia and Maryland were alive to the importance of the subject and that the earnestness which had characterized the movements of the Pacific coast states in this matter was equaled by the two eastern states mentioned.

It was shown in the last issue of this journal that the scale was in Illinois. And now it is reported by no less an authority than Professor H. E. VanDeman that it is causing much alarm in Ohio and Michigan, two of the leading fruit producing states in the Union. For some time it has been known that

the scale has overrun Long Island. Secretary J. Cole Doughty, of the Jewell Nursery Co., Lake City, Minn., in his report to the Minnesota Horticultural Society, of the annual meeting of of the Illinois Horticultural Society, published in the Minnesota Horticulturist for February says:

In closing the report I cannot refrain from calling the attention of this society to a danger that menaces us and threatens to destroy and render abortive all the advance we have made in horticulture in the past twenty-five years. We have an enemy at our doors so insidious that only the utmost care and vigilance will avert disaster. I refer to the San Jose scale. Professor Forbes, the state entomologist of Illinois, made an exhaustive report to the state horticultural society, knowing that eastern nurseries infected with this disease had made over 150 shipments to parties in Illinois that he could trace and how many other shipments of infected trees and plants is, of course, unknown. He said that "no danger equal to this, no calamity of equal proportion has ever threatened the fruit products of the state." The necessity for prompt and energetic action was so manifest that a committee was appointed to draft and present to the legislature of the state of Illinois "a bill for the control of injuries to fruits, etc."

Every intelligent person who has tried to secure an orchard or small fruit plant in this climate will agree that we already have obstacles sufficient to contend with without having to fight this insect. The most severe blight is but a summer dream as compared to the San Jose scale. It infests all kinds of vegetation. Forest trees, shrubs, and vines and even our most common grasses are subject to its ravages; but the chief danger is to our fruit trees, small fruits, roses and ornamental stock. It is so small as to escape observation except by the most careful search; is is so prolific in its increase that it soon spreads over a large area, adhering to anything with which it comes in contact, and, finally, it is so difficult to exterminate that no effectual method has been found to dispose of it except to burn the infected wood. Neither heat nor cold, sunshine or storm, has any affect upon it, so far as discovered, and it will come to us so surely as we live unless prompt and vigorous measures are taken to prevent its introduction. We can, however, keep it out for a fraction of the expenditure that will be required to eradicate it after it once gets in. Legislation to prevent its entering the state can be secured and enforced a great deal easier and cheaper than we can legislate laws for the destruction of our farmer's orchards and gardens, even though we compensate them for the loss.

Do not for a moment delude yourselves with the idea that this is a bugaboo or a false note of alarm. • Had you heard the report and discussion at the Illinois State Horticultural Society meeting, you would all agree that prevention is far cheaper and surer than any remedy for the extermination of the San Jose scale.

We present in other columns the results of the investigations by Victor H. Lowe of the New York State Experiment Station at Geneva, and Professor M. V. Slingerland of the Cornell Experiment Station, at Ithaca, N. Y., both of which show that the greatest danger of disseminating the scale is through the shipment of nursery stock.

All of these facts indicate plainly that no longer can the nurserymen take but a passing interest in the discussion of this important subject. Twelve states have already passed phytopathological laws of some sort California, Washington and Maryland have general laws covering all cases. Virginia recently added a San Jose scale law to her stringent law regarding peach yellows. In the other states black knot and peach yellows are the diseases against which the barrier is raised. And now the legislatures of Illinois and Minnesota are being asked to bar out "nursery stock infested with the scale, and other states are sure to follow.

The matter is to be carried again to congress, the state entomologist of Virginia having prepared a bill providing for inspection and destruction, when necessary, of all stock in any state, found infested with San Jose scale. This is one of the

THE NATIONAL NURSERYMAN.

important factors which will affect nursery interests during 1897, and plans for adjustment to new conditions must be made.

THE TARIFF SCHEDULE.

Following is the tariff schedule asked by the nurserymen of of the country:

FIRST—Stocks, cuttings or seedlings of Myrobolan plum, Mahaleb and Mazzard cherry, 3 years old or less, \$1.00 per thousand plants.

SECOND—Stocks, cuttings or seedlings of pear, apple, quince, and St. Julien plum, 3 years old or less, \$2.00 per thousand plants.

THIRD—Rose plants, budded, grafted, or grown on their own roots, 3 cents each.

FOURTH—Stocks, cuttings and seedlings of all fruit and ornamental trees, deciduous and evergreen shrubs and vines, Manetti, Multiflora and Briar rose, and all trees, shrubs, plants and vines, commonly known as nursery stock, unless otherwise specified, 30 per cent. ad valorem.

Now is the time for the nurserymen to assert themselves in a matter upon which they are entitled to receive attention bebefore congress. As suggested in the last issue of this journal, every nurseryman may help by urging the congressman from his district to present the claims of the trade to the schedule as stated above.

The views of an importer and those of a grower of nursery stock can hardly be called identical. The case of the importer was stated in the last issue of The National Nurseryman by Frederick W. Kelsey of New York city. But Mr. Kelsey evidently was not familiar with the schedule asked by the nurserymen. He said a specific rate of \$2.00 per 1,000 had been suggested for fruit stocks, seedlings, etc., which is, he said, equivalent to about 200 per cent. on the average price. But reference to the above schedule shows that the rate asked is \$1.00 per 1,000, as the value of the goods in Europe is less than half the average price of the articles named in paragraph I and less than one fourth the average price of the articles named in paragraph I and less than one fourth the schedule.

Mr. Kelsey asserts that the tariff on roses would cover Manette and Multiflora stocks, a specific duty of 3 cents per plant, while as a matter of fact, it does not apply to these items at all. They are included under paragraph IV at an ad valorem duty of 30 per cent. It is out of the question to talk of 500 or 600 per cent, when the schedule provides for a rate not to exceed 30 per cent, taking the average price for the last ten years of all the goods named. A duty of 10 per cent, is no protection. It is simply a tax and growers of nursery stock in the United States would prefer to see goods come in free unless there is a duty high enough to protect them.

HIGHLY PLEASED.

GRIFFING BROTHERS Co., MACCLENNY, FLA.—We are highly pleased with the effect of our advertisement in The National Nurseryman

INCREASES IN VALUE.

HENRY SCHROEDER, SIGOURNEY NURSERY, SIGOURNEY, IOWA.—
"Enclosed find \$1 again for the journal for another year. Last year while most everything got lower, THE NATIONAL NURSERYMAN got higher—not in price, but in value. The discussions among those in the trade, on the low price question, were worth the dollar alone."

SUCCESSFUL GROWERS. The frontispiece of this issue presents photo-engravings of

of the Spaulding Nursery and Orchard Co.'s blocks of apple, cherry and pear. Their blocks of growing stock have received high praise from visiting nurserymen.

J. B. Spaulding is at the head of this company, and has a national reputation as a successful grower, and a successful

nurseryman, this being his fortieth year in the business, which has been carried on near Springfield, Ill. Mr. Spaulding is of New England stock, and lived until 18 years of age on a farm among the Berkshire Hills. Interested with him are his sons, Frank E. Spaulding, manager of the sales department, and Irving Spaulding, secretary and treasurer; and his son by marriage, Frank R. Fisher, vice-president, all well known among nurserymen and business men. They carry on an extensive nursery business, having 600 acres, 30 miles of tile, and environments favorable to the development of vigorous trees.

They are located near the river, and adjoining the prairie, where they own and rent a variety of soils, such as are adapted to growing apple, pear, cherry, plum, small fruits, etc. Their annual planting is approximately, 200,000 apple; 150,000 standard pear; 60,000 dwarf pear; 150,000 cherry; 100,000 plum; 200,000 peach and other stock in proportion. They grow largely for the wholesale trade. They also do a good retail business, having now about 300 local agencies. Their packing grounds and cellars have all the conveniences. They are located on two railroads, and near Springfield, a city that boasts of excellent shipping facilities, a city situated in the centre of the greatest railroad state in the United States.

They are not surpassed in their new illustrated, descriptive

catalogue, containing 120 illustrations compiled from leading horticultural works, which are duly accredited on the outside cover of their catalogue.

J. B. Spaulding wishes us cordially to invite brother nurserymen to visit them, and says they would rather be visited by brother nurserymen than be "on paper."

Obituary.

John G. Bubach, of Illinois, died January 8th. He was born in Harrisburg, Pa., in 1818. He was in the nursery and fruit growing business for forty-five years. He made strawberry culture a specialty and was the originator of the Bubach No. 5.

John Stewart, Benmiller, Ont., died January 12th, of

pneumonia, aged 61 years. He was born in Gleninnis, Banffshire, Scotland and went to Canada forty years ago. He was a director of the Fruit Growers Association of Ontario. He leaves thirteen children.

H. M. Engle, Marietta, Pa., died of pneumonia last month at the age of 78 years. Mr. Engle was well known. He was devoted to the intelligent investigation of horticultural subjects and contributed much to general knowledge on the improvement and grafting of chestnuts.

Philip Smith, of Pomona, Ga., died of asthma on February 1st, aged 67 years. He was one of the pioneer nurserymen and fruit growers of Georgia. He entered the business over twenty years ago at Morrows, Ga., and in 1881 moved to Pomona, where he continued in the business until his death. His sons, J. H. Smith and Charles T. Smith, are proprietors of the Concord Nurseries, at Concord, Ga.

Among Growers and Dealers.

E. A. Riehl, Alton, Ill., is distributing his seedling strawberry, Ruby.

'The firm of Sweet & Shackelford, Mountain Lake Park, Md., has been dissolved.

A heavy surplus of apple and cherry trees is offered by C. V. Heikes & Co., Troy, O., in car lots.

Ornamental stock at low prices is offered by T. R. Watson, Old Colony Nurseries, Plymouth, Mass.

The Griffing Brothers Co., Macclenny, Fla., have in storage in Philadelphia twelve carloads of plums and spring budded peach trees.

E. H. Adams, Bonham, Tex., reports a dull season during 1896, owing to dry weather and short crops. Better trade is expected in 1897.

R. Douglas & Sons, Waukegan, Ill., claim the largest stock of evergreens in this country, all nursery grown, including Blue Spruce, Douglas Spruce and Abies concolor.

The Harrington Nurseries, Harrington, Del., E. C. Reese, proprietor, were established in 1875. Mr. Reese has a national reputation for accuracy in varieties and grading to the highest standard. His specialty is peaches.

The personal estate of Anthony Waterer, Knaphill nursery, Surrey, England, who died on November 16, 1896, at the age of 74 years, was valued at \$643,680. All the estate, real and personal was left to the son, Anthony Waterer.

C. M. Hooker, Rochester, N. Y., lets standard pear trees grow rather freely, heading say three or four feet high, thus making them half standards every year. During the winter very strong growth is cut back about one-half.

W. N. Scarff, New Carlisle, O., makes a specialty of small fruits. He prepares the soil specially for such fruits, and the plants used in propagating are procured by special selection. Great pains is taken to secure the fullest vitality.

W. C. Barry, Rochester, N. Y., is in favor of rather severe pruning. Fruit spurs are often too numerous. Winter Nellis pear, for instance, is inclined to overbear and produce small fruit. Large specimens can be obtained by proper pruning.

For the past three years Thomas W. Bowman's son, Claude V. Bowman, has been devoting his entire time to nursery work with his father, and now the business is being conducted under the name of Thomas W. Bowman & Son, Rochester, N. Y.

S. D. Willard, Geneva, N. Y., says more money has been made per barrel from Kieffer pears than from any other variety. He thinks that now, however, the stock of Kieffers bids fair to exceed the demand. He never heard of San Jose scale on the Kieffer pear.

A. H. Griesa, Lawrence, Kan., has the largest and oldest experimental ground in the West-under private ownership. On this he tests many varieties and he is thus enabled to advise his customers confidently. His wholesale list for 1897 gives results of his investigations.

The Painesville Nurseries, Storrs and Harrison Co., Painesville, O., have one of the most complete assortments in the world, including fruit and ornamental trees, grape vines, small fruits, roses, shrubs, etc. They have an immense stock in storage cellars ready for immediate shipment.

E. M. Buechly has rechristened the apple, Downing's Winter Maiden Blush. The new name is the Greenville. It was conceded that the old name was too long. The apple is a result of the propagation by Mr. Buechly of a seedling of Downing's Fall Maiden Blush. The new name was suggested last year by H. E. Van Deman.

Ellwanger & Barry, Rochester, N. Y.; Hoopes Brother & Thomas, West Chester, Pa; Andorra Nurseries, Philadelphia; Frederick W. Kelsey, New York; Thomas Meehan & Sons, Germantown, Pa.; B. A. Elliott, Pittsburg and Parson & Sons Co., Flushing, L. I., were bidders for furnishing 60,000 trees for Schenley park, Pittsburg. The contracts will be divided.

STATE ENTOMOLOGISTS CONFER.

At the recent conference of state entomologists and horticultrists in Chicago, says the *Orange Judd Farmer* of February 13th, the general situation was tully discussed and developed the fact that every one present considered the danger from San Jose scale very serious, calling for prompt and active measures. It also showed that the only prospect for efficient control must come through state legislation probably to be supported by national enactment where interstate commerce was affected.

The proposed Illinois and Michigan laws were taken as a basis for a very extended and rigid examination of the kind of enactments that might be effective. Bearing in mind the different conditions in the various states, and measures that were of general application, the members of the conference came to a definite agreement as the specific measures which they would recommend to the legislatures of their respective states. These measures look particularly to such a control of the nursery business that while responsible dealers and nurserymen shall be fully protected the indiscriminate distribution from this source of the San Jose scale may be promptly stopped; that stock shipped into one state from another shall be made subject to such inspection or record that this means of introduction may be guarded and that any centers of infection already established may be located and the stock destroyed or the pest exterminated. The resolution adopted which it was hoped might be of service in putting the general public of the states represented on guard at once is as follows:

"Resolved, That we recommend to the people of our respective states that in purchasing stock from other than home nurseries they require a certificate of inspection from such nursery specifying that such stock has been inspected by an official inspector and specifying the result of such inspection."

A MEDAL FOR PROFESSOR BAILEY.

The Veitch memorial trustees of England have decided to present a large silver medal this year to a number of gentlemen for distinguished service to horticulture. Among the gentlemen thus honored is Professor L. H. Bailey of Cornell University, Ithaca, N. Y. The medal is presented to him "in recognition of his efforts, by means of his lectures and writings, to place the cultivation of plants on a scientific basis; to promote the extension of horticultural education, and, by numerous trials and experiments, to improve and render more productive, plants grown for economic purposes."

THE NATIONAL NURSERYMAN.

SCALE AND THE MARYLAND LAW.

BLACKSBURG, VA., Feb. 6.—For some time it has been my desire to take notice of certain statements appearing in the December issue of THE NATIONAL NURSERYMAN and to add some remarks upon this question in general.

It appears from the account of the meeting of Maryland nurserymen furnished the *Baltimore American* from which you copy, that Professor Johnson, state entomologist of Maryland, brought up a letter, written by myself, for the consideration of the meeting and in this letter I am virtually made to say that in my opinion the Maryland law was passed for the sole purpose of harrassing outside nurserymen, etc. This statement attributed to me is entirely incorrect and the inference drawn from it that I threatened retaliation against the law per se is wholly unwarranted.

At about this time some slight difference occurred between myself and a large nursery firm of Maryland, they taking exception to my statement as an officer concerning the freeness of their stock from San Jose scale. The statement at which offense was taken was made by me in response to a demand made upon me in writing and to which there was no alternative but to state the facts. My motives were assailed quite bitterly by the offended party and following in a few days came a letter from Professor Johnson notifying me that the Maryland law would be strictly enforced against Virginia nurserymen. Also about this same time a letter from the same official to W. T. Hood & Co., notified them that this law would be strictly enforced. (See statement of W. T. Hood & Co., page 155, January issue of The National Nurseryman.)

This peculiar attitude of a nurseryman taking exception to my performing my plain duties under our state law and the fact of receiving Professor Johnson's letters at the same time led me to say that if this unreasonable law was enforced in an unfair spirit against Virginia nurserymen, I would retaliate by publishing Maryland nurserymen known to me to have infested premises.

I insisted that the proper course was first to establish the fact that Virginia nurserymen were sending out infested stock or ever had sent infested stock into Maryland. This to the present time has not been done. I give it as my official opinion that Virginia nurserymen have not disseminated San Jose scale outside the state and only to slight extent within the state and this through rehandling small lots of stock brought from several eastern states.

In this same item copied from the American it is said that Professor Alwood stated that it might be that scale was prevalent in Maryland. This is quite funny, to say the least. My statements were positive.

I also wish to say in regard to the language of the certificate (see p. 151, January issue.) I gave Messrs. Hood & Co., assurances that I used this positive language with great reluctance and only after three times inspecting their stock and placing an assistant upon their grounds to inspect and fumigate all their stock, both home grown and purchased, before placing upon packing yard. In making all their extensive shipments not a single case of San Jose scale was found, but we accomplished one good point by fumigation, viz., not a single specimen of root louse was found on the stock when packed for shipment.

We claim for our state that it is the first to fully inspect and

carefully locate the infested areas over a large state and that our work of fumigating on a large scale has fully demonstrated the cheapness and practicability of this method. As to its efficacy I am compelled to take that on statements of others for I have never had a chance to fumigate a single scale.

Two or three points in this state are suffering from outbreaks of this scale in the orchards, but here we shall rely upon soap suds for a year or so to learn its efficacy in slight attacks and shall use the axe for serious cases.

> WM. B. ALWOOD, Entomologist Va. Ex. Sta.

Recent Publications.

The transactions of the Indiana Horticultural Society of which C. M. Hobbs is president and Professor James Throop is secretary, have been bound and issued to members. The book is entertaining and valuable for reference.

In the reissue of Ellwanger & Barry's general catalogue attention is called to a number of meritorious novelties which this firm strongly recommends. Such endorsement should leave no doubt of the worth of these varieties which include Barry apple, Dorset and Lady Clapp pears, Columbus gooseberry, Winchell grape, Columbian raspberry, Marshall strawberry, Lemoine's latest lilac introductions, Crimson Rambler and other roses.

A warm, southern breeze, laden with the odors of a peach orchard in fruiting time and a strawberry patch in June was wafted into our office on a blustering northern afternoon last month. The cause was the arrival of the highly colored, spicily written "Red Label" catalogue of J. H. Hale, South Glastonbury, Hartford county, Conn. The ex-president of the American Association of Nurserymen, the widely known Georgia fruit grower, the author of the push cart story is on hand with another entertaining account of how money is made in the culture of fruit. The catalogue is a novel one and it reflects the enthusiasm which characterizes all that "Marse" Hale does, "shoo nuff"

With more than usual pleasure we call attention to the twentieth edition of "The American Fruit Culturist" by John J. Thomas, revised and enlarged by William H. S. Wood. This book has been the standard upon its specialty in this country ever since it was written, and it has been the text-book in most of the agricultural colleges and experiment stations in the United States. Probably no other book of its kind contains so much practical information or so complete and up-todate lists of fruit as this. Within the 773 pages is contained a vast amount of matter indispensable to the nurseryman and fruit grower. It is possible that there are a few who do not know that John J. Thomas was first president of the Fruit Growers Society of Western New York; honorary member of the Massachusetts Horticultural Society; Pennsylvania Fruit Growers Society; Worcester Horticultural Society; associate editor of Country Gentleman from its foundation until 1894, and for thirty years a practical nurseryman. Mr. Thomas died on February 22, 1895. He stood at the head of the pomologists of America. His "Fruit Culturist" was first published in 1846. In later editions under the title of "The American Fruit Culturist" it became one of the chief American pomological works. Mr. Thomas was the life long friend of Mr. Wood, and when the infirmities of the later years of the author prevented him from making the needed revision himself he requested that Mr. Wood should personally undertake it. The changes made in the twentieth edition are such as seemed to confine its matter strictly to the propagation and cultivation of fruits in the open air, and to bring it in all respects fully up to present knowledge. That Mr. Wood has attained this result is proved by even the most cursory examination. About 200 pages and 300 new wood cuts have been added. The chapter on insects and diseases has been greatly extended. The second section of the book, treating of all kinds of fruits, has been thoroughly revised. It embraces practically complete descriptions of all the acknowledged standard and approved newer sorts; while the descriptive index, as heretofore, includes many kinds now nearly or quite

superseded, and others which have so recently been introduced that their real value is not yet established. An entirely new chapter has been added on nuts, and a new chapter on wild fruits closes the second been added on nuts, and a new chapter on wild fruits closes the second section. The third section has been prepared expressly for this work by E. H. Hart, of Florida, upon the recommendation of P. J. Berckmans, of Augusta, Ga. It covers all the sub-tropical fruits which can be successfully cultivated. In this work all illustrations of fruit are from average-sized specimens and are life size, unless otherwise definitely stated. Space does not permit a detailed statement of the contents of the work. Suffice it to say that it cannot be too highly recommended to all nurserymen and horticulturists. Mr. Wood's revision of a noted book is one of the most notable features of the advance in horticultural education which mark the close of the century. Extra nursin 8vo. 773 pages 800 accurate figures \$2.50. New York: muslin, 8vo., 773 pages, 800 accurate figures, \$2.50. New York: WILLIAM WOOD & Co.

SITUATION WANTED

By a thoroughly experienced Nursery office man of 32, bookkeeper and stenographer. 15 years with leading firms, wholesale and retail. Experienced in handling agents. Moderate Salary. References.

Address "CLERK,"

Care NATIONAL NURSERYMAN, Rochester, N. Y.

TROY, O., March 1st, 1897.

C. V. HEIKES & CO.'S NURSERIES.

Heavy Surplus on Apple and Cherry Trees

Special low prices on car lots. Stock must go, as want to clear the ground. Can also supply a general line of Stock at bottom prices. OSAGE HEDGE PLANTS, in large or small lots.

C. V. HEIKES & CO., Troy, Ohio.

LARGEST STOCK OF

PEACH

ONE YEAR FROM BUD, in the State of Delaware.

Prices on Application.

R. S. JOHNSTON, Box 27, STOCKLEY, DEL.

Established in 1887.

Kansas Home Nurserv

Offer a full assortment of

Fruit and Ornamental Trees, Standard and New Small Fruits, Evergreens. Cataipa Bungi or Umbrella Trees, and Kansas Raspberry are Specialties. CATALOGUES FREE.

A. H. GRIESA,

Box J, LAWRENCE, KAN.

Jubilee in 1897.

Holland Roses. Tree

EXTRA FINE HEADS.

Also a few hundred Climbers, Baltimore Belle and Queen of Prairie Write me

C. L. YATES, ROCHESTER, N.Y. for Prices.

Don't Fail

to write us for sizes and prices on our immense stock of

PEACHES.



CHERRIES

(especially E. Richmond,)

KIEFFER PEARS.

Also a full line of all other Fruits.

In the ORNAMENTAL DEPARTMENT, we are offering special inducements to purchasers in need of high-grade trees of

MAPLES, all leading kinds; KILMARNOCK, NEW AMERICAN and ROSEMARY-LEAVED WILLOWS, LINDENS, &c., &c.. &c.

Our heavy blocks of **Shrubbery** are second to none other in this country, both for extent and variety, and the quality is above the

New Trade List wil soon be ready.

HOOPES BRO. &

Maple Avenue Nurseries, West Chester, Pa.

When writing to Advertisers mention The National Nurseryman.

EXTRA FINE PLANTS.

Superior quality, careful grading. Send me your Want List or come and see my stock.

Gooseberries Raspberries Transplants. Blackberries, المارا المارات المارات

Introducer of the "Pearl Gooseberry."

I offer all the STANDARD VARIETIES, including COLUMBIAN. LOUDON, CONRATH RASPBERRIES and POMONA CURRANT.

NOVELTIES A

Strawberry-Rasoberry, Golden Mayberry, Logan Berry, Raspberry-Blackberry.

ALLEN L. WOOD.

ROCHESTER, N. Y.

Tend for my Wholesale Trade List.



Largest Stock in America.

All Nursery Grown.

Including

Blue Spruce, Douglas Spruce, and Abies Concolor.

ALSO.

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R. DOUGLAS & SONS.

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When writing to Advertisers mention The National Nurseryman,



Trees and Shrubs namental

FOR NURSERYMEN, FLORISTS, AND DEALERS.

We have an especially large stock of SHRUBS in sizes suitable for lining out in nursery rows or for shipping direct to the retail trade.

Largest stock of JAPAN SNOWBALL (Viburnum plicatum). in the world, PRICES VERY REASONABLE.

WANTED. -Strong cane plants of Raspberries and Blackberries -Send list of varieties with prices.

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We have, at this time, a SURPLUS on Apples, Peaches, Pears, Plums, Cherry, Quinces, Houghton Gooseberris, Curants, (1 yr. old), Strawberry Plants, Asparagus, Rhubarb, &c.

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any one to set an orchard or fruit plantation unless he can have the assurance that what he plants will prove true to name. We realize the importance of this and make it a point to keep our varieties true.

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We solicit your patronage and guarantee satisfaction. SAMUEL KINSEY & CO..

Kinsey. Ohio.

Small • Fruit • Plants,

Of all the Leading Varieties, and at prices to suit the times.

Strawberry Plants, 2,000,000

ALL FROM NEW BEDS.

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PEACH, healthy well grown, and true to name, leading and standard varieties.

Also, PEACH SEED, cheap; from selected orchards.

vest, and other BLACKBRRY Miller, and Cuthbert RASPBERRY STRAWBERRY

Perfectly free from aphis or other insects. Standard and new varieties, in-cluding Oriole, Ideal, Sparta, Bouncer, Plow City, Glen Mary, Enormous, Bismarck, Wm. Belt, Satisfaction, and others.

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Superior quality, careful grading. Send us your want list or come and see our stock.

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SMITHS & POWELL CO..

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WE ARE HEADONARTERS FOR

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Apple Seedlings, Japan Pear Seedlings, French Pear Seedlings,

Apple, Cherry, Peach, Plum, Apricot, &c., Ready for Fall, 1896. ASK FOR PRICES.

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GENEVA. N. Y.

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Industry Gooseberries, Roses. Columbian Raspberries, Clematis.

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We supply everything needed by dealers.

SEND FOR WHOLESALE TRADE-LIST.

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ALL OLD AND NEW VARIETIES.

Immense Stock, Warranted True. QUALITY UNSURPASSED.

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BERBERIES VULGARIS-3 to 81/2 feet. PURPUREA-8 to 816 feet

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FORSYTHIA SUSPENSA-8 feet, LIGUSTRUM JAPONICUM-California Privet, MYRICA CERIFERA. ROSA CUCIDA.

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At Very Low Prices.

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(1))))))) Delaware College Agricultural Experiment Station. Department of Horticultare and Entomology. G. HAROLD POWELL, Horticulturist and Entomologist.

NEWARK, DEL., Dec. 15, 1896. MR. A. PULLEN, Milford, Delaware.

DEAR SIR:—This is to certify that I have examined a large number of trees and plants in your nurseries for peach yellows, peach rosette and San Jose scale, and have been unable to find any of the above difficulties or any other injurious insects or diseases. Yours very truly,

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Reliable and Clean Stock at Low Wholesale Rates. SEND FOR SURPLUS LISTS.

ASPARAGUS ROOTS, 2 and 3 years, strong.

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APPLE TREES. STD. AND DWARF PEARS. PLUMS, CHERRIES,

IN GOOD ASSORTMENT, FOR SPRING, 1897. WRITE FOR PRICES, ETC

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APPLE SEEDLINGS.

All grades. 100,000 1-in. and up, extra branched roots, cheap.

Shade Trees:

Maple (soft), Box Elder, Elm, White American Ash, Catalpa, Hickory, Black Locust, from 5 feet in height to 3 inches in diameter.

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OF BEST WHITE QUALITY, RAFFIA Braided.

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Complete assortment, including E. Morello, Wragg, etc.

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JAPAN, EUROPEAN AND NATIVE PLUM ON PLUM.

DOWNING GOOSEBERRIES. CURRANTS. Blackberries, and Ornamentals.

SEEDLINGS. Send List of Wants.

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Plums, 2 and 3 year. Abundance, Field, Grand Duke, Lomhard, Monarch, McLaughlin, Normands, Ogan, Pond's Seedling, Prunus Simoni, Red June; also 500 Wickson, strong.

Dwarf Apples, good Assortment, 2 and 3 year. Fine.

Peaches. FITZGERALD, June buds.

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Shrubs, Apples and Standard Pears Parties having first-class Stock to Exchange, please write.

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75,000 PEACH TREES, 1 year old from bud; leading varieties, principally in no one grade.

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2,000,000 STRAWBERRY PLANTS, comprising thirty-seven varieties.

600,000 ASPARAGUS ROOTS, 2 and 3 years old.

50,000 GRAPE VINES, 2 years old, 25,000 of them Moore's Early, balance—Niagara, Concord, Agawam, Delaware, Wyoming Red, Hartford, Worden, Pocklington, Lady, and Champion.

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We Offer Bargains in

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Norway Maple,
Silver L. Maple,
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Downing, Smith's I. and Houghton Goose B.
Norway Spruce,
Irish Juniper,
Pramid Arb. V.,
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HEAVY WHOLESALE BLOCKS of Lonicera Morrowii. Forsythia suspensa, Amoroha fruiticosa, Golden Russian Willow, Etc. Special Quotations at any time.

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By the 1,000 or Carloads.

We offer all the Standard varieties, including the three new early varieties

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We believe these will have a great future. Manalapan, N. J. D. BAIRD. & SON

Apple, Cherry, Pear and Plum

Seedlings and Cions.

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Large Stock. Low Prices. Send list of wants to

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FLOWERING SHRUBS in great variety. Descriptive Catalogue and Price-List free.

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Best Grading Quality and Packing.

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Evergreens of the Better Glass. Picea Pungens, Blue Spruce of Colorado, Douglas Spruce, Picea Concolor, Pinus Pondersors Millions of Homlock Spruce, White Am. Spruce, Am. Arbor-Vitee. Extra fine lot of Northern Red Cedar Seedlings, and Small Norway Spruce, Scotch, Austrian White and Dwf. Mountain Pines in Car Lots. Prices are below rock bottom. Several Hundred Thouand Am. White Elm, White Elm, Am. Linden and Sugar Maple Seedlings. Correspondence Solicited.

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Office Northwest cor. 11th & Walnut Sts. KANSAS CITY, MO.

Proprietors of Lee's Summit Nurseries.

Established in 1866 by Blair Bros. Wholesale and Retail. (ablished in 1806 by Dishi Bros.

STRICTLY No. I APPLE AND PEACH TREES BY CAR LOT, AND RUSSIAN AND AMERICAN APRICOTS, NATIVE PLUM.
SHADE TREES AND APPLE SEEDLINGS by the Million.

Prices Low. No better shipping facilities. We are not surpassed by any in the West in number of acres or quality of stock. We have the only practical Box Clamp in use. Price reduced.

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A general assortment of Fruit Tree Stocks, such as Apple, Pear, Myroboian Plum, Mahaleb and Mazzard Oherry, Angers Quince, Small Evergreens, Forest Trees, Ornamental Shrubs, Roses, Etc The largest stock in the country. Prices very low, Packing secured. Send for quotations before planing year orders elsewhere. Catalogue free. Agents for U.S. America and Canada,

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1,000,000 Asparagus Roots, 2 years old, Palmetto, Barr's and Conover's.

5,000 Paragon and Numbo Chestnuts, 1 and 2 years, grafted.

20,000 Sugar and Silver-Leaved Maples, 8 to 14 ft.

10,000 Carolina Poplars, 8 to 15 ft.

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50,000 Deciduous Trees of Leading Varieties.

500,000 California Privet, 1 and 2 years old, very stocky.

100,000 Flowering Shrubs, including a full assortment of leading varieties

10,000 Rosa Wichuriana.

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20,000 Climbing Vines-Assorted.

80,000 Dahlias-Finest Collection.

Special quotations on application. Correspondence with the trade solicited in reference to their wants in the Ornamental Line.

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A FULL LINE OF GENERAL NURSERY STOCK

A VERY FINE STOCK OF JAPAN PEAR SEEDLINGS.

Very large packing sheds. Cold storage barn. The best facilities for proper packing, and prompt shipping.

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ESTABLISHED 1852

600 Acres. UU. 13 Greenhouses.

(SUCCESSORS TO SIDNEY TUTTLE & CO.)

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Correspondence solicited and promptly answered. Send list of wants for prices. Salesmen wanted,

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SEDGWICK, KANSAS. (Successor to CHAUNCEY A. SEAMAN,)

Offer SHADE TREES in car lots at bottom prices.

French Fruit Tree Stocks

Grown and Exported by

LENAULT HUET, Ussy, France.

For Prices, address

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I have the following Stock for Spring of 1897 :

25,000 Apples, 3 years. 10,000 Plums, 2 years. 10,000 Cherries, 2 years. 10,000 Peaches, 1st class.

10,000 Dwarf Pears, 2 years.

50,000 Genuine Wilson Strawberry Plants.

The above trees are all grown on new ground, and are very fine in every respect.

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NURSERYMEN Should read this, I have just what you want.

stock, a nice clean article of dry baled SPHAGNUM MOSS. No delay or freight charges from branch roads. Orders for less than large car load shipped the first day received.

L. G. THOMPSON,

Write me for easy terms and prices.

TOMAH, WIS.

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The Ottawa Star Nurseries,

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FFER a very full and complete stock of FRUIT and ORNAMENTAL TREES, and call your attention especially to . .

APPLE-Good assortment in all grades.

PEAR-Standard and Dwarf, a good assortment in all grades. CHERRY-General assortment with a fair supply of English

Morello. PLUM on Plum, one and two years, European, Japan and American sorts. We are strong on Burbank, Weaver, Wolf,

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APRICOT—Both Russian and American sorts.

GOOSEBERRIES-A fair supply of Downings, Houghtons, and Champions, two years, No. 1.

FOREST SEEDLINGS-Including Russian Mulberry, Maple Black Locust, Ash, and Ossage Hedge. Also Maple, 4 to 5 ft. 5 to 6 ft., and 6 to 8 ft.

ASPARAGUS AND PIEPLANT.

APPLE SEEDLINGS.

For a more complete list we refer you to our Trade List, and solicit correspondence.

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(Established in 1851.)

APPLE-3 yrs. old, No. 1, 3/4 and up; 5 to 7 ft. Heavy on Ben Davis, Grimes Golden, Akin, M. Blush; a large lot of Jonathan, 1/8 to 34, 5 to 6 ft. Also other leading varieties in limited quantities.

CHERRY-2 yrs., Fine Early Richmond and Dyehouse.

Write for special prices, as we will not be undersold.

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Wickson, Red June, Hale, Triumph, Sneed, Connecticut. OVER 80 VARIETIES JAPANESE PLUMS. PEACHES IN VARIETY—NEW AND OLD.
ORIENTAL PEARS. A FULL LINE OF

SOUTHERN GROWN NURSERY STOCK FOR ALL SECTIONS OF THE COUNTRY.

Glen St. Mary Nursery Company. GLEN ST. MARY, FLORIDA.

High Grade Nursery Stock for Spring of '97.

Apples, Standard and Dwarf Pears, Cherries, Plums, Quinces, Cut-Leaf Weeping Birch, Purple-Leaf Birch, Silver Maple, Elms, Catalpa, Black Walnut and Butternut.

Write for Special Prices,

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C. H. ELDERING & SONS,

Bulb Growers and Wholesale Exporters,

HEEMSTEDE NT HAARLEM, HOLLAND,

wish to draw the attention of the trade to their extensive culture of Holland Bulbs and Roots

Any one in the trade who is in want of bulbs would do well to send us his list of wants, which will be returned at once with our special prices.

We are growers, not dealers, and are thus enabled to sell at "rock bottom"

Send on your list of wants.

I have a large quantity of 1 and 2 year

..Fav's Currants..

To offer at REDUCED RATES.

Write for prices stating quantity wanted.

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Strong 1 and 2 year plants for Spring delivery. WRITE US FOR PRICES.

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BEST SIZES FOR STOCKING NURSERIES.

Many Thousand COLORADO BLUE SPRUCE. Especially fine lot of AMERICAN ARBOR VITAE.

Also, IRISH JUNIPER, and all Standard Sorts.

For very low prices on Al Stock, ask C. L. WHITNEY, Warren, Ohio.

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Successors to GEO. PINNEY.

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Evergreens and Deciduous Trees.

Large stock of Arbor Vites, Norway Spruce, Ponderosa Pine, both seedlings and transplanted. White Ash, Sugar Maple and Silver Maple seedlings, and many other varieties; also HEDGE RUSES. Send for Wholesale Trade List.

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Are in need of some lines of Nursery Stock, and will sell their dry sery Stock,

Last Call!

We still have a quantity of

Hpple Seedlings

ever grew, guar free from aphis.

Also, Osage Plants, Ash, Silver Maple and Catalpa Speciosa Seedlings.

A LARGE STOCK OF Shade Trees.

Write for prices. Address,

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SEEDLINGS in any quantity for the trade. Very distinct from North-Eastern White Spruce.

After twenty years' trial—fully established as the tree for the bleak prairies

I also grow PRUNUS PUMILLA by the acre. M. E. HINKLEY, Marcus, Iowa. Correspondence Invited.

E have large quantities of Rocky Mountain DWARF CHERRY (the genuine), and fine two-year ASPARAGUS in the following varieties, DONALD'S ELMIRA, MOORE'S CROSS-BRED, CON-OVER'S COLOSSAL, PALMETTO and COLUMBIAN WHITE, all grown in vicinity of Boston.

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Strawberry Plants From new beds. All leading varieties. Special out on Brandy-wine, Cyclone, Staples, Tennessee Prolific, Lovett, &c.

50,000 Turner

RASPBERRIES. 5,000 Loudon

15,000 Brandywine 5,000 Miller 10,000 Marlborough 5,000 R. Church, 25,000 Golden Queen

5,000 Thompson 1,000 Caroline 5,000 Ohio Transpl'ts

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10.000 Eldorado

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10,000 Hansell

5,000 Lovett's Best 5,000 Minnewaski

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25,000 Stone's Hardy, R. C. 25,000 Snyder, R. C. 20,000 Wilson Early

20,000 Wilson Jr.

40,000 Lucretia Dewberry

CURRANTS

15,000 N. Star; 10,000 Victoria; 10,000 Red Dutch; 10,000 Versailles. GOOSEBERRIES.

25,000 Downing, 2-2. 50,000 Houghton, 2-2.

PRICES ROCK BOTTOM.

SCARFF. - - New Carlisle. O.

QUINCE, CURRANTS.

A General Line of Nursery Stock

AT LOW PRICES.

E. MOODY & SONS, LOCKPORT, N. Y. Niagara Nurseries Established, 1839

Apple, Peach, Standard Pears, Plum. Apricots, Grapes, Shade Trees, Evergreens, Shrubs.

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Baltimore and Richmond Nurseries. BALTIMORE, MD.

FRANKLIN DAVIS NURSERY CO.

Tennessee Natural Peach Pits and selected Smock. 50 YEARS.

1000 ACRES.

Strawberries, Nut Trees, Japan Pear Seedlings, Gooseberries, Roses, Raffla, General Supplies, &c., &c., &c.

JOHN CHARLTON,

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I offer for Spring, fine Standard and Dwarf Pears, Plums, Apples, Cherries, Quinces.

Gooseberries. 1 bave the finest plants of INDUSTRY in the country; 3 year plants. NONE HETTER.

DOWNINGS.—The largest and best stock to be found anywhere; STRONG PLANTS, PRICE LOW. Plenty of superior strong plants of TRIUMPH and WHITESMITH, the two best large white kinds.

Gurrants. Strong, 2 year plants. of CHERRY, PRINCE AL-BERT, NORTH STAR, BLACK CHAMPION and LEE'S PROLIFIC, &c., &c.

DIAMOND, EATON, MOORE'S EARLY, NIA-Grape Vines. GARA, SALEM, WORDEN, &c., &c.

Tree Hydrangeas. I offer elegant plants with bodies 3 to 4 feet.

Tree Paconies. HERBACEOUS PÆONIES, all colors.

Clematis. Mad. Ed. Andre, Jackmanii, Henryii, Ramona Duchess of Edinburgh-fine double white, Crispa, Coccines, Paniculata, &c., all STRONG, OUT-DOOR NURSERY-GROWN PLANTS. Do not buy Holland Plants, or plants from pots wintergrown for propagating, they are not desirable.

Ornamental Shrubs. I have fine Aitheas, Clethrs, Calycanthus, Deutzias, Honeysuckles (upright), Hydrangea (bush form), Spireas, Weigelias, &c., &c. WHITE FRINGE, VERY STRONG PLANTS.

Cut-Leaf Birch (very strong), Purple Beech, Maple Schwedlerii, &c. Honeysuckle-Hall's Japan, and Monthly Fragrant, elegant plants. Wistarias, in variety. Ampelopsis Vetchii, and Quinquefolio, &c.

If you intend buying

Apple Seedlings



Apple Root Grafts

This season, send for our Special Winter Wholesale Price List of "Grafts and Seedlings'

F. W. WATSON & CO.

TOPEKA, KAN.

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G. Bragg & Co.,

KALAMAZOO, MICHIGAN.

(39th Year.)

Our stock for Spring of 1897, consisting of Apples, two and three year butis; Pears, Standard and Dwarf; Plums, Cherries, Peaches, Ornamentals and Small Fruits, are strictly first-class. Can furnish in Car Load Lots.

We solleit correspondence.



BRAGG'S - Common Sense Tree Digger :-

Is known by leading nurserymen in every State in the Union, Canada and Europe. Comments are unnecessary, as all admit that the Common Sense Digger is the boss. We ship the Digger on trial, and should it prove unsatisfactory, Bragg pays the return freight.

MANUFACTURED BY

L. G. BRAGG & CO., KALAMAZOO, MICH.

Andre Leroy Nurseries

BRAULT & SON. Directors.

ANGERS, FRANCE.

Offer for February, March shipment, their SURPLUS STOCK of very best quality I year FINE PLANTS, well rooted, at reduced prices.

Apply for Special Quotations on Pear, Quince, Myrobolans, Mahalebs, Manetti Rose Stocks, etc., to

ANDRE L. CAUSSE.

105 and 107 Hudson Street, New York City.

OU WANT



KEIFFER PEAR TREES.

NATIVE PLUM TREES.

French Fruit Tree Stocks, Get our prices before placing your order.

General Nursery Stock, See List A.

W. A. WATSON & CO., - NORMAL, ILL

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THE GRIFFING BROS. CO.

MACCLENNY, FLORIDA,

Now have in Storage Cellars, PHILADELPHIA, PA.,

TWELVE CARLOADS

ABUNDANCE, BURBANK, BERCKMAN'S, WILLARD and other leading varieties of JAPANESE PLUMS, ranging in size from 7-16 up to 7-8 inch caliper, together with a

Handsome Lot of Spring-Budded Peach Trees,

in the 2-3 and 3 to 4 ft. grades, of such varieties as

THE DWARF JAPAN BLOOD, the earliest peach ever offered; TRIUMPH, GREENS-BORO, SNEED, CROSBY, CHAMPION, LORENTZ, ELBERTA, &c.

About 70 per cent. of this stock has been sold to Nurserymen throughout the north, and will be shipped to them from Philadelphia as soon as the weather will permit shipping with safety.

The other 30 per cent., consisting of about thirty thousand Spring-budded Peach Trees of the above-named varieties and the JAPAN PLUMS named in the following graded count list.

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JAPAN PLUMS. 1-year old buds on 2-year Marrianna roots.	Branched. 1/4 to 1/4 inch Caliper.	Branched. 11-16 to ¾ inch Caliper.	Branched. 56 to 11-16 inch Calipes.	Branched. 9-16 to % inch Caliper.	Partly Branched. % to 9-16 inch Caliper.	Partly Branched. 7-16 to 1/2 inch Caliper.
Abundance Berckmans Baily Japan Bully Japan Burbank Balarelsio Chabat Hoyo Suwun (Paragon) Kelsey Kerr (Hatauker No. 2) Normand Satsuma Willard Yellow Japan	330 2050 530 545 360	1950 1445 475 3960 430 450 490 160 180 45 90 59	1110 1296 810 3530 680 970 695 640 100 285 154 790	2160 2880 750 2755 790 810 765 800 240 500 695	1500 2160 1400 1815 1530 1340 1219 520 	650 1260 560 2800 630 566 760 63

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Write for our box list which will be published weekly. Also state what you are in need of and we will take pleasure in naming you low prices on your wants.

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800,000 Warfield.

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TEN MILLION STRAWBERRY PLANTS

75,000 Cyclone, 800,000 Tenn. Prolific.

250,000 Frandywine (Late), 250,000 Brandywine (Late), 250,000 Ocean City, 150,000 Parker Earl, 600,000 Mitchel's Early, 40,000 Princess,

20,000 Edgar Queen, 600,000 Beeder Wood,

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150,000 Berlin,

150,000 Dessie, 800,000 Lovett, 20,000 Timbrell,

25,000 Belle,

150,000 Barton's Eclipse,

20,000 Tennyson, 100,000 Beverly, 20,000 Bismark

10,000 Arrow. 100,000 Tubbs,

20,000 Shuster's Gem.

5,000 Glen Mary, 10,000 Sunrise

20,000 Gandy Belle, 15,000 Eleanor,

800,000 Bubach, 250,000 Dayton, 900,000 Haverland 600,000 Lady Thompson, 100,000 Wilson, 200,000 Saunders. 800,000 Sharpless, 150,000 Greenville. 150,000 Enhance, 100,000 Meeks' Early, 900,000 Crescent, 40,000 Mary, 25,000 Marshall, 25,000 Splendid, 40,000 Capt. Jack, 50,000 Swindle, 25,000 Van Deman,

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One Hundred Thousand Peach Trees—one year. One Hundred Thousand Peach—June Budded,

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MAGNOLIAS.

500 Accuminata, 4 to 6 feet.

1,000 Speciosa, 2-year, 4 to 5 feet.

POPLAR-Carolina and Lombardy; 9 to 12 ft.

ALSO,

Std. Pear, Plum, Cherry and Peach Trees.
CHAMPION AND ORANGE QUINCE.

DIAMOND AND POCKLINGTON GRAPE VINES.

H. E. HOOKER CO., ROCHESTER, N. Y.

American White Spruce

And other Evergreens.

ALL SIZES.

Also Hardy Apples, Grape Vines,
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Introduced and for sale by us. Send for circulars, plates, terms, &c. Not only have we a good stock of POMONA CURRANTS.

But also a COMPLETE GEN-ERAL ASSORTMENT OF TREES, PLANTS, ORNAMENTALS, VINES, &c., in CAR-LOAD LOTS. especially APPLE, PEAR, CHER RY, PLUM; with good assortment of PEACH and other fruit trees and plants.

Also CAROLINA POPLAR, SOFT MAPLE, ELM, &c.

APPLE STOCKS.
IMPORTED FRENCH PEARS,

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SEE TRADE LIST.

ORDER SPADES EARLY.

A limited quantity of Natural PEACH PITS to offer.

Address, ALBERTSON & HOBBS,
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Peach Trees and Buds FOR SALE.

Buy from the introducer and be sure that you get the true **Greensboro**from a nursery that has no San Jose Scale, "Yellows,"
"Rosette." nor diseases of any kind.

COPY.

CERTIFICATE OF EXAMINATION OF NURSERY STOCK.

N. C. AGRICULTURAL EXPERIMENT STATION, RALEIGH, N. C.

TO WHOM IT MAY CONCERN:

This is to certify that on the 28th day of January, 1897, the nursery grounds of John A. Young, at Greensboro, N. C., were personally inspected by me, and the growing stock was found free from San Jose Scale, West Indian Scale, Black Knot. "Yellows," and "Rosette," and all other infectious pests.
This certificate does not extend to a longer period than six months

from date of examination, nor does it include any stock not grown in the nurseries of the aforesaid.

GERALD McCARTHY,

Botanist and Entomologist,

APPROVED:
H. B. BATTLE, Director.
(N. C. EXPERIMENT)
BTATION SEAL.

Dated this 26th day of January, 1997.

ORDER FROM

John A. Young, Greensboro, N. C.

Proprietor of the **Greensboro** Nurseries, and introducer of the Greensboro and Connet's Southern Early Peaches.

When witing to Advertisers mention The National Nurseryman.



SHOWING UPRIGHT GROWTH OF STEMS AND DROOPING HABIT OF TIPS.

The National Nurseryman.

FOR GROWERS AND DEALERS IN NURSERY STOCK.

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VOL. V.

ROCHESTER, N. Y., APRIL, 1897.

No. 3.

A FEDERAL BILL.

METHOD ARRANGED BY ENTOMOLOGISTS AND HORTICULTURISTS FOR CONDUCT OF NURSERY BUSINESS—FOOD FOR REFLECTION.

Following is the full text of the revised San Jose Scale bill to be represented in congress at the first opportunity:

AN ACT.

TO PROVIDE FOR THE INSPECTION AND TREATMENT OF TREES, PLANTS, BUDS, CUTTINGS, GRAFTS, SCIONS, NURSERY STOCK AND FRUIT, IMPORTED INTO THE UNITED STATES, AND FOR THE INSPECTION AND TREATMENT OF TREES, PLANTS, BUDS, CUTTINGS, GRAFTS, SCIONS AND NURSERY STOCK GROWN WITHIN THE UNITED STATES, WHICH BECOMES A SUBJECT OF INTER-STATE COMMERCE.

SECTION I.—BE IT ENACTED BY THE SENATE AND HOUSE OF REPRESENTATIVES OF THE UNITED STATES OF AMERICA IN CONGRESS ASSEMBLED,

That the Secretary of Agriculture be, and he is hereby, authorized at the expense of the owner or owners to place and retain in quarantine all trees, plants, buds, cuttings, grafts, scions, nursery stock and fruit, imported into the United States at such ports as he may designate for such purposes, and under such conditions as he may, by regulation, prescribe, and that he may appoint inspectors for the purpose of examining such trees, plants, buds, cuttings, grafts, scions, nursery stock and fruit for the purpose of ascertaining whether they are infected by any dangerously injurious insect or disease, the importation of which will be prejudicial to the horticultural interests of the United States, and provide for the treatment of such when found necessary.

SEC. 2. That when such trees, plants, buds, cuttings, grafts, scions, nursery stock and fruit shall be determined to be infested with any dangerously injurious insect or disease they shall be treated at the expense of the owner or owners in accordance with the regulations of the Secretary of Agriculture, or they shall be destroyed in case their condition is such as to warrant such destruction; but an appeal may be taken from the decision of the inspector to the Secretary of Agriculture if such appeal is taken within three days after such inspection; and the decision of the Secretary of Agriculture shall be final.

SEC. 3. That when such inspection shall show that such trees, plants, buds, cuttings, grafts, scions, nursery stock and fruit are apparently free from dangerously injurious insects or diseases, a certificate to this effect, made in accordance with the regulations of the Secretary of Agriculture, shall be issued to the owner or owners thereof by the said inspector and this certificate shall operate to release all the objects above specified, when duly stamped or labelled with the same from further quarantine or restriction either at the said port of entry or in

inter-state commerce. Any person who shall forge, counterfeit, or knowingly alter, deface, or destroy any of the marks, stamps, or certificates, provided for in the regulations of the Secretary of Agriculture, on any such trees, plants, buds, cuttings, grafts, scions, nursery stock or fruit, or who shall forge, counterfeit, or knowingly or wrongfully alter, deface or destroy any certificate as provided for in said regulations, shall be deemed guilty of a misdemeanor, and, on conviction thereof, shall be punished by a fine not to exceed five hundred dollars, or imprisonment not to exceed one year, or both, at the discretion of the court.

SEC. 4. That whenever it shall appear to the Secretary of Agriculture that any foreign country shall have provided proper and competent inspection and treatment, in accordance with the provisions of this Act, for the objects above specified as being subject to inspection and treatment, he may, by proclamation or otherwise, accept such inspection and treatment in lieu of inspection performed by officers appointed by himself, which acceptance or proclamation by the Secretary of Agriculture shall relieve such articles specified in the foregoing sections of this Act, when properly stamped or labelled, from further quarantine or restrictions.

SEC. 5. That the Secretary of Agriculture shall cause to be inspected and properly treated at the expense of the owner or owners, prior to their shipment all trees, plants, buds, cuttings, grafts, scions, or nursery stock which are subjects of interstate commerce, and which are about to be transported from one state or territory or the District of Columbia, into another state or territory or the District of Columbia.

SEC. 6. That the said examination shall be made in the manner provided for by the rules and regulations prescribed by the Secretary of Agriculture, and that after such examination the trees, plants, buds, cuttings, grafts, scions or nursery stock found to be apparently free from dangerously injurious insects or diseases shall be marked, stamped or labelled for identification, as may be provided for by said rules and regulations of the Secretary of Agriculture, and when so stamped or labelled they shall not be subject to further quarantine or restriction in inter-state commerce. Any person who shall forge, counterfeit or knowingly alter, deface or destroy any of the marks, stamps or said devices provided for in the regulations of the Secretary of Agriculture on any such trees, plants, buds, cuttings, grafts, scions and nursery stock, or who shall forge, counterfeit or knowingly or wrongfully alter, deface or destroy any certificate provided for in said regulations shall be deemed guilty of a misdemeanor, and, on conviction thereof shall be punished by a fine not exceeding five hundred dollars or imprisonment not exceeding one year, or by both such punishments at the discretion of the court.

SEC. 7. That it shall be unlawful for any person, persons or corporation to transport from one state or territory or the District of Columbia, into any other state or territory or the District of Columbia, or for any person, persons, or corporation to deliver to any other person, persons or corporation or

to the postal service of the United States, except for scientific purposes by permission or direction of the Secretary of Agriculture, for transportation from one state or territory or the District of Columbia into any other state or territory or the District of Columbia any trees, plants, buds, cuttings, grafts, scions or nursery stock which have not been examined in accordance with the provisions in Sections 5 and 6 of this Act, or which on said examination have been declared by the inspector to be dangerously infested with injurious insects or diseases. Any person, persons or corporation violating the provisions of this Section shall be guilty of a misdemeanor and upon conviction thereof shall be punished for such offense as provided in Section 6 of this Act.

SEC. 8. That whenever it shall appear to the Secretary of Agriculture that any state, territory, district, corporation, firm or person shall have provided proper and competent inspection and treatment in accordance with the provisions of this Act for the objects above specified as being subject to inspection and treatment, he may by proclamation or otherwise accept such inspection and treatment in lieu of inspection and treatment by officers appointed by himself, which acceptation or proclamation by the said Secretary of Agriculture, shall relieve all such articles specified in Sections 5, 6 and 7 of this Act, when properly stamped or labelled, from further quarantine or restrictions in inter-state commerce.

SEC. 9. That the sum of fifty thousand dollars or so much thereof as may be necessary is hereby appropriated out of any moneys in the treasury of the United States not otherwise appropriated to carry into effect the provisions of this act.

SEC. 10. This law shall take effect on and after the first day of July, eighteen hundred and ninety-seven.

RATHBUN BLACKBERRY.

Of the Rathbun blackberry represented in the frontispiece of this issue, James Vick's Sons, Rochester, N. Y., say: It is with a sense of satisfaction and pleasure that we offer to the trade a new fruit of the highest quality, and which has previously been brought to notice in various publications. The Rathbun blackberry is admired by every one who has seen it, and only awaits to be known to be universally appreciated. No one who has seen it has been able to criticise it. We have now watched it with the greatest interest for three years, and are not able to say that it has a single weak point. Believing that in introducing it we are advancing the interest of fruit growers and the general public, we have no hesitation in asking a consideration of its claims. Its quality is so superior that it will seem like a new kind of fruit to those accustomed to any of the old and well known varieties.

The Rathbun blackberry has already become known, and has established a high reputation locally, and the fruit has brought a much higher price than any other blackberry in the market at the time. The plant is a strong, erect grower, and, unlike most varieties, produces but few suckers. It sends up a strong main stem which branches freely, and these branches curve over and bend downward toward the ground, and later in the season the tips touching the ground send roots down into it, and thus propagate themselves in the manner of the blackcap raspberry. It is not a dewberry, nor is there the least evidence that there is an admixture of dewberry in the plant, as no dewberries were cultivated on the place or in the

neighborhood. It is purely a blackberry with the tip rooting habit. As to its hardiness it may be said that it is quite hardy at its home, where it has sustained a temperature of fifteen or eighteen degrees below zero without harm. There is no reason to doubt that it is as hardy as most varieties.

The fruit of the Rathbun grows on long stems in clusters which enables it to be easily gathered. The berries are large with large pips and small seeds. They have no hard core, in fact no core is perceived in eating them-all is soft, sweet, luscious, with a high flavor. It is superior to all the well-known varieties of blackberry in cultivation, in quality. On this point it may be said there is nothing more to be desired, and it is not probable that there will ever be a variety to surpass it in this particular. The fruit is a jet black color with a high polish, and sufficiently firm to handle and carry well. It has been sent a distance of some thirty-six miles, by wagon and rail, going through in fine condition and selling in preference to the best other varieties in the market and bringing a considerably better price. The fruit has attained quite a local reputation, and every year it is more in demand, and at higher prices than other varieties of blackberries. A large proportion of the berries will measure from an inch and a quarter to one inch and a half in length, and the whole crop is very uniform in size. Every one who had the opportunity of tasting the fruit admits without reserve that it is the best blackberry ever eaten, and is more like the best dewberry than the blackberry, and yet much better than the dewberry. The fruit offered for sale in the market sells in preference to any other kind and brings a higher price. The hardiness of the plant was severely tested in the winters of 1895-96, when the thermometer for several days indicated a temperature of 20 degrees below zero. Plants of the Minnewaski and Erie blackberries on the same grounds were badly frozen, making it impossible for them to produce a crop of fruit. But a considerable amount of live wood remained on the Rathbun bushes, enough to give two-thirds of a crop.

Two common, quart strawberry boxes, one each of the Snyder and Rathbun varieties were picked in August, 1896, and placed in the hands of a wholly disinterested party, Mr. Lawson York, ex-postmaster of Smith's Mills, N. Y., with a request to count and report the exact number of berries in each basket. When he had done so, it was found the basket of Snyder contained 164 berries, while that of the Rathbun was filled with forty-five berries. One of these berries of the Rathbun was, at the same time, measured before witnesses and found to be one and three-fourth inches in length and one and three-eighths in diameter.

Among the many letters of commendation is the following: Cornell University, College of Agriculture.

L. H. BAILEY, PROFESSOR OF HORTICULTURE.

ITHACA, N. Y., July 21, 1896.

The Rathbun blackberry is now in full fruit and we are very much pleased with it. It is midway between a blackberry and a dewborry in habit as also in earliness. The berries are exceedingly large, glossy, jet black, and of good quality. I certainly think that there is a future for it.

L. H. BAILEY.

BEST FOR NURSERYMEN.

F. C. EDWARDS, FORT ATKINSON, Wis.—"I consider your journal the best for nurserymen of any in the United States, You may book my name for the year."

ORIGIN OF THE BILL.

CONVENTION OF HORTICULTURISTS AT WASHING-TON—SEVENTEEN STATES REPRESENTED— FR⊎IT GROWERS AND ENTOMOLOGISTS ADOPT RESTRICTIVE RESOLUTIONS.

Pursuant to the call of the Ohio Horticultural Society, delegates from state horticultural societies generally assembled at the Ebbitt House, Washington, D. C., on March 5th to consider and recommend federal and state legislation for preventing the introduction or diffusion of noxious insects and fungi in the United States.

E. H. Cushman, Euclid, O., President of the Ohio Horticultural Society, called the convention to order. He stated the object of the meeting and named the following committees: Credentials, F. M. Webster, Ohio; C. M. Hooker, New York; E. S. Goff, Wisconsin. Organization, William B. Alwood, Virginia; E. M. Wardall, California; R. S. Emery, Maryland. The following officers were elected: President, E. H. Cushman, Ohio; vice-president, J. H. Hale, Connecticut; secretaries, Wesley Webb, Delaware; M. J. Daniels, California.

Among the delegates were the following: William R. Sessons, Boston, Mass.; D. D. Denise, New Jersey; B. T. Galloway, L. O. Howard and M. B. Waite, of the Department of Agriculture; W. H. Farnsworth, Waterville, O.; S. A. Beach, New York; H. E. Van Deman, Parksley, Va.; W. B. Alwood, Blacksburg, Va; H. Gorman, Lexington, Ky.; M. V. Slingerland, Ithaca, N. Y.; Wesley Webb, Dover, Del.; Otto Lugger, St. Anthony Park, Minn.; J. Van Lindley, Pomona, N. C.; Gerald McCarthy, Raleigh, N. C.; M. J. Daniels, Riverside, Cal.; S. B. Heiges, Washington, president of the Pennsylvania Horticultural Society; W. W. Miller, Columbus, O.; V. H. Lowe, Geneva, N. Y.; C. M. Hooker, Rochester, N. Y.; H. K. Snow, Tustin, Cal.; E. S. Henry, M. C., of Connecticut; H. J. Webber of the Department of Agriculture; S. H. Derby, Woodside, Del.; C. M. Hobbs, Bridgeport, Ind.; Robert Gulick, Linkwood, Md.; E. S. Goff, Madison, Wis.; W. G. Johnson, College Park, Md.; J. W. Baker, Nashville, Tenn.; Walter H. Evans of the experiment station, Washington; E. H. Bissell, Richmond, Va.; E. M. Wardall, Los Angeles, Cal.; F. M. Webster, Wooster, O.; N. J. Bachelder, Concord, N. H.; Colonel E. S. Chamberlin, Loudon, Va.; E. H. Cushman, Euclid, O.; Captain R. S. Emery, Chestertown, Md.; Colonel J. H. Brigham, Delta, O.; W. C. Barry, Rochester, N. Y.

Professor L. O. Howard, entomologist of the Department of Agriculture, read a paper on the introduction of foreign insect pests and methods of prevention to be taken. He said that in a collection of 600 species of noxious insects exhibited at the World's Fair, 111 species were introduced from other countries. Among scale insects alone 23 species were of foreign origin.

Professor B. T. Galloway read a paper entitled "Plant diseases and the possibilities of decrease by legislation."

A paper from B. M. Lelong, California, on the inspection of trees, fruits and plants in that state, was read by the secretary. After a recital of the various legislative acts passed by the state showing that very satisfactory work had been accomplished, he cited several cases where large importations of badly infested trees had been destroyed, among them a lot of 325,000

citrus trees, comprising one shipment which had been condemned and destroyed at San Francisco after fumigation had been found to be ineffective. He stated that California was no longer the dumping ground for pest ridden trees, and as all the states had been benefited by the legislation of California, other states ought to adopt similar legislation.

Gerald McCarthy of North Carolina read a paper on insect foes, their prevention and eradication.

James McLaughlin, member of congress from California, spoke on the quarantine of trees at Los Angeles, and showed how the whole country had been benefited by the state laws prohibiting the introductiou of pests. He thought that should a bill be drawn up governing the inspection of importations, congress would be found in the humor to give the subject its earnest consideration.

James Wilson, the new secretary of agriculture, addressed the convention, expressing his willingness to do all in his power to further the objects the convention had in view.

The following committee on legislation which was afterward made permanent, was appointed: William B. Alwood, Virginia; John Van Lindley, North Carolina; C. M. Hooker, New York; E. M. Wardall, California; E. S. Goff, Wisconsin; D. D. Denise, New Jersey, F. M. Webster, O., C. M. Hobbs, Ind. This committee reported resolutions upon which was based the bill published in another column.

STATUS OF PEAR CULTURE.

At the meeting of the Western New York Horticultural Society the often-abused Kieffer pear received an excellent recommendation from Professor Waite, of Washington, D. C., for its vigor and constitution or stamina. In his address on "The Present Status of our Knowledge of Pear Culture and its Diseases," he said that the introduction of the oriental species marked the greatest epoch in pear culture in many years, and predicted that the continued crossing of Kieffer and varieties of high quality like Seckel, would, in a few years, give varieties better than ever yet known. He discussed scab, leaf blight and fire blight. Scab and leaf blight can be easily controlled by spraying, but fire blight is contagious, being carried by bees from blossom to blossom, and induced by too rapid growth, which may be checked by ceasing to cultivate and to prune the top, and instead, if necessary, pruning the root. No variety is blight proof.

SPECULATION.

A suggestion touching the now popular village improvement might well be studied by nurserymen and florists pressed by hard times. It may be considered very practical, since it comes from a florist who has put it into practice, at least in part. It looks to the buying up of the waste lands, so often an eye-sore about railway stations, and improving them. A public square or street and some fine building lots may often be cut from such a block of land. These might be put in proper shape, and a block of hardy, herbaceous perennials and hardy shrubs planted on the remainder. When improved, a portion of this land will nearly always sell for more than the cost of the whole.—American Agriculturist.

STATE LEGISLATION.

WASHINGTON CONVENTION CALLS UPON EVERY STATE TO PASS SAN JOSE SCALE LAWS OPERATING AGAINST THE NURSERYMEN.

At the national convention of horticulturists and entomologists at Washington on March 5th and 6th the committee on legislation recommended the following propositions to be embodied in state legislation as against the introduction or spread of dangerously injurious insect or plant diseases:

- 1st, That each state should provide for the proper inspection of nurseries and other premises for the detection of the presence of the San Jose scale, or other dangerously injurious insects or plant diseases.
- 2d. That each state should provide for the proper and timely application of the most approved remedial or preventive treatment when found necessary.
- 3d. That should a package of nursery stock, etc., be shipped into a state contrary to law, i. e., without proper inspection certificates attached, it ought to be so handled as to receive proper inspection and not be destroyed unless condemned by proper and competent authority.
 - 4th. That each state should co-operate in securing the passage and enforcement of a national law, providing against the introduction and dissemination of San Jose scale and other dangerously injurious insects and plant diseases by means of imports or through inter-state commerce.

The chairman of the committee on legislation stated that it appeared hardly possible to agree upon the exact verbiage of a bill to be recommended to the several states, but that the propositions reported embraced the essentials of fair and reciprocal state enactments. That the propositions as to national legislation embraced two distinct ideas, first to provide against importation into this country of dangerous pests and second, to prevent their dissemination from state to state through the medium of inter-state commerce. Also that this latter feature of the proposed congressional enactment was framed in a very liberal spirit so as to permit each state to wholly deal with the question if it would, or even the individual, firm or corporation might meet the requirements, by employing their own expert. It was felt that nothing less should be required than that this whole subject, however the work may be performed, should be placed under government control so as to insure equal and uniform enforcement of its provis-

The committee report was carefully considered by the convention and unanimously adopted with some light recommendations which have been incorporated in the copy as it appears in this issue.

The convention was permanently organized and provided an executive committee empowered to act for it as will appear from the full proceedings shortly to be published Further, it was voted that membership fee should be fixed at one dollar and that the funds received from this source should be used by the executive committee for printing and further promoting legislation as recommended by the

EXPORTS AND IMPORTS.

The U. S. treasury department announces the following statistics regarding exports and imports of nursery stock during 1896:

The value of plants, trees and shrubs exported was \$133,735, the customs districts forwarding the greatest quantities and the values sent from each being: Bangor, Me., \$3,023; Boston and Charlestown, Mass., \$5,035; Newport News, Va.; \$860; New York, \$42,446; Passamaquoddy, Me., 688; Brazos de Santiago, Tex., \$615; Paso del Norte, Tex., \$2,106; Saluria, Tex., \$1,107; Puget Sound, Wash., \$1,692; Buffalo Creek, N. Y., \$4,118; Cape Vincent, N. Y., \$502; Champlain, N. Y., \$4,721; Detroit, Mich., \$4,678; Niagara, N. Y., \$5,0,857; North and South Dskota, \$1,839; Oswegatchie, N. Y., \$1,053; Vermont, \$7,196.

The countries to which the largest supplies were sent were: Germany, \$10,463; Netherlands, \$566; United Kingdom of Great Britain, \$12,712; Dominion of Canada,—Nova Scotia, New Brunswick, etc., \$8,577; Quebec, Ontario, etc., \$75,199; British Columbia, \$1,806; Guatemala, \$4,519; Mexico, \$7,686; British West Indies, \$1,148; Hayti, \$1,934; Santa Domingo, \$2,335; Puerto Rico, \$1,970; Argentina, \$965; Uruguay, \$500.

The total value of plants, trees, shrubs and vines, known as nursery stock, dutiable, imported, was\$265,854. Of this, the following customs districts receiving the largest values were: Baltimore, Md., \$471; Boston and Charlestown, Mass., \$11,561; Georgetown, D. C., \$725; New York, N. Y., \$215,318; Philadelphia, Pa., \$20,611; San Francisco, Cal., \$1,489; Buffalo Creek, N. Y., \$926; Chicago, Ill., \$6,020; Cuyahoga, Ohio, \$972; Detroit, Mich., \$399; Genesee, N. Y., \$926; Milwaukee, Wis., \$659; Minneapolis, Minn., \$509; Niagara, N. Y., \$1,353; Cincinnati, Ohio, \$1,738; Indianapolis, Ind., \$076.

The countries sending us the largest values were: Belgium, \$131,768; France, \$9,046; Germany, \$58,877; Netherlands, \$27,684; United Kingdom of Great Britain, \$27,164; Quebec, Ontario, etc., \$1,480; Mexico, \$1,850; British West Indies, \$1,886; Brazil, \$427; Colombia, \$1,553; Japan, \$3,006.

The total values of plants and flowers imported, duty free, was \$689,453.

Of this the districts receiving the largest supplies were:
Boston and Charlestown, Mass., \$22,869; New York.,
\$508,761; Philadelphia, Pa., \$48,204; St. Augustine, Fla.,
\$2,397; San Francisco, Cal., \$6,257 Buffalo Creek, N. Y.,
\$4,970; Chicago, Ill., \$16,454; Cuahoga, Ohio, \$18,092;
Detroit, Mich., \$5,847; Genesee, N. Y., \$14,853; Huron,
Mich., \$6,544; Milwaukee, Wis., \$6,768; Minnesota, Minn.,
\$549; Niagara, N. Y., \$7,239; Vermont, \$2,118; Albany, N.
Y., \$913; Cincinnati, Ohio, \$4,826; Columbus, Ohio, \$1,372;
Indianapolis, Ind., \$5,291; Louisville, Ky., \$614; Pittsburgh,
Pa., \$515; St. Louis, Mo., \$588; Springfield, Mass., \$295.

The countries from which the largest quantities were imported were: Austria-Hungary, \$2,435; Belgium, \$11,263; France, \$169,519; Germany, \$18,806; Italy, \$3,466; Netherlands, \$279,678; United Kingdom of Great Britain, \$40,115; Bermuda, \$105,682; Quebec, Ontario, etc., \$22,644; Mexico, \$1,426; British West Indies, \$2,766; China, \$5,215; Hong Kong, \$953; Japan, \$19,898; Hawaiian Islands, \$1,129; British Africa, \$3,580.

Among Growers and Dealers.

A. Willis, Ottawa, Kan., offers a complete assortment of choice nursery stock.

An opportunity to dispose of a force of retail agents is offered in another column.

F. W. Watson & Co., Topeka, Kan., have 100,000 branched apple seedlings from 3-16 up.

Virgil Popham, New Fruit, Ky., has revised his directory of nurserymen, florists, seedsmen and dealers.

Peach trees grown on new ground and free from disease or scale are offered by W. P. Brinton, Christiana, Pa.

Charles Wright, Seaford, Del., was the first nurseryman on the peninsula to offer a bill of health with his stock.

A packing house owned by Chas. A. Green near Rochester, N. Y., was destroyed by fire March 1st. Loss above insurance \$3,500.

George Achelis, West Chester, Pa., has a fine stock of peach and apple trees and a general line of fruit, deciduous and evergreen trees.

A good assortment of the leading varities of peach trees, including Crosby, is offered by the West Jersey Nursery Co., Bridgeton, N. J.

Charles and George F. Crosman, of the firm of Crosman Brothers, seedsmen, Rochester, N. Y., assigned on February 24th to Henry B. Hathaway. Liabilities reported, \$45,000; preferences \$26,000.

John A. Young, Greensboro, N. C., is the introducer of the Greensboro and Connet's Southern Early peaches. He has trees and buds ready for delivery and has a certificate of freedom from scale or disease.

J. G. Harrison & Sons, Berlin, Md., write: "We are now digging one hundred thousand strawberry plants per day and have a large stock yet for our northern customers, and a stock of June budded peach yet unsold, also one year trees."

In the February issue of the *Minnesota Horticulturist* is reproduced a picture and sketch of Dr. Phineas A. Jewell who with his brother-in-law, J. M. Underwood, established in April 1869, the Lake Pepin Nurseries. Dr. Jewell died May 25, 1878, aged 49 years.

Just forty-five years ago Thomas Meehan commenced the nursery business in Germantown, Pa., with but three acres of ground and no capital. He made a specialty or ornamental trees, shrubs and evergreens of every description, not only for large private places, but for parks and cemeteries. At that time there was little or no demand for ornamental trees outside of a few of the commoner sorts. Mr. Meehan's foresight has been rewarded by a trade extending around the world.

O. D. Shields of the Colorado nursery company at Loveland Larimer county, has been down in the Arkansas valley on a still hunt for a new location and will try fortunes at Fowler, Otero county, says the *Denver Field and Farm*. He will soon begin work on the land for the new establishment which is to be started this spring. In time the Colorado nursery will have its headquarters at Fowler but several years will be required to get the plant in full working order so as to do a general nursery business.

Charles Wright, Seaford, Del., has 340 acres in fruits. It is claimed that he has the largest trial peach orchard in the world. Every scion, it is said, is cut from those trees which show the greatest vigor and productiveness combined with fruit of the largest size, highest color and finest quality. The Mamie Ross peach is described as twice as large as, and finer in every way than Rivers, with which it ripens. Connet Early is described as sister to the Elberta, ripening nearly a week before Mountain Rose. Cannon Early is described as a freestone, ripening with Hale's Early. Strawberry plants are a specialty of this nursery. An illustration in Mr. Wright's catalogue shows a hickory tree on the grounds, over which grows a grape-vine of unknown age, measuring 26 inches in diameter four feet from the ground.

THE NURSERYMAN'S DUTY.

President E. M. Sherman, of the Sherman Nursery Co., Charles City, Ia., read a paper on "The Duty of the Nurseryman to Horticulture" at the recent meeting of the Northeastern Iowa Horticultural Society, in which he said:

"I regard it as a nurseryman's duty to horticulture to gather and preserve for future generations the native trees, shrubs and plants which are being so rapidly exterminated by the clearing of our forests and the breaking of our prairie lands.

"I also consider it his duty to gather as far-as possible from every land the choice fruit, flowering and ornamental trees, shrubs and plants which may be able to withstand the climate where he is operating, to propagate these and distribute them in his trade. But in this work of the selection of new things the nurseryman should proceed with great caution and avoid, if possible, the introduction of varieties which do not possess real merit.

"The jobbing business, as carried on to-day, I believe has done and is doing more to degenerate the nursery business and injure the interests of horticulture than any other one thing and I consider it the duty of any nurseryman to refuse the use of his order blanks to men who may be purchasing the stock of him. If men wish to do a jobbing business, let their order blanks show the facts, so that purchasers may know from whom they are purchasing the stock. Then if they wish to buy, all well and good; but they should not be deceived into supposing that they are doing business with an old and well-established firm when the facts are they are doing business with some one who is buying stock of that firm.

"I think that the planter has a right to demand of the nurseryman that his order be filled with first-class stock, free from disease and insect pests, and that the same shall be true to name. I also think that he has a right to expect that nursery catalogues will be truthful

"I consider, however, that a nurseryman's chief duty to horticulture is the propagation and distribution of choice trees, fruits, and flowers and I believe he has done this work most thoroughly, for go where you will from the forests of Maine to the sand hills of Florida and from the Atlantic to the Pacific, even among the peaks of the old Rockies, you will find his agents have left the product of his toil.

VALUABLE FOR ASSOCIATION.

JOHN S. KERR, SHERMAN, TEX.—"Please find \$2,00 for two years subscription to NATIONAL NURSERYMAN. It is valuable for association among the leading spirits of the nursery interest."

IN SEVERAL STATES.

PROGRESS OF THE MOVEMENT AGAINST THE SAN
JOSE SCALE—LEGISLATION PROPOSED OR IN
FORCE—CANADIAN FRUIT GROWERS.

The activity of the movement against San Jose scale in the states is indicated by the following reports concerning which all nurserymen should be informed:

IN WEST VIRGINIA.

The West Virginia Horticultural Society discussed at length legislation to prevent the introduction of the pest from nurseries, and its spread in the state, and it was concluded that the state could accomplish very little in this direction unless the federal government took some action to control interstate commerce, and the following resolution with reference to this phase of the subject was adopted:

"Resolved, That it is the sense of this society that Congress should enact laws tending to prevent the distribution of the San Jose scale and other dangerous insects through interstate commerce, and that states should enact such uniform supplementary laws as will eradicate these pests where they have already become established."

IN WISCONSIN.

A. J. Phillips; West Salem, Wis., says regarding the San Jose scale:

"The question of extermination is the main one that confronts the horticulturists at this time. They feel confident they can manage the pest in Ohio if other states will do their duty as they ought, and we in Wisconsin should make a united effort to keep it out of our state. Planters should use every precaution to prevent its gaining a foothold on their premises. Every nurseryman should make an effort to have his premises and trees examined by a proper person, before he ships them to the buyers, and the same should be required of those who ship from other states. United we may stand, but divided, the scale may come upon us like a thief in the night.

"A strong magnifying glass is as essential to the nurseryman and orchardist as the Babcock test is to the dairyman."

IN NORTH CAROLINA.

The North Carolina legislature has just passed a bill which has been signed by the governor, providing for a commission composed of the state commissioner of agriculture, the director of the North Carolina Agricultural Experiment Station and the president of the North Carolina Horticultural Society to adopt regulations for the extermination of noxious insects, fungous diseases and weeds which are affecting or may effect crops. The commission has power to destroy at the expense of the owner any infested stock; it also has power to prevent the introduction of dangerous crop pests from without the state by adopting regulations not inconsistent with the laws and constitution of North Carolina and of the United States.

In a bulletin on the San Jose scale, Gerald McCarthy, state entomologist of North Carolina, at Raleigh, states that most of the larger nurseries of the state have been inspected and certificates of freedom from infestation have been given to those entitled to it. In some cases the scale was found on stock shipped recently to nurseries in the state from Maryland and Georgia. This stock, if it had not been discovered by the entomologist, would have been used for propagating the tree and the scale in these nurseries or would have been sold to citizens of the state for planting. In all such cases the nurserymen, upon learning the nature of the pest, promptly burned the infested stock. All stock in the state found infested with San Jose scale so far has been traced to Georgia, Maryland and New Jersey.

IN MINNESOTA.

There has been introduced in the Minnesota legislature a bill prepared by prominent members of the Minnesota Horticultural Society, together with Professor Otto Lugger of the Minnesota Experiment Station. The bill provides for the inspection of all nurseries in the state for the purpose of discovering San Jose scale. The same inspection of all nursery stock shipped into the state is provided for. Such stock must be accompanied by a certificate stating that the stock has been inspected and found free from the scale. All agents of transportation companies are forbidden to deliver nursery stock in the state of Minnesota unless stock is accompanied by certificate

Sections 5, 6 and 7 are as follows:

Section 5. Every person, firm or corporation growing or offering for sale in this state any trees, vines, shrubs or plants, commonly known as nursery stock, shall, on or before the first day of October in each year, apply to the state inspector of nurseries and orchards for the inspection of said stock under the provisions of this act, and a license for its sale, and shall deposit with the said inspector a fee of five dollars as a license for himself as principal, and one dollar as a license fee for each and every one of the local or traveling agents or employees who shall engage in selling such stock or soliciting orders for the same, and each of such principals shall execute to the state of Minnesota a bond, in the sum of one thousand dollars, with two good and sufficient sureties who are residents and freeholders of said state, conditioned that be or they will comply with all the provisions of this act, and that upon demand he or they will file with the state inspector of nurseries and orchards, within thirty days after delivery, a list of the persons to whom he has sold or delivered any such nursery stock, giving species and varieties, together with the postoffice address of each purchaser. Such information shall be preserved and be for the sole use of the nursery and orchard inspector and his deputies.

Section 6. No person, firm or corporation resident of another state, province, or country shall engage or continue in the business of importing any trees, plants, shrubs or vines, commonly known as nursery stock, into this state, or of selling such importations within the state, or of selling such articles within the state for subsequent importation into it, without having first obtained from the state inspector of nurseries and orchards a license to do business in this state as provided in section five of this act, and shall also file with the inspector of nurseries and orchards the bond herein required, together with the certificate of inspection by a legally authorized inspector of the state, province or country where said person, firm or corporation is located.

Section 7. The inspector of nurseries and orchards, upon receipt of the fee required in this act, together with the bond and a satisfactory certificate of inspection, shall issue license to the applicant according to the provisions of this act, and all such licenses shall expire on the first day of October next following the date of their issue.

IN MICHIGAN.

Referring to the San Jose scale the Michigan Farmer of March 13th says: •

"An unknown party came into the Farmer office a couple of weeks ago with some specimens of bark from trees in his apple orchard, which he said had been killed out by some disease. The bark was covered with the scale, and looked as if it had been scorched in a fire. The outside was black, and

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the inner side a dull red. Nearly every tree in his orchard he said was affected Had first noticed it last summer. The trees began to die in the fall. The party refused to give his name or location of his orchard, or permit a piece of the bark to be retained. He is probably a resident of Detroit, and his farm located a short distance from this city. That orchard should be cut down and the trees uttterly destroyed by fire. Those pieces of bark the man was carrying with him may spread the infection to other orchards. We look for a very serious time with the scale before it is stamped out, if it ever is. One thing is certain, work cannot be started too soon."

IN CANADA.

The fruit growers of St. Catharines, Ontario, have adopted the following resolution:

"Whereas, Authentic information has been received by this Association that the San Jose scale has made its appearance in the orchards and nurseries in the adjoining states of the Union, thereby seriously menacing the fruit growing interests of the Dominion of Canada. Be it, therefore,

"Resolved, That this association respectfully memoralize the Dominion Government to take the necessary steps to prohibit all importation of fruit of kinds known to be infested, and of all fruit trees and currant bushes until such evidence is furnished as shall satisfy an expert that they are free from the San Jose scale. And further,

"Resolved, That the government be memorialized to appoint an expert or experts to examine all such importations, with authority to have them re-shipped out of the country or destroyed, if found to be infected."

IN VIRGINIA.

At a called meeting on March 3d, at Charlottesville, Va., a state horticultural society was formed with the following officers: President, Samuel B. Woods, Charlottesville; vice-presidents, H. E. van Deman, J. B. Watkins, W. H. Boaz, John S. Lupton, Col. A. M. Bowman; secretary-treasurer, G. E. Murrell, Coleman's Falls.

The meeting was addressed by Professor W. B. Alwood of the State Experiment Station upon the advisability of steps being taken to prevent the introduction and spreading of San Jose scale in the state. Resolutions were passed promising the support of the society in obtaining legislation requiring certificates of inspection on state and interstate shipments of nursery stock. Society annual meetings will be held on second Wednesdays in September.

THE HORTICULTURAL SOCIETY.

The season of the horticultural society has come and gone and the lessons it teaches are more valuable than ever. Tha the meetings of the active societies in fifteen states were appreciated by the nurserymen can be seen by the large percentage of nurserymen who not only attended but participated in those meetings. The presidents of these state societies in several instances are nurserymen, and among the vice-presidents,

secretaries, treasurers and directors are the names of prominent nurserymen. In almost every case the name of one or more nurserymen appears on the programme, and the opinions of nurserymen in the discussions are regarded as authoritative.

Of course these conditions exist mainly because most nurserymen are orchardists to a greater or less extent and therefore come within the commonly accepted meaning of the term horticulturist. But it is pleasing to note the unity of interest which these meetings develop between grower and purchaser of nursery stock. The orchardist gets the benefit of the experience of the professional tradesman and the latter is certainly benefited by mingling with his customers and learning what is desired, and, on the other hand, what is so severely criticised as to be no longer in demand. From the proceedings of the state societies which in most cases are voluminous, The National Nurseryman has endeavored to present that which is of the greatest interest to the growers and dealers in nursery stock.



We present herewith a portrait of John Laing, one of the most prominent nurserymen in England. He is the senior member of the firm of John Laing & Sons, seed, plant and bulb merchants, rose, fruit tree and vine growers, at Forest Hill, London, S. E. Their nurseries are under the patronage of Queen Victoria, the Prince of Wales, the King of the Belgians and other royal princes; also the leading nobility of gentry. They have a large stock of roses, fruit trees, vines, shrubs, orchids, stove and greenhouse plants, herbaceous and bedding plants, florist flowers.

The great specialty of these nurseries is the collection of tubrous-rooted begonias, undoubtedly the largest, finest in quality and the most complete in the world. In form, substance, size and color of flowers this collection is believed to be unap-

proached. It has a world-wide fame and has been awarded four gold medals, the Royal Horticultural Society's highest honor, a silver-gilt cup; also seven first prizes at the great begonia show, and all the first prizes wherever exhibited. Mr. Laing began to give special attention to begonias in 1875.

Edward Herendeen, president of the Herendeen Manufacturing Co., Geneva, N. Y., died February 23d, aged 75 years. He was graduated from Haverford college, Penn., in 1851 and began his career in the nursery business at Macedon, N. Y., in partnership with the late John J. Thomas, author of "The American Fruit Culturist." He went out of the nursery business in 1874.

James S. Sears, of the firm of Sears, Henry & Co., Geneva, N. Y., died March 19th. He was born at Reading, Conn., October 16, 1836. He removed to Geneva in 1867 and became a member of the nursery firm of Sears & Henry. The late Lemuel Herendeen, president of the village of Geneva, became a member of the firm in 1872.



JOHN LAING.

The National Nurseryman.

C. L. YATES, Proprietor.

RALPH T. OLCOTT, Editor.

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Drafts on New York or postal orders, instead of checks, are requested.

Correspondence from all points and articles of interest to nurserymen and horticulturists are cordially solicited.

Entered in the Post Office at Rochester, as second-class matter.

ROCHESTER, N. Y., APRIL, 1897.

A BLOW AT THE NURSERY TRADE.

While the nurserymen of the country were busily engaged last month in final preparations for the spring packing, a national convention was held at Washington, the proceedings of which, published in full in another column, are of the greatest importance to the nursery trade.

It was a convention dealing almost entirely with nursery interests of the whole country, yet there were but two nurserymen, as such, present! And one of these was sent, uninvited, to see what was intended to be done. In view of all the circumstances, we are constrained to state the evidence points to direct antagonism of nursery interests. While the intent may not have been so pronounced as this, the results, we believe, amply justify the statement.

This convention of fruit growers and entomologists met pursuant to a call of the Ohio Horticultural Society requesting all state horticultural societies to send delegates; and upon the resolutions adopted was based a bill, to be introduced in congress at the first opportunity, providing for the inspection, fumigation and destruction when necessary of nursery stock throughout this country.

In spite of the refusal upon the part of fruit growers who served on the legislative committee of the convention to furnish a copy of this bill, The National Nurseryman is enabled, through the courtesy of the chairman of that committee, Professor William B. Alwood, state entomologist of Virginia, to present the bill as finally revised. It is stated by fruit growers that copies of this bill will be sent to nurserymen; but the difficulty in securing a copy for that very purpose leads us to make sure by this publication that the nurserymen shall have an official copy with the latest revisions. Particular attention is called to this bill which appears in this ssue. The fullest information in relation to this subject is

necessary in order to be able to deal with it when the time

It will be seen that the bill treats first of nursery stock imported into this country; and secondly, of nursery stock which is the subject of interstate commerce.

Special attention is called in the first place to the fact that fruit is subject to the same inspection as is nursery stock, only in case of importation into this country. Now the avowed object of this bill couched in general terms is the prevention of the introduction and the dissemination of the San Jose scale. And in what foreign country, except Japan, has the San Jose scale been reported? And how much fruit is imported from Japan? Section 5 of the bill refers to restrictions upon interstate commerce and now the words, "or fruit," are dropped! Only nursery stock is to be subject to the severe restrictions imposed, when it comes to a question of interstate commerce. And yet the entomologists who attented this convention are on record as declaring that the San Jose scale has been discovered in large numbers upon pear fruit sent freely from point to point within the United States and within certain states!

The latest declaration of this nature was that of Victor H. Lowe, entomologist of the New York Experiment Station at Geneva, N. Y., in a paper read before the recent meeting of the Western New York Horticultural Society, an organization of fruit growers, and published in part in the last issue of The National Nurseryman. Mr. Lowe's name appears in the list of those at the Washington convention. In his paper, above referred to, he said:

"At present the San Jose scale is doing its worst work in this state on Long Island. It has been found from one end of the Island to the other. On two different occasions we found fruit exhibited at the Long Island fairs which was badly infested. Since that time we have observed it in the nurseries there. [First on the fruit and then in the nurseries.]

"As early as July of 1894, we found pears infested with the San Jose scale for sale on fruit stands in New York, Brooklyn and Jamaica, L. I. In the first two instances all of the infested fruits observed were Bartlett pears from California; while at Jamaica, not only infested pears from California, but also infested pears grown on the Island were found for sale in the market places. This, together with the fact that infested fruit was sent to the Long Island fairs not only that year and the year following, but this year as well, indicates almost criminal carelessness on the part of those responsible."

And yet in the face of these positive statements regarding the danger of infection from the transportation of fruit within and between states, this convention of fruit growers deliberately struck out of the sections of the bill referring to interstate commerce all mention of fruit! Will a congressional committee report favorably a bill of such transparent injustice as this—a bill framed by fruit growers as against the nurserymen and ignoring entirely the provisions which should be operative against fruit?

Is it to be supposed that the fruit growers would acquiesce in a bill identical with this except that the words "or fruit" should be included in all sections referring to interstate commerce?

Why were the words "or fruit" not included in the sections referring to interstate commerce? Why, indeed, when the State of California, the land of the origin of the scale in this country and the land of the infested pear fruit on sale in New

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York state, threatening New York nurseries, was represented at the convention by M. J. Daniels of Riverside, member of the California State Board of Horticulture, and secretary of the Washington convention; E. M. Wardall, Los Angeles, also a member of the state board, and member of the legislative committee of the convention which drafted this bill leaving out the words "or fruit" in sections relating to interstate commerce; James McLaughlin, member of congress from California, who addressed the convention on quarantining trees in the Golden state; by H. K. Snow of the Tustin, Cal., Fruit Growers Association; and by a paper sent across the country by B. M. Lelong, secretary of the California State Board of Horticulture, to be read at the convention, detailing the "inspection" of trees, fruits and plants in that state, but making no mention, of course, of the failure of that "inspection" to prevent the San Jose scale from appearing on pear fruit for sale in the streets of three cities of New York state.

In how many other cities of the country has California fruit, infested with San Jose scale, been exposed for sale undetected?

The arbitrary nature of this bill is well illustrated, too, in the provision for inspecting nursery stock subject to interstate commerce. Should this bill become a law property valued at hundreds of thousands of dollars might be destroyed within a few days. The bill provides that not a tree or plant shall be forwarded from a nursery to a point beyond the state boundary until it shall have been duly inspected and labeled by an inspector appointed by the secretary of agriculture. If a nurseryman should have his stock dug and assorted and ready to ship, he must await the visit of the inspector before another move can be made. And if the inspector is delayed by many duties elsewhere the nurseryman's stock may be ruined or so delayed as to prevent him from complying with his contracts. There may be a remedy for this annoyance in section 8 of the bill, but the language of the section is so vague as to leave opportunity for wide difference of opinion in its interpretation, and there might still be costly delay.

So much for the bill itself. As to the subject under consideration, the San Jose scale, this journal has steadily called attention to the reports of the presence of the pest in various localities and to the necessity of continuing the watchfulness which has characterized the action of nurserymen generally in this matter. Entomologists have borne testimony to the promptness with which nurserymen have done all in their power to rid their nurseries of the scale in the few cases in which it has been discovered. And Mr. Lowe of the New York Experiment Station said a few weeks ago: "Western New York nurserymen are to be congratulated upon the care which they have thus far exercised with regard to keeping this serious pest out of their nurseries."

Nurserymen have not been slow to recognize the fact that their interests and those of the fruit grower are identical. Success in fruit culture causes a demand for more trees. The nurserymen are therefore surprised that horticulturists should meet and adopt such stringent measures without consulting the nurserymen. The action comes unexpectedly for there has been no attempt upon the part of nurserymen to ship stock known to be infested. On the contrary there has been cheerful acquiescence in the recommendations of entomologists in special cases.

That great damage might be wrought by the extensive spread of the San Jose scale is admitted, but if we are to have a law

in the matter, by all means let it be just; let it not impose severe restrictions upon one class and at the same time allow another class to produce the result it is ostensibly intended to prevent. We do not believe the eminent professors of the U. S. Department of Agriculture and the experiment stations and the prominent fruit growers wish to injure the nurserymen. We prefer to regard the developments of the Washington convention as the result of the zeal of the entomologists and the fears of the fruit growers combined in somewhat hasty action which we have discussed plainly. And we hope that upon reflection it will be deemed advisable to consult the nurserymen as to the provisions of an amended bill.

It was the intention of those at the Washington convention to have the bill introduced at the special session of the fifty-fifth congress. But it will probably not be possible to introduce the bill until the regular session of congress next fall. In the meantime the nurserymen of the country will be kept posted upon the subject through the columns of their trade journal and at the annual convention of the American Association of Nurserymen in St. Louis in June the matter will receive careful consideration. Within the membership of this association of more than twenty years standing are men prominent and influential in local, state and national circles, and they will make their influence felt in a demand for just consideration at the hands of the national legislators.

THE NURSERYMAN'S CASE.

William C. Barry, of the firm of Ellwanger & Barry, Rochester, N. Y., the only nurseryman at the national convention of fruit growers and entomologists at Washington, attending as a nurseryman and in the nursery interests, with the single exception of E. H. Bissell, of Richmond, Va., other nurserymen being there as representatives of horticultural societies, was particularly anxious to state the case of the nurserymen to the convention, but found no disposition to regard the nursery interests. Indeed there was a spirit of direct antagonism.

Mr. Barry attempted to show that such legislation as is proposed aims a serious blow at the nursery trade; that the long financial depression following close upon a period of greatly reduced prices for nursery stock had left the nursery interests in no condition to withstand such adverse legislation which he was prepared to show was not only ill-advised, but unnecessary.

It was particularly urged by Mr. Barry that any law affecting nursery stock should be so framed as to be capable of the interpretation intended by the legislative body enacting it. The proposed bill, he contended, is so worded as to be capable of great misinterpretation in the hands of such inspectors unacquainted with nursery stock as would be sure to be appointed under it in many cases. He endeavored to point out that adverse legislation could ruin the nursery industry just as it could ruin any other; that the nurserymen of the country had labored long to build up an industry which was at the foundation of horticulture upon which the welfare of the country very largely depended.

But Mr. Barry's argument was heeded little or not at all, and the legislative committee of the convention in executive session framed a bill which by reason of lack of knowledge of existing conditions or otherwise, is inimical to nursery interests.

THE MINNESOTA BILL.

The question of legislation as to San Jose scale in Minnesota was referred by the State Horticultural Society to a committee of its members. A bill was drafted on the lines of the Maryland bill, but later a meeting of the entomologists of the adjoining states was held at Chicago and they framed a measure, which, with modifications necessary to meet certain conditions, was recommended for the consideration of the different states and people interested in horticulture. The original Minnesota bill was withdrawn and the one framed on the lines indicated submitted as a substitute bill. It is now pending.

A portion of the bill is published in another column. A question has arisen as to the constitutionality of sections 5 and 6 providing for a bond and license in the case of non-resident as well as resident nurserymen. It is held that this is a tax on interstate commerce and that it covers precisely the same ground as was covered by the Minnesota tree law which was declared unconstitutional by the U.S. court in the fall of 1894.

A supporter of the Minnesota bill says: "The requirements of this bill are identically the same as to foreign and home nurseries. If I am not mistaken, the previous Minnesota tree law was condemned as unconstitutional because it required one thing of a resident and another thing of a foreign salesman.

"Our legislature has a judiciary committee, composed largely of lawyers, who pass upon the constitutionality of all measures coming before them, and they will doubtless give this bill more careful attention than they would ordinary measures. There has been no effort in framing this law to impose burdens upon outside nurserymen or salesmen that are not shared equally by Minnesota growers. It is, however, the opinion of most of the horticulturists and nurserymen in this state that it is far easier to keep out the San Jose scale than it is to suppress it when once introduced.

"I have no doubt that the terms of this law will be such as to impose as little hardship as possible upon people handling nursery stock, or at least as little as is consistent with safety and the accomplishment of the purpose for which it was designed. The present bill is in charge of the State Horticultural Society, and is, so far as I know, approved by the state entomologist and the experimental stations.

"I understand that legislation of a much more stringent character is contemplated or is now in active progress of enactment in several of the adjoining states."

SCALE BILL IMPRACTICABLE.

At a county horticultural society meeting in Michigan, during a discussion of the Michigan bill relating to insects, A. Hamilton said: "What I have to say will be from the standpoint of a nurseryman; I like the title of the bill, and that is all I do like about it. The bill is impracticable. No state inspector can inspect during the month of August all the nurseries in the state. I do not believe there is any scale in the nurseries of Michigan. Have the nurserymen done anything dishonorable, that they need to be put under bonds? Small farmers can not sell strawberry or other plants under its provisions. The planters need have no fear from the nurseries. Nurserymen can not afford to send out diseased trees."

PROTECT NURSERYMEN, TOO.

Editor of THE NATIONAL NURSERYMAN:

I enclose you herewith a copy of a proposed law drafted by the recent convention of horticulturists and entomologists at their session at Washington. The proposed law is to be a federal enactment of doubtful constitutionality and it most vitally affects the nurserymen of the entire country.

It seems to have been drawn entirely regardless of the equities of the case The nurserymen were not represented in committee, and in fact the only representative in the convention was William C. Barry, who appeared for the Eastern Nurserymen's Association, but who was an uninvited delegate sent by the executive committee of this association to look after their interests.

The proposed law is as a matter of fact drawn by fruit growers and experimental station men, and was drawn without consideration of or proper regard for the interests most at stake. It is from a practical nurserymen's point of view an ill-digested scheme almost impossible properly to enforce. It leaves to the secretary of agriculture almost unlimited power.

Fruit is subject to all the pains and penalties that nursery stock is, provided it is imported; but inasmuch as San Jose scale is unknown in any country outside of the United States, except Japan, from which no fruit is imported, the reason would seem to be in the desire of the guileless Californian who wishes to do away with all competition that would affect his market.

It is well known that the scale was found first in San Jose, California, where it obtained its name and it is equally well known that fruit from the Pacific coast is badly inflected. This fruit is exposed for sale on fruit stands and in stores from the Rocky Mountains to the Atlantic ocean, and the danger of infection from this source is a hundred times as great as from nursery stock, especially nursery stock grown in such sections as Western New York, where the pest has never been known. The bill affords no protection whatever against infection from this source and this omission alone should discredit and condemn it.

Nurserymen generally are agreed, I think, that if the pest is as bad as reported, something should be done to prevent its spreading. But certainly no nurseryman would undergo the tedious and expensive requirements of this law with the moral certainty that the first California orange or pear eaten on his grounds might infest his premises.

If we have a law, let us have a just law, one that will answer the requirements of the case, and that will protect the nurseryman from the fruit grower, as well as the fruit grower from the nurseryman.

Rochester, N. Y.

IRVING ROUSE.

THE BILL relating to insects which was introduced in congress during the closing days of the last session by Congressman Swanson, of Virginia, was largely prepared by Dr. L. O. Howard, entomologist of the U. S. Department of Agriculture. It formed a basis for the bill now under consideration.

THE PROSPECT is good for another big peach crop in Delaware; also for good crops of plums, apples, pears and small fruits. The planting since last spring has been heavier than for years. Elberta continues to be a favorite variety.

In Hursery Rows.

RUSSIAN CHERRIES—M. E. Hinckley, Marcus, Ia., says: "In cherries we are at least ten years behind the present status of plum culture. Some experimenters claim that the introduction of the Russian makes an era in cherry culture. Just how far north the best of Russians may be grown remains to be tested. What we chiefly need is to have some enterprising nurseryman in the Northwest propagate a select list of these hardy sorts and push them in that section.

BEN DAVIS APPLE—S. D. Willard, Geneva. N. Y., says: "For the last five years, in the cities of New York and Philadelphia, the Ben Davis apple has been selling at from twenty-five to fifty cents over the Baldwin. Last fall it sold at fifty cents over the Baldwin. It is a better keeper than the Baldwin, and when the latter has melted down and gone out the Ben Davis is in good condition. It is a fine cooking apple, and it meets the wants of the people in certain directions."

ITASCA PLUMS—Dewain Cook, Superintendent of the Windom, Minn., Trial Station, reports as follows: "I received samples of what promises to be a plum of extraordinary value; they were sent me by the Jewell Nursery Co. They were of great value is its exceeding earliness. Trees sent me last spring of this variety, which they call the Itasca, grew vigorously until about July 1st and then ceased to grow, resembling in this respect the Manitoba plum, thus indicating that its origin was in the far north. On account of its good quality, large size, earliness and apparent hardiness of tree, I predict for this variety a large range of usefulness, not only in good plum growing sections but in the far north where most other varieties would fail."

PEAR ON QUINCE STOCK-At the U. S. Experiment Station at Fort Collins, Colo., experiments were recently made in the use of quince instead of French pear stock for grafting pears. The following varieties were tested: Bessemianka, Buffum, Clapp's Favorite, Edmond's, Idaho, Kieffer, Lawrence, Le Conte, Louise Bonne of Jersey, Mount Vernon and Vicar. Some years ago an equal number of scions of each variety was grafted on French pear stocks, and on quince stocks, and the trees have grown in contiguous rows on low land. None of the varieties named have done well on the quince stocks. The dwarfing action of the stock seems to have gone beyond the limit of healthy growth, and the trees present a stunted and sickly appearance. On pear stocks the growth of all varieties was good, but Clapp's Favorite excelled in vigor and appearance. On the western slope in Delta county, quince stock is favored and is being planted largely.

CRIMSON RAMBLER—All that has been said of this beautiful climber is borne out by inspection of the flowering plants at Ellwanger & Barry's greenhouses. Last month the large pyramidal clusters of deep crimson hue were admired by many visitors. The habit of this variety is so different from that of any other that it attracts marked attention anywhere, even among a large collection of new and striking kinds. The blossoms are in clusters of fifty or more and it is easy to imagine the brilliant effect of many of these clusters spread over a large surface upon a skillfully trained climber. The blossoms retain their color and form a long time. Ellwanger & Barry have a very large stock of plants of the Crimson

Rambler in all stages and of thrifty growth. They have also plants of Aglaia (Yellow Rambler), Thalia (White Rambler) and Euphrosyne (Pink Rambler) and specimens of new French roses recently imported. The first Marechal Niel brought to this country was brought by Mr. Ellwanger the senior member of this firm. That was 35 years ago and ever since that time the firm has been making a specialty of roses.

SPORADIC PLANTERS OF PITS.

A bill is before the Michigan legislature relating to the prevention of injurious diseases of nursery stock through introduction from other states or countries. Except in one particular it differs little from enactments answering the same purpose in California, writes Leonard Coates, the well-known California nurseryman, in the California Fruit Grower.

This exception is in sections 5 and 6, whereby it is made necessary for nurserymen to obtain a license, and give a \$1,000 bond, in order to do business, which also applies to nurserymen outside the state. A synopsis of the bill did not show how it was proposed to do this, in regard to the latter clause, but, broadly, the idea is good.

If a man is unable to purchase a license, he is pecuniarily unfit to be a nurseryman; if he cannot produce a thousand dollar bondsman, he is morally deficient. An individual may open a store for groceries, or dry goods, fruit or fish, and cannot, by intent or through ignorance deceive or mislead the public to any extent. In the nursery business it is different. During a period of high prices there always crops up a lot of mushroom dealers and propagators, would-be nurserymen, but who have had no training as such, and who manage to bud a stock of fruit trees which become ready for sale when the market begins to fall. The result is, that these trees are sold for about what they will fetch, and they have succeeded in injuring those nurserymen who are worthy the name, and who foljow the business as a profession. But have they, on the other hand, benefited the planter? In some cases it has undoubtedly enabled him to get his trees cheaper, by the trade being obliged, to some extent, to meet these hucksters half way. But it is a question if the gain be real or permanent. Whatever tends to cheapen the market value of goods, does not, necessarily, give better value for the dollar. These spasmodic or sporadic planters of pits, and budders thereof possess but narrow experience, and are apt to be enthusiasts and hobbyists, if nothing worse, and will propagate and recommend varieties which do well on their particular five acre lot, knowing little and caring less about the very varied conditions and requirements, even in a limited area.

This cheapening of nursery stock cannot but work harm to the fruit interests of the state. There may be nurserymen who love their profession for its own sake, and artists who paint, or sing for art's sake, but they do not exist in great numbers. Without due compensation, or a reasonable percentage of profit, there is no encouragement to spend money in the endeavor to introduce and originate improved varieties, or to use only the best stocks, no matter at what cost, on which to graft or bud. For this one reason alone, the proposed duty on imported nursery stock, and the Michigan idea of a nurseryman's license are blessings as much to the planter as to the propagator.

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FAGUS SYLVATICA (European Beech)-5 to 6 feet.

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A \$10,000 CONTEST.

Will you state the missing word for one-tenth of total paid in if you are the only lucky guesser? as was Mr. M. L. Brittain, Atlanta, Ga., who was fortunately the only one in 10,385 subscribers to Atlanta Constitution at \$1.00 each, in contest ending January 1, 1897, and received check for \$1,033.50. Follow his example, and send one or more guesses by return mail. The sentence is:

"A private conversation with the Judge had given him of the justice of his cause.

One among a half dozen or more easiest thought of and most commonly used words, containing not less than five nor more than nine letters is the proper word. SEND IT IN. If you desire, send enough guesses to feel sure of it, as did Mr. Brittain. It paid him. All guesses must be sent in same envelope with the remittance that entitles you to said guesses, which are carefully booked. None others will be answered or booked. There are six conditions that entitles you to a guess; first, remittance of 50 cents for a history of "The Apple and its Origin." Descriptive book of fine fruits, and how to grow them, etc. All combined under one cover, price 50 cents. Limited to 4,000, equal \$2,000. Second, remittance of \$1.00 for first edition of Financial Directory of Nurserymen, Florists, Seedsmen, etc., which contains 10,000 addresses, each classified. Price, \$8.00. Limited at 800 copies, equal to \$300. Third, remittance of \$4.00, just half price of \$5.00 new revised Directory, latest edition. Limited at 800 copies, equal to \$3,200. This entitles a subscriber to two guesses and is of great value to anyone. Fourth, remittance of \$4.00 for one dozen apple trees, including standard and 50 cent new varieties, F. O. B. Fifth, remittance of \$5.00 for 100 apple, F. O. B., such as salesmen retail at 20 cents to 50 cents each. Sixth, remittance of \$4.00 for 1,000 apple trees, including standard and so the such as a subscriber to two guesses and is of great value to anyone. Fourth, remittance of \$4.00 for 1,000 apple trees, including standard and so the such as a selection and thrifty. 200,000 trees, 100 varieties new and standard sorts. The sentence is taken from a standard educational work, that is read by all who can read a newspaper. The identical book is sealed and placed under lock until contest closes. Then the sentence with the original word will be published and check forwarded to the lucky person or persons. The contest begins March 15, 1897, and closes June 1, 1897—only 75 days. Should more than one guess the original word One among a half dozen or more easiest thought of and most commonly sons. The contest begins March 15, 1897, and closes June 1, 1897—only 75 days. Should more than one guess the original word so often and pleasantly used by every one, the entire one-tenth of all paid in with guesses will be equally divided between the successful guesses. Any one is entitled to as many guesses on same word or on different words as they remit with each guess sufficiently for same, according to either or all of the six conditions. On receipt of remittance with

ing to either or all of the six conditions. On receipt of remittance with guesses we will send post paid to each guesser, free, a copy of one of the finest productions in the world on bi-metallism and mono-metallism, explains the wonderful effects of each, and why of all the misery and distress in our country and towns which every individual sensibly feels. Size, 14 columns of 22 inches each. It sets forth a speedy and permanent return of prosperity—worth dollars to every reader; doubly so to all who have not read "Coin's Financial School" and "The First Battle," W. J. Bryan's great book. Your receiving this shall serve as a receint for remittenest of show your guesses are booked, ster. a receipt for remittance to show your guesses are booked, etc. As this is a wonderful age for the centralization of capital into the hands of a few. Do you want to be one of the few as did Mr. Brittain? Make the effort now; send your guesses at once and state number of circulars wanted to supply friends, etc., who ought to make some money, and after first remittance will allow you to retain 10 per cent. on all guesses you canvass.

For Canvass through your Town or Country.

If you only procure 20 to 30 guesses per day it will pay you from \$1.00 to \$5.00 cash per day during the contest. Many can be induced to take half a dozen guesses. Will accept individual's checks that go or postage stamps, when more convenient than money orders or currency. Want an agent in every town, school and postoffice bounds. Want to give away at close of contest over \$2,000. Cut this advertise and the state of the state over \$2,000. ment out and use it as a prospectus, it may not appear in this paper again. Sending at once your own guesses with first remittance entitles you to retain commission on all balance you send.

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5,000 Paragon and Numbo Chestnuts, 1 and 2 years, grafted.

20,000 Sugar and Silver-Leaved Maples, 8 to 14 ft.

10,000 Carolina Poplars, 8 to 15 ft.

2,000 Purple Leaved Beech.

50,000 Deciduous Trees of Leading Varieties.

500,000 California Privet, 1 and 2 years old, very stocky.

100,000 Flowering Shrubs, including a full assortment of leading varieties

10,000 Rosa Wichuriana.

20.000 Horeysuckles-Climbing.

20,000 Climbing Vines-Assorted

30,000 Dahlias-Finest Collection

Special quotations on application. Correspondence with the trade solicited in reference to their wants in the Ornamental Line.

When writing to Advertisers mention The National Nurseryman.

W. T. HOOD & CO.,

Old Dominion Nurseries -350 acres.

A FULL LINE OF GENERAL NURSERY STOCK
A VERY FINE STOCK OF JAPAN PEAR SEEDLINGS.

Very large packing sheds. Cold storage barn. The best facilities for proper packing, and prompt shipping,

W. T. HOOD & CO. - - RICHMOND, VA.

ESTABLISHED 1852.

Phoenix Nursery Co., 13 Greenhouses.

(SUCCESSORS TO SIDNEY TUTTLE & CO.)

NURSERYMEN AND FLORISTS & Wholesale and Retail.

Correspondence solicited and promptly answered. Send list of wants for prices. Salesmen wanted.

P. O. BOX 1215. BLOOMINGTON, ILL.

THE SEDCWICK NURSERY CO.

SEDGWICK, KANSAS.

(Successor to CHAUNCEY A. SEAMAN,)

Offer SHADE TREES in car lots at bottom prices.

The_____

Kinsey Nurseries

Established 1852.



We have, at this time, a SURPLUS on Apples, Peaches, Pears, Plums, Cherry, Quinces, Houghton Gooseberries, Currants, Strawberry Plants, Asparagus, Rhubarb, &c. Also, a full line of Shade Trees, Shrubs, and Evergreens.

IF IN NEED OF NURSERY STOCK of any kind do not fail to write and get our prices. It does not justify any one to set an orchard or fruit plantation unless he can have the assurance that what he plants will prove true to name. We realize the importance of this and make it a point to keep our varieties true.

We solicit your patronage and guarantee satisfaction.

SAMUEL KINSEY & CO., Kinsey, Ohio.

When writing to advertisers mention The National Nurseryman,

BREWER & STANNARD,

The Ottawa Star Nurseries,

OTTAWA, KANSAS,

FFER a very full and complete stock of FRUIT and ORNAMENTAL TREES, and call your attention especially to . . .

APPLE-Good assortment in all grades.

PEAR-Standard and Dwarf, a good assortment in all grades.

CHERRY—General assortment with a fair supply of English Morello.

PLUM on Plum, one and two years, European, Japan and American sorts. We are strong on Burbank, Weaver, Wolf, Lombard and German Prune.

PEACH-A very fine lot, in all grades.

APRICOT-Both Russian and American sorts.

GOOSEBERRIES—A fair supply of Downings, Houghtons, and Champions, two years, No. 1.

FOREST SEEDLINGS—Including Russian Mulberry, Maple Black Locust, Ash, and Ossage Hedge. Also Maple, 4 to 5 ft. 5 to 6 ft., and 6 to 8 ft.

ASPARAGUS AND PIEPLANT.

APPLE SEEDLINGS.

For a more complete list we refer you to our Trade List, and solicit correspondence.

Small • Fruit • Plants,

Of all the Leading Varieties, and at prices to suit the times.

2,000,000 Strawberry Plants,

ALL FROM NEW BEDS. .

200,000

Red and Black Raspberry, Blackberry, Gooseberry, Currants, &c.

Correspondence Solicited. Address

P. D. BERRY, DAYTON, OHIO. P. O. Box 412.

I have the following Stock for Spring of 1 97:

25,000 Apples, 3 years, 10,

10,000 Plums, 2 years.

10,000 Cherries, 2 years.

10,000 Peaches, 1st class.

10,000 Dwarf Pears, 2 years.

50,000 Genuine Wilson Strawberry Plants.

The above trees are all grown on new ground, and are very fine in every respect.

EUGENE COVEY. - - Penfield. N. Y.

High Grade Nursery Stock for Spring of '97.

Apples, Standard and Owarf Pears, Cherries, Plums, Quinces, Cut-Leaf Weeping Birch, Purple-Leaf Birch, Silver Maple, Elms, Catalpa, Black Walnut and Butternut.

Write for Special Prices.

JAY WOOD, KNOWLESVILLE, N.Y.

When writing to Advertisers mention The National Nurseryman.

FINE STOCK OF ...

And a general line of Fruit, Deciduous and Evergreen

Trees. Ornamental

GEORGE ACHELIS, WEST CHESTER CHESTER CHESTÉR CO., PA.

WANTED! To buy a force of

nursery agents.

J. T. COOK, 159 CHERRY STREET, GENEVA, N. Y.

Clematis Jackmanıı

Strong 1 and 2 year plants for Spring delivery. WRITE US FOR PRICES.

GEORGE BROS, - East Penfield, N. Y.

EVERGREENS: SMALL PLANTS BY THE MILLION.

BEST SIZES FOR STOCKING NURSERIES.

Many Thousand COLORADO BLUE SPRUCE. Especially fine lot of AMERICAN ARBOR VITAE.

Also, IRISH JUNIPER, and all Standard Sorts. For very low prices on Al Stock, ask

C. L. WHITNEY, Warren, Ohio.

EVERGREEN NURSERY CO., Evergreen, Wisconsin.

Evergreens and Deciduous Trees.

Large stock of Arbor Vitæ, Norway Spruce, Ponderosa Pine, both seedlings and transplanted. White Ash, Sugar Maple and Sliver Maple seedlings, and many other varieties; also HEDGE ROSES. Send for Wholesale Trade List.

Z. K. JEWETT & CO.

NURSERYMEN Should read this, I have just

what you want. Always in

stock, a nice clean article of dry baled SPHAGNUM MOSS. No delay or might charges from branch roads. Orders for less than large car load shipped the first day received.

L. G. THOMPSON,

Write me for easy terms and prices.

TOMAH, WIS.

Syracuse Nurseries.

A large stock of a general assortment of the following:

Budded Apples, Standard and Dwarf Pears,

Plums, Cherries, Peaches, Roses, Ornamental Trees, Shrubs and Vines.

Superior quality, careful grading. Send us your want list or come and see our stock.

We issue no trade price list, but are always glad to give prices,

SMITHS & POWELL CO.. SYRACUSE, N. Y.

Black Hills Spruce.

SEEDLINGS in any quantity for the trade Very distinct from North-Eastern White pruce.

After twenty years' trial-fully established as the tree for the bleak prairies

I also grow PRUNUS PUMILLA by the acre. Correspondence Invited. M. E. HINKLEY, Marcus, Iowa.

E have large quantities of Rocky Mountain DWARF CHERRY (the genuine), and fine two-year ASPARAGUS in the following varieties, DONALD'S ELMIRA, MOORE'S CROSS-BRED, CON-OVER'S COLOSSAL, PALMETTO and COLUMBIAN WHITE, all grown in vicinity of Boston.

WHITING NURSERY CO., 457 BLUE HILL AVE., BOSTON, MASS.

RASPBERRIES.

From new beds. All leading varieties. Special cut on Brandy-wine, Cyclone, Staples', Tennessee Prolific, Lovett, &c.

15,000 Brandywine 50,000 Cuthbert 25,000 Golden Queen

5,000 Loudon 5,000 Miller 10,000 Marlborough 5,000 R. Church,

50,000 Turner 5,000 Thompson 1,000 Caroline 5,000 Ohio Transpl'ts

BLACKBERRIES.

40,000 Early Harvest, R. C. 10,000 Erie, R. C.

10.000 Eldorado 5,000 Lovett's Best

10,000 Hansell

5,000 Minnewaski 5,000 Ohmer

25,000 Stone's Hardy, R. C. 25,000 Snyder, R. C. 20,000 Wilson Early

20,000 Wilson Jr. 40,000 Lucretia Dewberry

CURRANTS.

5,000 N. Star; 10,000 Victoria; 10,000 Red Dutch; 10,000 Versailles. GOOSEBERRIES.

50,000 Houghton, 2-2.

25,000 Downing, 2-2,

PRICES ROCK BOTTOM.

W. N. SCARFF. - - New Carlisle. O.

Our • Horticultural • Visitor.

A Monthly Journal FRUIT GROWERS.

No patent medicine ads. or patent pages. Only 25c. a Year. Sample copy FREE.

E. G. MENDENHALL,

Editor and Publisher.

Kinmundy, Ill.

Apple, Peach, Standard Pears, Plum Apricots, Grapes, Shade Trees. Evergreens,

Shruba.

HEADQUARTERS FOR NURSERY STOCK.

Baltimore and Richmond Nurseries. BALTIMORE, MD.

FRANKLIN DAVIS NURSERY CO.

Tennessee Natural Peach Pits and selected Smock. 1000 ACRES, 50 YEARS.

Strawberries, Nut Trees, Japan Pear Seedlings, Gooseberries, Roses, Raffia. General Supplies, &c., &c., &c.

JOHN CHARLTON.

University Avenue Nurseries,

ROCHESTER, N. Y.

I offer for Spring fine Standard and Dwarf Pears, Plums, Apples, Cherries, Quinces.

I have the finest plants of INDUSTRY in the Gooseberries. country; 3 year plants. NONE BETTER.

DOWNINGS .- The largest and best stock to be found anywhere; STRONG PLANTS. PRICE LOW. Plenty of superior strong plants of TRIUMPH and WHITESMITH, the two best large white kinds.

Currants. Strong, 2 year plants, of CHERRY, PRINCE AL-BERT. NORTH STAR, BLACK CHAMPION and LEE'S PROLIFIC, &c., &c.

Grape Vines. DIAMOND, EATON, MOORE'S EARLY, NIA-GARA, SALEM, WORDEN, &c., &c.

Tree Hydrangeas. I offer elegant plants with bodies 3 to 4 feet.

Tree Paconics. HERBACEOUS PÆONIES, all colors.

Clematis. Mad. Ed. Andre, Jackmanii, Henryii, Ramona Duchess of Edinburgh-fine double white, Crispa Coccinea, Paniculata, &c., all STRONG, OUT-DOOR NURSERY-GROWN PLANTS. Do not buy Holland Plants, or plants from pots wintergrown for propagating, they are not desirable.

Ornamental Shrubs. I have fine Altheas, Clethra, Calycanthus, Deutzias, Honeysuckles (upright), Hydrangea (bush form), Spireas, Weigelias, &c., &c.
WHITE FRINGE, VERY STRONG PLANTS.

Cut-Leaf Birch (very strong), Purple Beech, Maple Schwedlerii, &c-Honeysuckle-Hall's Japan, and Monthly Fragrant, elegant plants Wistarias, in variety. Ampelopsis Vetchii, and Quinquefolio, &c.

Apple Trees

2 years—Fine.

Good Assortment.

100,000 3-16 and all up-Branched.

Apple Seedlings

Prices very low.

F. W. WATSON & CO.

TOPEKA, KAN.

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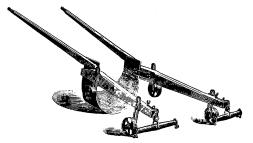
L. G. Bragg & Co..

KALAMAZOO, MICHIGAN.

(39th Vear.)

Our stock for Spring of 1897, consisting of Apples, two and three year buds: Pears, Standard and Dwarf; Plums, Cherries, Peaches, Ornamenta s and Small Fruits, are strictly first-class. Can furnish in Car Load Lots.

We solicit correspondence.



BRAGG'S

- Common Sense Tree Digger:

Is known by leading nurserymen in every State in the Union, Canada and Europe. Comments are unnecessary, as all admit that the Common Sense Digger is the boss. We ship the Digger on trial, and should it prove unsatisfactory, Bragg pays the return freight.

MANUFACTURED BY

L. G. BRAGG & CO., KALAMAZOO, MICH.

Andre Leroy Nurseries

BRAULT & SON, Directors,

ANGERS, FRANCE.

Offer for February, March shipment, their SURPLUS STOCK of very best quality 1 year FINE PLANTS, well rooted, at reduced prices.

Apply for Special Quotations on Pear, Quince, Myrobolans, Mahalebs, Manetti Rose Stocks, etc., to

ANDRE L. CAUSSE.

105 and 107 Hudson Street, New York City.

YOU WANT.....TRW BOY



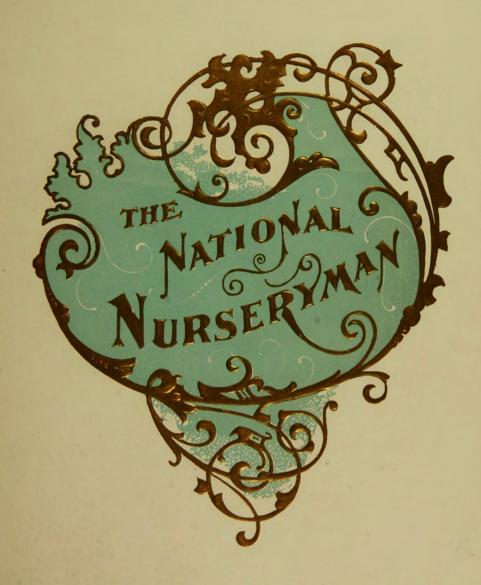
French Fruit Tree Stocks.

Get our prices before placing your order.

For General Nursery Stock, See List A.

W. A. WATSON & CO., - NORMAL, ILI

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May, 1897.

Painesville Nurseries.



NE of the most complete assortments in the world, including FRUIT and ORNAMEN-TAL TREES, GRAPE VINES, SMALL FRUITS. SHRUBS, ROSES, HARDY PLANTS, CLIMBING VINES, BULBS and GREENHOUSE PLANTS, in all the leading new and old varieties, of all grades and sizes.

> Immense stock in storage cellars ready for immediate shipment.

Extra fine stock of Standard and Dwarf Pears. PLUM, PEACH, CHERRIES and MULBERRIES.

Best lot two-year (4 to 5 feet) Quince on the market.

NUT TREES-Large assortment.

Downing, Houghton and English Gooseberries-extra selected.

Strong, splendidly rooted Blackberries, from root cuttings.

Moss, Hybrid Perpetual, and Climbing Roses-strong two-year, clean, handsome stock.

ORNAMENTALS-all classes.

Get our prices before placing your orders, large or small. Special inducements for early orders.



LANGASHIRE LAD.

Catalogues and Price Lists Free.

200 ACRES.

THE STORRS & HARRISON CO.

PAINESVILLE, OHIO.

FOR FALL 1897.

යිooseberries

and



Currants.

Leading Varieties.

Extra Fine Plants.

It will be to your advantage to write to us for prices before purchasing elsewhere.

Ellwanger & Barry,

Mount Hope Nurseries, ROCHESTER, N. Y.

200.000 Peach Trees. 2,000,000 Strawberry Plants, 100,000 Blackberry, 500,000 Raspberries.

Eldorado, Maxwell, Leader Blackberries.

MILLER, LOUDON and COLUMBIAN . .

TRIUMPH. GREENSBORO,

Raspberries.

and a full assortment of

Wickson and Red June

PLUMS.

Peaches

. . . . AND OTHER FRUITS.

Our Catalogue will save you money

MYER &

BRIDGEVILLE, DELAWARE,

LOUIS LEROY'S NURSERIES.

ANGERS (M. & L.) FRANCE,

AZALEAS, CAMELIAS, CLEMATIS LILACS, MAGNOLIAS, RHODODENDRONS, ROSES, ETC., ETC.

AF Orders Now Booked at Low Prices.

SOLE AGENT FOR U. S. AND CANADA,

AUG. RHOTERT.

26 BARCLAY STREET, NEW YORK.

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Novelties for 1897-1898.

The New Hardy Yellow Climbing Rose, YELLOW RAMBLER (Aglaia.)

HE NEW HARDY TEHOW CHIMDING HOSE, YELLLUW HAMBLLEK (Aglaia.)
We expect to have a good stock of strong field-grown plants of this variety for the coming season, and we strongly recommend the Yellow kambler as being one of the most important introduced the plants of the control of the control

LORD PENZANCES HYBRID SWEET BRIAR.

These are very interesting and pleasing novelties and have become immensely popular in England already. They are crosses between the common old fashioned sweet brier and various garden roses, all of them retaining the delightful fragrance of flower, foliage and woud which characterizes the common briar. The flowers range in color from very dark crimson to white, with all intermediate shades. The plants are wonderfully vigorous and extremely hardy, so that they are especially an acquisition to those places where the climate is too severe for ordinary roses.

THE BIG BLACK RASPBERRY.

${f CUMBERLAND}$ $({}^{Trade-}_{Mark.})$ The Business Black-Cap.

This is by far the largest Black Raspherry yet introduced and, as the fruit is very firm and stands long shipping, it is destined to be the market variety among black-aps. The berries are simply immense and of such handsome appearance and fruit grown by the originator was sold at 10 cents per quark, when the kinds were selling at 6 cents. We control the entire stock of this berry, but offer to arrange with a limited number of retailers to sell it under the trade-mark name, Cumberland, under certain restrictions as to price, propagation, etc.

LITHOGRAPH PLATES AND DESCRIPTIVE CIRCULARS

of all these novelties will be supplied to our customers—the circulars at their actual cost, and enough plates for agents' book, free of charge. Yellow Rambler and Sweet Briar plates are now ready and plates of the Cumberland are being prepared. Write us at once.

FOR SPRING OF 1887 we still have a considerable stock of Roses, Shrubs Fruit Trees, Small Fruit Plants, etc. Send for our Surplus List.

JACKSON & PERKINS CO.,

NEWARK, WAYNE CO., NEW YORK.

TEN MILLION STRAWBERRY PLANTS

75,000 Cyclone, 800,000 Tenn. Prolific 250,000 Brandywine (Late), 250,000 Ocean City,

150,000 Parker Earl, 600,000 Mitchel's Early.

40,000 Princess, 20,000 Edgar Queen, 600,000 Beeder Wood,

50,000 Rio.

125,000 Woolverton, 150,000 Berlin,

150,000 Jessie,

800,000 Lovett, 20,000 Timbrell,

25,000 Belle, 150,000 Barton's Eclipse.

20,000 Tennyson,

100,000 Beverly, 20,000 Bismark,

10,000 Arrow, 100,000 Tubbs, 20,000 Shuster's Gem,

5,000 Glen Mary, 10,000 Sunrise,

20,000 Gandy Belle,

15,000 Eleanor.

800,000 Warfield, 850,000 Gandy, 300,000 Bubach, 250,000 Dayton,

900,000 Haverland.

600,000 Lady Thompson, 100,000 Wilson, 200,000 Saunders,

800,000 Sharpless, 150,000 Greenville, 150,000 Enhance,

100,000 Meeks' Early. 900,000 Crescent,

40,000 Mary

25,000 Marshall 25,000 Splendid, 40,000 Capt. Jack, 50,000 Swindle,

25,000 Van Deman,

20,000 Giant, 15,000 Weston,

10,000 Murray, 50,000 Henry Ward Beecher,

6,000 Bouncer, 9.000 Brunette,

10,000 Holland.

One Hundred Thousand Peach Trees—one year.

One Hundred Thousand Peach-June Budded.

Five Hundred Thousand Asparagus Roots.

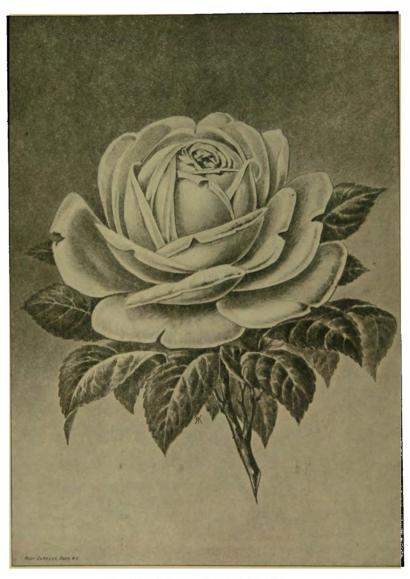
Plum and Apple Trees.

Send list of wants. Catalogue free.

HARRISON'S NURSERIES.

BERLIN.

When writing to advertisers mention The National Nurseryman.



MARCHIONESS OF LONDONDERRY.

The National Nurseryman.

FOR GROWERS AND DEALERS IN NURSERY STOCK.

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VOL. V.

ROCHESTER, N. Y., MAY, 1897.

No. 4.

SPRING SALES.

VOLUME OF BUSINESS COMPARES FAVORABLY—
PRICES LOWER THAN EVER—SCARCITY OF
MONEY—LITTLE PROSPECTIVE PLANTING.

Following are reports of spring sales from all sections:

Brown Brothers' Co., Rochester, N. Y.:—"Our spring '97 season was a very satisfactory one and slightly in advance of the preceding year. We believe the outlook for fall business is fairly bright, and have hopes that it will be very much better than even anticipated."

IRVING ROUSE, Rochester, N. Y.:—"Speaking for my own business, I can say that the amount of trees handled this spring compares favorably with the amount of business done last year. This is partly owing to the fine weather we have had. The prices unfortunately are still lower than last year, and are in all lines at or below the cost of production.

"The amount of two-year stock coming on for next fall's business is, however, largely diminished, and with a normal trade, we look to see a sharp advance all along the line, on next season's business."

CHASE BROTHERS Co., Rochester, N. Y.:—"Our business of this spring compares quite favorably with that of one year ago. Retail sales will figure about the same in dollars. Cannot say at this time as to the figures on wholesale business, as we have had no time to figure up and make comparison; but wholesale trade has been coming in in very fair shape. We of course hope for a better business another year."

IN THE WEST.

GENEVA, NEB., April 19.—Youngers & Co.: "We are unable at this date to give anything more than an approximate idea of our business for the spring of '97. This much we know, that the volume is much larger than it has been for four years. We have been running under high pressure since the middle of March, and sales are still good. Prices are, however, far from satisfactory. Still we have not sold at the low prices that some of our neighbors have.

"We find a tendency toward strengthening on certain lines of stock. With us cherry trees have been much stronger than in the early part of the season. Our trade has also been very heavy on peaches, and from present indications will close the spring business with not enough stock on hand to load an ordinary hay rack. So far collections are exceptionally good. We hope to be able to report later that business has been very satisfactory."

Ottawa, Kan., April 17.—A. Willis: "Our trade this past year was very good from the time our salesmen began work until the first of August; after that it was light all fall and winter, making our last fall trade light and trade again light for this spring; making trade for the fall of 1896 and spring of

1897 about one-third less than it was for the fall of 1895 and spring of 1896. So much for the retail trade.

"Collections fall of 1896, poor all round. In spring of 1897 full reports not yet in, but apparently fully as good as the average in wholesale trade. In the fall it has always been light. The present spring we have had the largest trade we have ever had, but at very low prices. We hope the future will bring us a better show for prosperity than has been our lot fihis year."

LAWRENCE, KAN., April 17.—A. H. Griesa: "The season has not been as favorable to nursery work as one could wish for. It was too wet most all the time either to dig, pack or set trees. The amount of trees sold was less than last year, at a rather less price.

"The prospects are not flattering for the future. When the price of farm produce rules as the past years, there is not much profit left in the farmer's pocket wherewith he can buy the material to keep up or improve the farm. An improvement in the price of farm products will do more to establish business than any political confidence. Until the people and politicians unite in providing more money to circulate for the product of labor whether trees, farm produce or other product, it will not get there, and the decline will continue.

"In this state according to official reports gathered by assessors there was 450 acres less in nurseries in the state in 1896 than in 1895. Yet I believe there are more trees burned in 1897 than any year before. And yet there were lots of trees sold."

LAWRENCE, KAN., April 21.—There is at least one nursery firm not discouraged by the "universal depression." Last spring A. C. Griesa & Bro., of this place, with C. W. Carman invested in the Lawrence Nursery Company. That venture has been of sufficient success to encourage them to push a little harder in their home office, the old Mount Hope, and they have lately arranged with G. L. Knight, formerly of Rochester, N. Y., to take charge of their retail correspondence.

Instead of having large quantities of stock to burn this spring, as was expected early in the season, they report everything sold except a few varieties of apples grown for the northern trade.

CENTRAL STATES.

WAUKEE, IA., April 17.—John Wragg & Sons Co.: "We are glad to report that we are getting most through with our spring delivery. It has been the wettest and most disagreeable spring that we have experienced since we commenced business in 1876.

"Our wholesale trade has been much poorer than the past three years. Our retail trade is very poor. It appears that we are just reaping our harvest of our four years of democracy.

"In some of our special lines we have sold our stock out very close. The evergreen trade is the only thing that we can report up to an average, Take it as a whole our business will not average 20 per cent. of what it was even last year, and from correspondence with other nurserymen in the West, we find that they make about the same report. Yet we think the tendencies are upward, and are looking forward to a healthy demand for nursery stock for the fall of 1897."

NORMAL, ILL., April 17.—Augustine & Co.: "We have filled more orders this spring than in any other packing season for a number of years, but it is noticeable that a greater per cent. of the orders come direct from planters than heretofore. There seems to be comparatively little dealer trade in this section of the country. The spring has been exceptionally fine for handling stock. The outlook for this summer's work is controlled almost entirely by the price of grain."

OSAGE, IA., April 23.—Gardner & Son: "Sales will foot up with us about the same as last spring but we have a better class of orders and there is more cash in them than in spring of '96. We have found it hard work to keep our men in the field and only by close organization in gangs with a competent foreman with each gang have we been able to keep them out. Times seem to be improving and with a fair sort of a summer we expect to push fall sales ahead of any previous year."

SPAULDING, ILL., April 20.—Spaulding Nursery and Orchard Co.: "Have to report that our shipments of carload lots was fair; (nine cars, loaded mostly with apple, cherry, pear and plum.) Sales or shipments of less than car lots were quite a little heavier than for many seasons past. We look for an improvement in fall trade."

IN THE SOUTH.

MACCLENNY, FLA., April 17.—Griffing Brothers Co.: "The past season's business has closed with us very satisfactorily, we having sold out very clean, especially in the line of Japan plums of which we shipped a large consignment to Philadelphia in February. Our Texas trade has also been very satisfactory, and the planting in Florida and Georgia has been quite large.

"As compared with last season's business we have disposed of fully double as many trees and at equally as good prices. We consider the prospects for next fall's business very encouraging."

Baltimore, Md., April 21.—Franklin Davis Nursery Co.: "We have had our usual retail trade this spring and been very busy, but orders are dropping off rapidly now. Our wholesale department is a little behind last season and prevailing prices quite low. On the average we expect to make our usual showing.

"From present indications we do not see much encouragement for better prices in the near future as there seem to be too many trees on the market for the demand. Our plantings this spring are about as in previous years, and up to this time stock is starting off nicely. The weather has veen very favorable for spring work."

GLEN ST. MARY, FLA., April 19.—G. L. Taber, president Glen St. Mary Nursery Co.: "In this latitude 'spring sales' are hard to distinguish from 'winter sales,' as also are 'winter sales' from 'fall sales.' In other words our shipping season is continuous here from October to April.

"The past season, taken as a whole, has proved all that we expected, and our sales have been larger than during the previous year. The amount of stock shipped has been very much larger than any previous season, but the prices have been lower, and hence our cash increase has not corresponded to our increased sales. We sometimes wonder whether the

'bottom' has yet been reached in prices of nursey stock. We hope so."

IN THE EAST.

CAYUGA, N. Y., April 17.—Wiley & Co.: "We have no fault to find with the volume of spring business unless it be that the more we do (at present prices) the worse we are off.

"One bright feature, as to the outlook for the future is, that a large number of the more heavy growers will largely reduce their plantings this spring, and many of the smaller growers are not going to plant anything. This followed up for a few years will have a tendency to bring us back to normal conditions."

Morristown, N. J., April 17.—C. F. McNair: "Business at this point is smaller in volume than one year ago. Orders are smaller and there is much complaint of scarcity of money among planters. Growers and wholesale firms are offering prices decidedly lower than in spring of 1896, and every indication exists that the bottom is not reached."

Dansville, N. Y., April 20.—James M. Kennedy: "Spring opened up unusually early. Nurserymen commenced digging on March 13th and continued without any drawback, which is something unusual. The wholesale trade this spring will be about 25 per cent. less than last spring while the retail trade will be 10 per cent. greater. The demand for nursery stock has been good, but the prices were not what we expected. In fact they were lower than last fall. I judge about all the surplus stock will be used up when the season is over, with the exception of some varieties of standard pears.

"I am safe in saying no nursery stock in this locality has been injured by the winter and last year's budding is looking fine. The prospects for next fall and spring, as far as can be judged, are that prices will advance on all nursery stock, as I think and hope the times will be better under William McKinley.

"About the same amount of stock will be planted here this spring as a year ago."

MILFORD, DEL., April 22.—A. Pullen: "Regarding the business here for past fall and this spring, would say have had the greatest output of stock in our experience, and at the prevailing figures of seasons past. Altogether very satisfactory. Whilst having a fair demand for pear, cherry, and a general line of stock, the calls for peach and plum (which are grown here as specialties) far surpassed that of any previous season. In peach we handled something over 500,000, and in plum about 45,000.

"Would say that we consider the outlook good, though trade will be regulated to a great extent by what may result as revenue from the fruit crop of this season. At this date have yet a good showing for fruits of all kinds on the Peninsula."

Welland, Ont., April 19.—Morris, Stone & Wellington: "Our shipments in bulk will be about the same, or more than last year, but not as much in dollars.

"The season here has been very favorable for the handling of stock, and for early shipment."

JUST WHAT IS NEEDED.

E. FORD JEWETT, CANON CITY, COLO.—"I can't afford to be without your valuable publication. I enclose one dollar for subscription. I only wish it came oftener. It is just what is needed for nurserymen and for them only. Success to you."

PRESIDENT WILSON.

THE HEAD OF THE AMERICAN ASSOCIATION EN-DORSES THE POSITION OF THE NATIONAL NURSERYMAN—DEMANDS A HEARING FROM NURSERYMEN AND AN AMENDED BILL.

Following is the strong outspoken opinion of the president of the American Association of Nurserymen on the subject of the federal bill for inspection of nursery stock.

Editor of NATIONAL NURSERYMAN:

I notice in the April number of the NATIONAL NURSERYMAN an account of the national convention of horticulturists and entomologists held in Washington on March 5th and 6th. I was in Washington City at the time that the convention was held, but my time was so fully occupied in matters of business that I did not attend any session of the convention. I called at the Ebbitt House, the headquarters of the convention, and noticed that the nurserymen of the United States were especially conspicuous by their absence, as near as I could learn or see. William C. Barry of Rochester, N. Y., and J. Van Lindley of Pomona, N. C., were the only nurserymen I saw there.

I have read with a good deal of interest the result of their deliberations. It seems to me that if the proposed legislation was carried out in the various states recommended by this committee on legislation, it would work a great hardship upon the nurserymen of the United States and accomplish nothing but confusion and a continual clashing of interstate commerce. It seems to me that the great nursery interests of the United States should be heard before any such legislation proposed by the said convention should be enacted into law.

While the nurserymen of the United States realize the importance of all the safeguards that can be used to prevent the dissemination of the San Jose scale and other destructive insects and diseases, I don't believe this can be done by state legislation. I believe that the horticulturists and nurserymen of the United States should unite in recommending a national law that would give ample protection to the great nursery interests of the country and at the same time successfully prevent any further dissemination of insects or fungous diseases which trees and plants are heirs to. I believe such a law could be secured through national legislation at the regular session of the fifty-fifth congress, but no such legislation can reasonably be expected by the called session of the fifty-fifth congress.

I believe this important question should receive the careful attention of the horticulturists, pomologists, fruit growers and nurserymen of the country at the next meeting of the American Association of Nurserymen to be held in St. Louis on the second Wednesday of June next, and that a strong committee should be appointed to formulate and present and urge the passage of such a law as would do justice to the great fruit growing interests and the nursery interests of the country alike.

This matter should be presented and urged before the regular session of the fifty-fifth congress upon their assembling at the capital next December.

I believe in what I have said that I have not only expressed my views, but I believe I have voiced the sentiment of the nurserymen generally. This is a very important question and should receive the careful attention of all fruit growers and nurserymen.

Atlantic, Ia.

SILAS WILSON.

SOUTH AFRICA NURSERY.

A horticulturist, and former Californian, H. E. V. Pickstone, is conducting a nnrsery business in Constantia, Cape Colony, Africa. In a recent letter addressed to the editor of the California Fruit Grower, that gentleman states that fruit growing there is in its infancy as regards practical commercial orcharding. He writes in part as follows:

"The whole country has but 2,000 dessert pear trees in bearing; 5,000 ditto plums; 1,000 drying peach and 5,000 winter apple trees of reputable quality and size. The only fruit grown in any quantity is a freestone, white-fleshed, melting peach of the Gross Mignonne type and apricots of a nondescript type but of very fair quality. In citrus trees there are probably close to 500,000, nearly all seedlings and bearing fruit of fair to very good quality.

"I may say that we are moving slowly but steadily, the drawback being that the land is in the hands of a class described in California as moss-backs and here as there, they move slowly. Good fruit land is very dear. An idea may be gained when I say that I have to clear brush land at my own expense, costing \$60 to \$75 per acre and pay \$50 per acre per annum in addition as rent. Several Californians have come here only to leave disappointed at the high price of lands. Several others are still here however. They are settled and I hope to our mutual benefit.

"Another great drawback here are the southeast winds. They are a terror to the nurseryman. I have had on several occasions 2,000 buds blown clear out in one night and every leaf stripped from my peach seedlings. These results are not entirely due to the strength of the wind. For miles inland they are laden with salt which settles on the foliage, and the sun's rays acting on it simply withers away the leaves. All nursery trees have to be staked, increasing labor considerably.

"In my nurseries and in others there are very nearly all the best known California varieties both in citrus and deciduous trees. There is no fruit boom and we do not want one. Indiscriminate planting would be fatal to our future with fruit. Yankee fruit land speculators and colonization promoters had best give us a wide berth.

"That we can grow good fruit is in my opinion a certainty, pears in particular. I am an optimist and so can with confidence look forward to the day when we shall land cargoes of choice Bartletts, plums and grapes in New York in the months of February and March. This country owes much to P. J. Cillie now of Wellington, Cape Colony, whom doubtless you will remember and whose friends in California will be glad to hear is always in the van in the development of sound horticultural methods."

AN EXCELLENT INVESTMENT.

W. A. YATES, BRENHAM, TEXAS.—"Enclosed please find \$1.00 for renewal of The NATIONAL NURSERYMAN. I regard it as an excellent investment for every one interested in the growing and handling of nursery stock. With best wishes for your continued success."

ENDORSEMENT.

FRUIT GROWERS' JOURNAL SUPPORTS THE NURS-ERYMEN'S POSITION—SAYS ORCHARDS SHOULD BE PROTECTED FROM INFESTED FRUIT.

The Michigan Farmer whose horticultural department is noted for its sturdy defense of horticultural interests in general and Michigan horticultural interests in particular, published in a state where the appearance of San Jose scale has caused alarm and where, therefore, the situation is not one of passive looking on, supports the position of the National Nurseryman on the federal insect bill in the following unmistakable terms:

"The peculiar thing about the act is the fact that foreign fruit is to be subjected to such inspection, but no reference is made to domestic fruit. This is what has excited the ire of nurserymen. They contend, and with truth, that such insects as the San Jose scale, are just as liable to be spread through the fruit shipped from affected orchards as through stocks sent out by nurserymen. The fact that the convention demanded the inspection of imported fruit is pretty good evidence that those who took part in it knew quite well that the fruit was equally as dangerous a means of transmitting diseases and insect pests as trees, plants, buds, or scions. With this knowledge it is certainly a singular thing for them to omit domestic fruit from the list of articles for which they demand government inspection, stamping and labeling.

"It is a fact known to all fruit growers who have given any attention to the subject, that for the past two years California pears, shipped into this and other states, have shown the presence of the San Jose scale, the most dangerous pest known to the fruit grower. If it is to be disseminated over the country by the fruit of affected orchards, what is the sense of inspecting and labeling nursery stock? We are in far more danger in this state from California fruit than from eastern nursery stock, and any law for the prevention of the spread of such pests which does not recognize this fact will prove worthless. In case such an act as the one referred to becomes a law, then states free from such insect pests, as a precaution against them, should pass laws preventing the shipment of fruits into them from other states whose orchards are suffering from dangerous diseases and injurious insects."

THE FRUIT OUTLOOK.

Advices to the American Agriculturist from specialists, state horticulturists, and commercial orchardists, brought down to the latest possible date, show general health in peach and apple orchards, and the prospect continued for a fair crop, although the middle and northern states are by no means out of the way of frost. The famous Georgia peach belt suffered through several weeks of hard rain which blasted the later bloom and rotted the small peaches already formed. Around Ft. Valley, while reports are somewhat contradictory, indications point to sharp damage, particularly to the Elberta peach. A leading orchardist of Bibb Co. reports that the crop of Elbertas will be possibly a fifth of a full one, other varieties a quarter to a third of a crop; small fruit in Georgia generally

promising. Japan plums in middle and lower Georgia apparently unhurt, and the few apple orchards uninjured. The promising peach sections of Saluda and Aiken counties, S. C., will probably ship a large quantity of fruit, many young orchards coming into bearing this season; some damage through cold weather, and much fruit already formed will fall off. Outlook in Eastern Tennessee generally fair, although some damage to peaches on low ground.

The great peach growing belt of the peninsula and middle states promises a liberal yield, although there is still plenty of time for accidents, including belated frosts.

Usually at the forefront as a producer, York state has a rich promise at this early date of a good yield of most kinds of fruit, barring some exceptions. A rest season is generally expected in apple orchards, although some kinds including Golden Russets, Pippins and Wealthy, give promise of fair yields. Blossom buds on Baldwins and Greenings are scarce in nearly all parts of the state. Peaches, pears, plums and cherries came through the winter in good shape, giving promise of fairly liberal yields so far as bloom goes, but cold rain storms are liable to work disaster, particularly in cherries.

Fruit trees yielding indifferently last year at the same time make strong and healthy growth, which may tell in the fruitage this season. In the western part of the state, from Wayne and Ontario counties to the Niagara river and Lake Erie, fruit growers are generally encouraged, although not expecting very many apples. Fruit trees on the southern shore of Lake Ontario are in excellent condition, measurably free from insects or fungous diseases, except in a section in the central portion of Wayne and Orleans counties, where the canker worm has become thoroughly established. Peach buds were seriously damaged by cold weather, but not completely destroyed as at first thought, and may make a light crop. In the Chautauqua grape belt the outlook is promising for nearly all kinds of fruit except apples.

Michigan's peach crop is important, not only to the growers represented, but also to the markets of Chicago and the West generally. While some injury has been done, particularly in orchards distant from the lake, and in the central and southern part of the state, the peach growing sections in the main promise fairly well. State Horticulturist Taft writes that from appearances in early April the product will be 75 to 80 per cent. of a full crop. Owing to large yields the past two years the vitality of the trees has been impaired. Further west and southwest fruit orchards are in generally healthy condition, one of the leading fruit growers of Wisconsin reporting the outlook in that state for fruit generally, the best in ten years. Prof. Budd of the Iowa agricultural college reports apple and cherry trees in good condition, while Horticulturist Whitten of the Missouri college points to considerable loss in peach buds, particularly in the northwestern part of the state, with a good outlook elsewhere and bright promise for apples and plums. New England does not expect a full crop of apples this year.

SAN JOSE SCALE IN GEORGIA.

No bill has as yet been passed by the Georgia legislature regarding San Jose scale, but it is very probable that stringent legislation will be urged at the next session, as the pest has already made its appearance at several points in the state.

FOR HARMONY.

No Profit In Growing Insect-Infested Trees --As a Matter of Courtesy Nurserymen Should Be Consulted---A Just Law.

James F. Le Clare, the well-known nurseryman, of Brighton, N. Y., voices the sentiment of hundreds of nurserymen in the following opinion of the proposed federal law:

Editor NATIONAL NURSERYMAN:

I have until now, barely had time to glance over the proposed bill and comments on same as given in April National Nurseryman. (Why is it such things are generally "sprung" on nurserymen just at shipping time?) I have sometimes thought that nurserymen work harder to serve their customers than any other class of business men, and get the least thanks for it.

The most lamentable phase of the proposed federal bill against insect pests is the evident lack of harmony between the parties most interested, who should stand shoulder to shoulder against the common enemy. While every effort in the direction of exterminating such pests is commendable, any public measure to that end should be undertaken in a spirit of perfect fairness, with due regard for the rights of all concerned. The injustice of any law that would benefit the fruit grower to the loss or annoyance of the nurseryman, or vice versa, is apparent to all. The entomologist, perhaps, may be excused from any "fellow feeling" in the matter, as he naturally looks at it from a professional point of view; he is in the position of the Irishman who held a wisp of burning straw under a hornet's nest over his neighbor's haymow, and endeavored to console his neighbor for the loss of his barn by the fact that the "bastes were destroyed."

The very fact that such a law is proposed shows the general awakening to the importance of more thorough and systematic care of our trees and orchards, which is encouraging, and without which fruit growing cannot be a success.

Yet I am strongly inclined to think legislation in this direction is entirely unnecessary; the instinct of self-preservation compels both nurseryman and fruit grower to rid themselves of such pests, if they have them, or keep them off if they haven't. There is no profit in growing insect-infested and diseased trees or plants in the nursery rows, any more than there is in fruiting them in the orchard or vineyard.

But, if we must have a law, let us have, (as Mr. Rouse says), a just law; one that will, at least, regard the rights of all parties interested, and one that shall be as free as possible from unnecessary annoyances and hindrances to trade.

The nurserymen of this country are largely interested in this matter, and should have some voice in it. I should like to see such a spirit of fairness and justice on the part of the fruit growers and horticulturists, (yes, even the *entomologist*,) and such a recognition of the fact that we are equally interested with them in this matter, that they will, as a matter of courtesy, consult us. If they do not, we should rise and *demand* that our interests be protected.

I did not receive an invitation to the Washington convention. Brighton, N. Y. J. F. Le Clare.

Obituary.

Philip Wickens, whose death occurred on Monday, March 29th, was born August 25th, 1828, at Rotherfield, Sussex, England, coming to this country in 1851 and had since identified himself with the nursery business of Ellwanger & Barry, of Rochester, N. Y.

A close friend of Mr. Wickens writes of him as follows: A distinguished horticulturist and pomologist, it was above all in the field of pomology that he excelled. In this sphere he was the peer of the late Charles Downing, Patrick Barry and Marshall P. Wilder. For all species of hardy fruits—the pear, the apple, the plum, the peach, the cherry, together with the smaller species, his knowledge was extraordinary. If a specimen of an unknown pear, for instance, were sent for identification and no one could determine the variety, it was placed before Mr. Wickens, for its true name, which never failed him. For the smaller fruits he had an especial fondness; and though Dr. Boteler's protege, the strawberry, proved poisonous to him, no one was more conversant with its numerous varieties than he.

His memory, which was remarkable in many ways, was phenomenal in everything that related to the flavors and characteristics of fruits. Had he been born a viticulturist, and therefore, have possessed a similar nicety of taste in regard to wines, he might have surpassed Monsieur Merrmann, the celebrated oenologist of Bordeaux. He was early and late in visiting the charges he loved; and was the first to note the mantling rose on the cheek of the ripening crab, the flush of maturity on the Crawford or Red-Cheek Melocoton; the gilded side of the Bartlett, the bloom of plum and prune, and the first ruddy tints of Gravenstein, Jonathan, and Northern Spy. With the cedar-bird, or "orchard-beauty," he was present to taste the first cherry; and no wasp, butterfly, or bee cherished more fondly the vinous savour and perfume of all kinds of ripening fruit. An orchard, and fruit tree were his delight: and fruit his specialty, of which he was a supreme judge. A taste was sufficient, so long as he had fruits about him and he might watch and carefully note their development. But his knowledge sat lightly upon him, and only those who knew him well were aware of the extent of his pomological accomplish-

Of a quiet, retiring disposition, his temperament was nevertheless always genial. It was a pleasure to meet him with his pleasant smile and cordial greeting. He diffused graciousness and good nature. The office of Ellwanger & Barry where he labored assiduously for nearly four decades will lack his sunshine; and it seems as if the nurseries-orchards and plantations of fruits must miss his cheery presence and his wonderfully observant eye.

DR. ROBERT HOGG.

Dr. Robert Hogg, the renowned English pomologist, died at his home in London, March 14th, aged 79 years. He was the author of the "Fruit Manual," an encyolopedic dictionary of fruits grown in Great Britain, and was also the editor-inchief of the Journal of Horticulture. He was at one time associated with the management of an immense fruit tree nursery at Brompton, the site of the former garden of the Royal Horticultural Society, at what is now South Kensington.

AMEND THE BILL.

MEASURE PROPOSED BY WASHINGTON CONVEN-TION ADMITTED TO BE DEFECTIVE — DELE-GATES SUGGEST AMENDMENTS — ONE SAYS FRUIT SHOULD BE INCLUDED.

Herewith are presented statements of the nurserymen who were members of the committee appointed at the convention at Washington on March 5th and 6th to draft a bill for the inspection of nursery stock:

FROM C. M. HOBBS.

Editor NATIONAL NURSERYMAN:

In compliance with your request, I snatch a little time from the hurry and rush of the packing season to briefly reply, as a nurseryman and a member of the committee on legislation at the recent conference in Washington, to some of the objections offered in your last issue to the proposed bill.

First, a word as to the necessity of national and state legislation along the line proposed in this bill. It appears to those who have observed carefully the progress of the fungous diseases and insect pests afflicting plants, trees and fruits in this country, that the time has come for concerted action throughout the country for their suppression. Success in fruit growing and the nursery business seems to depend upon this. As the larger proportion of our most dangerous fungous diseases and insect enemies have been imported from foreign countries, it is clear that we should seek by some means to prevent their introduction. It is also clear that we need national legislation regulating interstate commerce in dangerously infested plants and fruits. The bill proposed attempts to accomplish these ends.

The proposed bill is based in its national, or interstate features, on the present pleuro pneumonia law. This law has been in operation several years, and its constitutionality has not been questioned, so far as I know. The committee took as a basis for this bill, a bill proposed by the foremost entomologist in this country.

The committee selected by the convention to propose a bill for its adoption, was composed of ten persons from as many different states. Two of the members chosen could not serve, and the working committee was reduced to eight. Of these two were professors of horticulture in state experiment stations, one a practical entomologist, one a fruit grower; the occupation of one member I am unable to give, and three were nurserymen. The nurserymen may have not have been representative of the profession—we will waive that matter. If I correctly interpreted the spirit of the committee, its purpose was to secure the best possible protection to the fruit and nursery interests of the whole country. There was no hostility to the nursery interests expressed in the committee, neither any intended in the proposed bill.

As to why fruit was not included with trees, plants, etc., in interstate commerce, if I remember correctly, all but one member of the committee were in favor of including fruit. This member was so certain of its impracticability, and so confident that it would kill the bill in congress, and contended so vigorously and persistently for this point, that the committee consented to make the bill apply only to fruit from foreign

countries. This member was not from California. My opinion was, and is now, that the bill should be amended to include dangerously infected fruit, as the facilities for distributing dangerous pests by this means is apparent to all.

It is urged that the bill places too great discretionary powers in the hands of the commissioner of agriculture. It appears evident that large discretionary powers must necessarily rest with some one, as it will be impossible to provide by special act for all the details of the case, and to provide for all the emergencies that may arise.

The bill is criticised as being of doubtful interpretation and impracticable. Without entering into a detailed argument of the case, suffice it to say, that I believe the general principles of the bill are possible of intelligent interpretation, and in intelligent hands possible of practical application.

The objection is made that the bill, if enforced, would destroy the nursery business. I fail to see how or why. This bill provides for the inspection, and if found infested, for the treatment of dangerously diseased trees, plants, etc., and provides a penalty for the distribution of dangerously infested trees, plants, etc. These principles have been enacted into law in a number of states, and have been found to be practical, and to protect the nursery and fruit interests rather than destroy them.

It is evident to my mind that the nursery business will come, and that soon, to both inspection by an expert at seasonable times, and to fumigation, or other remedial and preventive treatment. The large planters of trees are becoming so aroused to the terrible havoc caused by the San Jose scale, that they are going to be very careful where they buy their trees. That nurserymen insist that they do not have the scale in their nurseries or locality, will not satisfy the intelligent buyer. He knows that this pest is scarcely discernible with the naked eye, requiring a trained eye and glass to detect it in its early stages, and is not usually detected by the ordinary observer until it has multiplied in such quantities as to produce a marked effect.

Recognizing these facts, and that inspection by an expert is not infallible, several large nursery concerns have been and are arranging to fumigate all the stock they send out or receive.

I can say for the committee having this proposed bill in charge, that in their wildest fancy they never dreamed it to be perfect in all its details. We are glad of these criticisms if they shall perfect the bill, or shall result in such legislation as will protect the great nursery and fruit interests of the country from the constantly increasing foes that menace them.

Bridgeport, Ind. C. M. Hobbs.

FROM C. M. HOOKER.

Editor NATIONAL NURSERYMAN:

In reply to yours of the 5th inst, I thank you for your offer of space in the National Nurseryman to reply to your article of April 1st, entitled "A Blow at the Nursery Trade," and to give a statement of the facts in relation to the action of the national convention at Washington March 5th and 6th, as I am sure had you been better informed, that paper would never have been published, and it is best that your subscribers be fully informed as to the proposed national law and prepared to judge for themselves as to its necessity and merit.

Having had the honor of being appointed delegate to the convention at Washington by the Western New York Horticultural Society, it was thought best to consult some of the

nurserymen here as to what measures should be taken as to a state and national law relative to insect pests, more especially San Jose scale, as that is the only one that we feel that it is necessary to legislate against. Accordingly the members of four firms, the most extensive and reliable in Rochester, were invited to meet and consult with me on the subject. We had two meetings and an outline of state legislation unanimously agreed upon, provided similar national legislation could be had; and I went to the convention instructed by them to form such a law.

At the convention I had the honor of being placed on the committee on legislation. We found a law already drafted for national legislation. This the committee discussed as thoroughly as possible during the time allowed us, amending it in some very important particulars and it was unanimously approved by the convention. Power was given the committee to amend it, before passage, if thought best.

This law is no doubt not yet perfect. Few laws are, at first at least; but it is a long step in the right direction, and if the nurserymen or others wish it changed, they no doubt will call a meeting, and make such suggestion to the committee on legislation as they think best. I can assure them that their amendments will receive proper consideration. It is not probable that any law can pass the present session of congress, so there is time enough to have the proposed law thoroughly discussed.

I note what you say in relation to the inspection of fruit This section was opposed by others on the committee, as well as myself, but allowed to remain, as a favor to the California delegates, who want to use it against the Mexican orange worm. You will see that the Secretary of Agriculture is left to do as he pleases about the inspection of fruit; but it is made his duty to have nursery stock inspected and properly treated. This may appear unfair to some; but it is impossible to properly inspect and treat fruit; and it has never been shown that a case of infection has taken place from the San Jose scale on fruit, sold all over our country for years. In talking over the subject at the meeting of nurserymen in Rochester, all agreed that something must be done to prevent the introduction of the San Jose scale into the nurseries and orchards of Western New York. We are now free from it, but cannot remain so long without proper protection.

Inspection of the nurseries was approved of, but thought not to be sufficient. It was agreed at the meeting that fumigation of all nursery stock with hydrocyanic acid gas should be done before dissemination of the stock, so as to be perfectly sure to furnish planters' stock free from injurious insect life. This would be a little trouble and expense; but it appears to be necessary, owing to the danger of the San Jose scale, and quite as much for the benefit of the nurserymen as for the customers, as an infected nursery means a ruined nurseryman, while his customers may dig up a few trees and not feel the loss perhaps. The proposed state law, which was approved of by the meeting of nurserymen, required inspection and treatment of all nursery stock with gas.

From what I have written, you will readily see that on the committee on legislation I represented very fully the nursery interests of Rochester as well as the fruit growers of Western New York. There was also Mr. Hobbs (of Albertson & Hobbs) on the same committee. J. H. Hale, nurseryman, is on the executive committee. W. C. Barry represented the Eastern

Nurserymen's Association, and other nurserymen were present; so I think you should admit that the nurserymen were well represented and treated at the convention. The list of those present show the character of the men, and I saw nothing there of a wish to injure the nursery trade, but an earnest wish to protect the country from the invasion of dangerously injurious insects.

Rochester, N. Y.

C. M. HOOKER.

FROM J. VAN. LINDLEY.

Editor NATIONAL NURSERYMAN:

I noticed several articles in the last number of your paper very severely criticising the San Jose scale bill now before congress. The committee met at the Ebbitt House at Washington, D. C., on March 5th. Messrs. Hooker, Hobbs and myself are nurserymen as well as fruit growers and every clause in the proposed bill was well considered.

The word "fruit" was left out, and as well as I can remember, it was by the request of C. M. Hooker. There was no record before us where the scale had been disseminated from fruit; consequently, the committee all agreed with Mr. Hooker, and we had plenty of evidence that the scale had been sent out by nurserymen in several states. And some of them have been sending it out for two or three years, but it has only been found out during the past season and it has caused great loss to fruit growers. In some cases in this state the entire orchard has been destroyed, and I learn the same has occurred in other states.

I can see no other way to stop the pest from being scattered by nurserymen who have it than to get such a bill through as we propose. We nurserymen who are clear of it will have to submit and be put to some trouble in order to reach the unfortunate who have it. And, according to the eighth section, if we are found clear of the pest, we have no further trouble than to attach a certificate to each package we send out. That would be very little trouble and those nurseries who are infested with it will have to submit to the destruction or fumigation of their stock and nothing but severe and strict laws can accomplish it. As I view it, it is a protection to all nurserymen who are clear of it at present, and I think they can easily afford to be put to some trouble where the benefit is so great by the protection the said bill gives them.

Now if those nurserymen who oppose the bill will carefully investigate and analyze it all through, then visit the infested districts and learn how dangerous it is, I believe they will endorse the view the committee took of it. No bill was ever more carefully considered.

Pomona, N. C. J. VAN. Lindley.

PROFESSOR ALWOOD'S RETORT,

William B. Alwood, chairman of the committee on legislation which drafted a federal bill for inspection of nursery stock, at the Washington convention, has written us a long communication in which for page after page he appears to labor under the impression that the NATIONAL NURSERYMAN is opposed to all federal legislation on this subject.

The editorial in the April issue which he criticises on this point contained the following: "That great damage might be wrought by the extensive spread of the San Jose scale is admitted, but if we are to have a law in the matter, by all means let it be just. * * * And we hope that upon reflec-

tion it will be deemed advisable to consult the nurserymen as to the provisions of an amended bill."

Does that read like opposition to any kind of federal legislation?

Professor Alwood has asked us to publish his entire communication. We regret we have not space to do so and allow opinions to be formed from it without comment. Following are the portions covering the writer's argument, a comparison of which with our April issue will indicate the facts:

Editor NATIONAL NURSERYMAN:

The leading editorial in your April issue is headed "A blow at the nursery trade," and in the first paragraph you seek to convey the idea that unknown to the nurserymen at large, this convention met and took action inimical to the nursery interests. It occurs to me that if the editor will carefully reread his files from December last to date, he will discover that he himself has given most prominent place to this movement in all its phases leading up to the assembling of the convention at Washington.

You say but two nurserymen were there as such, "and one of these was sent uninvited to see what was to be done." Evidently from what Mr. Rouse says on page 38, April number, this latter was W. C. Barry. Perhaps even Mr. Barry was not "present as such," at least only half of him, for on the official list of members he registered himself as president Western New York Horticultural Society, and president Eastern Nurserymen's Association. Mr. Barry was mighty well treated for an uninvited guest as he was made chairman of the committee on resolutions and did as much talking before the convention as any one present; excepting the reading of reports and papers, more than all the entomologists put together. Perhaps Mr. Bissell was also an uninvited guest. but he was made chairman of the committee which retired and after due consideration selected and reported the legislative committee

Surely in working ability the nurserymen present outclassed any other, and I may almost say, all other interests represented. Certainly my friend Bissell will bear me out in saying they did their share of talking. The names of Barry, Hale, Van Lindley, Hooker, Hobbs and Bissell bear out what I say, and these gentlemen repeatedly stated in committee work and in the convention that they were acting from the nurseryman's standpoint.

Further, the personnel of the committees will show that the utmost deference was shown the nurserymen. The committee of five selected to nominate a legislative committee had Mr. Bissell as chairman and one other nurseryman among its numbers. The legislative committee of ten as reported by this committee and elected by the convention, was composed of three nurserymen, viz: C. M. Hooker, J. Van Lindley and C. M. Hobbs; of two entomologists, three agriculturists, and two horticulturists. Certainly a fair proportion of nurserymen and not an undue proportion of any other interest. The intimation by you that California interests had undue weight in this committee is not borne out by these facts. There was but one man on the legislative committee from beyond the Mississippi river, and not a single Californian in any manner tried to influence our action outside of the open discussion participated in by all.

Now as to some of the provisions of the bill with which you take issue: In the first place, to be plain and brief, there has

never occurred a single case of infection of San Jose scale which could be traced to fruit as the agency by which the scale was carried. True, entomologists lay some stress upon the fact that California pears often carry this scale and are sold in our eastern markets with live scale upon them. This fact causes uneasiness, yet three seasons of vigorous work in the East have failed to reveal a single case where this fruit has been the cause of infection. Rest assured if the entomologist can show conclusively a single case of scale traceable to this commerce in fruit the fact will be promptly published broadcast. Until then would it not be better to legislate against well known evils rather than to presume a case a priori?

While the real reason for this convention was undoubtedly the alarm caused by the spread of the San Jose scale, yet it took, and was deliberately intended to take, a wider scope.

AMERICAN POMOLOGICAL SOCIETY.

In response to an invitation of the Ohio State Horticultural Society, the twenty-fifth biennial session of the American Pomological Society will be held in the City of Columbus, Ohio, on September 1, 2 and 3, 1897.

Every effort will be made to obtain the most favorable rate over all roads and connecting lines leading to Columbus for all attendants, and most hospitable entertainments have been promised by the Ohio pomologists.

The proceedings of the session will be of great practical value to the pomological interests of the nation, and members have been especially requested to secure as large an attendance from each state as possible.

P. J. Berckmans, Augusta, Ga., is president; G. C. Brackett, Lawrence, Kan., secretary; first vice-president, C. L. Watrous, Des Moines, Ia; treasurer, Charles E. Richardson, Boston, Mass.

TREATMENT FOR SAN JOSE SCALE.

The report of the entomological department of the New Jersey Agricultural Experiment Station, for 1896, prepared by Professor John B. Smith, is devoted mainly to the appearance and spread of the San Jose scale and is particularly valuable by reason of Professor Smith's extensive experience with the scale in nursery and orchard from the time of its first appearance on the Atlantic coast. The scale has now been found in twenty states.

After discussing the subject very fully Professor Smith makes the following recommendations for treatment of the scale in his state:

- 1. Destroy infested stock whenever practicable.
- 2. Spray thoroughly as soon after the trees become dormant as possible, with fish-oil soap, one pound in one gallon of water.
- 3. Spray again in early spring, before the buds begin to swell, with fish-oil soap, two pounds in one gallon of water, and do it thoroughly.
- 4. Cut back or prune the treated trees a few days after spraying, so as to leave no more wood than absolutely necessary for the use of the tree and crop.
- 5. On scaly trees use whitewash liberally throughout the summer, keeping the trunks and branches covered with lime as thoroughly as possible.

J. VAN. LINDLEY.

The subject of the following sketch was born in Indiana November 5, 1838. His father, Joshua Lindley, moved from North Carolina to Indiana in 1830, remaining there 10 years and returning to North Carolina in 1840. He was a leading pomologist of his day.

J. Van. Lindley comes of old Quaker stock, and when the war between the states commenced, he went to Missouri and joined the U. S. cavalry service, serving three years in the Union army, returning to North Carolina at the end of the war, welcomed alike by friend and foe as all are who go south for business.

On his return from the war he found everything at his father's home in a deplorable condition (results of the war); but he went to work without capital, shouldering his father's debts and was 10 years getting started and out of debt. During this time the nursery was known as New Garden Nurseries. Ioshua Lindley & Son, proprietors.

In 1874, being even with the world and with not over one thousand dollars worth of property, he started for himself under the name of Pomona Hill Nurseries and no change has been made during the 22 years intervening. His nursery interests have steadily increased until now they form one of the leading southern nurseries.

Besides his nursery interests he is largely interested in the leading peach orchards of North Carolina and Georgia. He is the introducer and disseminator of several leading kinds of fruit for the South and has always taken a lively interest in this kind of work. His is a familiar face at the annual sessions of the nurserymen's conventions. He was at one time president of that society.

SHOULD INCLUDE FRUITS.

PAINESVILLE, O., April 27.—J. J. Harrison, president of the Storrs & Harrison Co.: "We would favor reasonable regulations to prevent the dissemination of injurious insects and diseases, but they should apply equally to trees, plants, bulbs and fruits; to the small as well as the large shipper. And if there are laws to be enacted, it should be done by the general government and not, as heretofore, by individual states, as state laws cannot be effective and be constitutional. The result of all state laws in this line has been to disarrange business to the injury of many until such laws have been declared unconstitutional by the higher courts.

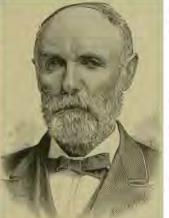
"We do not favor the proposition to have all foreign importations of trees and plants overhauled at certain ports of entry as proposed, as the unpacking and handling and repacking would result in much greater mortality to the trees and plants than to insects or diseases. Had this been practiced from the foundation of this government, we very much doubt if we would have one less disease or insect than we now have. The great difficulty of detecting these minute insects or their eggs is such that it would require a miscroscopical examination of every tree and plant to their minuest parts to prove effective, which would be utterly impractical.

"The introduction of the San Jose scale from California is the bugaboo that has created all this consternation and that has animated this whole move (to have the stable door locked after the horse has been stolen.) There is no more proof that the San Jose scale was imported from abroad than that the Colorado beetle was. Each was undoubtedly indigenous to the mighty West. The right time to have legislated against it would have been when it was confined to the Pacific coast and not now after it is distributed from the Pacific to the Atlantic, from the lakes to the gulf.

"Should the proposed law be enacted the cost of its enforcement would be enormous and probably more than offset any benefit that might be derived from it.

"At the meeting of the Michigan Horticultural Society held at Grand Rapids last winter, in discussing the San Jose scale we understood that J. H. Hale remarked that the intelligent, energetic fruit grower would be on the alert and see to it that

> this nor any other insect pest should get the start of him in his orchards, while the careless shiftless fellow would not long remain a competitor."



J. VAN. LINDLEY.

A NOVELTY OF HIGH MERIT.

The frontispiece of this issue presents with photographic accuracy the form of the hardy white rose Marchioness of Londonderry as grown by Ellwanger & Barry, Rochester, N. V. It is a novelty of high merit, ivory white, of fine form, highly perfumed, plant vigorous and free flowering.

Messrs. Ellwanger & Barry say: "We have carefully tested this variety, and being convinced of its great value, offer it with the strongest commendation."

The rose is indorsed in London by the Gardener's Magazine as follows: "Unquestionably one of the largest roses,

blooms attaining a diameter of six inches when fully developed and one of the sweetest of the hybrid perpetuals."

Wiley & Co., Cayuga, N. Y., offer in another column imported fruit stocks at cost.

Gooseberries and currants in leading varieties, extra fine plants, are offered by Ellwanger & Barry for fall of 1897.

An attractive list of small fruit plants is presented this month by Allen L. Wood, Rochester, N. Y. It includes well known standard varieties and novelties.

Jackson & Perkins Co., Newark, N. Y., are sole agents for the United States, of Charles Detriche, Angers, France, grower of French fruit tree stocks and ornamentals.

C. M. Stark, of the Stark Brothers Nursery and Orchard Co., writes to Leonard Coates of California, that he finds in France the growers all object to myrobolan stock as short-lived, preferring the St. Julien, which stock is used there almost universally.

The National Nurseryman.

C. L. YATES, Proprietor.

RALPH T. OLCOTT, Editor.

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Advertising rates will be sent upon application. Advertisements should reach this office by the 20th of the month previous to the date of issue.

Payment in advance required for foreign advertisements.

Drafts on New York or postal orders, instead of checks, are requested.

Correspondence from all points and articles of interest to nurserymen and horticulturists are cordially solicited.

Entered in the Post Office at Rochester, as second-class matter.

ROCHESTER, N. Y., MAY, 1897.

THE SEASON'S TRADE.

A wide range of opinion is expressed in our semi-annual reports on sales. It is generally stated that the amount of stock handled compares favorably with that of last year, but prices are lower than ever and there is still great scarcity of money.

Favorable conditions are the probability that planting will be considerably reduced and that stock has in most cases been well cleaned up. In several instances reports are indicative of much confidence in a better trade next fall. It is believed that much will depend upon the fruit crop this year.

THE TARIFF SCHEDULE.

Section 251 of the tariff, as reported from the ways and means committee of the house of representatives, reads as follows:

"Plants, trees, shrubs, vines, bulbs, and roots of all kinds, for growth in the open air or otherwise, 30 per cent. ad valorem."

As a result of the requests from nurserymen all over the country, this paragraph reads as follows in the tariff bill which passed the house:

"Stocks, cuttings or seedlings of Myrobolan plum, Mahaleb, or Mazzard cherry, three years old or less, \$1.00 per thousand plants; stocks, cuttings or seedlings of pear, apple, quince and the St. Julien plum, three years old or less, \$1.75 per thousand plants; rose plants, budded, grafted or grown on their own roots, 3 cents. each; stocks, cuttings and seedlings of all fruit and ornamental trees, deciduous and evergreen shrubs and vines, Manetti, Multiflora and Brier rose, and all trees, shrubs, plants and vines, commonly known as nursery stock, unless otherwise specified, 30 per cent. ad valorem."

It will be seen that this is just what was wanted by the nurserymen, with the exception, that the rate in the second clause is \$1.75 instead of \$2.00 as asked.

An effort is being made to secure the insertion of the word "evergreens" in the first paragraph, in order to provide for a specific duty of \$1 per thousand on this stock. This is at the request of western evergreen growers.

THE FEDERAL INSECT BILL.

In the April issue we published the text of a federal bill providing for the inspection of nursery stock. We detailed the circumstances of its adoption by a convention at Washington of horticultural society representatives and entomologists. We called attention to the fact that nurserymen were not invited to send delegates, although the business before the convention was almost exclusively nursery business, and we called attention to certain prominent features of the bill.

All that was said in that issue we reaffirm. And while doing so, we present the statements in detail of those who were at the convention. We have no desire to prolong this controversy. It is with difficulty, however, that we refrain from referring to certain facts.

Let our position be understood. We made objection to the manner in which the convention was called and to the phraselogy of certain portions of the bill. And we did not argue against necessary and proper inspection of nursery stock. We refer to any and every line on the subject in the April issue of this journal as bearing out our position, here stated.

The words "kindred organizations" and "all persons interested are invited to attend" do not constitute an invitation to nurserymen, when at the same time care is taken to name Horticultural and Agricultural Societies and Experiment Stations. A national interest which half a decade ago had reached a valuation of \$100,000 cannot be "fully represented" at a convention called vitally to affect that interest, upon a mere invitation to "kindred organizations." Such an interest, in view of the nature of the business in hand, deserves to be named specifically, at least as much as do Agricultural Societies.

That half a dozen nurserymen listed in the official report of the proceedings of the convention as accredited delegates of horticultural societies of which they are officers, should be considered as fully representing the great nursery interests of the country in a body of forty-five horticulturists and entomologists arranging for the conduct of the nursery business, is the position taken by some of our correspondents.

We are pleased to note the declaration of those at the convention that the bill should be discussed now by the nurserymen, and that instead of being pushed through congress and put into effect on July 1st as provided in the last section, it should be held open to amendment. That is exactly what was suggested in our April issue.

The executive committee of the American Association of Nurserymen will meet within a short time to consider this subject.

Representatives of the four Rochester firms referred to by Mr. Hooker may be heard from later regarding the conference he speaks of.

THE JUNE CONVENTION.

The 22d annual convention of the American Association of Nurserymen will be held at St. Louis, June 9th and 10th. The secretary makes the following announcement:

There is every reason to expect that the coming convention will prove one of the most enjoyable ever held by the Association. The world-famous Missouri Botanical Garden, often spoken of as the Shaw Garden, is located at St. Louis, and an invitation to the American Association of Nurserymen to visit the same has been cordially extended by the Director, Dr. William Trelease, who further promises the services of the garden staff as guides. The Missouri Botanical Garden is endowed under the will of the late Henry Shaw, an ardent horticulturist, and provision is made for an annual banquet. The members of our Association are also indebted to Dr. Trelease for an invitation to attend the "Shaw Banquet" as honored guests. This invitation, for the evening of June 10th, has been accepted for the Association by the executive committee.

It is expected that welcome will be extended to the visiting nurserymen by Mayor Ziegenhein and the Hon. Norman J. Colman.

The tariff discussion will undoubtedly be one of the most interesting features of the convention. The committee appointed at Chicago, last year, will report its work at Washington. The result of the efforts of this committee will probably be as important as anything which has ever been accomplished by this Association, and all will be glad to hear the details. There will also be the report of the committee on freight charges, a matter of vital importance to the trade. Other members intend to propose profitable discussion, and for that reason it has not been thought wise to arrange a long program in advance.

Among those who will take part are: President Silas Wilson, Hon. N. H. Albaugh, Prof. F. W. Card, of the University of Nebraska, Hon. C. L. Watrous, E. J. Holman.

The convention will open at the Lindell Hotel on the morning of June 9th. Special railroad rates are expected.

FOR FAIR TREATMENT.

In a leading editorial on the Washington convention and the proposed federal law Vick's Magazine says:

"California fruit growers have suffered from a greater variety of insect pests than these of other parts of the country; they also are the agents which have introduced into our eastern cities the pernicious San Jose scale. It has been brought in on California fruit, and especially pears. From the fruits the insects found their way to the fruit trees in several localities in the vicinity of New York city and spread from those centers.

"A very noticeable feature of the proposed law is that in the matter of the examination of fruit, which is carefully guarded in case of importations into the country, no notice is taken of it in interstate commerce; the transit of fruit from one state or locality to another is left as it is at present, and without any regulations whatever. And yet, as already stated, it is by sending California fruits into eastern markets that the San Jose scale is now troubling eastern nurserymen and fruit growers.

"It is evident, therefore that the proposed law can only be partially effective. There are also some points in relation to the execution of the law that appear defective and which may be positively injurious to the interests of nurserymen. It is better that legislation of this kind should be delayed until the interests of all parties are considered and fairly treated, than to enact it and then find it ineffectual, or to have it disregarded as impracticable."

A WORD TO THE ENTOMOLOGISTS.

If ever a journal persisted in calling attention to the valuable work of the entomologists, state and national, in relation to a special line, that journal is the NATIONAL NURSERYMAN. When there was little or no discussion of such subjects among the nurserymen of the country, this journal was alive to the importance to the trade of a knowledge of methods of keeping nursery stock free from insects and disease.

The files of the the National Nurseryman disclose constant reference to this subject—papers read by entomologists at horticultural conventions, communications from entomologists at considerable length, reports of conferences of entomologists, reviews of books by noted entomologists and their value to the trade, etc. Full appreciation of the work of the experiment stations has been accorded.

It has been the special endeavor of the NATIONAL NUR-SERYMAN to keep its readers informed of the tendency toward more general legislation against insects and disease and to suggest that plans for adjustment to new conditions be made.

And now, though no fault of the entomologists, a convention was called with only such notice to nurserymen of its intention as was given in an announcement in the NATIONAL NURSERYMAN and our protest is construed to mean objection to all federal legislation upon insects. Two years ago, in June 1895, this journal said: "It is probable that the question of guaranteeing nursery stock to be free from injurious insects will confront the nurserymen very soon. In cases where the San Jose scale has been discovered, this has already been necessary, and there is opportunity to increase confidence upon the part of the planter by guaranteeing stock free from injurious insects."

Since then there have been passed state laws under some of which nurserymen have been able to transact business without delay and great expense and with guaranty of stock free from insect or disease; while in others they have been obliged to do business at a great disadvantage owing to special provisions. The text of these state laws has been published in the NATIONAL NURSERYMAN.

It is on the subject of a federal law which shall provide for proper inspection and fumigation of nursery stock without unnecessary restrictions, that the nurserymen ask to be heard.

Californians are trying to discover who started the great business of fruit raising which now distinguishes that state from all in the Union. So far the record seems to belong to Mr. Wolfskill, who planted 80 acres of apricots and peaches and 6,000 grapes, in the town of Winters, in Selena Co., in 1851. In 1855 the first apricots from these trees were sold.

GARDNER & Sons, Osage, Ia.—"We are much pleased with the returns we have received from our advertisement in the NATIONAL NURSERYMAN."

GENERAL OPINION.

FRANK EXPRESSIONS FOR AND AGAINST THE PRO-POSED INSECT LAW—NURSERYMEN WHO FAVOR IT—A NOTED ENTOMOLOGIST'S VIEWS.

Following are opinions, from various sections, regarding the proposed federal law providing for the inspection of nursery stock:

SHOULD NOT BE INDORSED.

William Pitkin, secretary Chase Brothers Co., Rochester, N. Y.:—"We did not receive any invitation to attend the Washington convention, and haven't understood that nurserymen generally were invited to be present.

"We feel that the bill drafted by that convention is very imperfect in detail and should not be indorsed in its present shape by nurserymen generally. In our opinion the letter from Mr. Rouse in your April issue hits the nail on the head and we can subscribe heartily to what he said. The matter should come up at the next annual meeting of the American Association of Nurserymen for careful discussion, and we think should be referred to a good committee, with full power and authority to act on such lines as may be adopted by the convention.

"The Washington meeting was evidently made up almost entirely of fruit growers and theorists, who had no knowledge or interest in the nursery business and no desire to formulate a bill that would be acceptable to the nursery interests and yet effective. We believe such a bill can be drawn by a committee of the American Nurserymen's Association, and one that will not be too rigorous in its provisions, and yet effective in preventing the spread of San Jose scale and other injurious insects and diseases."

FAVORS AN AMENDED LAW.

N. H. Albaugh, president Albaugh Nursery and Orchard Co., Tadmor, O.:—"With the already enacted state laws, generally drafted by men ignorant of the real needs of fruit growers and nurserymen, on the line of noxious and destructive insects (no two laws alike) and other laws and staterapidly following 'pell mell' on this line, I believe a plain, practical national insect law would be a god-send to nurserymen and fruit growers.

"I was invited to attend the meeting at Washington city, but could not attend on account of previous engagements. I saw the draft of the present bill, however, and think it, in the main, a practical measure, needing however some amendments on fruits. Better by far, have a good national law, than forty different state laws, no two alike and many of them impractical, and really prohibitive to outside nurserymen."

WANTS A JUST LAW.

Charles Wright, Seaford, Del.:—"I fully agree with Mr. Rouse, page 38, April issue. 'If we have a law let us have a just law.' It's a good deal like wanting the other fellow to kill his cow with the anthrax and let yours alone. Why keep our trees and plants infested with San Jose scale and continue to propagate and scatter it far and near on California oranges, pears, plums and other fruits which go into every country town in the United States? If we are going to stamp it out let us do it right.

"Not many nurserymen would care to send out stock so infested, and most of the better class of the profession now send a bill of health with their goods. It seems to me that each state should pass a law providing that no such infested fruit shall be exposed for sale within the limits.

"California gave us the scale; now let her find a market for her infested fruit, and not inoculate every eastern state with it. The nurseries that were so unfortunate as to get this scale on stock bought for propagating purposes from California, were the first to fumigate and use every means to send out only such stock as they knew to be free from scale."

REALIZED MORE TIME NEEDED.

J. H. Hale, South Glastonbury, Conn.:—"I was at the convention of horticulturists and entomologists at Washington on March 5th and 6th as a representative of the Connecticut Pomological Society, but more particularly to look after the interest of the nursery trade and while I have only hurriedly read your article in relation to the convention in your April issue, I think that you did not have a full understanding of the matter.

"There is no possibility of any legislation at this session of congress and before the matter comes up for final action I think fruit growers, nurserymen and all interested parties will be able more thoroughly to study the matter and help to shape a bill that will be just and fair to all interested and be of real value to the commercial horticulturists of the country.

"C. M. Hobbs, of Indiana, C. M. Hooker of Rochester, William C. Barry, a representative of W. T. Hood & Co. of Richmond and myself were at the convention as the representatives of the nursery interest, and I think we realized that before any legislation was passed the matter would have to be put in better shape than there was time to consider in the two days' convention."

SHOULD BE DISCUSSED.

Edwy C. Reid, editor *Horticultural Gazette*, Allegan, Mich.:
—It is by no means a perfect measure, but seems practicable in most of its features and should be thoroughly and carefully discussed by the horticultural public."

HEARTILY FAVOR THE BILL.

Edward H. Bissell, Richmond, Va.:—"I am heartily in favor of the bill proposed at the Washington convention of fruit growers, and I think that the nurserymen and fruit growers should unite and have the bill passed at the earliest hour possible. The expense necessary to fumigate stock is very small, and the protection afforded thereby will be of incalculable value. In my opinion nurserymen will find that this will work greatly to their advantage, in that the small expense necessarily incurred to fumigate the stock will be counterbalanced by the much greater freedom with which fruit growers will order. Fruit growers will order stock confident that they will be incurring no risk from insects by doing so.

"If national legislation is neglected, various states will undoubtedly pass laws which will be greatly to the disadvantage of interstate commerce. In the nursery business it is absolutely necessary to secure prompt delivery, and it would be disastrous to have a system adopted which would necessitate inspection in transit."

W. T. Hood & Co., Richmond, Va.:—"We are heartily in favor of the law proposed by the Washington convention of fruit growers. In our packing last fall in order to meet the

requirement of the Maryland and Virginia laws we arranged to fumigate with hydrocyanic acid gas all of the stock which we shipped from our packing-ground. The expense necessary for this was small, and we are well satisfied with the result of the experiment. We believe if all nurserymen were compelled to fumigate their stock, the result would be greatly to the advantage of fruit growers and nurserymen generally."

SAYS NURSERYMEN WERE WANTED.

W. W. Farnsworth, secretary Ohio State Horticultural Society, Waterville, O.:—"As one of the committee of three who wrote the call to the convention I can say that nurserymen were invited and wanted. I am a nurseryman myself in a very small way as well as a fruit grower, and I do not see how the interests of the one can antagonize the other in this matter, and would be very sorry, indeed, to do anything that would in any way place unnecessary restrictions or hardships upon either. But every one who has given the matter any attention realizes that something must be done and the object in calling that convention was to see what that something was and thus try and do it.

"The committee on legislation contained at least three nurserymen, and the number of them in attendance can be seen by examining the list of delegates.

"If the bill is faulty amend it by all means, but do not try to convey the impression that nothing can or need be done, nor that the nurseryman on one side and the entomologists and fruit growers on the other comprise two separate and distinct classes with diverse and antagonistic interests."

NEW JERSEY'S ENTOMOLOGIST.

Prof. John B. Smith, entomologist of the New Jersey Agricultural College Experiment Station, New Brunswick, N. J.:
—"In your issue for April '97 you devote considerable space to the legislation proposed by the convention at Washington, March 5th and 6th. It is quite right that you should call the attention of the nurserymen to this bill and should bring out any objections that there might be to it. It is only after the fullest discussion of a subject of this kind that a proper course can be arrived at. As a mere spectator at the meeting referred to, although an experiment station entomologist, I may have the right to speak in criticism of what was done at the meeting without stultifying myself by having voted one way and acted another, and I can also praise, without being accused of simply defending a measure which I had an interest in passing.

"I am free to say that I believe in as little legislation as possible in matters of this kind. It seems to me that, as a matter of mere self-protection, nurserymen should do all within their power to keep the San Jose scale out of their grounds, and that they should welcome any assistance that can be offered by state or national governments that will enable them to recognize the presence of the insect in the earliest possible stages. I will call attention, however, to the fact that the legislation proposed is not directed against the San Jose scale alone. It is directed against any insects that might be imported from other countries. An introduction of the San Jose scale into California for instance would not be a serious matter, since the insect already occurs in that state; but an introduction into that state of the 'orange fruit-worm' would be a most serious misfortune.

"It should be remembered that the most serious pests with which fruit growers and nurserymen have to deal are insects which have been imported from a foreign territory, and in New Jersey we have suffered severely in recent years from three insects that might have been kept out by a system of quarantine, such as is proposed in the bill. I refer to the 'sinuate pear-borer,' which has destroyed numerous orchards as far as it has spread; to the 'pear midge,' which has caused losses amounting to many thousands of dollars in Connecticut. New York and New Jersey, and the 'wood leopard moth,' which, besides killing many fruit trees, is also destroying shade trees in the cities immediately surrounding the port of New York. We may add the 'elm leaf beetle' to this same list, although it does not attack fruit trees.

"To your criticism of the Californian laws that they permit the distribution of infested stock to other states, while guarding themselves against its receipt, the obvious answer is that if all other states guarded themselves as well, California simply could not send out the infested stock. It seems to methat the interests of the nurseryman lie with those of the fruit grower in this particular. How serious a pest the San Jose scale is, can never be realized by one who has not dealt with it. Nurserymen who are fortunate enough to have establishments outside of the range of this insect will, of course, object to any legislation on the subject, since it would be an annoyance to them without any possible benefit; but on the other hand, when it is realized that their establishments do lie outside of the range of the scale their trade will be increased by this very fact, and inspection will be perfunctory.

Furthermore, the bill provides its own remedy against the suggested inconvenience of a failure of the inspector to examine stock, since the secretary of agriculture may appoint any member of the firm or even an employee as inspector to make the examination. I must confess that in my opinion this renders the bill of little value; nevertheless, it seems that for this very reason nurserymen have no particular right to complain. It may also be as well to say that the interests of the fruit grower are by all odds the most important in this matter. When the men interested in the nursery are compared with those interested in fruit it does seem that the primary consideration should be the protection of the fruit grower. I am sorry to say that as a class he needs protection. There are plenty of individuals who do not, and who are fully able to take care of themselves; but there are a great many also who become easy subjects of a plausible salesman, and I am sorry to say that there are some nurserymen who are not entirely honest. I have always adopted the theory that a man is to be considered honest until the contrary is proved, and I have on first dealings with a man always trusted him to do as he said he would. I have found that my trust has been misplaced in some instances,-not many I am glad to say,-and those men cannot under any circumstances gain any favors or consideration from me in the future. It is obviously against the interests of a nurseryman who has a reputation to be dishonest, and particularly toward an experiment station, whose word of recommendation on the contrary, may mean a great deal to him. A man who cannot restrain his dishonesty where it is obviously in his own interest, cannot be trusted to deal justly with his customers. It is against such men that protection is needed and protection can be gained only by national legis-

I have had at least as much experience with the San Jose scale as any individual station worker, and I believe the insect is to be dreaded more than any other pest that has ever invaded the Eastern United States. No one who has not seen it in badly infested orchards can have any idea of its ravages and of the difficulty in dealing with it.

"Criticism is made of the omission of the word fruit from the sections dealing with interstate commerce, and at first sight it might seem as if there was some justice in this criticism; but suppose the word was inserted,-what effect would that have upon traffic between New Jersey and the states of New York and Pennsylvania? If we take into consideration that there are thousands of acres south of the middle of New Jersey under fruit culture, that there are car-loads of strawberries, blackberries and other small fruits shipped into New York and Philadelphia daily and that such fruits are also shipped as far west as the Mississippi and as far north as Maine, and that from the time peaches, apples and pears begin to ripen, train load after train load goes into those cities, the impossibility of making an inspection becomes at once apparent. The insertion of the word 'fruit' under such circumstances would mean the death of the bill. It simply could not be executed.

"The presence of the word 'fruit' in the section dealing with foreign commerce could not be considered as objectionable. The object is to exclude from our territory pests that are not already here. We have enough to deal with what we already have; we do not need additional insects from foreign climes. Of course fruit that is not grown in our country would need no inspection;—e. g. bananas, and dried fruits which cannot harbor insects. The amount of fresh fruit that comes into our market that is not raised within our country is comparatively small, and the inspector would know in a general way what to look for on fruits coming from differents parts of the world.

"It is not quite just to say that the interest of the nursery-man was not considered. It is true that Mr. Barry was perhaps the only representative of an individual nursery interest; but he was accorded a fair hearing for all that he had to say. It was unfortunate that Mr. Barry came in so late, that he had no opportunity for taking part in the general discussion and began his statements after a five minute rule had been adopted. This was not enforced against Mr. Barry, however, and I believe that there was no disposition on the part of any member of the convention to shut off any statement of facts concerning the effect such a bill would have upon any interest.

"Furthermore, there were two representatives of nursery interests on the legislative committee who were perfectly competent to care for these interests. It has been suggested that there was undue zeal on the part of experiment station workers. I believe on the contrary that they have acted with great moderation and have, with possibly one or two exceptions, been very conservative. Personally, I have always felt that a nurseryman unfortunate enough to have the San Jose scale deserved the utmost consideration, while one who was fortunate enough to have escaped its visitation had the right to have that fact most publicly stated. If we lived in an ideal community, laws of this kind might be dispensed with; but unfortunately we do not, and it seems to me that the nurseryman is as much interested in a law such as is proposed as the fruit grower can possibly be."

SHOULD BE AMENDED.

W. & T. Smith Co., Geneva, N. Y.:—"In our opinion, some national legislation in regard to the San Jose scale would be found quite desirable inasmuch as the different states are

enacting laws varying greatly in many respects, so that it is almost impossible to know what to do in shipping stock into the different states. If we have some wise national legislation on the subject, entirely practical in its making, (and it seems to us such a law could be devised), there is no reason why nurserymen should not support it.

"We do not favor the bill which has been proposed, as we think it should cover fruit as well as trees, and there are several other points which might harass nurserymen more or less."

Recent Publications.

The Cornell University Agricultural Experiment Station has issued timely bulletins on sweet peas, dahlias, the currant stem girdler and the raspberry cane maggot.

Number 6 of volume VIII of the Experiment Station Record, like its predecessors indicates valuable research over a wide field covering every feature of agricultural and horticultural work.

The latest additions to the "Bibliotheque d'Horticulture et de Jardinage" are "Useful and Destructive Animals as Related to Horticulture, Except Insects," by A. Larbalatrier; pp. 154; figures 29; cloth, 2 fr.; "Geraniums: Description and Culture," by H. Dauthenay, with alphabetical list of varieties; pp. 292; figures 22; cloth, 2 fr., 50c. Paris: OCTAVE DOIN ET LIBRAIRE AGRICOLE.

The proceedings of the forty-second annual meeting of the Western New York Horticultural Society have been issued by the secretary, John Hall. Within the 147 pages of the book is information worth many times the membership fee, which is \$1.00, and upon payment of which any person, however slightly interested in horticulture, may become a member and receive a copy of the proceedings. The San Jose scale, and other topics of the time, are quite fully discussed.

A valuable contribution to the horticultural literature of the day is the thirtieth annual report of the Ohio Horticultural Society, of which E. H. Cushman, Euclid, is president, and W. W. Farnsworth, Waterville, is secretary. The frontispiece is an excellent likeness of the well-known nurseryman and horticulturist, George W. Campbell. It is a book of 188 pages, containing a great variety of up-to-date information upon horticultural subjects.

The Florida Horticultural Society's Annual for 1896, just received from the printer, is a timely horticultural hand-book. It contains a full report of the last annual meeting; a tabular list of the fruits of Florida, showing the relative adaptability of the different varieties to the several sections of the state, with full description and account of each, including over 100 varieties of deciduous fruits, and over 50 varieties of tropical fruits. It is a compendium of latest practice and best methods for practical growers, and information for prospective planters, as well as readable outline of horticultural progress in the South. It will be sent free to any one remitting \$1.00 as membership fee for 1896 to the president, G. L. Taber, Glen St. Mary, Fla. The tenth annual meeting of the society will be held at Orlando, Fla., on May 4th.

Recent additions to the Bibliotheque d'Horticulture et de Jardinage, published by Octave Doin under the direction of Dr. Heim, Paris, are "Culture of Exotic Ferns" by A. Buyssens; "Calceolarias, Cinerarias, Coleus, Heliotropes, etc.," by Jules Rudolph, laureate of the French National Society of Horticulture; "Rose Culture," by Cochet-Cochet and S. Mottet, members of the National Horticultural Society of France. Each of these books is a hand-book on the subject named. It is very interesting to note the views of experts who have spent much time in studying she smallest detail of their specialties and from points of view not obtainable upon this side of the Atlantic. Progressive nurserymen would enjoy the contents of these books which may be obtained at little cost. The price of "Rose Culture" is but 50 cents and of the others but 40 cents each. All are fully illustrated. The books are standard authorities on the subjects treated. Paris: Octave Doin, 8 Place de l'Odeon.

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G. HAROLD POWELL, Horticulturist and Entomologist.

NEWARK, DEL., Dec. 15, 1896.

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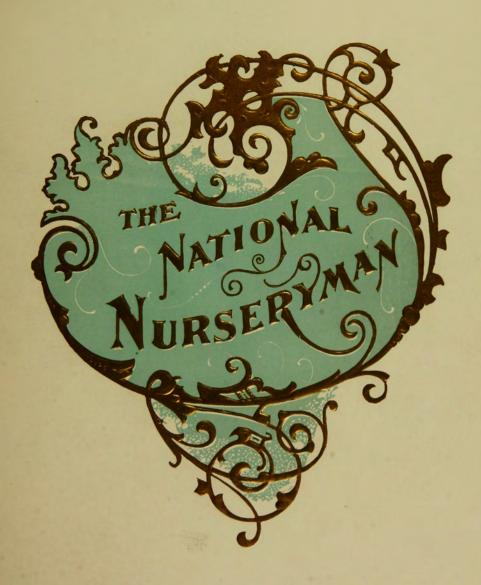
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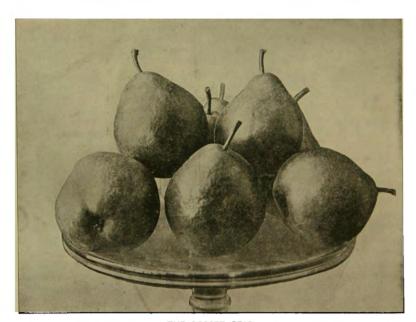
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FOR GROWERS AND DEALERS IN NURSERY STOCK.

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10 E

TREATING STOCK.

ADVANTAGES OF WHALE OIL SOAP SOLUTION AND GAS TREATMENT FOR SAN JOSE ŞCALE—SOME PRACTICAL POINTS ON CASES CITED.

In the fourteenth annual report of the New York Experiment Station, at Geneva, N. Y., F. A. Sirrine, entomologist, under the head of notes and remedies for the pernicious and other scale insects, after describing experiments in the nurseries of Keene & Foulk and Parsons & Sons, Flushing, N. Y. and Lovett & Co., Little Silver, N. J., makes the following practical suggestions as to the treatment of nursery stock:

"During the spring shipping season all the infested stock in Keene & Foulk's nursery was destroyed, and all suspected stock sold, whether washed during the winter or not, was put through the gas box. A good share of the pear trees washed during December was destroyed. On all the latter that were saved, as well as on other stock treated twice with kerosene emulsion, a good many live specimens were found in July. In most cases they appeared to have issued from adults which were fairly well protected around the union of the branches with the trunk of the tree. In other cases the adults were protected by dire at the base of the tree; this was especially the case with the one year old stock. Undoubtedly some of the scale insects would have escaped the action of the washes as well as the climatic effects at these points. All the one year old stock was injured to such an extent by the kerosene emulsion that it had to be cut back. In some cases the branches of older stock were injured.

WHALE OIL SOAP.

"Between the first and fifteenth of August, Mr. Foulk trimmed about one hundred each of one and two year old apple and peach trees and had the dirt removed from their crowns. Half of each of these he washed, from the branches to the exposed roots, with whale oil soap, using two pounds of soap to a gallon of water. The remaining 50 of each he painted with raw linseed oil. These trees were thoroughly inspected August 21st. With the exception of a few young which had migrated from the untreated branches unto the body where the whale oil soap had been removed by rain, not a living specimen could be found. At that time no injury to any of the trees was noticeable.

"During the first half of November Mr. Foulk cut back between 10,000 and 12,000 two year old apple and plum trees and removed dirt from collars. These he had washed with whale oil soap solution, two pounds to one gallon of water. When inspected November 15th it was found that the cold weather, together with the frothiness of the solution had interfered with the thorough application of the wash. As a result some of the pernicious scales had escaped. All of these trees

were re-washed, care being taken to keep the wash hot for the workmen.

GAS TREATMENT.

"Before the spring shipping season opened Mr. Foulk made two fumigating boxes for the purpose of treating with hydrocyanic acid gas all suspected stock sold. These boxes were 13 x 3 x 3 feet, made of flooring and without a cover. White lead was used for filling the mortises and putty for the larger joints. Outside of the boxes was entirely covered with oiled muslin and the latter given two coats of paint. Each box cost about \$10.

"The same amount of chemicals was used to each box of trees as recommended for treating scale insects on citrus trees in California, viz., I ounce of fused cyanide of potassium, I fluid ounce of commercial sulphuric acid and 3 fluid ounces of water for 150 cubic feet of space. As each box only contains 117 cubic feet, the amount of gas used in each box was a trifle more than recommended. About 75 apple trees that had been treated with the gas were heeled in and retained for the purpose of noting effect of gas on trees and scale insects. They were examined on four separate occasions between the first of May and September.

"When inspected in June a single live scale insect was found which proved to be a male. No injury to the trees was noticeable. In one case where gas treated stock was sent out a pear tree was found in August to be infested. This tree with a number of other pears was sold to the purchaser with a plum. The latter was badly infested with the pernicious scale and had been overlooked the previous fall when the stock was inspected. Of course the plum tree was brought in contract with the pears when delivered, but at that season the pernicious scale is supposed to be dormant. There is also a chance that the owner transferred the insects later in the season by handling the trees.

"Although some results indicate that the gas treatment is not a complete success, in most cases the failures can be traced to something which has interfered with its thorough application. Any remedy will prove a failure when tested on the pernicious scale, unless care is taken to make the treatment thorough. Even whale oil soap will prove a failure in nursery unless dirt is removed from base of the tree and the wash thoroughly applied to all parts.

"From the amount of stock which I have had the privilege of inspecting, after treatment with gas and whale oil soap, I think it is safe to assert that, all things considered, the gas treatment is the cheapest remedy for nurserymen who handle and ship fruit trees in large quantities, and will be as effective as any remedy under ordinary conditions of application.

FUMIGATING BOXES.

"One generator will answer but two are better. An ordinary glass fruit jar makes a good generator. The fused potassium cyanide should be weighed and put into packages containing the proper amount required for each generator, so that

all the workman will have to do will be to empty the package into the generator after having placed it under the box. He should be provided with two measures, one for the acid and one for water. The acid and water should be put into the generator before the latter is placed under the box. As soon as the potassium cyanide is dropped into the generator the hole under the box should be closed with a short piece of board and banked with dirt. It is best to run the generators during cloudy days, or during early morning and late in the afternoon. The gas should be allowed to act for one hour.

DIPPING STOCK.

"As Parsons & Sons Nursery Co., follow the plan practiced by some nurserymen of digging their stock only as needed to fill orders, some plan, which would be as cheap and more convenient for small lots of trees than the gas treatment, had to be devised. Dipping the trees in a solution of whale oil soap appeared feasible and harmless to the trees. For this purpose a tank, the dimensions of which are here given, was made. This nursery haul their stock to one packing house to pack, hence it was an easy matter to dip the stock before packing and the principal cost by this method of treatment was the tank and soap. The tank was made of galvanized iron and cost \$9.00. It is approximately 8 x 2 x 1 feet, and will hold a trifle over 94 gallons. It was found more convenient to only use from 60 to 70 gallons of the mixture at a time. Whale oil soap costs 61/2 cents per pound in half barrel (200 lb.) quantities in New York city.

"C. L. Marlatt in his report on experiments with winter washes against the San Jose scale says: Whale oil soap washes, even at three pounds to the gallon are thin enough when cool to be sprayed without difficulty and no trouble whatever was experienced with one and one-half and two pounds to the gallon.

"There must be a difference in the whale oil soap manufactured by different firms. It was found that two pounds of the soap, obtained in New York city, added to a gallon of water had to be kept at a temperature of about eighty degrees to work well, and, if allowed to cool below sixty degrees it formed a very thick soft soap. It had to be scooped out of the tank into a kettle each morning and remelted, after which it was kept warm by placing an ordinary oil stove under the tank.

"Parsons & Sons Nursery Co. have only used this tank since November 10th, and none of the treated stock has been inspected. From the tests made of whale oil soap by the United States Division of Entomology near Riverside, Maryland; also, from those made during the fall in the nursery of Keene & Foulk at Flushing, it is quite evident that a whale oil soap solution made by dissolving two pounds of the soap in a gallon of water, will kill all the pernicious scale insects, if thoroughly applied, and not injure the trees. Hence, failure by the process of dipping must be the result of careless work.

SUMMARY.

"With the exception of whale oil soap none of the winter washes have proven successful in the tests made by the United States Division of Entomology. It was also proven by these tests that none of the washes were as effective when applied in winter as when applied during the fall. Fairly good results have been obtained at the Florida Experiment Station from the use of resin wash. In this section of the country winter is not only a disagreeable time to apply the washes, but rains are liable to remove them before they have time to act on the

dormant scale insects. Hence, the only conclusion that can be drawn is that better results will be obtained by applying winter washes during the fall; that winter washes applied in winter are liable to be a waste of time. Also, that the simplest remedy, viz., whale oil soap, makes the best wash for general use.

"In order that any wash may prove a success when applied to nursery stock for the pernicious scale it is absolutely necessary to remove the dirt around the crown and apply the wash thoroughly from buds down to the roots. This is especially true for all stock which is budded, grafted or grown from cuttings. Hence, for nursery stock the wash must be applied during the fall or early spring. It is recommended that the wash be applied during fall in preference to spring, as the pernicious scale is active during the fall and more susceptible than during the spring.

"It should be remembered that whale oil soap solution is more difficult to apply than other washes unless applied during warm weather. By spraying the tops of the trees with a summer wash at intervals of five days during July, possibly whale oil soap solution could be used to an advantage on the trunk of the trees during the summer.

"All things considered, the gas treatment is the simplest and cheapest remedy that many nurserymen can use. As far as tested on nursery stock here on Long Islandwit has given as good results as any of the other remedies.

"For nurserymen who dig their stock only as the orders are filled, probably the dipping of the stock in a solution of whale oil soap will prove the simplest and cheapest remedy.

OTHER INSECTS.

"The oyster-shell bark-louse and the euonymus scale can be controlled by summer washes. If the latter are applied often enough and thoroughly at the right season, viz., from the 1st of June to the 1st of July for the oyster-shell bark-louse and from the 20th of June to the 20th of July for the euonymus scale, these pests can be exterminated.

"Linseed oil is not a safe remedy to use at any season on peach trees, and should be carefully tested on all plants with thin bark before being recommended for general use against scale insects. As far as tested it is the most effective remedy for scale insects during their dormant condition. Mr. Foulk thinks it can be safely applied to apple and pear trees, excepting the young twigs, at any season or stage of growth, and if applied to the old scales during the winter no young will ever issue.

"The experience of Keene & Foulk demonstrates that kerosene emulsion, dilated with three parts water, applied even in winter is very unsafe and by no means certain in its results. In the tests made by the United States Division of Entomology only pure kerosene emulsion killed all the pernicious scales. It also killed the trees.

"Poor results from the use of kerosene emulsion often occur, which can be traced to some slight detail in its manufacture, such as too much lime in the soap or in the water used, or to improper emulsifying. Hence the above results are given simply as they occurred and not to condemn kerosene emulsion for all purposes.

"Crude petroleum emulsion is more expensive than kerosene emulsion. It will be a more dangerous remedy to use than kerosene emulsion.

ILLINOIS SCALE BILL.

In a long editorial criticism of the Illinois scale bill introduced in the senate by Mr. Dunlap the *Fruit Growers Journal*, Cobden, Ill., says:

"The true animus of the bill, however, is disclosed by sections 9 and 10 of the bill, when the large wooley headed Afro-American projects himself into the arena:

Section 9. No person or persons, firm or corporation resident of another state, province or country shall engage or continue in the business of importing any trees, plants, shrubs or vines, commonly known as nursery stock, into this state, or of selling such importations within the state, or of selling such articles within the state for subsequent importation into it, without first having obtained from the State Board of Horticulture a license for the sale of said property and depositing with said board a fee of \$5 as a license fee for himself as principal, and \$1 as a license fee for each and every one of the agents or employees who shall engage in selling such stock or soliciting orders for the same, and each of such persons, principals, shall be required to execute to the State Board of Horticulture a bond in the sum of \$1,000 with two good and sufficient sureties, residents of this state, conditioned that he will comply with section 8 of this act.

Section 10. Every person violating the provisions of this act shall be liable upon conviction before a justice of the peace or a court of record to a penalty not less than ten nor more than two hundred dollars for each offense.

"The McKinley bill and the Dingley bill rolled into one would be discounted in its protective features by the bill as expressed in the above sections. But who is to be protected? The bill claims to be in the interests of horticulture; but on investigation it appears to be protective of the nurserymen of he state against competition from the nurserymen living out, side of the state. It is not the fruit growers that are to be-protected. They are to be made to pay higher prices for nursery stock. The fact is, this bill has but two purposes in view—and they are to confer benefits upon the nurserymen and the members of the State Hortïcultural Society."

THE APPLE EXPORT TRADE.

It was long ago seen that the apple export business of the season now drawing to a close says the American Agriculturist would prove by far the largest on record. Approximately 3,000,000 bbls. of apples have been shipped abroad from the United States and Canada during the season of 1896-7, or fourfold the trade of the previous year and fully double any season's exports in the history of apple shipping. Summing up the season's business it was satisfactory, in that never before has American fruit been so well advertised, not alone in England but particularly on the continent of Europe. There is every reason to hope that in seasons to come there may be a permanent and steadily increasing demand for choice American fruit. A lesson to be learned is the fact that it is unwise in the extreme to export any but strictly choice apples, well packed, attractive in appearance and possessing good keeping qualities.

Among the best sellers were Kings and choice Russets, while the relatively small quantities of fancy Newtons commanded high prices and there was also a fairly good demand for choice Baldwins and Spys. Considerable complaint was heard of poor keeping quality of Spys, while many of the Greenings exported showed discoloration. Enormous quantities of fair to really good apples sold in the English markets from \$1.50

to \$2.50 per bbl., and it required something prime to command \$3 or better; no inconsiderable part of the average exports were received in such poor or indifferent condition as to sell at \$1.25 and even lower. In March Australian apples appeared on the London market, affording some competition for American fruit, but our export trade has been liberal into April and May.

The subjoined table, showing the movement from United States and Canada ports, is made up from figures compiled by Mahlon Terhune, the New York freight broker, and points to the overwhelming increase in our export business over anything previously reported The total for this season includes 3000 bbls. from Philadelphia in addition to the points named.

APPLE EXPORTS IN BARRELS FROM PORTS NAMED.

Season.	New York.	Boston.	Montreal.	Portland.	Halifax.	Total.
1896-97 1895-96 1894-95 1893-94 1892-93 1891-92 1890-91	565,191 230,705 221,398 29,398 218,037 537,247 76,503	84,771 523,123 4,796 254,138 339,964	128,027 273,353 56,255 429,243 320,427	141,955 155,878 49,344 235,395 163,145	35,058 116,725	751,255 1,438,155 174,841 1,203,538 1,450,336

FOR AN EXHIBITION IN 1899.

The Gardeners' Magazine has been stirred by the Hamburg exhibition to remark: "It is time that something be attempted to vindicate British horticulture in the eyes of our continental friends, and to quicken anew an interest in horticultural exhibitions, and thereby materially raise the general standard of these gatherings. The time is most opportune for taking the preliminary steps for holding a gathering of an international character. This year we have the Hamburg exhibition, next year our Ghent friends will have their quinquennial, and an international exhibition in London would fittingly follow in 1899. Two years would be none too long for making the necessary arrangements, for to bring a gathering such as the one we have in view to a successful issue, something beyond drawing up a schedule of prizes is necessary."

MINNESOTA SCALE BILL.

In the rush of the closing days of the Minnesota legislature the San Jose scale bill, to which reference has been made in these columns, failed of passage. The *Minnesota Horticul*turist says:

"We can scarcely hope that the failure of the bill to become a law will not prove a misfortune to the fruit growing interests of the state with the insect already in so many places in Illinois, a state with which we have so intimate business relations in the matter of nursery stock. It is likely that nurserymen outside our state are not sorry that this bill has failed to pass, as it would put them to a little inconvenience and the risk is not theirs, but with us facing the probability that in the next two years the insect may find a foothold in the state, it is a serious matter. That the nurserymen of the state will do everything they can to keep it out, we are assured, but with so many irresponsible dealers in nursery stock who are exploiting Minnesota, and without permanent interest in our welfare, the risk is certainly very real."

THE POINT EXACTLY.

PROFESSOR F. W. MALLY'S SOUND ARGUMENT ON THE FEDERAL INSECT BILL — A GOOD MEASURE WHEN PROPERLY AMENDED.

Professor Frederick W. Mally of Hulen, Tex., makes the following comment on the federal insect bill in the Dallas, Tex., News:

"In a recent issue the *News* called attention to a bill (No. 96) now pending in congress, providing for the inspection and treatment of plants infected by insects or disease. I have read the bill and find a few most serious omissions in its provisions—omissions serious enough that the advisability of its passage in its present form is questionable."

"Sections 1, 2, 3 and 4 provide for the inspection of all kinds of nursery stock and propagation material, and also fruits imported to the United States. The penalty for attempting to import trees, scions or fruits infected with dangerous insect pests or fungus diseases is heavy, and justly so, for certainly measures looking to the accomplishment of such immunity can not be too rigidly provided for and prosecuted.

"In section 5 the first important omission occurs. It provides for the inspection of all kinds of nursery stock and propagation materials, grown in the United States which may become subjects of interstate commerce, but omits the inspection of fruits grown in the state and which are also subjects of interstate commerce. The advisability of spending time and money in providing for the rigid inspection of the one and not the other is a questionable expenditure to say the least. It should be remembered that for any given locality the fruiting orchards are the sources of infection for either the fruit grower or the nurseryman. Propagation wood is almost universally taken from bearing trees whenever the same are accessible. It must, therefore, be evident that the nurseryman needs protection from the orchardist with his bearing trees, should they be infested, in which case protection against the fruit of such trees should be provided for, since it is well known that some of the worst insect pests attack the fruit quite as freely as the trees.

"In these days of rapid progress and the high standard of the general and agricultural press, nurserymen are compelled as a matter of business and self-preservation to be thoroughly informed about these various injurious pests and diseases, and with but few exceptions no effort on their part is spared to protect their nursery from infection. There is consequently less danger of the widespread dissemination of injurious insects, etc., through the transfer of nursery stock than through the hundreds of miscellaneous shipments of infested fruits. Both the orchardist and the nurseryman, as a class, recognize the importance of the strictest vigilance in these matters, and it is manifestly inadequate to legislate for the one and omit the other.

"The worst feature of the present form of the bill develops when one considers that of the shipments from any one given locality those from the orchard are the most certain to transmit the pest in its most virulent form, and that these products are exempted from inspection. Nursery stock is usually grown for a year, or in many cases two years, and the probabilities are that if infested wood has been used in propagation it will

be detected and thoroughly disinfected or destroyed before any shipments are made. Furthermore, shipments of nursery stock are more or less limited in their power to disseminate, inasmuch as they are not sold usually, annually to the same parties, while the fruits go to every home and castle each year. Should either be omitted from inspection it must be evident that the one fraught with the least danger to all concerned would be the product of the nursery rather than that of the orchard.

"From the foregoing it must be evident that the deficiencies in the bill could easily be adjusted by providing for a thorough system of orchard inspection, since the orchard is the direct and original source of both the fruit and the propagation material. A suitable penalty could be inflicted for allowing trees in an orchard, when known to be attacked, to remain infested without the application of heroic measures to eradicate the pest. The proposed bill provides for about one-third of the legislation required to make it an effective measure and to enable its enforcement to accomplish the desired control of and immunity from injurious insect pests-to other diseases.

"As general manager of an extensive nursery and orchard, my experience easily places me in a position to foresee the application of a perfected bill in its three features, namely: Inspection of nursery stock, inspection of fruits and inspection of orchards. I also fully realize that a perfected bill would be of untold benefit to every interest involved, and its passage would be a consummation devoutly to be hoped for. Such a measure will be heartily indorsed by every fruit grower and nurseryman in Texas, and since our Texas orchardists and nurserymen have fortunately maintained a high standard, they have nothing to fear or suffer from the passage of a perfect bill. An imperfect bill is objectionable, first, for the reason that it is imperfect, and second, many an orchardist or nurseryman might feel securely protected in all respects through the provisions of a bill which has been made a law, but which he later finds in fact, and much to his sorrow, lacking in important respects. The incomplete bill works a hardship for the plain and simple reason that it does not protect in the several important essentials above outlined.

"In view of these serious omissions we should urge our senators and representatives in congress to provide for the insertion of suitable amendments to the bill, and then secure its passage. Let our suggestions be in the spirit of co-operation rather than that of antagonism, and let it be our aim to secure a great good, equitably distributed among all interests involved. We would suggest that all of our friends, fellow orchardists and nurserymen, take an interest in this bill, and give our senators and representatives in congress the benefit of their experience, observation and co-operation in a laudable endeavor.

PENNSYLVANIA PEACH BELTS.

Professor George C. Butz of the Pennsylvania Experiment Station estimates the total area devoted to peaches at 11,000 acres, containing about 2,000,000 trees. These are in well-known "peach belts." The largest, the Juniata belt, comprises 3.500 acres and lies principally in Juniata county, but extends into the counties of Mifflin, Perry and Snyder. The South mountain belt lies wholly within Franklin county and contains 2,500 acres. The third district is not made up of a belt, but the trees are scattered over the line of counties from

York to Northampton. This region contains about 2,300 acres without special concentration at any one point. Other counties are making experiments with young orchards ranging from 500 to 1,000 trees. It is a matter of record that there is more or less of a failure from winter-killing of blossom buds about every four years. Where the trees are planted on high ground or mountain slopes less damage results from frosts than in valley orchards. Where the wood is not properly matured the damage is usually great.

Among the most profitable varieties grown are White Heath Cling, Solway, White Heath Freestone, Bilyen's October, Levy's Late, Crawford's Early and Late, Mountain Rose, Reeve's Favorite, Moore's Favorite, Old Mixon Free, Stump the World, Chair's Choice, McAllister, Wonderful, Beer's Smock, and a few others. The above include early and late varieties. Avoid clings, as they are not wanted in the market. Yellow fleshed peaches are preferred to white, and in setting commercial orchards this should be borne in mind.

OLD CHICAGO NURSERYMEN.

In an article on "Gardeners and Gardening in Early Chicago" in the *Florists' Exchange* is the following reference to old Chicago nurserymen:

"Of nurseries in the city the only one worthy of note was the Sheffield nurseries started in 1846 by Mr. W. B. Ogden and Dr. Whitney, John Goode, now of Florida, being manager. In 1848 Martin Lewis bought a third interest, and in ten years became sole owner. He is eighty-one years old and lives in Evanston, a wealthy capitalist. He built a greenhouse in 1849. In 1866 August Dressel joined him. Mr. Dressel is now a successful florist. Mr. Lewis was an English bred gardener.

"Of outside nurseries Dr. Kennicott had a noted one at West Northfield; his son Flint is president of the Kennicott Company, wholesale florists, on Wabash avenue. Another notable nurseryman was Robert Douglas, of Waukegan, who is still in the saddle. Out at Naperville was Louis Elsworth, still another notable one; he died a few years ago at a good old age.

SPAULDING NURSERY COMPANY.

The Springfield, Ill., *Monitor*, in a recent description of the Spaulding Nursery and Orchard Co., said:

"Just imagine what a nursery of 600 acres planted in trees, vines, bushes, and shade trees means. It means in the first place a thorough preparation of the soil for the purpose by a small army of men and boys employed; it means blocks of apple orchards covering over 140 acres of ground with over 6,000 Ben Davis apple trees and over 2,000 of other varieties.—perhaps fifty in number—including the Wine Saps, Grimes' Golden, etc., all splendid through winter keepers. It means ten acres of cherry orchard, of every known variety worth raising; ten acres of pear orchard, including the Koonce, Kieffer, Garber, etc.; it means two acres of the very choicest varieties of peach orchard; it means a nursery of ten millions of young apple, pear, cherry and plum trees, one, two and three years old; it means thousands of quinces, apricots, grapes,—blue grapes, black grapes, white grapes and red; cur-

rants, gooseberries, blackberries, dewberries, raspberries, strawberries, mulberries, persimmons, chestnuts—one of the Spaulding pets—butternuts and English walnuts; it means a nursery of ornamental trees of great variety adapted to any climate and any soil; can be selected from this mammoth nursery; it means such an established fact overlooking the banks of the beautiful Sangamon river, made historic by the immortal Lincoln; it means forty years of toil, forty years of research; it means the employment and supplying of 400 agents throughout the lovely states of Illinois, Indiana, Iowa, Missouri, Wisconsin, Minnesota, Michigan, Ohio and Colorado."

FAST FRUIT TRAIN SERVICE.

Negotiations which for some time have been pending, have at last resulted in the inauguration of a movement that will insure for the fruit season of 1897, a fast fruit train service, between Sacramento and Chicago, the proposed time between these points being 120 hours, or five days exactly, says the California Fruit Grower. There will be no change in freight rates, the \$1.25 per 100 pounds and 24,000 pounds for the minimum carload arrangement still remaining in force. This special fast service and scheduled time for which shippers have been working during the last two or three years will prove of great value to the fruit industry of California.

COLORADO HORTICULTURAL LAW.

Colorado's new horticultural law provides that when thirtyfive electors in any county, at least one of whom must be the owner of at least two acres of orchard, presents to the board of county commissioners of that county a petition asking for protection to the horticultural interests of the county it shall be the duty of the commissioners to appoint a county inspector of horticulture. He shall act for one year, drawing pay at \$4 a day for his services and may appoint deputies who shall be paid \$2 each daily. Before being appointed to office, applicants for inspectors must pass an examination before the professor of entomology at the state agricultural college and receive license from him showing them to be competent. The examining professor shall get \$5 for each such examination. In assuming his active duties the inspector must first supply to every owner or manager of an orchard or vineyard in his county a blank form furnished by the state board of horticulture. This blank is to be returned in time to the board of horticulture, with answers made thereon to printed questions regarding the health of trees, vines, etc., on the sender's ground and the manner in which the injunctions of the inspectors have been complied with.

In this way the board can keep informed of the presence or absence of horticultural pests in every county of the state. When shrubs or vines are imported into a county from outside its limits they shall be inspected within a period of forty-eight hours thereafter. All expense of inspecting trees or vines and eradicating pests shall be borne by the owners of the trees or vines. Should the owner fail to pay the cost, or not be found, the expense of inspection and disinfection shall become a lien against the orchard or garden so inspected and treated. The inspector may establish quarantine lines and stations wherever required in his territory.

THE CONVENTION.

PROGRAMME OF THE TWO DAYS' SESSION—
FEW PAPERS TO BE READ—CONSIDERABLE
BUSINESS EXPECTED—THE BANQUET.

Following is the programme for the annual convention of the American Association of Nurserymen to be held at the Lindell hotel, June 9th and 10th:

WEDNESDAY, JUNE 9.

MORNING SESSION, 10 O'CLOCK.

Address of welcome, by Mayor Ziegenheim and Hon. N. J. Colman. Response.

President's address, Silas Wilson, Atlantic, Iowa. Report of treasurer.

AFTERNOON SESSION 2 O'CLOCK.

Election of officers.

Selection of next place of meeting.

Reports of committees.

THURSDAY, JUNE 10.

MORNING SESSION, 9 O'CLOCK.
Reports of committees and unfinished business.

- "Piece Roots vs. Whole Roots,"-E. J. Holman, Leavenworth, Kan.
- "Sending Trade Lists to Planters,"—C. L. Watrous, Des Moines, Ia. "Insect Laws. State or National, Which Shall It Be,"—Hon. N. H.
- "Insect Laws, State or National, Which Shall It Be,"—Hon. N. H. Albaugh, Tadmor, Ohio.

AFTERNOON SESSION.

- "The Nurseryman as an Educator,"—Professor Fred W. Card, of the University of Nebraska.
- "Inspection in Relation to Suppression of San Jose Scale," and "Treatment of Nursery Stock by Hydro-Cyanic Acid Gas Process."— Prof. W. B. Alwood, Virginia Agricultural Experiment Station, Blacksburg, Va.

Meetings of Protective Associations will be held Wednesday evening. Thursday evening all delegates are invited to attend the annual Shaw banquet as honored guests. This banquet is one of the events of the year at St. Louis, and it is hoped that appreciation of the high compliment will be evidenced by large attendance. Kindly notify the secretary of acceptance Wednesday.

Many of the members will, of course, wish to visit the famous botanical gardens, and this, with the unusual number of important matters to be considered, may necessitate continuing the session into Friday.

ALL SHOULD ACT.

MARCELINE, Mo., May 8.-S. H. Linton: "The interest of every nurseryman is to have stock free from disease or insects, and every progressive, live and industrious nurseryman will have no other stock to send out. The nurseryman uses every available means in his power to have his stock reach its destination in the best condition possible, but he of all men gets abuse rather than kind words for the pains and extra trouble he has taken to please his customers. 'If the average and small nurseryman is asked to pay the expenses of a nursery inspector the result will be, they can't do it, they will have to close business. Every nurseryman, great or small, should consider his direct interest in all bills pending in congress and if any clause or section in these bills is contrary to the general interest of the nursery business, proceedings should be taken at once to amend that clause or section. Do not wait for some other person to do what you should do, but act at once.

THE NURSERY BUSINESS.

Writing on the subject of the nursery business as a national industry a correspondent in the Fruit-Growers Journal says: The census bureau gives the following interesting figures as to the extent of the nursery business in the United States. The total number of nurseries, 4,510; their value approximates, estimated at the present depressed values, \$41,987,835. The nurseries in the year 1891 occupied 172,806 acres of land valued at from \$15 to \$150 per acre; the capital invested approximates \$54,425,669, furnishing employment to 41,657 men, 4 580 boys fourteen years up, and 2,279 women. This is a remarkably good showing, resulting chiefly from the evolution of less than seventy-five years in this industry. There is no industry that feels more keenly the great depression in agriculture and in horticulture. I can scarcely imagine any industry which has done as much for mankind in the whole country at large, and produced so few millionaires. Most nurserymen die comfortably poor in the sense that the masses look upon wealth, but rich in the satisfaction of knowing that as business men from a national standpoint they have done much to benefit mankind and made this country more desirable for home builders.

To deny the nursery a high national position among the most important and beneficial industries of our Uncle Sam's domain, would be to withhold from it as a national industry its just dues. The envious disposed and chronic grumblers have claimed that nurserymen have had an undue share in the management of state and district horticultural societies. As there are no laws that can be justly placed to debar them or anyone disposed to participate in its benefits, we see no just cause for complaint of an equal showing. The local nurserymen in most every state have been the pioneers in horticulture; they have opened up and blazed the way and shown up the practicable side of general horticulture, and are certainly as much at home in a meeting of horticulturists as a landscape gardener. Such men as Elsworth, Bryant, Edwards, Douglas, Phœnix, Whitney and others in the early history of horticultural societies in this state, Illinois, have all been identified with the nursery business at one time, and have devoted their best days to bringing on the present evolution in horticulture. The present generation can scarely estimate their real true worth as a factor in this evolution for the betterment of the people and of the home builders of this and adjoining states.

FAVOR THE FEDERAL BILL.

West Chester, Pa., May 3.—Hoopes, Brother & Thomas: "The federal insect bill, on the whole, meets our approval. The subject of quarantining imported trees and plants is open to some objection as the delay incurred by so doing may possibly be not only inconvenient but detrimental to the goods, still if the inspection could be accomplished without any delay upon arrival of the stock this would not be a serious disadvantage. We are inclined to believe that should the bill become a law, foreign nurserymen would take measures to have their goods examined by competent parties who would be accepted by the Commission of Agriculture, which would obviate any delay on this side. The act is a just one and will; beyond a doubt, be a great help in preventing the dissemination of many insect pests."

CHARLES M. PETERS.

Charles M. Peters, senior member of W. M. Peters' Sons, Wesley, Md., was born March 3, 1854, at Roses Bar, Uba Co., 'California.' His first work was done at the Fruitland Nurseries, situated at Newark, Delaware, operated by Mr. Randolph and W. M. Peters. This partnership was dissolved, W. M. Peters, his father starting a nursery at Centerville, Delaware, and conducting the business there up to December 1874. In 1871 a tract of land was purchased nine miles from Snowhill, Worcester Co., Maryland, containing one thousand acres. Charles M. Peters, the oldest son was put on this farm February 14, 1872, to start a nursery and fruit interest there. He planted the same spring fifty acres in peach, apple and cherry trees; twenty acres in strawberries; that same fall one hundred bushels of peach seed were planted. The following spring five thousand standard pear trees were

planted in orchard form; in addition to this three thousand peach, one thousand apple trees and twenty acres in strawberries.

The nursery interest was increased by putting out fifty thousand apple grafts, 3,000 cherry stocks, 5,000 Norway maple seedlings, 50 pounds of asparagus seed and 300 bushels of peach seed. The peach seed planted in the fall of 1872 produced seedlings in August 1873 ready for budding. InDecember, 1874, W. M. Peters went there to reside. His youngest son, Reese C. Peters, went with him. The interest started was increased and permanent employment was given his two sons. The next step was in the fall of 1886, when his two sons were given an equal interest in the business. Being situated five miles from the nearest shipping point on railroad, another farm was bought containing 600 acres at Ironshire Station. gave a switch from the station ad-

joining the nurseries making the facilities for handling trees in carload bulk unsurpassed by anyone. At this time the firm was changed to W. M. Peters & Sons. This same fall 800 bushels of peach seed was planted; the following spring, Reese C. Peters moved to this farm to direct the planting of other nursery stock. The planting being increased every year.

On June 15, 1889, W. M. Peters died. The firm then changed to W. M. Peters' Sons, the business moving along very satisfactorily. Reese C. Peters, the junior member of the firm, gave his entire attention to the propagation of the digging, packing and shipping, C. M. Peters attending to the correspondence and other details of the business.

The firm now has devoted to nursery stock 150 acres, including small fruits and has ready for fall and following spring 600,000 peach trees, one year old from bud, to be increased by June budding during the month of June; 20,000 Japan plums, 15,000 apples, 3,000 shade trees, 15,000 grape vines,

100,000 asparagus roots. There are strawberry plants to dig from 20 acres, planted this spring and a million peach seedlings to bud in August next; also 20,000 apple seedlings to bud. Their specialty is peach trees and strawberry plants.

GIANT CYPRESS TREE.

The giant cypress tree of Tule (Taxodium mucronatum) stands on the grounds of the little church in the town of Tule, on the road from Oasaca to Guatemala, by way of Tehuantepec, and is the largest of the Mexican Taxodiums, and perhaps the most famous tree in the New World. Its trunk at five feet above the ground, according to a comparatively recent measurement, has, in following all its sinuosities, a circumference of 146 feet, while the actual girth is 104 feet, the greatest diameter being forty feet, and the least twenty feet. Its height is estimated to be 150 feet, and the spread of its

branches is 141 feet. As measured by Baron Thielmann last autumn its height was between 160 and 170 feet, and its largest diameter fortytwo feet. This tree, believed to be two thousand years old, was figured recently in Garden and Forest. It was mentioned by Humboldt, and his name is inscribed on the bark.

Another of these wonderful Mexican Taxodiums is the cypress of Montezuma, the largest of the great Cypress trees in the gardens of Chepultepec, near the City of Mexico, and a noted tree nearly four centuries ago. The Cypress of Montezuma is a tall and still graceful tree, 170 feet high, with a trunk to which travellers have ascribed a girth varying from forty to nearly fifty feet, these discrepancies being due, no doubt, to the different points above the surface of the ground at which they were made. The Mexican Taxodium, although it grows to a much greater size, is specifically almost identical



CHARLES M. PETERS.

with the Bald Cypress (Taxodium distichum.)

Indiana and Illinois claim they have the oldest pear trees in the West in their respective states. There is one near Springfield, Ill., known locally as the great Sudduth pear tree, which is fifty feet in height and ten feet in circumference. It is said to be fifty years old. This does not begin to compare with some of the old pear trees planted by the early German and Swedish settlers in the vicinity of Philadelphia, but it is remarkable for a country settled so comparatively recently as what was but a few years ago known as the "far West."—Mechan's Monthly. Detroit has some old French pear trees which are known to be 150 years old, and are yet in bearing. The early French settlers planted pear trees along the Detroit River from Monroe to Grosse Pointe, and many are yet alive. The fruit is small, but of very choice quality, and a few trees yet furnish immense crops.—Michigan Farmer.

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DALPH T OLCOTT, Editor.

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SOUND ARGUMENT.

One of the best criticisms of the proposed federal insect bill that has come to our notice is that by Professor F. W. Mally, of Hulen, Tex., which we present in another column. He argues for a perfected bill applicable to inspection of nursery stock, inspection of fruits and inspection of orchards. As we have continually contended, anything short of this will not meet the exigencies.

A clear idea of the important question may be obtained by a perusal of the article referred to.

DISTRIBUTION OF SCALE.

At the Washington convention of horticulturists and entomologists in March, it was stated that the San Jose scale is disseminated only on nursery stock, and for that reason it was deemed sufficient to secure federal legislation which would provide only for the inspection and treatment of nursery stock; that there was no danger of infection from scalecovered fruit. This is the assertion of the state entomologist of Virginia who was made chairman of the legislative committee of the convention.

This statement has been flatly contradicted by entomologists all over the country. Indeed, there had not come to our notice a single expression corroborating that opinion until the Washington convention of horticulturists was held. On the contrary, entomologists and horticulturists upon all sides had declared, as they still declare, that there is great danger of infection from scale-covered fruit. We have already noted these statements.

C. M. Hobbs, a member of the legislative committee of the Washington convention, stated that all but one member of the

committee deemed it necessary to include fruit in the proposed inspection, but that C. M. Hooker argued that if fruit were to be inspected, the bill could not be passed.

Whatever the Virginia state entomologist may think of the assertions of other entomologists that infection may be caused by San Jose scale on fruit as well as on trees, he must certainly admit that Professor I. O. Howard, chief of the division of entomology of the United States Department of Agriculture, is recognized as one of the leading authorities in this country on the subject of San Jose scale.

In a bulletin on the San Jose scale published in 1896 by the United States Department of Agriculture, Professors Howard and Marlatt say:

"Its importance from an economic standpoint is vastly increased by the ease with which it is distributed over wide districts through the agency of nursery stock and the marketing of fruit, and the extreme difficulty of exterminating it where once introduced, presenting as it does in the last regard, difficulties not found with any other scale insect."

The entomologist of the Experiment Station at Urbana, Ill., referring to the above extract says: "The authors, Messrs. Howard and Marlatt, have been for a long time in the Division of Entomology, at Washington, Mr. Howard being now its chief; and they have thus for many years been made continuously acquainted with the history and spread of this scale, have personally studied it at many different localities, and have obtained information concerning it from all parts of the United States infested by it. No one else can speak with such authority on the subject of its injuries to horticulture, and few are less likely to make extreme or sensational statements concerning it. My own brief experience with it fully bears out, so far as it goes, the statements above quoted."

The opinion of Professor Howard, corroborated by that of other entomologists expressed before there was any reason for a contrary opinion, will carry great weight in unprejudiced minds.

A federal bill providing for the inspection of nursery stock and not for the inspection of fruit, will, according to the best authorities, leave the way open for the dissemination of the San Jose scale through an avenue known to the scientist and to the practical orchardist. The statements at the Washington convention were made in the face of the opinion of the chief of the federal department of entomology, published months before and supposed to be in the hands of every state entomologist. The Virginia state entomologist himself quoted Dr. Howard's bulletin in the August 1896 issue of the NATIONAL NURSERYMAN.

INSECT LEGISLATION.

President Wilson, of the American Association of Nurserymen, has appointed as a special committee to consider the subject of insect legislation, C. L. Watrous, Des Moines, Ia.; N. H. Albaugh, Tadmor, O.; Lewis Chase, Rochester, N. Y.

The views of the Eastern Nurserymen's Association will be presented at the June convention by a committee composed of Irving Rouse, William C. Barry and William Pitkin.

It will be seen by the programme that the principal subject to be discussed at the convention is that of legislation on insect pests.

PLANT REGISTRATION.

PROPOSED ESTABLISHMENT OF A FEDERAL BUREAU —TO SIMPLIFY NOMENCLATURE—DETAILS OF THE PLAN—VIEWS OF CHAIRMAN CORBETT.

The question of establishing a bureau for the registration of plants in connection with the present Division of Pomology, was brought before the Section of Botany and Horticulture of the Association of American Agriculture, Colleges and Experiment Stations by Professor L. C. Corbett, of the West Virginia University. After a careful consideration of the matter, the section appointed a committee to report upon the feasibility of the scheme and to suggest the outline of a plan to be presented to congress at an early date. The committee consists of L. C. Corbett, Morgantown, W. Va., chairman; W. A. Taylor, U. S. Department of Agriculture, Washington, D. C.; Professor L. H. Bailey, Ithaca, N. Y.; F. S. Earle, Auburn, Ala.; and C. A. Shinn, Berkeley, Cal.

PURPOSE OF THE PLAN.

The purpose of the plan is outlined as follows by Professor Corbett:

- 1. To discourage the duplication of names and the re-naming of old sorts for commercial purposes.
- To form a national herbarium of economic plants, which shall be made up largely from type specimens.
- 3. To simplify the matter of nomenclature.
- 4. To aid the student of varieties as well as of variation of plants under culture.
- 5. To secure to the originator of a truly valuable variety some reward for his labor, the same as is now accorded the inventor.

The incorporation of such a clause (No. 5) will, I am sure, secure the hearty co-operation of all plant breeders, nurserymen and seedsmen, and this co-operation we must have in order to advance the scientific ends sought.

It is further proposed that this central bureau be made a part and parcel of the present Division of Pomology of the U. S. Department of Agriculture. A very valuable nucleus for the beginning of such work is had in the fruit models now in the museum of that department.

Each person interested in this matter will kindly formulate his ideas on the subject and send to some member of the committee who will put them in such form that a bill may be drafted at any early date and presented before congress. The idea in having the members of the committee so scattered is to get the needs of the several sections of the United States as well represented as practicable. It is hoped that each one interested will lend hearty co-operation in the matter.

It is proposed to have some place in the United States where all plants placed upon the market can be officially registered, numbered, and a description, together with specimens of the bloom, seed, foliage and fruit placed on record. When it is not practicable to preserve the original, colored casts are to be prepared, as in the case of citrons, drupaceous and pomaceous fruit, as well as vegetables. In all cases where plants are sent for registration, specimens of flowers, foliage, fruit, root, tuber or seed must accompany the application. All vegetables must be accompanied by a given amount of seed (to be determined) to be preserved for purposes of noting the duration of cultural varieties, the influence of climate during any series of years or in any locality. A further purpose of the seed shall be to grow plants for purposes of identifying the sort.

This is a topic nurserymen and horticulturists have often discussed.

PROFESSOR CORBETT'S OPINION.

Regarding the subject, Professor Corbett writes as follows: "The matter is still being agitated and when it becomes possible to convince people of the importance and the aim of the movement, there is no difficulty in getting their hearty support and co-operation. The difficulty has been, so far, that those to whom the movement would bring the most benefit have been those who have brought most opposition to it. Nearly every one who has written a criticism of the scheme has understood it to be some movement which had for its aim the duplication of the work already done by the experiment stations. That is, that there was to be some government establishment where all varieties, no matter what their origin, were to be tested. This of course would take a series of years, would require the employment of a large force of hands as well as a large territory. They have further misconceived the idea in that they seem to suppose that such a central station could be made practicable.

"From the very nature of the case of testing varieties, such work must be done at the several state stations in order that the climatic conditions suited to the variety of products grown in the United States may be taken advantage of. Briefly stated, the object of the Bureau of Plant Registration is merely to have an official recognition of importations as well as varieties, so that those introducing or importing them shall have the protection that such a guarantee would carry with it. It is not the purpose to test varieties in any sense, but merely to record them and to give the introducer or importer the first right in handling them.

"No official meetings have been arranged for, and it is hoped that the scheme can be put in operation without the enactment of new laws, either through the head of the Department of Botany or Pomology. This of course would necessitate a somewhat increased appropriation to the department undertaking the work, but those best informed in the matter seem to think that no new legislation is necessary. Therefore the third question as to the drafting of the bill is disposed of in this way.

"I think there is very general interest in the matter, and if we can only get importers and growers to take an active, live interest in the scheme there will be no trouble in carrying it out. All of the experimental station horticulturists with whom I have corresponded, take an interest in the matter as they think it will not only be of great scientific value, but a direct aid and benefit to those engaged in the propagation of new varieties. Professor Bailey's ideas on the subject were very clearly set forth in his Annals of Horticulture for 1890."

CONVERT TO STRINGFELLOW THEORY.

Mr. M. Crawford, of Cuyahoga Falls, O., has become a convert to the Stringfellow theory and practice that trees, when planted, should be pruned to a straight root, cutting close all side roots. Mr. Crawford tried it this summer with good results, although some would rather wait until a dryer season before they become entirely converted to this new way. It has been the custom of nurserymen ever since whip-grafting of roots came into practice to cut off all side branches, and the grafts have grown without trouble, so there is really nothing new in Mr. Stringfellow's way, at least as far as one-year trees are concerned—Texas Farm and Ranch.

Among Growers and Dealers.

The post-office address of David Baird & Sons, is Baird, N. I.

Lewis Chase, of Chase Brothers Co., Rochester, N. Y., is in the South.

Peach and plum trees for fall delivery are offered by Alexander Pullen, Milford, Del.

Frederick W. Kelsey has changed his address from 145 to 150 Broadway, New York city.

Extra fine small fruit plants in standard and novel varieties are offered by Allen L. Wood, Rochester, N. Y.

Apple trees and seedlings and peach trees, all leading sorts, are offered by F. W. Watson & Co., Topeka, Kan.

An opportunity for one who wishes to work his way up in the nursery business is offered in another column.

French grown fruit and ornamental seedlings are offered in carefully graded lots by Hiram T. Jones, Elizabeth, N. J.

I. E. Ilgenfritz' Sons, Monroe, Mich., proprietors of the Monroe Nursery, are celebrating their golden anniversary.

Small fruits are a specialty with W. N. Scarff, New Carlisle, O. Strawberry plants for August and September shipment.

Harrisons, at Berlin, Md., have probably more peach trees growing than any concern in the United States from natural seed.

The Fruitland Nurseries, Augusta, Ga., P. J. Berckmans proprietor, comprise 300 acres in nursery stock and over one acre under glass.

Myer & Son, Bridgeville, Del., offer 200,000 peach trees, 2,000,000 strawberry plants, 100,000 blackberry and 500,000 raspberry plants.

Jacob Moore, Vine Valley, N. Y., desires a nurseryman or dealer with a large force of agents to introduce his new currant, Moore's Diploma.

June budded peach trees may be contracted for at a special low price of W. M. Peters' Sons, Wesley, Md. They have 30 acres in peach seedlings.

J. Cole Doughty, the genial secretary of the Jewell Nursery Company was confined to his house by a severe attack of the grip during the rushing spring season.

Hiram T. Jones, 49 North avenue, Elizabeth, N J., is the American representative of J. Blaauw & Co., Boskoop, Holland, growers of ornamental stock.

Satisfaction is guaranteed by August Rhotert, 26 Barclay Street, New York city, agent for Louis Leroy's Nurseries, Angers, France, in choice French nursery stocks.

P. Sebire & Sons, Ussy, France, through their American agents, C. C. Abel & Co., Box 920, New York city, offer a general assortment of fruit tree stocks at low prices.

The Franklin Davis Nursery Co., Baltimore, Md., is headquarters for fruit and ornamental stock of choice varieties. Low prices are offered on peach trees for early orders.

R. H. Blair & Co., proprietors of the Lee's Summit Nurseries, with offices in Kansas City, Mo., are conducting a business that was established in 1866. Their stock is very extensive.

Smiths & Powell Co., Syracuse, N. Y., offer budded apples,

standard and dwarf pears, plums, cherries, peaches, roses, ornamental trees, shrubs and vines. They make prices by letter

J. G. Harrison & Sons, Berlin, Md., just purchased 20 acres of land, between the Pennsylvania Branch, and Baltimore & Atlantic railroads in the town limits where they will erect packing houses.

Jackson & Perkins Co., Newark, N. Y., have made arrangements with Luther Burbank, Santa Rosa, Cal., to act as general agents for the sale and introduction of his new creations in flowers and fruits.

George Arnaudeau, representing Andre L. Causse, sole agent for the United States and Canada of Brault & Sons, directors of the Andre Leroy nurseries, Angers, France, called on Western New York nurserymen last month.

John S. Calkins, the well known olive grower and nurseryman of Pomona, California, has retired from business on account of ill health. Chase & Son have purchased the extensive stock and will remove it to their nurseries at Riverside

Charles Wright, Seaford, Del., reports that his barn, packing sheds and outbuildings with nearly all implements and feed were destroyed by fire on May 6th. The loss was \$5,000; insurance small.

L. D Sanders, Plain Dealing, La.: "Tree orders came in slowly owing to the very dry season and short crops last year. Fruit crop not very good. Keiffer and Le Conte pears will give a full crop; peaches, three-quarter crop; Japan plums, three-quarter; American plums, but few; apples very short.

M. J. Graham, Adel, Iowa, writes: "My trade is largely local and would have been fully up to any previous years' trade, had it not been for impassable roads. People cry 'hard times.' Money is scarce with the man who sells corn at 10 cents per bushel; but the man with a carload of fat steers to sell usually has money to burn."

Luke Brothers Company of Chicago and Montreal have opened an office in Rochester, N. Y. Messrs. Luke Brothers have been remarkably successful in the retail business, their sales having largely increased each season notwithstanding the hard times. With ample capital they seem to possess the push and characteristics of that phenomenon of the business of former times, George A. Stone. The Rochester business will be under the management of A. D. Pratt of this city, who will also have charge of the buying and packing for all sales made in the states. They will be extensive purchasers.

NEW ENEMY OF THE SCALE.

A correspondent of *The Country Gentleman* gives the information that the destructive San Jose scale which has been brought from California into eastern orchards, to the great alarm of fruit-growers, has met at last with a check in Florida. Professor P. H. Rolfs, of the Florida Experiment Station, discovered it in vast numbers at De Funiak, and in the course of his investigation he observed many dead scales on trees which had never been sprayed or treated in any way. He found that the mortality was due to a parasitic fungus which had attacked the scale and killed it. This morbific fungus is a native of Florida; it can be propagated artificially with ease in unlimited quantities and it can be applied with a spraying machine like other insecticides.

HAMBURG EXHIBITION.

MOST IMPORTANT EVER HELD IN EUROPE—GREAT HORTICULTURAL HALL—FLOWERING AND FINE-FOLIAGE PLANTS—MAMMOTH PALMS.

Regarding the Hamburg international horticultural exhibition which opened on May 1st, the Gardeners' Magazine, speaking from advices direct from the exhibition after its opening, says:

"The exhibition is the most important that has yet been held in Europe. It is in every way worthy of that enterprising city, and cannot fail to afford satisfaction to those who during the past two years have given so freely of their time and talent to making the needful arrangements. The executive have been fortunate in securing for the purposes of the exhibition an ideal site: extending over an area of about fifty acres, it affords abundant space for both exhibits and visitors; highly picturesque, it has given full opportunity for the display of the landscape gardeners' art; and situate within a short distance of the centre of the city, and nearly surrounded by tram lines, it can be readily reached from every part of the city. The site, which forms part of the moat that originally surrounded the city, is one of its most important open spaces, and the public spirit evinced by the citizens is worthy of imitation in this country, for they not only readily surrendered their rights for a year or so, but provided the funds required for beautifying the grounds and the erection of the necessary buildings.

"The permanent exhibition, which will be continued until the end of September, includes collections of evergreen, deciduous, and coniferous trees in great variety, and arranged with due regard to general effect; and in the beds and borders are collections of hardy bulbous and perennial plants, to be in due course supplemented by tender plants adapted for the embellishment of the flower garden during the summer. Just now the tulips, of which many thousands of bulbs have been planted, produce a brilliant effect, and the tropical and other water lilies in the basin of the great fountain are coming freely into flower, and should form a feature of more or less interest until the end of the summer. Protection has been and still is given the water lilies at night by means of canvas, supported by rather stout wires, painted a grey colour, radiating from the fountain in the centre to the margin of the basin. The buildings provided for the accommodation of the plants, cut flowers, fruits, and vegetables contributed to the special exhibition are spacious, and, as so strikingly exemplified by the inaugural show now being held, admirably adapted for the purpose.

THE GREAT HALL.

"The structures provided for these special shows form a continuous line of upwards of two thousand feet, and they are so designed as to form a series of handsome buildings culminating in the great hall. This is unquestionably the most magnificent structure that has yet been provided in Europe for the purpose of a horticultural exhibition, and in admiring its stately proportions it is impossible to restrain a feeling of regret that notwithstanding the important position occupied by horticulture in the United Kingdom, no such hall has yet been provided for the display of the products of the garden. The special show now being held has, like other gatherings of

a similar character, some weak features, but these are more than counterbalanced by strong ones, and the object lessons it affords with regard to the usefulness of hardy shrubs for indoor decorations, and the arrangement of both flowering and ornamental-leaved plants are of immense value. Our German friends adopt a much bolder style of arrangement of plants than that which finds favour in this country, and it would be well were we to follow their example, and break away from the flatness and formality which characterizes so many of the groups presented to public notice at our exhibitions.

FLOWERING, AND FINE-FOLIAGE PLANTS.

"Groups had a considerable number of classes provided for them, and as the competition is keen, and the whole of the arrangements more or less meritorious, they constitute a magnificent feature. These are all arranged in the great exhibition hall. On either side of the hall is a broad terrace with a wide border next the wall, and at the end opposite to the vestibule is a spacious orchestra. The middle of the hall is occupied by an expanse of turf intersected by broad, winding walks, and a winding stream which in the centre widens into a miniature lake. At either end is a large, sloping bank at present occupied chiefly by Indian azaleas, and on the central portion of the turf are grouped flowering and fine foliage plants of various descriptions. In some cases they are placed in circular beds, and in others they are arranged in irregular groups or dotted about on the grass. Ornamental leaved and flowering plants are balanced with great judgment. and the colours of the general scheme are so well harmonized as to produce an effect at once rich and effective. Immediately below the balustrade of the vestibule is a great bank of azaleas comprising one hundred finely-flowered specimens, beyond is the green turf with its beds and groups of plants and miniature lake, and rising as it were from the turf is a semi-circular bank of azaleas, upwards of one hundred feet across, flanked by rhododendrons and fine-foliage plants, this bank of plants being so carried up as to appear to merge into the plants with which the orchestra is so lavishly and tastefully decorated.

"The principal groups for effect are arranged on the borders that skirt the terraces; and as the terraces are five or six feet above the general level of the hall, and the majority of the plants employed of the largest size, many of the plams employed rising to a height of fifteen or sixteen feet, they produce an effect which for boldness, is seldom approached at exhibitions at home, and indeed could not be equalled at gatherings at which the plants are arranged under tents of ordinary construction, because of an insufficiency of space. There are two groups of commanding importance, and these bold masses of foliage and flowers, extending the whole length of both of the terraces, one group on each, adds immensely to the general effect within the great hall.

MAMMOTH PALMS.

"The most remarkable contribution of palms to the exhibition is that from L. Winter, Bordighera, Italy. Mr. Winter wholly fills a house about one hundred feet by twenty-five feet with huge specimens, chiefly of species of Phœnix, some fully twenty feet high, and all perfect in development. The species most strongly represented are Phœnix tenuis, of which, in addition to those within the building, there are two groups, each comprising some half-dozen specimens outside flanking the entrance, and giving the visitors a foretaste of the magnifi-

cent display within the structure. It was interesting to observe that the pots and tubs occupied by the plants are only just large enough to receive the stem, and consequently boxes in which plants of Phœnix tenuis with stems fifteen inches in diameter are growing are only eighteen inches square. Mr. Winter has also outside, and not far from his palms, a superb collection of agaves, opuntias, and plants of a similar character, which, by reason of the large size and splendid condition of the individual plants, is especially attractive."

THE TARIFF SCHEDULE.

As already announced the senate committee was asked by the executive committee of the American Association of Nurserymen at the request of evergreen growers to add evergreen seedlings to the tariff schedule in regard to seedlings and make them dutiable at \$1.75 per 1,000. This was done by the senate committee.

Articles in this paragraph not specifically provided for are changed from 30 per cent. to 25 per cent. ad valorem.

RUSSIAN FRUITS.

Professor I. L. Budd, Ames, Ia., writes as follows to American Gardening:

"Under the head, 'Some Russian History in Iowa,' the words used and resolutions quoted give a false impression. The truth is that we have sent out for trial in a small way the most promising apples, pears, cherries, plums, prunes, peaches, shrubs, etc, of Eastern Europe and Central Asia. The reports from careful amateurs are specially favorable, as an almost invariable rule.

"The apples, pears and many shrubs have naturally proven most valuable in North Iowa, Dakota, Minnesota, Vermont, and the cold North generally, as have some of the cherries and plums.

"South of the forty-second parallel the East European plums, cherries and peaches have proven specially valuable. If your space will permit, we can send you from all parts of the West reports from our trial stations as favorable as that I inclose, by Mr. Curtis. This is selected for the reason that he is widely known as a careful experimenter with long experience, and as a judge of good fruits; his location is like that of Southeast Iowa.

"Our labor in securing a wide test of these fruits, shrubs, etc., is now about completed. In 1898 we will be able to close for good the college nursery so severely criticised by three or four of our Iowa friends. The new crosses and hybrids of fruits, roses, etc., we are now testing will be distributed without cost to planters, as from the other experiment station. Our nursery work was forced on us, as without it the real value of these new fruits would never have been known."

The report referred to is by B. O. Curtis of Paris, Ill., and is as follows:

"The Russian cherries with me are a great success. In 1895 the severe freeze on the 14th of May killed all my cherries, except on the English Morello and the Cerise de Ostheim. In 1896 the cherry crop was good. All the Russian varieties were loaded with fruit. Cerise de Ostheim again produced a heavy crop of delicious fruit. This is very late and equal to

English Morello in productiveness, and superior to it in hardiness and quality.

"I prize the Russian cherries for their hardiness of tree, quality of fruit, and for early and profuse bearing. I have had them for ten years and have not lost a tree from transplanting or any other cause.

"The Russian plums have come to stay. I have been planting them now for ten years and have not lost a tree and have not seen the least damage on them, except one tree of Maruraka, with stem five feet high, which is sunscalded on the south side. Another tree of same variety, with a low stem, is perfect. Both of these bore a full crop in 1896 of large, nice blue plums of the best quality and most beautiful appearance. It was a sight to see the fruit as it hung on the trees. It matured perfectly and is one-third larger than the Communia. Dame Aubert Blue is the largest of all plums I have grown or seen. Many of the specimens measured two and one-fourth inches in diameter. Color, dark blue; flesh firm, juicy, rich and delicious. It is equal to the best English varieties, and the tree is a perfect ironclad. In the May freeze, in 1895, the ground froze half an inch deep. This killed all the leaves and young shoots on the Lombard, while the leaves of the Communia and the Russian plums were not damaged in the least, This proves the Communia to be of Russian origin. The leaves of the English plum were all scorched by that freeze, but not a leaf of any Russian was changed in color. The trees seem as hardy as any forest tree.

"The Long Blue, Leipsic, Hungarian and White Nicholas produced plentiful crops the past season.

"The Russian plums I have are all hardy, productive and superior in quality. The English plums are tender in tree and will be winter-killed when it is cold enough to kill peach trees."

THE DORSET PEAR.

The Dorset pear is a seedling raised by the late Lemuel Clapp. It is a very handsome and showy late-keeping pear. Large, golden yellow ground, with bright red on sunny side; flesh juicy, melting, sweet, of good quality. Keeps and ships well and is a valuable late pear. Ripe in February, but keeps in perfection till May. Ellwanger & Barry, Rochester, N. Y., exhibited beautiful specimens of it at the World's Fair in May, 1893. Tree a vigorous grower.

NURSERY STOCK VALUATION.

Mr. Freeman, Q. C., contributes an article on "The Humours of Arbitration" to the first number of the Land Magazine, (England) and among many good stories he tells there is one of a counsel who was examining a nervous expert in the valuation of nursery stock. The witness was a hostile one, and counsel took him through the list this way: "What do you put down for the Platycodon Mariesi?" He didn't know. "Really? Well, what for the Eccremocarpus scaber, the Leptosiphon androsaceus, or the Echeveria secunda glauca?" Still no answer. Counsel went on: I'm afraid you're not much used to valuing plants! At least you know the Lophospermum scandens?" "No." "Nor the Matricaria eximia corymbosa?" "No." "Well, what do you know? Do you know a cabbage?" Witness (in despair): "Yes, thoroughly." Counsel: "So I thought." At this point the jury intimated that they were quite satisfied about the claim.

CANADIAN FRUIT PROSPECTS.

Professor John Craig in a recent lecture on Canadian fruit prospects gave the following information:

The climate of this province favors a mixed husbandry. Small fruits grow in profusion. Apples may be grown successfully in nearly all parts for home use, and large commercial orchards are being planted in the Valley of St. John River. The fruit harvest is later than the neighboring province of Nova Scotia.

QUEBEC.

The conditions in Eastern Quebec approach quite closely those obtaining in many parts of New Brunswick. The principal fruit areas lie along the south side of that great artery of commerce—the St. Lawrence. It seems to be a principle in plant growth, especially apple growth, that the further north a given variety may be grown to successful fruitage, the finer in quality will be the fruit. In L'Islet county, seventy miles northeast of the City of Quebec, plum growing has become a specialized industry. On the island of Montreal one finds a truly extensive style of fruit growing, and apples and plums are staples.

ONTARIO.

Along the banks of the Detroit river in the extreme southwest, are gigantic pear trees. These are from seed planted by French missionaries probably. One of the oldest of these is said to date from 1705. Tradition also states that a colonist brought three pear seeds in his vest pocket and planted them near Amherstburg. These grew, bore fruit, the seed of which produced the picturesque old trees marking the landscape of that region, at the present day. The planting of apple orchards began there about the year 1794. Since that time grape growing has assumed enormous proportions. The manufacture of wine is a business of growing importance. On Pelee Island alone there are 350 acres of vineyards. The peach industry is not more than twenty years old, yet in 1894 a single station, that of Leamington, shipped 35,000 baskets of peaches. Last year that number was probably doubled. It is estimated that half a million peach trees were planted last spring. There are those who would rather possess a plum orchard in the Beaver Valley, than own an orange grove in California. The apple region of Lake Huron produces about half a million barrels per annum. The Niagara Peninsula is one of the oldest fruit growing sections of the country. During the shipping season, a daily fruit train leaving Niagara Falls carries away such peaches, plums, cherries, pears and berries as are not shipped by boat from Hamilton or St. Catharines. A single firm paid three thousand dollars for fruit baskets in 1894, and these baskets cost about three cents a piece. The peninsula of Prince Edward county is famous for apples. In Ontario the area of orchard, garden and vineyard in 1895 was 320,122 acres; apple trees of bearing age, 6,913,906; young trees not bearing, 3,548,053; yield of apples last year, 55,895,755 bushels, or about twenty million barrels.

MANITOBA AND NORTHWEST.

As far as tree fruits are concerned those which can be grown successfully without extraordinary care have yet to be produced. Berries of all kinds may be grown.

British Columbia offers a country full of resources for vast success in fruit growing. She can claim the proud distinction of numbering among her landed proprietors, the Earl of Aberdeen, who is the largest orchardists in the Dominion.

A WOMAN'S WAY.

"Now, Alexander," exclaimed Mrs. Boggles, excitedly, don't you stir a step! I've seen enough of your gettin' cheated by tree agents, and I'll interview the rest of 'em that come along this season myself."

"But I'm only goin' to the door jest to see"-

"No, you ain't; I'm goin' to the door myself, and you kin jest set still where you air! That chap who has jest come up the walk and rung the bell is one of those 'ere slick tongued tree-pedlers. I kin tell 'em fur's I kin see 'em now, and if you'll set right still, I'll go out and shoo him off the premises in a hurry."

An interval of three minutes is supposed to have elapsed. Mrs. Boggles and her caller have both been doing some talking, and it is now the tree agent's innings.

"But, madam," he persists, in the oily and persuasive tones common to his kind, "I am sure you do not wish to neglect this opportunity to secure one of these elegant and handsome andromeda floribundas. This cut will give you a faint idea of what it looks like, madam. It is an evergreen plant, you will notice, with rich, dark-green foliage, abundantly sprinkled with pure white flowers, and it will be just the thing to fill up that blank space to the right of the bay-window, and I'll guarantee that every time you gaze forth from your casement upon its chaste beauty and attractiveness you will bless the day you were lucky enough to secure it."

"H-how much is it?" faltered Mrs. Boggles.

"Only \$2, madam; and you must remember, this elegant and handsome ornamental shrub will live for hundreds of years, if properly cared for, and the cost is a mere bagatelle compared to the enjoyment you will derive from it. I can see you are a lover of the beautiful in Nature's works—all pretty women are—and in justice to yourself you really ought to have it. What do you say? Shall I send you one?"

"You said the price was \$2?"

" Yes."

"I wasn't goin' to buy anything, but I—I guess I'll take one of them andromedarys, or whatever you call 'em."

"Andromeda floribunda is the name, madam."

"All right; you can send me one of 'em—and be sure to pick out a nice one."

"Certainly, madam. You shall have one of the finest in the nursery. And now, allow me to call your sttention,"—et cetera, et cetera.

And he kept right on "calling her attention" until he had sold her a list of nursery stock amounting to \$17.50.

There are a few women in this world who are frank enough to own up when they have made fools of themselves. Mrs. Boggles is one of the few. When the glib-tongued retailer of high-priced nursery novelties had secured her signature agreeing to take these articles and left her with the duplicate bill staring her in the face, she looked at it for a moment, or say a moment and a half, in a dazed sort of way, footed up the figures to see that the total was correct, and then going into the house, she placed the self-accusing document in front of her worser and wiser half, and said:

"I got off as cheap as I could, Alexander; it does beat all what a talker that man was! and I don't blame you half as much as I did for gettin' roped in that last time; and, now, if you'll keep quiet on the subject, I'll do the same, and here-

after you kin 'tend to the tree peddlers when they come along, and I'll 'tend to my housework, same's we've been doin' in the past. Is it a bargain, Alexander?"

And, with a quiet chuckle of satisfaction-which was somewhat modified by the reflection that he would have to foot the bill when it came in-Alexander responded that it was.-Exchange.

HORTICULTURE IN THE WEST.

One of the best observers in far western horticulture is E. F. Stephens of Nebraska, who says: "In the New England and middle states nurserymen bud the apple tree for the purpose of getting high-headed trees. The climate there favors high-headed trees, with a view of getting the bearing wood up from the ground and opening up the head to secure as much sun as possible, their climate being damp and chilly rather than hot and windy, as with us. In the extreme western and northwestern portions of the western states it has been found more successful to graft the trees and later years' experience has shown that these trees withstand our trying climate better if they are headed low. Here we must guard against the trying winds, hot suns and the tendency to sun scald on the trunks. It has been found that where trees were headed within fifteen to twenty-five inches of the ground the trunk of the trees was less likely to be battered by hail and cannot suffer from sunscald. The trees suffer less from wind. The fruit is more easily picked and contrary to the experience of the eastern states, it is often found that the greater portion of the fruit is grown on the lower branches, especially in the more trying locations."

Obituary.

Mrs. Prosper J. A. Berckmans, wife of the well known nurseryman of Augusta, Ga., died May 13th Of her a local paper said: "To her honored husband, and manly sons, all esteemed and so popular in the community, the deepest and most sincere sympathies were extended for the loss of wife and mother, and they received assurance that not alone was sorrow

John Saul, the well-known nurseryman and florist, died at his home near Washington, D. C., on May 12th, in his seventyfourth year. He was born at Lismore, County Cork, Ireland, December 25th, 1823. He was trained in the science of landscape gardening, and soon after becoming of age removed to the Isle of Wight, and subsequently to Bristol, England, in both of which places he was manager of extensive nurseries.

Mr. Saul arrived in Washington in May, 1851, and was at once engaged by the government to lay out the Smithsonian grounds, Lafayette Square and other public squares, and also by W. W. Corcoran to plan the beautifying of Harewood Park. In 1852 he bought the property in which he spent the remainder of his life. He was among the first in America to advocate a more general use of orchids and other rare and valuable plants, and a goodly portion of his establishment at Washington was given up to their cultivation. He was also an extensive grower of roses and nursery stock.

Recent Publications.

"Nuts for Profit" is a treatise by John R. Parry, of Parry, N. J., on the propagation and cultivation of nut-bearing trees adapted to successful culture in the United States, with extracts from leading authorities.

Gooseberries is the subject of bulletin 114 of the New York State Agricultural Experiment Station which has just been issued. The subject has been treated in an exhaustive manner so that the bulletin will be of great value to fruit growers and nurserymen who are interested in growing and propagating this fruit.

"Some Common Birds in their Relation to Agriculture" is the subject of an interesting bulletin, number 54 of the farmer's series. of the Department of Agriculture. An examination of stomachs of birds shows that without the birds insects which injure fruit and trees would be more numerous. All who are in doubt as to the value of birds should read this bulletin.

Another volume of the Rural Science Series, edited by Professor L. H. Bailey, has been published by the Macmillan Company. It is entitled "The Fertility of the Land," and is by Professor Isaac Phillips Roberts, director of the College of Agriculture and professor of agriculture in Cornell University. The plan of the work is ably set forth by the editor in his preface: "If a man has spent the greater part of his life as a teacher of agriculture and an experimenter, and has been a successful farmer at the same time, and has had the advantage of much travel, his opinions upon farm methods should be invaluable to his fellows. If in addition to all this he has had a philosophical turn of mind and has persistently inquired into the reasons and results of all that he has seen, it would seem to be nothing less than a public misfortune if he should fail to leave some of his wisdom in permanent and consecutive form. The book sets forth the author's philosophy of the means of maintaining the productivity of the land, and since the productive power of the land is the first and fundamental consideration in farming it, must follow that this book comes as near to being a treatise on agriculture as any single volume can be. It appeals to me with especial force, because it so well combines the best teachings of science with the philosophy of farm practice. It is the ripened judgment of the wisest farmer whom I have known." The work is most entertainingly written. On every page is evidenced the broad vision of the author, and in a single chapter is concentrated information which when thus presented seems indispensable. While it is more especially a book for the farmer rather than the fruit grower, the latter may obtain valuable suggestions as to plant food, the conservation of moisture, fertilizers, nitrogen and nitrification, rotations, etc. Cloth; pp. 415, \$1.25. New York: THE MACMILLAN Co.

GEORGE W. CAMPBELL, DELAWARE, O .- "I think my subscription to the NATIONAL NURSERYMAN should be renewed about this time and herewith inclose \$1 which please acknowledge. I hope you are meeting with the success which your excellent journal deserves."

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Peach and Plum Buds ready June 20th.

Having 30 acres in Peach Seedlings from Tennesee seed, planted fall 1896, will contract to grow June Budded Peach Trees at special low price. Correspondence solicited. Special inducements offered to purchasers in car load lots.

Address

W. M. PETERS SONS,

WESLEY, Worcester Co., MD.

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Peach Trees. 36 36

Over One and One-half Million Budded to sell from

And grown from natural seed and on virgin soil. Guaranteed free from any taint of disease.

VARIETIES.

Stephen's R. Ripe, Conet's So. Early,
Old Mixon Cling. Stump the World.

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Greensboro, Reeve's Favorit

Reeve's Favorite,

Crawford's Late, Early Rivers.
Cling, Lemon Free.

Golden Drop, Walker's Vara Free, Bray's R. Ripe, Chinese Cling,

Moore's Favorite, Bokara No. 3,

Connecticut, Geary's Holden, Kalamazoo, Early Michigan,

Chair's Choice Fox Seedling, White Heath Cling, Ford's L. White,

Morris' White, Snow's Orange,

Lery's Late,

Alexander,
St. John,
Champion,
Hale'sEarly
Mt. Rose,
Crosby,
Hill's Chili,
Lewis,
Willett,
Elberta,
Old Mixon,
Fitzgerald.

Wilkins Cling,



Globe,
Salway,
Bilyeus,
L. October.
New Prolific
Lorentz,
Sneed,
Smock,
Triumph,
Water Loo,
Mc Intosh.

Troth's Early,

10

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We can furnish buds of any of the above varieties at the lowest possible price to meet the times.

We want your list of wants, and prices will be quoted promptly on what you may need. We have probably more peach trees than any other concern in the United States.

WE HAVE OVER ONE MILLION

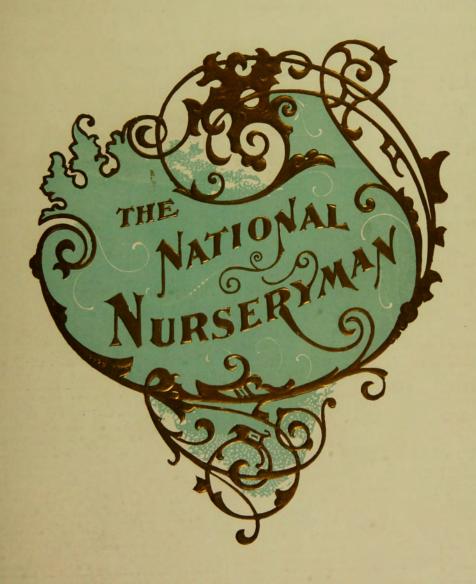
peach to bud this season, and will accept contracts now for June budding or Fall budding for delivery 1898 or Spring 1899.

HARRISON'S PURSERIES,

Send for Wholesale Price List to-day.

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WILL BE REPRESENTED AT ST. LOUIS BY ORLANDO HARRISON, BADGE No. 104.



Extra Fine Plants

It does not pay to buy poor stock. Get my prices for Fall of '97 and Spring of '98 on

CURRANTS. GOOSEBERRIES, BLACKBERRIES. RASPBERRIES,

(Root Cuttings.)

I offer all the STANDARD VARIETIES, including COLUMBIAN, LOUDON, CONRATH RASPBERRIES and POMONA CURRANT.

.. NOVELTIES

Strawberry-Raspberry, Golden Mayberry, Logan Berry, Raspberry-Blackberry.

ALLEN L. WOOD, ROCHESTER, N Y.

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Plates for Plate books free

YOU CAN GET * THEM OF US.

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Apple. Stb. Pear AND CHERRY.

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50 years in business proves our reliability.

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A responsible party who is a good salesman, to sell Standard and Dwarf Pears, Apples, Plums, Cherries, &ci, at wholesale to Nurserymen and large dealers. Good wages and steady employment to the right man. Address with references. D. H. PATTY, Nurseryman, GENEVA, N. Y.

N. B .- I also want a man experienced in running salesmen, to work up a force of agents on commission, or for a share of the profits,

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FLOWERING SHRUBS in great variety.
and Price-List free.

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GENEVA, N.Y.

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Herb Pæonias.

Peaches.

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Ouinces

We supply everything needed by dealers.

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W. & T. SMITH CO.

TREE ROSES on Rosa Rugosa. The Ideal Tree Rose. complete assortment of Holland grown stock.

Hiram T. Jones. United States and Canada, J. Blaauw & Co.,

French Grown Fruit and Ornamental Seedlings. Grades carefully maintained. Send list of wants for special prices.

100,000 CURRANTS and GOOSEBERRIES, 30,000 ROSES, on own roots, field grown, and a very complete general assortment.

HIRAM T. JONES, Union Co. Nurseries, Elizabeth, N. J.

ESTABLISHED 1866 BY BLAIR BROS

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Office N. W. Cor. 11th and Walnut Sts., - Kansas City, Mo Proprietors of the LEES SUMMIT NURSERIES.

Apple and Peach, new and leading varieties by the car lots.

Russian and American Apricots and native Plums by car lots.

Russian and American Apricots and native Plums by car lots.

We are not surpassed by any Nursery in the west, in number of acres or quality of stock. We have the only practical box-clamp in use. Price reduced.

A person of honesty and ability who

A person of honesty and ability who least a fair knowledge of the nursery business. The applicant must have at least a fair knowledge of the nursery business, a willingness to begin with low wages, and a desire to make it his life work, and must be able to furnish the best of references as to his honesty and ability; one with some capital to invest preferred. Should like some one to begin work at once, to be ready for promotion in the near future in case he proves capable and so wishes. Address H, care of " National Nurseryman "

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Always in what you want.

stock, a nice clean article of dry baled SPHAGNUM MOSS. No delay or freight charges from branch roads. Orders for less than large car load shipped the first day received.

L. G. THOMPSON,

Write me for easy terms and prices.

TOMAH, WIS.

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Painesville Nurseries.



NE of the most complete assortments in the world, including FRUIT and ORNAMENTAL TREES, GRAPE VINES, SMALL FRUITS, SHRUBS, ROSES, HARDY PLANTS, CLIMBING VINES, BULBS and GREENHOUSE PLANTS, in all the leading new and old varieties, of all grades and sizes.

Immense stock in storage cellars ready for immediate shipment.

Extra fine stock of Standard and Dwarf Pears, Plum, Peach, Cherries and Mulberries.

Best lot two-year (4 to 5 feet) Quince on the market.

NUT TREES-Large assortment.

Downing, Houghton and English Gooseberries—extra selected.

Strong, splendidly rooted Blackberries, from root cuttings.

Moss, Hybrid Perpetual, and Climbing Roses—strong two-year, clean, handsome stock.

ORNAMENTALS--all classes.

Get our prices before placing your orders, large or small. Special inducements for early orders.



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43rd YEAR. 1.200 ACRES. 32 GREENHOUSES.

THE STORRS & HARRISON CO.

PAINESVILLE, OHIO.

FOR FALL 1897.

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and



Currants.

Leading Varieties.

Extra Fine Plants.

It will be to your advantage to write to us for prices before purchasing elsewhere.

Ellwanger & Barry, Mount Hope Nurseries, ROCHESTER, N. Y.

200.000 Peach Trees. 2,000,000 Strawberry Plants, 100,000 Blackberry, 500,000 Raspberries.

Eldorado, Maxwell and Lucretia Blackberries.

MILLER, LOUDON and COLUMBIAN . .

TRIUMPH. GREENSBORO and EMMET,

and a full assortment of

Raspberries. Wickson, Red June and Giant

Peaches ... AND OTHER FRUITS.

It will be to advantage of those in the trade to correspond with us.

Our Catalogue will save you money.

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BRIDGEVILLE, DELAWARE

Peach and Plum Trees

FOR FALL DELIVERY 1897.

All desirable leading old and new varieties of Peacheshere in fruit-All desirable leading old and new varieties of reaches here in fruiting orchards. Have the new Triumph, Greensboro and Sneed fruiting. Buds can be supplied in season at low rates. Large stock of Plum trees, all on Plum roots, one and two year. Buds in season from either nurseries or orchard trees. Have all the leading Japanese varieties, Abundance, Burbank, Chabot Satsuma, Willard and others. Also in good supply the new Red June and Wickson. Have the usual supply of Asparagus Roots to offer. Two and three years old. strong.

ALEXANDER PULLEN.

Milford Nurseries.

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Novelties for 1897-1898.

The New Hardy Yellow Climbing Rose, YELLOW RAMBLER (Agiaia.)

We expect to have a good stock of strong field-grown plants of this variety for the coming season, and we strongly recommend the Yellow Rambler as being one of the most opportant introductions of recent years, it leng the only yellow climbia whose yet known that has any hardiness whatever. In our nitroduction of the Yellow of the Yellow rambler as the state of the Yellow rambler as the year of the Yellow rambler and the yellow grown and yellow ramble are yet thrown that has any hardiness whatever. In our nitroduction and yellow recently resulting plants of the Yellow Rambler years store and yellow ramble and yellow recently recently recently store and yellow ramble. It is the yellow recently rece

LORD PENZANCES HYBRID SWEET BRIAR.

These are very interesting and pleasing novelties and have become immensely popular in England already. They are crosses between the common old fashioned sweet briar and various garden roses, all of them retaining the delightful fragrance of flower, foliage and wood which characterizes the common briar. The flowers range in color from very dark crimson to white, with all intermediate shades. The plants are wonderfully vigorous and extremely hardy, so that they are especially an acquisition to those places where the climate is too severe for ordinary roses.

THE BIG BLACK RASPBERRY.

CUMBERLAND (Trade-) The Business Black-Cap.

This is by far the largest Black Raspberry yet introduced and, as the fruit is very firm and stands long chipping, it is destined to be the market variety among black-cape and the standard of the standard of the largest produced by the control that the standard of the s

LITHOGRAPH PLATES AND DESCRIPTIVE CIRCULARS

of all these novelties will be supplied to our customers—the circulars at their actual cost, and enough plates for agents book, free of charge. Yellow Rambler and Sweet Briar plates are now ready and plates of the Cumberland are being prepared. Write us at once.

FOR SPRING OF 1897 we still have a considerable stock of Roses, Shrubs ruit Trees, Small Fruit Plants, etc. Send for our Surplus List.

JACKSON & PERKINS

NEWARK, WAYNE CO., NEW YORK,

Syracuse, N. Y.,

offer a large and choice stock of BUDDED APPLES.

STANDARD AND DWARF PEARS, PLUMS, CHERRIES, PEACHES, ROSES, ORNAMENTAL TREES, SHRUBS AND VINES.

Our stock is of superior quality and most carefully graded. Send us your want list or come and see our stock. We issue no trade price list, but will make low prices by letter.

Do not forget the OLD RELIABLE SYRACUSE NURSERIES.

Andre Leroy Nurseries

BRAULT & SON. Directors.

ANGERS, FRANCE.

Offer for February, March shipment, their SURPLUS STOCK of very best quality I year FINE PLANTS, well rooted, at reduced prices.

Apply for Special Quotations on Pear, Quince, Myrobolans, Mahalebs, Manetti Rose Stocks, etc., to

ANDRE L. CAUSSE,

105 and 107 Hudson Street, New York City. When writing to advertisers mention The National Nurseryman.

FRENCH FRUIT TREE STOCKS AND ORNAMENTALS

Grown especially for the American trade by

MR. CHAS. DETRICHÉ Angers, France,

JACKSON & PERKINS CO., Newark, N. Y.,

Sole Agents for the U.S. and Canada.

Mr. Détriché is one of the oldest and most reliable of French growers and goods ordered from him can be depended upon to be of exactly the quality, variety and grade ordered. Especially fine stocks of young ornamentals.

Old Dominion Nurseries-–350 acres.

PEACH, (including Crosby, Champion, Sneed) STANDARD PEAR, Large Stock. APPLE, . .

A FULL LINE OF GENERAL NURSERY STOCK. A VERY FINE STOCK OF JAPAN PEAR SEEDLINGS.

Very large packing sheds. Cold storage barn. The best facilities for proper packing, and prompt shipping,

W. T. HOOD & CO., - - RICHMOND, VA.

ESTABLISHED 1852.

600 Acres. . Phoenix UU: 13 Greenhouses.

(SUCCESSORS TO SIDNEY TUTTLE & CO.)

NURSERYMEN AND FLORISTS & Wholesale and Retail.

Correspondence solicited and promptly answered. Send list of wants for prices. Salesmen wanted.

P. O. BOX 1215.

BLOOMINGTON, ILL.

THE SEDGWICK NURSERY CO.

SEDGWICK, KANSAS.

(Successor to CHAUNCEY A. SEAMAN,)

Offer SHADE TREES in car lots at bottom prices.

High Grade Nursery Stock for Spring of '97.

Apples, Standard and Dwarf Pears, Cherries, Plums, Quinces, Cut-Leaf Weeping Birch, Purple-Leaf Birch, Silver Maple, Elms, Catalpa, Black Walnut and Butternut.

Write for Special Prices,

JAY WOOD, KNOWLESVILLE, N.Y.

🦚 Obtain our Special Prices before buying elsewhere. 😘 MIS LERDY'S WIRSERS French Nursery Stocks Best Grading, Quality, Packing Molesale Catalogues Free on application.

OUR SPECIALTIES FOR '97.

Strawberry plants for August and Septembershipment. Potted and layer plants. Newer kinds, Carrie, Marguret, Glenn Mary, Clyde, Wm. Beit, Brunetts, Champion of England, etc., etc. All standard kinds in im-

mense quantities.

Eureka, best early black Raspb'y 200,000 Currants, 1-100,000 Eldorado R. C. 50 000 Ohmer. Munger, late Gault, "everb'r'ng"
Columbia, "purple
Miller. "early red 500,000 Snyder. 200,000 Early Harvest. 25,000 Wauchusett. 50,000 Stone's Hardy. 14 early red Miller, " " late London. 100,000 Houghton, 2-1. 25,000 DOWNING, I.

We grow a complete stock of all small fruit plants and can quote as low prices as any firm in the United States, stock considered. Get our prices on your wants for fall.

W. N. SCARFF, New Carlisle, O.

oney Locust Hedge, Most Ornamental for Parks and Lawns.

Strong and handsome for farm fencing Hardy for cold climates. Easy seller at good profits. Put your agents on to it. Plates of this beautiful Hedge to sell from, furnished cheap. Osage Orange Hedge and plates also. WRITE FOR PRICES AND TRY THEM.

A. E. WINDSOR, - HAVANA, ILLS. -_

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POMONA CURRANT, 1 and 2 yrs. No. 1. 50,000 POMONA CURRANT outtings.
LOUDON RASPBERRIES, suckers and transplants,
MUNGER, the new, large BLACK CAP RASPBERRY.
OHMER and ELDORADO BLACKBERRIES.
Ornamental Trees and Strubs. Peronias, Hardy Herbaccous Plants, &c.
INSPECTION OF STOCK DESIRED.

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Willis Nurseries, Ottawa, Kan.

offer a large and complete assortment of choice nursery Stock to the trade. Prompt attention given to all correspondence and orders.

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A Monthly Journal FRUIT GROWERS.

No patent medicine ads. or patent pages. Only 25c. a Year. Sample copy FREE.

E. G. MENDENHALL,

Editor and Publisher.

Kinmundy, III.

Apple, Peach, Standard Pears, Plum Apricots. Grapes. Shade Trees. Evergreens, Shrubs,

HEADQUARTERS FOR NURSERY STOCK.

Baltimore and Richmond Nurseries, BALTIMORE, MD.

FRANKLIN DAVIS NURSERY CO.

Tennessee Natural Peach Pits and selected Smock. 1000 ACRES. 50 YEARS. LOW PRICES ON PEACH TREES FOR EARLY ORDERS.

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Strawberries. Nut Trees Japan Pear Seedlings, Gooseberries, Roses, Raffia. General Supplies, &c., &c., &c.



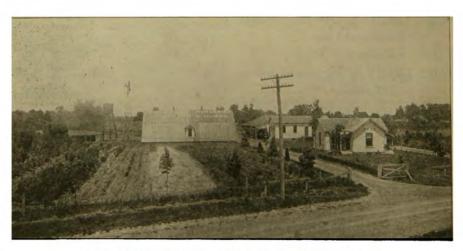
FIELD OF 300,000 APPLE, PEAR, CHERRY AND PLUM.



PART OF PACKING FORCE.



MAIN OFFICE WORK ROOM-RECEPTION ROOM AND PRIVATE ROOM NOT SHOWN.



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SCENES AT ALBERTSON & HOBBS' NURSERIES, BRIDGEPORT, IND.

The National Nurseryman.

FOR GROWERS AND DEALERS IN NURSERY STOCK.

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Vol. V.

ROCHESTER, N. Y., JULY, 1897.

No. 6.

THE CONVENTION.

TWENTY-SECOND ANNUAL MEETING OF THE AMERICAN ASSOCIATION OF NURSERYMEN.

LIST OF THOSE PRESENT-A HEARTY WELCOME-PRESIDENT WIL-SON'S ADDRESS-TREASURER'S REPORT-OFFICERS AND PLACE OF MEETING-REPORTS ON TRANSPORTATION, TARIFF AND LEGISLATION-OTHER COMMITTEE REPORTS-LIST OF EXHIBITS-VISIT TO MISSOURI BOTANICAL GARDEN -BANQUET AT THE MERCANTILE CLUB.

The twenty-second annual meeting of the American Association of Nurserymen was held at the Lindell hotel, St. Louis, June 9th and 10th. The attendance though not large, embraced many of the leading nurserymen of the country. Those who registered at the Lindell hotel, the headquarters of the convention, and others who were noticed at the meetings were :

N. H. Albaugh, George Arnaudeau, E. Albertson.

R. C. Berckmans, P. J. A. Berckmans, jr., George A. Bryant, R. H. Blair, A. L. Brooke, A. J. Brown, Herman Berkhan, John L. Bagley, R. J. Bagley, E. H. Bissell, James A. Bayles.

A. Currie, C. S. Curtice. A. B. Combs, J. C. Chase.

J. R. Dow, J. A. DeVeer, E. T. Dickinson, Edwin Davis, C. N. Dennis, J. H. Dayton, H. S. Dixon, M. B. Fox.

A. H. Griesa, T. E. Griesa, Charles E. Greening.

W. F. Heikes, T. S. Hubbard, Orlando Harrison, N. W. Hale, C. M. Hobbs, D. Hill, E. J. Holman.

C. A. Ilgenfritz, Z. K. Jewett, Hiram T. Jones, W. H. Johnston, H. W. Jenkins, George S. Josselyn.

Gustav Klarner, E. W. Kirkpatrick, L. G. Kellogg.

D. S. Lake, Ralph Lake, Samuel Lorton, V. H. Lowe.

J. Horace McFarland, J. D. Meriweather, jr., G. E. Meissner, Thomas B. Mechan, J C. Miller, Charles J. Maloy, Jacob W. Manning, E. G. Mendenhall, W. B. Otwell.

W. J. Peters, Charles M Peters, Alexander Pullen, Irving Rouse, E. H. Ricker.

J. H. Skinner, C. M. Stark, W. P. Stark, J. M. Samuels, Theodore J. Smith, L. T. Sanders, E. M. Sherman, J. N. Schuette, F. H. Stannard, W. G. Storrs, W. N. Scarff, Irving Spaulding, C. W. Shriver, J. P. Sinnock, E. W. Stark.

L. R. Taylor, F. W. Taylor, W. W. Thomas, E. Y. Teas, John C. Ure, J. Van Lindley.

C. L. Watrous, E. S. Welch, F. G. Withoft, N. A. Whitney, R. A. Wickersham, Allen L. Wood, W. A. Watson, F. W. Watson, H. J. Weber, Frank A. Weber, F. L. Williams, Silas Wilson.

Peter Youngers, C. L. Yates, Horace Zimmerman.

THE WELCOME TO ST. LOUIS.

President Silas Wilson, of Atlantic, Ia., opened the convention on Wednesday morning in a spacious hall of the Lindell hotel and introduced Mayor Ziegenheim of St. Louis, who welcomed the nurserymen in a hearty original manner that was thoroughly appreciated. He said:

"We have had many conventions in this city. As you all know we recently had a McKinley convention here. As mayor of this great city I extend you the most cordial welcome. I

see before me representatives not only from our suburb, Chicago, and the country adjacent to St. Louis, but members from the Atlantic seaboard and even from France. You are all welcome and I extend to you the utmost freedom of the city. You need have no fear of trouble of the slightest degree. We have the greatest street car system in the West. In most cities it is against the law to smoke in street cars or to spit on car floors. Well, we have such laws here, but gentlemen, you may enter our cars and smoke and spit all over the floor, and if you are arrested, all you need do is to make telephone connection with the mayor's office and I will order your release at once. The city is yours while you stay.

"There is nothing small about St. Louis. When we have anything here, we have it first class. As evidence of this fact you will remember the recent cyclone, traces of which are still to be seen. We want you all to say when your meeting is over that St. Louis is the only city in which to hold a convention."

Hon. N. J. Colman, of St. Louis, ex-Secretary of Agriculture, addressed the convention as follows:

"The nurserymen of this state have asked me to welcome you to St. Louis and to the state of Missouri. Associated with you in former years and twice honored by the election to the highest office at your disposal, it gives me great pleasure to add my welcome to that of the mayor. When, you were here before, we had a population of 400,000. Now we have 600,000. There are some objects here which are pleasant for horticulturists to look upon, especially Shaw's garden. In no other city on the continent could you find such an extensive garden. Professor Trelease, selected by the founder before his death at the suggestion of Professor Asa Gray, has tendered you a banquet to-morrow night. This is the largest garden on the globe that was founded by a single individual. We have the largest parks in any city on the continent, one of them 1,400 acres in extent.

"But I am here also to speak of this state. Missouri is the third state in point of farms and farm products. It is the grand agricultural state of Missouri. No state can compare with it in its horticultural products. Its elevation and splendid climate give it peculiar advantages. It is the home of the big red apple. Why, the entire southern half of the state will soon be covered with orchards. The state has immense mineral resources. Do you wonder we call it grand old Missouri? It is an empire in itself. It would be able to carry on all the great industries of a nation. It is likewise the home of education, refinement and intelligence. It has the largest state school fund. We are proud of our state. We suffer neither from the cold of the North nor the heat of the South. We are on the great highway of the nation whether you travel from the Atlantic to the Pacific or from the gulf to Hudson bay. This is perhaps the last time I may have the opportunity of meeting you, but I bid you Godspeed. No class of men is engaged in nobler work. What shall be said of the nurserymen who have caused millions of trees, plants and shrubs to grow where none grew before? It has been part of my mission

in life to grow fruit. Every farmer should have a fruit garden. I have tried to impress on the farmers the advantages of fruit growing. It is your province to urge men to buy trees and plant them."

President Wilson in thanking the mayor and ex-Secretary Colman, said the convention represented 4,500 nurserymen who joined in an expression of appreciation of the cordial greetings.

PRESIDENT'S ADDRESS.

The president then read his annual address:

Gentlemen of the American Association of Nurserymen:

The honor of presiding over the deliberation and enterprises of this association for the current year was alike unsought and unexpected by myself, and yet the surprise of my selection did not lessen my appreciation of your kindness, nor my sense of the high honor con-

The cordiality which exists among the progressive nurserymen of There is a freedom from the prethis country is to be commended. judice and jealousy so often manifested in other vocations. This association should be kept alive if for no other purpose than the social advantages enjoyed by our members also the business advantages by the nurserymen of this association should not be underestimated. Many thousand dollars worth of business is transacted annually at our meetings.

Our twenty-second annual convention meets under circumstances of great encouragement. The work of this association during the past year in the matter of securing a tariff on nursery stock will result in more substantial good to the nurserymen of America than any other year's work ever done by this association, with the possible exception of the work done by the transportation committee of 1888.

I desire to commend the tariff committee of this association for their untiring energy and faithful services rendered. I believe this association should have standing committees as follows, viz: Transportation, Tariff and Legislation. I would therefore recommend the appointment of the above named committees or the continuation of the committees already appointed. I would further recommend the appropriation of at least \$500 by this association to be set aside, or as much thereof as may be needed for defraying the expenses of said committees, believing the funds of this association cannot be expended in any other way that will result in as much good to the association. We will have the pleasure of hearing the reports from the above named committees which will no doubt be interesting to every member of the association. The fruit growers and entomologists of the United States held a con-

vention in Washington, D. C., on March 5th, 1897. The principal act of this convention was the appointment of a committee on legislation which formulated a bill known as the Federal Insect or San Jose Scale bill, which, if it should become a law without amendments or modification, it would certainly work an unreasonable hardship upon the nurserymen of the country. I believe this to be a very important question for the nurserymen of the country and that it should receive the careful attention of this association.

While I am in sympathy with the disposition manifested by the fruit growers and entomologists to stamp out the San Jose Scale or other destructive insects or diseases wherever found, I am also in favor of the great nursery interests of the United States being at least consulted before such important legislation should be enacted. I have therefore announced as committee on legislation men of experience and ability in order that they might present a report on this important subject at this meeting.

In conclusion, I desire to return to you the trust you have so lavishly bestowed upon me.

TREASURER'S REPORT.

Treasurer N. A. Whitney presented the following report: June 10, 1896, balance on hand, \$1,837.12; membership dues, \$1,100.82; total, \$2,937.94.

June 11, 1896, paid Professor Bailey, \$54; E. H. Van Deman, \$42.83; Miss Jacobson, \$50; Whitehead & Hoag Co., \$44.13; Union and Advertiser Co., \$201.70; W. C. Barry, \$51; J. J. Harrison, \$48; Silas Wilson, \$88; Irving Rouse, \$48; W. W. Morrison, \$22.44; Whitehead & Hoag Co., \$50; W. C. Barry, \$7.12; salary treasurer, \$50; salary secretary and clerk hire, \$325; postage and railway commission, \$49.46; total. \$1,141,68.

Amount received, \$2,937.94; less amount paid out, \$1,141. 68. leaves balance on hand, \$1,796 26. Mr. Albaugh stated that the expense of the tariff committee caused a larger total of disbursements than usual and accounted for the difference of \$40.86 in the balances on hand in 1896 and 1897. The total interest account was \$93 52.

VICE-PRESIDENTS.

The following vice-presidents were chosen: Alabama, W. F. Heikes; Arkansas, T. Wing; Colorado, J. A. Gage: California, Thomas B. Bolender; Connecticut, J. H. Hale; S. Dakota. George A. Whiting; Delaware, A. Pullen; District Columbia, James Wilson; Florida, G. L. Taber; Georgia, R. C. Berckmans; Illinois, E. G. Mendenhall; Indiana, E. S. Albertson; Iowa, Samuel Lorton; Kansas, F. S. Stannard; Kentucky, J. M. Samuels; Louisiana, L. T. Sanders; Maine, Herbert A. Jackson; Maryland, Edwin Davis; Massachusetts, J. W. Manning; Minnesota, J. Cole Doughty; Michigan, C. W. Shriver, Mississippi, Dr. McKay; Missouri, Joseph Schuette; Nebraska, Peter Youngers, jr.; New Jersey, H. T. Jones: N. Carolina, J. Van Lindley; Ohio, W. G. Storrs; Pennsylvania, J. Horace McFarland; Tennessee, W. W. Baird; Texas, E. W. Kirk. patrick; Vermont, D. J. Camp; Virginia, E. H. Bissell; Wisconsin, Z. K. Jewett; Washington, C. L. Whitney; Idaho, S. S. Lewis: New Hampshire, J. C. Chase; Montana, S. M. Emery; Utah, J. A. Goodhue. **ELECTION OF OFFICERS.**

At the opening of the afternoon session on June 9th, the vice-presidents reported the following nominations for officers for 1897:

President, Irving Rouse, of New York.

Vice-President, E. Albertson, of Indiana.

Secretary, George C. Seager, of New York.

Treasurer, N. A. Whitney, of Illinois.

Executive Committee-C. L. Watrous, Des Moines, Ia.; R. C. Berkmans, Augusta, Ga.; F. H. Stannard, Ottawa, Kan.

The report was accepted and the gentlemen named were declared the new officers.

It was decided to continue the standing committees as

follows: Transportation--N. H. Albaugh, Tadmor, Ohio; Irving

Rouse, Rochester, N. Y.; A. L. Brooke, North Topeka, Kan.; N. W. Hale, Knoxville, Tenn.; Silas Wilson, Atlantic, Ia. Tariff -W. C. Barry, Rochester, N. Y.; Irving Rouse, Roch-

ester, N. Y.; N. H. Albaugh, Tadmor, O.; J. J. Harrison, Painesville, O.; Silas Wilson, Atlantic, Ia.

Legislation-C. L. Watrous, Des Moines, Ia; N. H. Albaugh, Tadmor, O.; Irving Rouse, Rochester, N. Y.
Silas Wilson, Des Mornes, Ia.
PLACE OF MEETING.

The vice-presidents reported that after much balloting a decision which lacked only three votes of being unanimous had been made in favor of Omaha as the place for the convention on the second Wednesday in June, 1898.

The eastern members promptly demurred to this. Messrs. McFarland, of Penn.; Bissell, of Maryland, and Berckmans, of Georgia, argued for a more eastern point Messrs. Taylor, of Nebraska, Dennis, of Illinois, favored Omaha. Mr. McFarland called attention to the fact that the convention was held at Chicago in 1893, at Indianapolis in 1894, at Niagara Falls in

1895, at Chicago in 1896, and at St. Louis in 1897, and it was time it should be held in the East again. Mr. Bissell said a majority of the nurserymen were in the East; that if a vote were taken according to state representation in the badge book, the convention would surely be held in the East. New York has 76 members of the association yet has but one vote, the same as states having but from three to five members. He moved to substitute Detroit for Omaha in the report as to place of meeting. Mr. Berkmans suggested as an amendment that Chicago be the next place of meeting.

F. W. Taylor, of Nebraska, made an eloquent plea for Omaha. "I have attended 11 out of 14 meetings of the association since I became a member," said he, "and we ask for once that the convention be held in Nebraska. The expense will not be great to the eastern members. The fare from Chicago to Omaha is but \$12.50 and exposition rates will prevail in June, 1898. The trip can be made in a night. You can eat supper in Chicago and breakfast in Omaha. The people of Nebraska have raised \$1,000,000 in good hard money for the big Omaha exposition. We have good hotels in Omaha. We will guarantee that you will have a most enjoyable time if you will come to Omaha next year."

C. N. Dennis said the nurserymen could go to Detroit any year for a convention, but that the Omaha convention is to be next year and should be seen.

Mr. McFarland thought a successful convention could not be held during a great exposition. Little was done at Chicago during the World's Fair, said he, while at Niagara Falls one of the best meetings had been held.

BALLOTED ON THREE PLACES.

A. L. Brooke, of Kansas, moved that the convention ballot upon the three places suggested, Omaha, Chicago and Detroit. Mr. Bissell asked that the membership vote be polled, but President Wilson declared that such a course would not be admissable at that stage of the proceedings. Mr. Taylor suggested as a compromise that the conventions be held regularly at Chicago after next year. W. B. Otwell, Carlinville, Ill., suggested that if sociability was the point, an informal ballot be taken and the members be allowed to vote upon any place that had attractions to offer.

It was decided to ballot on the three places named. Messrs. Peters, of Ohio, and Dennis, of Illinois, were appointed tellers. The result of the ballot was: Omaha, 62; Chicago, 57; Detroit, 1; total, 120.

President Wilson announced that Omaha had been selected as the place of meeting in 1898. Mr. Taylor said to the convention, "I thank you very heartily. We will do all in our power to make it one of the most enjoyable conventions. I can guarantee signed permits from the mayor of Omaha allowing you to do as you please, thus going Mayor Ziegenheim one better. The first two days can be devoted to the business of the association, the remainder to the exposition."

The following resolution presented by A. L. Brooke, North Topeka, was adopted:

"Resolved, That the places of the meetings of this association shall not be located either east or west of a line of the meridian of the city of Chicago for more than two years in succession."

TRANSPORTATION.

A. L. Brooke, North Topeka, secretary of the committee on transportation, reported: "The association last year appropriated \$500 for the use of the committee. We have not expended a cent of this money. But we have accomplished much in regard to freight rates, mostly in the western department. The western transportation committee imposed a hardship by making trees in bulk go at class A rates. We succeeded in securing a reduction. Those of you who are in the East do not have much complaint, because you are under the eastern classification which covers territory as far as the Mississippi river. The western classification governs all the western territory except one line to the South. There is also a southern classification. The trouble has been with the western classification.

"What I would like to call your attention to is: First, we want a reduction in the size of bundles of trees from 100 to 50 pounds. The western classification requires trees to be bundled to 100 pounds for the first class. We find that these bundles are too heavy. They are handled carelessly by railroad men. If the bundles weighed but 50 pounds they would go through all right. There would be no loss of freight to railroad companies.

"Second, as to trees in less than carload lots. Frequently it is desired to ship trees in quantities weighing from 4,000 to 5,000 pounds, which does not reach the carload rate. Under the ruling of the western association the ra lway companies must charge 1½ rate.

"You have the eastern nurserymen's association; we have the western. I want to say that the southern members would profit by forming an association also. We take up questions in which we are interested as an association and when necessary we carry them to the national association, and we have had help every time. There is a burden on freight in the South. We recommend a southern organization. If you do not succeed the first year or two in obtaining relief, you surely will by working on. Railway men are gentlemen. They are always glad to have you bring them information. Why do we not get more out of them? Because as compared with live stock, grain, etc., the nursery shipments are not large. Railway officials should be informed of needed changes, and I assure you that you can bring them about in time."

TARIFF REPORT.

The committee on tariff, through its chairman William C. Barry, Rochester, N. Y., presented the following report:

"Your committee appointed at the last annual meeting of the association to secure, if possible, a satisfactory duty upon imported nursery stock, has great pleasure and gratification in reporting that through the persistent efforts of the committee and the influence which the members of the association exerted, the schedule prepared and presented by your committee was enacted with slight modification by the House of Representatives in March, and the bill is before the Senate, with the probability that favorable action thereon is likely to be had soon.

"Your committee does not consider it necessary to present a long report giving details of the work, inasmuch as nearly all the members of the association are familiar with the plan pursued, from the various circulars which have been addressed to them during the winter and spring months. Suffice it to say that the object for which the committee was appointed will undoubtedly soon be accomplished.

"Your committee is under special obligations to the Hon. Henry C. Brewster and the Hon. W. B. Hooker of New York and the Hon. J. P. Dolliver and the Hon. W. B. Allison of Iowa, for the interest they manifested in the measure and the valuable aid they gave.

"It is proper to add that the Messrs. Albaugh and Hale, being unable to serve on the committee, Messrs. Rouse and Harrison were appointed by the president in their stead and Mr. Pitkin of the Eastern Nurserymen's Association was added to the committee.

Appended are copies of the circulars addressed to the association by the committee.

Respectfully submitted,

WILLIAM C. BARRY,

J. J. HARRISON, IRVING ROUSE,

SILAS WILSON,

WILLIAM PITKIN.

LEGISLATION.

The main topic of discussion during the convention was the San Jose scale. The committee on legislation composed of C. L. Watrous, N. H. Albaugh and Irving Rouse, made a report which is embodied in an account of this feature of the convention, in another column.

OTHER COMMITTEES.

The president appointed the following committees:

On president's address—W. J. Peters, Ohio; H. J. Weber, Mo.; W. F. Heikes, Ala.

On treasurer's report—C. A. Ilgenfritz, Mich.; Peter Youngers, Neb.; E. M. Sherman, Ia.

On exhibits—J. W. Manning, Mass.; C. N. Dennis, Ill.; C. M. Hobbs, Ind.

On necrology—T. S. Hubbard, N. Y.; J. Van Lindley, N. C.; E. H. Bissell, Va.

On resolutions—A. L. Brooke, Kans.; N. H. Albaugh, Ohio; Orlando Harrison, Md.

The committee on president's address reported as follows: "We, the committee on the president's address, beg leave to report as follows: We fully coincide with him in recommending the appointment or continuance of committees on transportation, tariff and insect legislation, and cheerfully recommend the appropriation of expense fund therein named."

Upon recommendation of the committee on treasurer's report, the report was adopted as presented.

EXHIBITS.

The committee on exhibits reported as follows: "We find the following exhibits.

- "E. H. Riehl, Alton, Ill.—Ruby strawberry, large even size, conical, bright red, moderately firm, tart, plant apparently strong, vigorous, healthy and productive.
- "A. H. Griesa, Lawrence, Kan.—Fink apples in a good state of preservation showing it to be a long keeper. He also exhibits a branch of Superb apricot, showing good size and productiveness.
- "D. Hill, Dundee, Ill.—Shows forty-four samples and twenty-one varieties of evergreens, including the rarer kinds, Pinus pungens, Picea concolor, Pondersa pine. One three old specimen of the last named measures three feet in height,
 - "L. T. Sanders & Son, Plain Dealing, La,-Shows ripe

Eureka peaches, Biery, Abundance and Norman plums and Early Margaret apples; also a specimen of variegated-leaved Liquid Amber.

- "M. B. Fox, Rochester Lithograph Company—A good exhibit of lithograph plates, flowers, etc., plate books and binding for nurserymen's use.
- "J. Horace McFarland, Harrisburg, Pa.—Shows nurserymen's catalogues and printing, photographs of fruits, flowers, etc., also Professor Bailey's Rural Science and Garden Craft series of books.
- "J. P. Sinnock, Moberly, Mo.—Specimens of variegated leaved ash, a sprout from the native green ash.
- "E. H. Ricker, Elgin Nursery Co., Elgin, Ill.—Seventeen specimens of seedling evergreens, mostly 2-year, two of European Larch, all vigorous and healthy; also samples of baled moss for nurserymen's use.
- "Joseph Heinl, Jacksonville, Fla.—Samples of well-rooted Irish Juniper cuttings.
- "Dayton Fruit Tree Label Co.—Full and artistic display of tree and plant labels.
- "Hiram T. Jones, Elizabeth, N. J.—Specimens of Rosa rugosa stock for working tree roses, grown by J. Blauw, Boskoop, Holland.
- "Z. K. Jewett, Sparta, Wis.—Samples live sphagnum moss for nurserymen and florists' use.
- "F. L. Williams, Tamaroa, Ill.—Device for transplanting small stocks and plants. An exhibit of Sneed peaches from Tennessee was of such taking quality as to be all gone when the committee reached the basket."

NECROLOGY.

The committee on necrology reported as follows:

"We are gathered here as representatives of one of the largest and most important industries of the country. While engaged in the active duties of our profession, considering the questions that perhaps check our progress and making plans on which future success will depend, it is but proper that we should recognize that we who are here in the full enjoyment of health and life's pleasures are profiting by the patient industry, by the careful study and the calm judgment of others whose labors on earth have ceased and who have passed to their rest beyond.

"We have to chronicle the loss from our membership by death during the past year of J. S. Sears and Lemuel Herendeen, of the firm of Sears, Henry & Co., Geneva, N. Y.; J. G. Bubach, of Princeton, Ill., the well-known originator; Robert Douglas, of Waukegan, Ill., and W. M. Samuels, the pomologist, of Clinton, Ky.

"By the loss of these members we recognize that we are deprived of those who have been strong forces in promoting the interests of our profession in various branches. Robert Douglas was one of those who were active in organizing this association, and he has ever since been one of our most valuable and efficient members. The history of the useful life of these members is one that we can all study with profit, and their example will be an incentive to others."

REPORT ON RESOLUTIONS.

The following is the report of the committee on resolutions:

"This association of national nurserymen before closing its labors of one of the most laborious and useful conventions

since its organization desires to express its thanks for its most cordial reception and hospital treatment by his honor, the mayor of the city of St. Louis; for the fraternal greeting extended by our brother nurserymen of the great state of Missouri; for the generous invitation extended by the managers of Shaw's Botanical Garden to be present at their eighth annual banquet provided for in the will of Henry Shaw; for the kind treatment we have received at the hands of the manager and clerks of the Lindell hotel.

"We desire to congratulate the outgoing president, Hon. Silas Wilson and his splendid corps of helpers on the success of their labors the past year, and heartily thank them for the vigilance that they have manifested in their respective positions. The work of the past year has brought the rainbow of promise to our great industry and we are greatly encouraged to take new hope, new energy and step forward to a new success."

SHAW'S GARDEN.

On the afternoon of June 10th a majority of the nurserymen at the convention visited the Missouri Botanical Garden where they were conducted to points of interest under the direction of H. C. Irish and Superintendent Gurney. Every courtesy was extended to the visitors by the garden management. The nurserymen were greatly pleased with the visit.

The board of trustees of the Missouri Botanical Garden has decided on a 100-acre addition to Shaw's Garden. Plans are being prepared by the Olmsteds of Boston. The work of making extensions and improvements will begin during the present summer and will cover a period of five years. This season will be devoted to grading and the laying of water pipes. Next year the planting will begin. The year following the walks will be laid out. The fourth year the herbaceous plants will be put in, and in the fifth year the work of preparation will be completed.

The proposed improvements are the beginning of an entire remodeling of Shaw's Garden. The instructions given to the Olmsteds were, first, for a general plan for improving the farm land adjoining the garden; second, a detailed plan for the North American synopsis, and a small department of medical botany; third, suggestions for the gradual modification of the present park to harmonize with the improvements. Professor Trelease, who has embodied the plans in his forthcoming annual report, estimates that the cost of the improvement will be about \$1,500 an acre, and, when completed, will in time give Shaw's Garden a place beside the famous botanical gardens of the world.

THE BANQUET.

The convention was brought to a close at a banquet, the eighth annual, provided for nurserymen, gardeners and florists by the terms of the will of Henry Shaw, founder of Shaw's garden. This was held in the spacious banquet hall of the Mercantile club and was attended by a large number besides the members of the American Association of Nurserymen.

Dr. William Trelease, director of the Missouri Botanical Garden, was toastmaster. He honored the new president of the American Association, Mr. Rouse, by calling upon him first for a speech. Mr. Rouse responded briefly and suggested Mr. Albaugh as the association's spokesman for the evening.

Mr. Albaugh said: "We belong to a profession the oldest in the world. Adam was a nurseryman, for was he not put

into a garden to keep it? But not being able to distinguish between a Keiffer pear and a Whitney crab, he got into trouble.

"We come here to-night exceptionally well pleased. We were jollied at the opening of our convention by the jolliest mayor in the United States, and now we are banqueted by the most complete banqueters in the United States. We were here in convention fifteen years ago. By mistake we met several times in your smart suburb, Chicago. We will never do it again. Hereafter when we want to go to the center we will come to the metropolitan city of St. Louis."

Speeches were made by ex-Secretary of the Interior D. R. Francis, ex-Secretary of Agriculture Colman, and others.

CONVENTION NOTES.

The Lindell hotel, though very old, afforded plenty of room for the convention.

Several of those at the convention visited Jefferson barracks on Thursday afternoon.

Professor Fred W. Card, of the University of Nebraska, read a paper on "The Nurseryman as an Educator," an abstract of which will appear in a forthcoming issue of this journal.

The thanks of the convention were extended by special resolutions to the committees on transportation, tariff and legislation for their laborious work in behalf of the association.

A number of the nurserymen visited the Anheuser-Busch brewery early Thursday morning and were well repaid. It is the largest brewery in the world and is one of the sights of St. Louis.

Thomas B, Meehan had his usual luck with him at the convention. Some one in a moment of absent mindedness took Mr. Meehan's umbrella and left his own, and now Mr. Meehan is wondering in which state his property is.

F. W. Taylor who pleaded so eloquently for the convention at Omaha next year, is chief of the bureau of agriculture, horticulture, forestry and irrigation of the Trans-Mississippi and International Exposition at Omaha from June 1 to November 1, 1808.

Peter Youngers was greatly elated when Omaha was finally selected as the place for the next meeting. He arrived on the scene Tuesday and worked early and late with F. W. Taylor in efforts to secure the next meeting for Omaha. He promised to buy something for the advance guard at Omaha next June.

The weather was all that could be desired during the convention. Just after the president's gavel fell, closing the last session a warm wave arrived and before the nurserymen got out of St. Louis they experienced a little of what was feared by some last year when the association voted to go to St. Louis.

Sixty members of the association accepted the invitation of Stark Brothers to visit the latter's nurseries and orchards at Louisiana, Mo. It had been planned by the Messrs. Stark to convey the visitors by steamer during Thursday afternoon to Louisiana, but the banquet on Thursday night interfered with this plan. So sleeping cars were arranged to be in waiting for those who made the trip and these were entered at the conclusion of the banquet. The party arrived in Louisiana early on Friday morning, and remained aboard the cars until a seasonable hour when it was taken in carriages about the extensive property of Stark Brothers. The party returned to St. Louis in the afternoon, some of the visitors proceeding to their homes from Louisiana. The party was photographed at Louisiana.

INSECT LAWS.

STATE OR NATIONAL, WHICH?—PAPER READ BY HON. N. H. ALBAUGH BEFORE THE AMERICAN ASSOCIATION OF NURSERYMEN AT THE CONVENTION AT ST. LOUIS.

Hon. N. H. Albaugh read the following paper at the St. Louis convention:

"When Frank R. Stockton wrote the 'Lady or the Tiger' he propounded a most momentous question, and he, himself, feared to open the cabinets lest he make the mistake of his life, and be devoured by the ferocious brute.

"As nurserymen, we are in a similar quandary. While we would be delighted to open to the lady of beauty, and joy, and prosperity, and wealth, yet, with the appearance among trees of the most pernicious enemy of the century, we pause and inquire, before venturing, the 'Lady or the Tiger," which?

"To be or not to be' was Hamlet's most sublime soliloquy. To enact or not to enact, confronts us in part. I say in part, advisedly, for with the phenomenally wise acres who infest our legislative halls, ofter more destructive to the nurserymen or horticulturist's best interest than the pernicious San Jose itself, we feel, as a profession, like flying to some vast wilderness, and giving up the ghost, sure enough.

"Maryland says 'put on your inspector's certificate, and have that sealed with the seal of the Pentigraph' of the Maryland State 'bugger,' and all shall be smooth sailing, and it is, for Prof. Johnson is the right man in the right place.

"Virginia echoes 'me too' or words to that effect. Ohio says, township inspectors may 'set on' your case, and if you have the 'itch,' or in other words the scale, the old man will ask you for your little fine of from five to a hundred dollars.

"California uncorks its bottled wisdom and wrath, and after having inoculated 'we all' with the scale, and after sending us car loads on car loads of scaly fruit, and green and stomachaching at that, suddenly takes a virtuous spell, and through its sagacious township 'bug inspectors' (who oft-times cannot distinguish between a tumble bug and a humbug), burns up our healthy trees to make room for its own inferior ones, from the home nurseries.

"Illinois tries to clap on a mustard plaster about as large as a bed quilt, in the shape of a bond and license law, to cover all foreigners, (as if Ohio and New York, which furnished the largest part of its intelligent population, were foreign countries) and is going to compel Ellwanger & Barry or The A. N. & O. Co. to put up a thousand dollar bond, with native sucker securițies, and a five dollar license, before they can, respectively, send a Crimson Rambler rose, or a Diamond peach tree to that immaculate state.

"Verily, the cabinets have been unlocked, and the tiger is liable to spring out at any moment and devour somebody. If only it could be the wise horticultural solons of some state legislatures, it would be a God-send.

"The danger is truly great, yet that is no reason why a whole quart of nux vomica should be given at a single dose.

"In addition to fruit trees, this pernicious scale attacks nearly all kinds of ornamentals, including the elm, poplar, birch, chestnut, linden, Kilmarnock willow, roses and all sorts of shrubs, thus endangering parks, cemeteries and all public grounds.

"Eternal vigilance is said to be the price of liberty, and vigilence of a similar kind should actutate all intelligent, not to say honest nurserymen, who expect to keep themselves clear of the great pest. The nurseryman, or fruit grower, who will knowingly and willfully, for the sake of a few paltry dollars, send out infected stock, is a public felon and should be treated accordingly. The ignorant or careless one is scarcely less guilty.

"If the San Jose came and went as the 'ships that pass in the night' there might be some excuse, but he is a slow, as well as a villainous brute, and so can surely be circumvented by prompt and intelligent methods. True, he is not as deep as Mercutio's well, nor as wide as a church door, nor as large as an elephant, but he is enough, he will serve.

"Nurserymen, too, are largely made to suffer for old and obsolete pests.

"The San Jose scale has made everybody suspicious. The wooley aphis that went into Noah's ark with the other animals has almost upset several deliveries of trees this spring. Indeed, in one case that I know of, a 'hullabaloo' was raised by customers on discovering on the branches of some nursery stock, the eggs of the katydid, which are as large, individually, as the scales on a good sized white fish, on the supposition that this row of scale-like eggs was the genuine San Jose.

"That the nurseryman and fruit culturist should be able, on sight, and even 'afar off," to know the appearance of the San Jose, is almost absolutely necessary in order to be constantly on the alert to combat it. Several nurserymen in my vicinity traveled many miles to see this insect upon orchards of all different varieties, and note its effect on each. Once seen and thoroughly examined, it is not easily, thereafter, mistaken. Its spread is comparatively slow, and should and can be easily stamped out if taken in time. Given a year or two the start and your orchards and nurseries are ruined.

"The great variation and inconsistency of state laws is so confusing that nurserymen and fruit growers stand aghast and know not which way to turn. The remedies and preventives proposed, through entirely unskilled and uninformed officials, are more dangerous than the insect itself. Many of the state laws enacted, and sought to be enacted, are bunglesome, impracticable, unconstitutional, and worse than useless.

"But is nothing, therefore, to be done? Not by any means. If all the state laws had a reasonable uniformity, there would be less cause for complaint, but such, unfortunately, is not the case. Again, township or local inspectors are nearly always inefficient, from lack of a reasonable knowledge of entomology, and develop into local autocrats and despots, who are far more dangerous than all the insect enemies put together.

"If inspection must be had, (and it looks as if that was the most rational thing to do), then in the name of all the saints at once, let the inspectors be learned men in their profession. One such inspection is worth more to horticulturists than a ten acre field full of local autocrats.

"A general national law seems absolutely necessary. Suitable inspectors could be appointed under it in the various states. The certificate of these men would be the 'sesame' to all fruit and plant trade, not to hinder sales and shipments, but to facilitate them, by previous examination of nursery and orchard. Infested trees do not come from an uninfested nursery; scaly fruit does not come from an orchard free from scale, and right here, why should scaly fruit be shipped into a

city and there consumed, in crowded streets and suburbs, where many homes are adorned with just the ornamental trees and shrubs upon which the scale is so particularly destructive. A plain, practical national law, easily understood, but forcible and incisive enough to stand alone, seems to be the crying need of the hour. One that will necessitate few changes from year to year, one that is so fair that all half-way honest people will be glad to obey and aid in enforcing, and then this mighty spectre that is stalking through our nurseries, orchards and lawns will be shorn of its greatest terror. The 'lady or the tiger,' which? That is the momentous question, to which I answer emphatically, 'The lady ever, the tiger never.'"

ALWOOD ON THE SCALE.

In his remarks on the San Jose scale before the American Association at St. Louis, Professor William B. Alwood, of Virginia said:

"At the present time, from my own record, I know that nineteen states on the Atlantic and adjacent states inland are infested with the San Jose scale. How the scale came into the eastern part of the United States it is not necessary to go into now, except to say that it came on nursery stock from California, and for five or six years it was spreading upon the eastern half of this continent in the nurseries and orchards before we had the first inkling that there was a San Jose scale this side of California except in our cabinets. It is now four years since the first case was known and it is only during the last eighteen months that we have fully to realize the extent of the dissemination of the San Jose scale in the East. I may say further that it is only within the last few weeks that we

have had brought to our attention some of those alarming cases where the scale has existed right under the nose of specialists for years without having been detected. Now these cases which I shall cite are all arguments for the necessity of most thorough inspection laws, so that we shall be able, by the facts brought out by inspection, to provide such measures, whatever they may be, as will stop the further dissemination of this scale as it has been heretofore widely disseminated."

The speaker stated that a law had been passed by the state of Virginia provided for the appointment of inspectors and giving them almost absolute power in regard to treatment of infected premises, and stated that in the first two-days' work after his appointment as such inspector he had located ten treatment to the state of the

went on to cite a large number of cases where the scale was found to have existed for some time, and its presence had not been suspected, and where only a prompt destruction of the infected stock could prevent the infection from spreading farther. He said, "I do not believe in treating nursery stock for the scale. I believe in burning it."

A case of scale was found to exist, Professor Alwood went on to say, within a few steps of the door of the Horticultural Building of Cornell University—had been there for three years without having been detected, and was only found the other day by a man from the Experiment Station. The scale is adapting itself to different climatic conditions; it has been found in the mountainous regions of Virginia at a height of 2,000 feet; in Western New York and as far north as Canada. It infests all the deciduous fruit trees that belong to the

rosaceæ; among trees it infests the black walnut, the American chestnut, the American and European Lindens, the Catalpa, Cut-leaf birch, etc. "There is at present no case on record where fruit has disseminated the scale, its spread generally taking place from branch to branch where trees are planted closely together, and in one case at least the infection was carried from place to place by peach gatherers who had brushed up the scale with their garments "



IRVING ROUSE.

IRVING ROUSE.

The new president of the American Association of Nurserymen is well known as one of the largest importers of foreign stocks in this country. His importations for a single year have amounted to 8,000,000 trees and plants. Mr. Rouse went from Catskill, Green County, N Y., to Geneva, and entered the nursery business. In 1873 he moved to Rochester.

His nurseries comprise 350 acres in a solid block. The land is clay loam and lies on a gentle slope two miles west of the city limits. Mr. Rouse grows heavily the leading varieties of standard and dwarf pears.

In the affairs of the American Association Mr. Rouse has been very active. He has done efficient work as chairman of the executive committee, and during the last year he has aided greatly in securing results in tariff and insect legislation matters. He will make a valuable president.

AN ORIGINAL SUBSCRIBER.

ELMER SHERWOOD, ODESSA, N. Y.—"I hand you herewith \$1 for subscription to journal for 1897. I have been a subscriber since the receipt of one of the first sample copies sent out in 1893. I do not see how nurserymen can get along without it."

The National Nurseryman.

C. L. YATES, Proprietor.

RALPH T. OLCOTT, Editor.

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OFFICIAL JOURNAL OF THE AMERICAN ASSOCIATION OF NURSERYMEN.

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Correspondence from all points and articles of interest to nurserymen and horticulturists are cordially solicited.

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ROCHESTER, N. Y., JULY, 1897.

THE AMERICAN ASSOCIATION.

The twenty-second annual convention of the American Association of Nurserymen was marked by the attendance of a majority of the leading members, important action relating to federal legislation upon the subject of the San Jose scale and many pleasant features, chief of which were the visit to Shaw's garden and the banquet at the Mercantile club. From a business point of view there was little to boast of, but in view of present conditions the result was not unexpected. Side trips to Albertson & Hobbs' nurseries and to those of Stark Brothers varied the programme for some.

By far the most important subject considered at the convention was that of insect legislation. It is particularly gratifying to the NATIONAL NURSERYMAN to note the unanimous backing given to the position taken by this journal on this subject. When the convention of horticulturists and entomologists at Washington last March endorsed a bill which would work great injury to the nursery business, the NATIONAL NURSERYMAN took a bold and decided stand instantly, maintaining that there could be effective legislation without detriment to a large class. It called attention to objections to the bill proposed at Washington and it was at once assailed by the promoters of that bill who said they were determined that it should be passed by congress, and that the nurserymen might as well bow to the inevitable.

There was a great deal of declaration that that bill was perfectly just and was what was wanted to meet the situation. But at St. Louis the chief promotor of that bill said that the wording of the bill did not suit him, that those who drafted and supported it did not know about the practical working of the nursery business, and that it wasn't intended to have that bill passed anyway; that it was only to bring the matter before the people that it was presented in congress.

It would be uncharitable in view of the remarkable change of front in this matter, to dwell at length upon the victory achieved by the nurserymen's trade journal. But it may not be out of place to remark that all who have followed this discussion must easily see the importance to the trade of having a journal to represent it. The Washington convention was distinctly a horticulturists and entomologists' convention, and it could not be expected that the horticultural journals would take up the matter in the interest of the nurserymen and against the action of that convention, although several were impelled by the patent injustice proposed, to do so, as was noted in this journal at the time.

The action of the American Association in condemning the Washington convention's bill was unanimous as was also that endorsing the bill prepared by the legislative committee of St. Louis. The latter bill has the hearty endorsement of Professor Alwood who declared that he would do all in his power to secure its passage.

TARIFF CHANGES.

On June 16th the nursery schedule of the proposed new tariff was discussed in the senate. Several changes were made. The paragraph relating to nursery stock was changed to read as follows:

"Stocks, cuttings, or seedlings of Myrobolan plum, Mahaleb or Mazzard cherry, three years old or less, 50 cents per thousand plants and 15 per cent. ad valorem; stocks, cuttings or seedlings of pear, apple, quince, and the St. Julien plum, three years old or less, and evergreen seedlings \$1 per thousand plants and 15 per cent. ad valorem; rose plants, budded, grafted, or grown on their own roots, 2½ cents each; stocks, cuttings and seedlings of all fruit and ornamental trees, deciduous and evergreen, shrubs and vines, Manetti, Multiflora, and Briar rose, and all trees, shrubs, plants and vines, commonly known as nursery stock, not specially provided for in this act, 25 per cent. ad valorem."

The following paragraph was inserted:

"Orchids, palms, dracænas, crotons, and azaleas, 30 per cent. ad valorem. Tulips, hyacinths, narcissi, jonquils, lilies, lilies of the valley and all bulbs, bulbous roots, or corms, which are cultivated for their flowers, 30 per cent. ad valorem. Natural flowers of all kinds, preserved or fresh, suitable for decorative purposes, 30 per cent. ad valorem."

DESERVES THE POSITION.

The American Association of Nurserymen in convention at St. Louis last month unanimously adopted the following resolution introduced by Hon. A. L. Brooke, of North Topeka, Kan.:

"Resolved, That the American Association of Nurserymen in its 22d annual convention at St. Louis hereby endorses the application of F. G. Withoft, of Dayton, O., as a special agent under the secretary of agriculture of the United States, as we consider him efficient and capable and a practical agriculturist and horticulturist of many years experience and of national reputation."

Mr. Withoft fully deserves recognition in this or any similar position. He is one of the most experienced and widely known nurserymen and horticulturists in the country. He is

vice-president of the Albaugh Nursery and Orchard Co., which has large orchards in Ohio, Kentucky and Georgia. He is president of the Ohio Fruit Land Co., Fort Valley, Ga., and is largely interested in other enterprises. He is prominent in the Masonic, Odd Fellows, Knights of Pythias and commercial travelers circles.

TREE CASE IN COURT.

A tree agent in Baltimore sold a bill of goods to a party for \$77. After the goods had been received and paid for by check the party discovered that he had been humbugged and stopped payment of the check. The tree agent brought suit to recover. In the testimony it was proven that a crape myrtle was sold and a ground myrtle sent, at the cost of \$1.50. The stock otherwise was said to be overcharged and misrepresented. Expert testimony was heard for both sides, but the jury brought in a verdict a few days ago granting the plaintiff \$30, he paying the costs. This amount had been offered by the purchaser before the case went to trial, but was refused.

MISSOURI HORTICULTURISTS.

The Missouri Horticultural Society met at Springfield on June 8, 9 and 10. Professor J. M. Stedman of the state university gave an interesting and valuable lecture on woolly aphis and San Jose scale. The speaker stated that the scale now exists in three counties in the state and urged the immediate extermination of this most destructive enemy of fruit trees.

Professor George H. Van Houten of Lenox, Ia., delivered an address on Oriental horticulture. He confined his remarks to the industry in Japan and Northern Asia.

Judge Samuel Miller of Bluffton read a paper on grapes.

A peach growers' association was organized among the members of the horticultural meeting. The society adjourned to hold the winter meeting at Moberly December 7 to 9.

YELLOW RAMBLERS AND SWEET BRIARS.

Editor NATIONAL NURSERYMAN.

We are sending you by mail to-day a small spray of flowers of the Yellow Rambler, which we thought you possibly might be interested in seeing. It is characteristic of this variety that it does not bloom with full freedom until having been established two years and as these flowers were cut from one year old plants it does not fairly show the size and magnificence of a cluster of the flowers. We are convinced, however, that after plants have been established a reasonable length of time and attain fair size and strength, they will present fully as magnificent an appearance when in blossom as does the Crimson Rambler. The flowers are borne after the same manner of those of the Crimson Rambler, namely, in splendid large trusses, but you will notice from the spray we have sent you, they are also very fragrant, which is a point in which the variety is superior to the Crimson Rambler, the latter having no fragrance whatever.

Wish you could also see the plants of the Lord Penzance Hybrid Sweet Briars, which we have in bloom. They are truly magnificent. They were propagated from cuttings three years ago this spring and now stand eight to ten feet high covered with bloom from top to bottom. We have nine varieties of these now in blossom and the colors range from blush white to very dark crimson, with one of a distinct copper color and another of a most peculiar salmon shade. Their single flowers are a very pleasing change from the double roses almost everywhere sought after and the freedom with which they are produced makes the plants most magnificent in appearance. They are very strong, upright growers and form large shapely bush, that is in itself very ornamental. They are, therefore, most aptly adapted for planting singly and in groups as one would plant decorative shrubs of any kind.

We also have two or three seedling roses of our raising that look very promising, being distinct in color and appearance over other varieties. Shall give them the most careful testing for a year or two more and possibly may find them worthy of introduction.

Jackson & Perkins Co.

Newark, N. Y., June 23.

Obituary.

Hon. Joseph S. Fay, the well-known horticulturist and philanthropist, of Wood's Holl, died at Cambridge, Mass., June 14th, aged 84 years.

Robert Douglas, one of the best known nurserymen in the country, died at his home in Waukegan, Ill., on June 1st, aged 84 years. Mr. Douglas was widely known as an evergreen specialist. He was an authority on arboriculture and forestry and was often consulted by park authorities. He was born in England but had lived in Waukegan since 1844. Mr. Douglas was an active and valued member of the American Association of Nurserymen. He attended the convention of that association in Chicago last year. Many thousands of acres of timber planted under his direction remain a monument to his love of nature.

Mr. Douglas was known as the father of forest planting in America. After the Catalpa speciosa became noted he grew millions of this tree. Many western states now have forests of this and other trees, which were all planted by this enterprising man. Another of his noted introductions to cultivation is the Blue spruce, some magnificent specimens of which may still be seen on his grounds in Waukegan. He was the first man to grow forest-tree seedlings by the million, and for nearly half a century he devoted his time and skill to raising conifer and other tree seedlings. He planted large forests in many western states, and the most successful plantations of Catalpa speciosa in the United States were made by him near Farlington, in Kansas. His counsel has always been in demand wherever forest problems were studied in this country, as, for example, at the Leland Stanford University, in California, and George W. Vanderbilt's estate at Biltmore, North Carolina. He was one of the valued assistants of Professor Sargent in gathering data for his forest report of the tenth census, and many of the specimens in the Jesup collection of woods in the Museum of Natural History, in New York, were collected by him. No one in his time has devoted himself to the study of trees with greater intelligence or success, and no one has done more to increase the love for them or to encourage the planting of them in the United States.

NEW FEDERAL BILL.

PROPHECY OF THE NATIONAL NURSERYMAN FUL-FILLED — WASHINGTON CONVENTION'S BILL CONDEMNED—PROFESSOR ALWOOD ENDOR-SES NURSERYMEN'S MEASURE.

The principal topic discussed at the St. Louis convention of the American Association of Nurserymen was federal legislation regarding the San Jose scale. The committee appointed by President Wilson upon this subject presented a report; and a draft of a bill prepared and endorsed by the Eastern Nurserymen's Association was read and discussed. The report of the committee, the bill proposed by the Eastern association and all the discussion at the convention was in direct opposition to the action taken by the convention of horticulturists and entomologists at Washington last March, to which action THE NATIONAL NURSERYMAN entered a vigorous protest. And just as was prophesied by this journal, a bill was prepared by the nurserymen at the St. Louis convention which, while providing for inspection of nursery stock does not contemplate an injustice to nurserymen, as did the one proposed by the Washington convention.

The bill drafted at the St. Louis convention bears the endorsement of the entomologist of Virginia who was chairman of the committee of the Washington convention which drafted the objectionable bill.

This entomologist was present at the St. Louis convention at his own request. On the afternoon preceding the opening day of the convention he was invited to state what he wished to regarding the bill drafted by the Washington convention. He was allowed to talk at considerable length during which time he reviewed the history of the Washington convention, all of which was given in detail three months ago in The National Nurseryman. Finally Messrs. Rouse, Brooke, Hubbard and others began to question him upon the practical operation of the bill he was defending, and in the course of twenty-five minutes he was obliged to admit that he could not answer the most important questions asked by the leading nurserymen present.

NURSERYMEN INQUIRE.

"Why was the entire expense of inspection proposed to be placed upon the nurserymen?" asked A. L. Brooke, of Kansas. "I never thought of that," replied Professor Alwood.

Mr. Brooke—"Why should not the general public pay for the inspection if it is for the general public benefit?"

Prof. Alwood—"The point was not raised by the nursery-men present."

Mr. Brooke—"Well, we nurserymen here are rather disposed to dissent."

Prof. Alwood—"The bill does not meet my views as to its wording."

Irving Rouse—"Where do you get any authority for proposing to put nursery stock in quarantine?"

Prof. Alwood—"I don't know of any authority for it."

Mr. Rouse—"It is clearly unconstitutional to do as this bill proposes."

Mr. Brooke—"Do you believe it is practicable to do the fumigating at port of entry and then reship the stock?"

Prof. Alwood-"I don't know."

Mr. Rouse—"Do you know in what manner imported nursery stock is packed?"

Prof. Alwood-"I don't know."

Mr. Rouse—"Well, that is just our judgment of your bill—that it was drawn up by a lot of men who do not know the practical working of the nursery business."

Victor H. Lowe, entomologist of the New York Agricultural Experiment Station, Geneva, N. Y.—"You say you can inspect all the nursery stock in Virginia. Why, in New York state we grow millions of trees. From my office window I can look out upon several hundred thousand young trees. How am I to give any reasonably thorough inspection under such circumstances in the manner you prescribe? I have tried it—I have inspected many blocks of nursery stock in Western New York, but not so that I could give a certificate."

Prof. Alwood—"There is no trouble in finding the scale on two-year old stock if it is there. I do not inspect one-yearold stock."

WORSE THAN BEFORE.

Mr. Rouse—"In the light of your explanations made here to day, the bill you are defending is many times worse than it before appeared to be. We are told by good authority that your inspection does not amount to anything."

Prof. Alwood-" Who says so?"

Mr. Rouse-"Some of the workers."

Prof. Alwood-" I am sorry to hear it."

Mr. Brooke—"Now, I favor inspection of nursery stock. But I have not yet been able to learn why that committee at the Washington convention saw fit to draft a law imposing the whole expense upon the nurserymen. I understand that meeting of fruit growers at which there was a scattering of nurserymen prepared this bill and endeavored to have it passed. And I understand that it is the desire to get the assistance of this convention in passing that bill."

Prof. Alwood—"There was nothing said of such a thing. I am not here officially."

Mr. Brooke—"You see the great injustice of the proposed bill,"

Prof. Alwood—"Yes, I don't believe in its wording."

Mr. Watrous—"Then you can't tell who drafted the bill?" Prof. Alwood—"The entomologists,"

Mr. Watrous—"Then they proposed the expense on the nurserymen."

Prof. Alwood—"No; I think that was done by the convention."

Mr. Brooke—"You see the position we are in."

Prof. Alwood—"Certainly."

Mr. Brooke—" Do I understand that you would not treat any nursery stock that is free from disease?"

Prof. Alwood-"That is my position."

Mr. Brooke-"But this bill does."

Prof. Alwood—"The Secretary of Agriculture is to decide." Mr. Brooke—"Well, we do not think the nurserymen on that committee at Washington convention acted wisely."

ANOTHER BILL PROPOSED.

Mr. Watrous who, as chairman of the legislative committee of the American Association presided at the conference, read the proposed bill drafted by the Eastern Nurserymen's Association. This bill was read at a meeting of that association in Rochester, N. Y., just before the St. Louis convention and it

commerce.

THE NATIONAL NURSERYMAN.

was endorsed unanimously. C. M. Hooker, who was a member of the Washington convention's legislative committee that drafted the objectionable bill was present at the meeting of the Eastern association at which that unanimous action was taken. The Eastern association's bill was directly opposite to the Washington bill in the main particulars. When this bill was read at the St. Louis conference, Professor Alwood said

the Eastern association at which that unanimous action was taken. The Eastern association's bill was directly opposite to the Washington bill in the main particulars. When this bill was read at the St. Louis conference, Professor Alwood said he did not think it was necessary to inspect all nursery stock regardless of suspicion regarding it, and he thought the inspection when performed in any case should be under the supervision of the Secretary of Agriculture or other equally good authority. These two points constituted his criticism of the Eastern association's proposed bill.

Finally Mr. Watrous said: "I think perhaps Professor Alwood has shown us that the Eastern association's bill is not

just what we want for our own interests and I am very sure we have shown him the injustice of his bill. Now had we all not better cross lots and agree upon a substitute?"

Prof. Alwood—"Well, I am ready to help you in any way I

Prof. Alwood—"Well, I am ready to help you in any way I can to secure a satisfactory bill. The Washington bill does not suit me either."

GETTING TOGETHER.

On the eve of the convention Mr. Rouse had a long talk with Professor Alwood, during which the latter promised to endorse a bill upon lines proposed by the nurserymen and to discard entirely the Washington convention bill to which the National Nurseryman first called attention and vigorously opposed.

On Wednesday, June 10th, Professor Alwood reviewed the history of the San Jose scale as has been repeatedly done in the NATIONAL NURSERYMAN and as is contained in the bulletins of the Department of Agriculture, the State Experiment Station bulletins, the works of Professors Smith and Comstock who discovered it in the East, and as described also in the horticultural publications repeatedly throughout the country. On Thursday morning he detailed the gas method of treatment of the scale which was described in the June issue of the NATIONAL NURSERYMAN.

On Wednesday afternoon Mr. Watrous, chairman of the legislative committee presented a report in which he said: "We have spent considerable time on this subject. Yesterday afternoon we had a conference at which we condemned the bill prepared at the Washington convention, and decided that the bill prepared by the Eastern Nurserymen's Association was not just what we wanted. In the evening we prepared a bill which meets the approval of the committee and has the endorsement of Professor Alwood."

THIS BILL ENDORSED.

N. H Albaugh then stated briefly the provisions of the bill, which in full is as follows:

AN ACT. To provide rules and regulations for the inspection of trees,

plants, shrubs, vines, grafts, cuttings and buds commonly known as nursery stock, imported into the United States. And for rules and regulations for the inspection of trees, plants, shrubs, vines, grafts, cuttings and buds commonly known as nursery stock, grown within the United States, which become subjects of interstate commerce.

Section 1. Be it enacted by the Senate and House of Representatives of the United States of America in Congress

United States from foreign countries, shall be subject to inspection in the hands of the owner, and before reshipment, sale or planting out, according to rules and regulations prescribed by the Secretary of Agriculture, and when so inspected and found apparently free from dangerously injurious insects or diseases the certificate of the officer making such examination and finding shall be issued to the owner or owners of such nursery stock. A copy of this certificate shall be attached to and accompany each carload, box, bale or package, and when so attached and accompanying shall operate to release all such nursery stock from further inspection, quarantine or restrictions in interstate commerce. Section 2. Whenever it shall appear to the Secretary of Agriculture that any foreign country shall have provided proper and competent inspection for nursery stock about to be imported into this country, he may by proclamation or otherwise accept such inspection and certification in lieu of the in-

Section 3. All trees, plants, shrubs, vines and bads commonly known as nursery stock grown within the United States, may become subjects of interstate commerce, under the rules and regulations as hereinafter provided. The Secretary of Agriculture shall cause to be inspected all trees, plants, shrubs, vines and buds known as nursery stock, which are subjects of interstate commerce and which are about to be transported from one state or territory or the District of Columbia. This examination shall be made prior to September 1st of each year in the manner provided for, and prescribed by the Secretary of Agriculture, and if such nursery stock is found to be apparently free from dangerously injurious insects or diseases, the certificate of the officer making such examination and finding.

shall be issued to the owner or owners of such nursery stock,

a copy of which certificate shall be attached to, and accom-

pany each carload, box, bale or package, and when so attached

and accompanying shall operate to release all such nursery

stock from further inspection, quarantine or restriction in

spection as provided for in Section 1 of this act. This accep-

tation by the Secretary of Agriculture shall operate to relieve

all such nursery stock when accompanied by a copy of the certificate of inspection from further restrictions in interstate

interstate commerce. Section 4. That it shall be unlawful for any person, persons, or corporation to deliver to any other person, persons or corporation or to the postal service of the United States, (except for scientific purposes or by permission of the Secretary of Agriculture) for transportation from one state or territory or the District of Columbia, to any other state or territory or the District of Columbia, any trees, plants, shrubs, vines or other nursery stock which have not been examined in accordance with the provision of Section 3 of this act, or which on said examination have been declared by the inspector to be dangerously infested with injurious insects or diseases. Any person, persons, firm or corporation who shall forge, counterfeit, or knowingly alter, deface or destroy any certificate or copy thereof as provided for in this act, and in the regulations of the Secretary of Agriculture, or shall in any way violate the provisions of this act shall be deemed guilty of a misdemeanor and on a conviction thereof, shall be punished, by a fine not to exceed \$500 nor less than \$200 or by imprisonment, not to exceed one year, or both at the discretion of the court.

Section 5. The rules and regulations herein provided for shall be promulgated on or before the 1st day of July of each year.

Section 6. That the sum of \$100,000 or so much thereof as may be necessary, is hereby appropriated out of any moneys in the treasury of the United States, not otherwise appropriated to carry into effect the provisions of this act.

Section 7. This act shall take effect on and after the 30th day of June, 1898.

Upon hearing the bill read J. VanLindley, Pomona, N. C., who was a member of the Washington convention legislative committee said: "I am perfectly satisfied with that bill. It will cover all the points. I will work for it."

Charles E. Greening, Monroe, Mich.—"I think we should provide for the inspection of orchards."

Mr. Albaugh—"I would like to ask the gentleman by what authority is the United States government going into a gentleman's orchard and inspect the fruit. That is a matter for the state to handle."

C. J. Maloy, Rochester, N. Y.—" Does this bill cover stock taken from the woods?"

Mr. Albaugh—"It does not matter where the stock comes from"

The report of the legislative committee was adopted and the bill as presented was unanimously adopted. The bill bore the signatures of Messrs. Watrous, Albaugh and Rouse of the legislative committee and the endorsement of Professor Alwood over his signature. Professor Alwood said he would send circulars to the members of the Washington convention legislative committee asking it to endorse the nurserymen's bill, and that if necessary he would fight for this bill as against any other.

Upon motion of Mr. Jewett, a vote of thanks was extended to the members of the legislative committee of the Association for their faithful work on the subject of insect legislation.

ILLINOIS BILL OPPOSED.

The following resolution was unanimously adopted:

"Resolved, By the nurserymen of the United States in convention assembled, that we think the bill as passed by the legislature of the state of Illinois and now in the hands of its governor for his signature, is oppressive in its nature and would work great hardship to both the people of the state of Illinois and the nurserymen of the whole country.

"Resolved, That we earnestly request that his excellency, the governor of the great state of Illinois, veto said bill."

Theodore S. Hubbard, Fredonia, N. Y., suggested the following to be added to Section 3 of the proposed federal insect bill:

"And such stock, so certified, received by any person, may be reshipped by him on a certificate issued according to within provisions for his own stock."

Mr. Hubbard also suggested that as to the penalty for destroying a certificate the words "accompanying stock" should follow the words "knowingly alter, deface or destroy any certificate or copy thereof;" inasmuch as the certificates would be printed upon the tags in many cases.

A VISIT TO BRIDGEPORT, IND.

A party of eleven from the East traveled together to the St. Louis convention of the American Association. One of the party describes the visit that was made to Bridgeport, Ind., as follows:

"We started from Rochester in a heavy rain storm on Monday, June 7th. The following morning dawned bright and clear and as we were comfortably quartered in a luxurious and easy-riding car of the Big Four railroad, which passed through a country unequalled for variety and wealth of scenery, the morning promised to be a most enjoyable one, and a most excellent breakfast, to which we did ample justice, awaited us in the dining car where the service and appointments were all that the most fastidious could desire. At 11 o'clock we reached Indianapolis where a number of nurserymen, who had been kindly invited by Messrs. Albertson and Hobbs to spend the day at Indianapolis, were, through the courtesy of the railroad officials, granted stop-over privileges on their certificate tickets.

The party consisted of J. Van Lindley, E. H. Bissell, F. G. Salkeld, W. G. Storrs, Edwin Davis, R. A. Wickersham, J. H. Dayton, J. J. Barnes, A. L. Wood, M. B. Fox of the Rochester Lithograph Co., C. L. Yates of The National Nurseryman, who were cordially welcomed on their arrival by Mr. Albertson and conducted, via the Vandalia railroad to Bridgeport; thence by carriages a short distance to the home of Albertson & Hobbs where they received a hearty welcome and were royally entertained.

"After dinner the gentlemen were shown a large field of fine Bubach and Grandee strawberries, from which were picked berries measuring from 5 to 7 inches in circumference. After the visitors had eaten strawberries to their heart's content, Messrs. Albertson and Hobbs took them through their nursery. It was delightful to drive through such well kept grounds; every block of trees presenting a clean appearance and the most healthy and thrifty growth imaginable. The drive was through 200 acres closely planted in young trees and plants, and a field of 100 acres, mostly planted in apple, peach, plum, pear and cherry, over half of which planting was made the past spring and which is now in a remarkably fine and thrifty condition. Some very fine specimens of the Catalpa Bungei were passed; they also grow largely the Carolina poplar for their local trade, as this seems to be the favorite tree in the streets of Indianapolis.

"The business was first established at Canton, Washington Co., Ind., by the father of Mr. Albertson some time in the 40's, over 50 years ago; the founder removing from there to Bridgeport in 1875, making that place a small branch of the main business. The present firm commenced business there about 20 years ago. The place was then in a comparatively unsettled state, and Messrs. Albertson and Hobbs deserve great credit, as, by their own industry, energy and good business ability they have built up a large business. They have the most extensive nursery in the state.

"The office of the firm is situated at the entrance to the grounds and is surrounded by a number of acres of ornamental and shade trees and plants and evergreens, standard pears; pear, plum and cherry buds, etc. The building itself is an ornament to the place. The rooms are large and contain the latest improvements for office work.

"A short distance from the office is a fine, large cellar for storing trees for early spring shipment, as the firm does both a wholesale and retail trade. A very noticeable feature in driving through the nursery was the freedom from weeds; also the absence of insects from the trees, which is due to their fine and original system of spraying, which was thought by Mr. Storrs to be the most complete he had seen.

"Later in the day the firm took us a short trip to the suburbs of Indianapolis where we were driven through a number of small fruit plantations, chief among which were those of Messrs. George Blue and J. B. Edwards. In this drive we were shown plantations of small fruits, between 200 and 300 acres, over 50 being Pomona currants from one to twenty years of age. The crop this year was not a full one, yet as compared with other varieties, of which some 6 or 8 of old and new standard sorts were growing beside them, the crop was more than double that of any other, while many of the old sorts were an entire failure.

"Messrs. Albertson and Hobbs were the introducers of the Pomona and have sold hundreds of thousands of plants in the last three years. We also had the pleasure of seeing one of the finest quince orchards in the country, the variety grown being the Missouri Mammoth. From these trees the proprietor, Mr. Mustard, has sold over \$500 worth of fruit in the past two years. There has not been an entire failure in fruit in ten years. Preserved specimens weighing from 18 to 24 ounces were shown us and were reported as by no means uncommon.

"The drive through this finely cultivated place showed great care and painstaking on the part of the owners and was a genuine treat; we returned to the city feeling well paid for our trip.

"By the courtesy of the Big Four a special sleeper was provided for the party and at 11:20 o'clock that night, accompanied by Messrs. Albertson and Hobbs, we started on our way to St. Louis,"

Each of the visitors expressed the warmest thanks to Messrs. Albertson and Hobbs for the treat afforded. It was one of the pleasantest features of convention week.

NURSERY BUSINESS IN CALIFORNIA.

The nursery business in California is in a deplorable condition, says Leonard Coates in California Fruit Grower. Outside of the depression financially which has existed for several years in all lines of business, this state of things has been brought about largely by greed and jealousy. On two occasions within the last twenty years a Pacific Coast Nurserymen's Association has been formed, but never lived long enough to accomplish anything. Nurserymen's associations are established and successful realities in almost every state in the Union, and nowhere is such an organization more needed than in California—alike for the good of the public and the trade. Our nurserymen are all afraid of each other, and will not even consent to the interchange of opinions and relation of experiences on vital matters pertaining to the craft.

WORTH MANY TIMES THE PRICE.

BAY VIEW NURSERIES, JAMES McColgan & Co., Atlantic High-LANDS, N. J.—" We enclose \$1 for the National Nurseryman. We think your journal is worth many times the price."

Among Growers and Dealers.

Honey Locust hedge is a specialty with A. E. Windsor, Havana, Ill.

Raffia is sold by the pound by Thomas Meehan & Sons, Germantown, Pa.

M. J. Henry, Vancouver, B. C., says that spring trade in his vicinity was nearly double that of 1896.

The Dayton Fruit Tree Label Company's exhibit at the convention attracted much attention.

· Frederick E. Young, Rochester, N. Y., made an assignment last month to Wallace S. Wing, of Henrietta, N. Y.

Ex-President Silas Wilson, Atlantic, Ia., called on Western New York nurserymen toward the close of last month.

Herman Berkhan passed a week among Western New York nurserymen on his return from the St. Louis convention.

- F. G. Withoft, Tadmor, O., has been spending some time in Colorado and Arizona, combining business and pleasure.
- E. H. Pratt has severed his connection with T. S. Hubbard, of Fredonia. Mr. Hubbard will manage his business himself.
- C. H. Eldering & Sons, Heemstede, Holland, make a special offer on Lily of the Valley pips and Roman Dutch Hyacinths.
- E. Y. Teas, Irvington, Ind., makes specialties of Pomona currant, Loudon raspberries, Munger raspberry, Ohmer and Eldorado blackberries.
- S. D. Wilard, Geneva, N. Y, says French Damson will be the popular Damson plum when its merits become known and nurserymen get a stock of it.

George Arnaudeau, representing the Andre Leroy Nurseries, of which Andre L. Causse, New York city, is the American agent, called on Rochester nurserymen after the convention.

A gold medal and a prize of honor valued at \$250 have been awarded to Anthony Waterer of Knap Hill Nurseries, England, for an exhibition of rhododendrons at the Hamburg exhibition.

M. E. Callahan, Salt Lake City, Utah: "Our spring trade was about the same as that of 1896. We do not look for any increase at present. A heavy frost on May 10th cut peach, apricot, plum and apple on low land."

Levavasseur & Sons, Ussy and Orleans, France, claim to be largest growers and exporters of all kinds of nursery stocks to the United States. Herman Berkhan, 39 Cortland St., New York is the sole agent for the United States and Canada.

After attending the convention at St. Louis, Orlando Harrison, of Harrison's Nurseries, Berlin, Md., made a trip East to see fruiting all the latest introduced strawberries, and to look after sales of their large stock of peach trees.

Grape stock growers hope to make up in the fall for losses sustained last season and this season. "It does seem," remarked one at St. Louis, "as if when most of the grape stock is grown by six or eight firms, there ought to be a profit in that branch of the nursery business."

A field meeting of the Connecticut Pomological Society was held at J. H. Hale's fruit farm, South Glastonbury, on June 15th. About 275 visitors were present, nearly 100 of whom were from New York, Pennsylvania, New Jersey, Delaware, Maryland and Washington, D. C.

WHOLESALE LISTS.

SHOULD THEY BE SENT TO PLANTERS?—C. L. WATROUS' PAPER BEFORE THE AMERICAN ASSOCIATION—A HEARTY ENDORSEMENT.

C. L. Watrous presented the following paper before the American Association at St. Louis last month:

"For two thousand years the man who killed his faithful friend and servant, the goose which laid for him a golden egg every day, has been held up to the derision and contempt of mankind. Nobody has pitied the despair his greed brought upon him. It has seemed to me for years that every wholesale grower, tempted to send his trade and surplus lists to planters ought to buy a copy of the old book and commit to memory the fable of the avaricious man and his goose. When the wholesaler sends his prices to planters in hopes of selling more stock he kills the business of the retailer, who by himself or his agents, through heat and cold and hunger and discomfort visits the scattered homesteads and urges sales to planters.

"We usually have a round or two at cursing the tree peddler at our annual gatherings, and we feel very virtuous about it, of course. The tree peddlar is a sinner, beyond doubt—a poor miserable sinner—but without his labors half the nurserymen would have to quit business. This, you may say, does not seriously affect the public welfare. But something else would happen which would be of public concern and deep concern, too. Three-fourths or nine-tenths of the fruit and flower planting which is now done, and ought to be done, would cease to be done. Men will not buy unless you go to them. Every business has fallen into that habit. It would be a public calamity of serious proportions if you could starve out of business the host of small nurserymen and dealers who grow some stock, push sales to planters, and buy at wholesale, whatever they lack.

"One wholesale list will spoil the salesman's work in a neighborhood. Probably only one man will buy, and he is liable to delay action till the season is past. If he buys the wholesaler has gained one sale, but he has done what he could to kill the goose which has brought him golden eggs, and would have continued to do so if the knife had been kept out of its vitals.

"The wholesale trade cannot prosper unless the retailer is allowed to make a living. The retailer can make sales among his friends and neighbors which the distant wholesaler can not, and the community is vastly benefited in the long run by their missionary efforts in procuring the sale and planting of wholesome fruits and stately trees and beautiful flowers. We shall never have too much of this work, but may easily have too little of it; and, in spite of all his sins, the tree missionery has done a mighty work in turning the wilderness of our vast country into fruitful and smiling homes, fit for the health, the comfort, and the pleasure of the most luxurious people on earth. May his tribe increase!

"It takes a vast expenditure of energy and personal magnetism to persuade men to pay money for trees and plants which will bring no profit for several years, but the country needs the planting. A community without plenty of fruit and flowers is a community without homes fit to rear the best

type of men and women. Homes adorned and enriched with abundant fruits and trees and flowers are the hope and the best heritage of the nation and the good the tree missionary does in making them what they are will live and bless the land long after his sins are forgotten."

At the conclusion of Mr. Watrous' paper, A. L. Brooke said: "Prices of late are at such a point that something ought to be done by this association. The sending of wholesale price lists broadcast is one of the worst things that could be done. I know how it is in the West. There is scarcely a planter in Kansas who has not a price list from New York and Illinois. The same list is sent to us.

"This practice seems to me outrageous. It is nothing less than business suicide. As long as nurserymen will do this there is no protection for the trade.

"I heartily endorse all that is said in Mr. Watrous' paper. We ought to drive it home. Each nurseryman here should upon his return try to get his price lists into the hands of proper persons. Why, I see right here in this hotel price lists which should be confined to the trade; yet they are scattered about here broadcast. A farmer comes in here and secures a list, if he has not one already, and he gets his nursery stock as cheaply as do I."

Mr. Webster, Ill.—"I endorse all that Mr. Brooke and Mr. Watrous have said. There are men in my section who never purchased at wholesale in their lives; yet they have the wholesale lists and we are asked to compete.

"Gentlemen, the way the nursery business is being conducted in this country is a disgrace to the fraternity."

A. C. Griesa—"If we continue as at present, we shall have to sell as we buy, at wholesale."

E. H. Bissell—"In other lines of business those in the wholesale department generally display a sign 'Wholesale Only.' Why should not firms who persist in sending wholesale rates to planters be reported to this association?"

Mr. Webster—"One remedy, it may be, lies in the power of the protective associations. Let them reconstruct their lists and cross off many of the names."

Mr. Brooke—"I move that this convention by a rising vote heartily endorse the sentiments contained in Mr. Watrous' paper."

The motion was adopted, all present rising to their feet.

CALIFORNIA COMMENT.

Leonard Coates, the well-known nurseryman of Napa, Cal., writes as follows to the California Fruit Grower:

"The Nurserymen's National Convention is now (June 10th) assembled at St. Louis. The last census gives the capital invested in the nursery business in the United States as approximating \$54,425,669, and the total number of nurseries at over 4,500. It is a pity that California is not represented at this convention. Far better would it be for us to be more in touch with the craft east of the Rockies rather than continue a sort of pseudo-friendship which frequently but veils real enmity. Because our environments differ is no reason why we have not much in common. Orchard fertilizers, cross pollination, and many other vital questions have been much longer combated there than here, and the nurseryman, as everywhere, the pioneer and instructor in horticulture, should be familiar with all these things."

PIECE ROOTS AGAIN.

THE OLD CONTROVERSY OCCUPIED BUT BRIEF ATTENTION AT THE ST. LOUIS CONVENTION— SUGGESTION FROM E. J. HOLMAN.

The whole and piece root question occupied the attention of the American Association for a brief time at the St. Louis convention last month. It was precipitated by the following paper read by E. J. Holman of Leavenworth, Kan:

It would ill become me to undertake to teach this body in the art of grafting and that is not our purpose. We believe nurserymen are and should be educators and we all know that the art of grafting, though it be the art that doth mend nature, is to the practical nurseryman a very simple act, but to the world at large it is a mystery supposedly dangerous to attempt and one of the impossibilities except to the initiated. With this the normal situation it is one of the easy things to add mystery to mystery by skillfully playing on the mind, or if you please, want of mind of the over credulous every day man.

We all know what piece root grafting is, but how many of this body know what whole root grafting is, save by the way of experimentation to confirm their skepticism concerning any advantage of this method.

We do not believe arguments are needed with this body to prove that the people need information on this subject from so high a source as the American Association of Nurseryman. But a few months ago a party wrote to one of our leading horticultural journals asking which made the best tree, one from a piece or whole root. Surprisingly the answer was: "There is not much information on this subject."

Will not the association furnish the information and enable the horticultural press to inform the people.

I offer the following resolution:

Resolved, by the American Association of Nurserymen, that the piece root method of propagating apple trees is best for the following reasons: First, it secures the tree on its own roots sooner, thereby making a more even growth in nursery and orchard. Second, the tendency of the seedling is back to the wild tree and lacking in the thrift of our improved varieties. Therefore, the more there is of it than sufficient to well start the scion the more it impedes thrift. Third, the use of piece root trees by our large orchardists, and tests by experiment stations and individuals, all confirm the advantage of piece root propagation.

As soon as Mr. Holman had read his resolution N. H. Albaugh said: "This association has discussed some weighty questions which have troubled man from time immemorial, but such difficult problems as 'Who killed Cock Robin?' and 'Who struck Billy Patterson?' we have not been able to solve. If this body is to lift the veil now for the first time revealing the answer to the piece and whole root question, then it will be one of the most important rulings we can ever hope to make.

"This question of whole root and piece root is not new. I was foolish enough fifteen years ago to write a paper on the subject. We in Ohio have had some experience as nurserymen. I am not saying what they know out in 'Kansaw 'where they produce everything from a peach-root to a populist. But

in Ohio we have discarded the old plan of cutting an apple root in three or four pieces and grafting upon each piece. Mr. President, I move that this resolution be laid upon the table."

C. N. Dennis, Hamilton, Ill.—"We used the whole root, cutting it shorter and shorter, and now we use the piece root. We get better roots on the piece root."

Mr. Holman—"I would like to ask Mr. Albaugh what length of whole root he uses."

Mr. Albaugh—"We do not use the long tap root. We select roots shorter and well-branced and we trim them down. We look for many branch roots and as little tap root as possible."

Mr. Holman—"But the gentleman has not answered my question. How long are the roots?"

Theodore S. Hubbard, Fredonia, N. Y.—" Perhaps you don't want to tell, Mr. Albaugh."

A. L. Brooke, North Topeka—"We know who struck Billy Patterson and we also know a whole lot of things that they don't seem to find out in Ohio. Now, I'm from the Buckeye state, but I live in Kansas, lively Kansas. And I want to say that Kansas grit discloses many things."

Mr. Albaugh—" I bought a farm in Kansas once. By hard work I succeeded in getting crops above the surface, but then the wind began to blow, and it blew and blew and blew until I had nothing left. I got my eyes and clothes full of Kansas grit and I want to say I was glad to get back into Ohio."

The resolution was tabled.

SEED TRADE ASSOCIATION.

The fifteenth annual meeting of the American Seed Trade Association was held at the Ebbitt House, Washington, June 8, 9 and 10.

The following officers were elected: President, Jerome B. Rice, of Cambridge, N. Y.; first vice-president, E. B. Clark, Milford, Conn.; second vice-president, J. Bolgiano, Baltimore, Md.; secretary and treasurer, S. F. Willard, of Comstock, Ferre & Co., Wethersfield, Conn.; assistant secretary, C. E. Kendall, Cleveland, O.; executive committee, T. W. Wood, Richmond, Va.; S. F. Leonard, Chicago, Ill.; A. L. Don, New York; Albert McCullough, Cincinnati, and W. Atlee Burpee, Philadelphia

TO INSPECT ONTARIO ORCHARDS.

At a large gathering at Hamilton, Ont., June 21, of fruit growers of Western Ontario, held for the purpose of discussing the San Jose scale, Professor Craig and Professor Panton laid before the meeting the results of their inspection of the Niagara orchards.

A unanimous resolution was passed calling upon the government to appoint a regular inspector of Ontario orchards and the inspection of all nursery stock coming into the country from the United States. As the remedy for the disease is the uprooting and the burning of infected trees, the meeting considered that the government should recompense the farmer losing his stock.

M. J. HENRY, VANCOUVER, B. C.—"I enclose renewal for your paper and think that any person that tries to run a nursery without it, is behind the times."

OLDEN FRUIT FARM SOLD.

L. T. Moore, a capitalist of Kansas City, has purchased a controlling interest in the Olden Fruit farm at Olden, Mo., the largest in the world, and will manage it in person. The consideration is not known. The farm is valued at \$250,000 to \$300,000. It is situated on the Memphis railroad in the Ozark mountains, and consists of 2,280 acres, on which are over 100,000 peach trees, 60,000 apple trees, 2,000 pear trees, and forty acres of blackberries, besides a large variety of other fruits. On the property are a large warehouse, a cannery with a capacity of 10,000 cans per day, a cold storage building holding 15,000 barrels of apples, a hotel, a sawmill, and a number of houses for the use of the managers and tenants. The only other shareholder of the Olden company now is J. C. Evans of Clay county, Missouri.

PROTECTIVE ASSOCIATIONS.

The Nurserymen's Mutual Protective Association elected the following officers: President, Hon. N. H. Albaugh, Tadmor, O.; vice-president, W. C. Barry, Rochester, N. Y.; secretary and treasurer, George C. Seager, Rochester, N. Y.; executive committee, E. Albertson, Bridgeport, Ind.; Irving Rouse, Rochester, N. Y.; D. S. Lake, Shenandoah, Ia.

The American Nurserymen's Protective Association elected the following officers: President, C. L. Watrous, DesMoines, Ia.; vice-president, G. E. Meissner, Bushberg, Mo.; secretary, Thomas B. Meehan, Germantown, Pa.; treasurer, N. A. Whitney, Franklin Grove, Ill.; executive committee, C. L. Watrous, W. J. Peters, C. H. Perkins.

The Messrs. Berckmans, Augusta, Ga., made an exhibit of conifers at the Nashville exposition which attracts much attention. The Georgia railroad asked the Messrs. Berckmans to provide improvement for its exhibit and the grounds were accordingly laid out for the railroad. The Messrs. Berckmans did not expect the prominent announcement made upon placards that they furnished the shrubs. It was late in the season when they were notified to undertake the work, and only such shrubs and trees as could be moved were used.

The nursery business carried on by the late John Saul will not be taken up by his sons. William Saul, the elder, is in poor health; the others follow different callings.

WORTH \$10 PER YEAR.

JOS. M. NEIL, LAPORTE, IND.—"Find enclosed \$1.00 in payment of subscription. Can't get along without it. It is worth \$10 a year to me. Every tree man should be a subscriber."

WANTED!

A position in Nursery office; have had several years experience in all branches; can engage from July 1st. Would be willing to invest and take part interest, or work on salary. Address,

"C" Care National Nurseryman.

SPECIAL OFFER We offer from our Hamburg Nursery Two Million Lily of the Valley Pips, German variety, extra strong quality. Two Million Roman Dutch Hyacinths. The bulbs of these very cheap small hyacinths are about the same size as the French ones, but the flowers are stronger and the bells larger. We grow large quantities of those sorts which we know are the best for forcing.

Terms: Cash from unknown parties. Write us for our special prices.

C. H. ELDERING & SONS,

BULB GROWERS AND WHOLESALE EXPORTERS,
HEEMSTEDE Nr. HAARLEM.

P. SEBIRE & SONS, NURSERYMEN, Ussy, Calvados, France.

A general assortment of Fruit Tree Stooks, such as Apple, Pear, Myrobolan Plum, Mahaleb and Mazzard Cherry, Angers Quince, small Evergreens, Forest Trees, Ornamental Shrubs. Roses, Etc. The largest stook in the country. Prices very low. Packing secured. Send for quotations before placing your orders low. Packing secured. Send for quotations before placing your orders elsewhere. Catalogue free. Aspaits for U. S. America and Canada.

C. C. ABEL & CO., P. O. Box 920, NEW YORK.

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ALL OLD AND NEW VARIETIES.

Immense Stock,
Warranted True.
QUALITY UNSURPASSED.
Prices lower than ever before. Send

STRAWBERRIES,
CURRANTS, GOOSEBERRIES,
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SMALL FRUIT PLANTS.

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USSY (Calvados) AND ORLEANS, FRANCE

Largest Growers and
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Send your List of Wants for Special Prices to

HERMAN BERKHAN, Sole Agent, - 39 and 41 Cortland Street, NEW YORK.

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RAFFIA

Acknowledged superior to all other materials used for similar purposes. Sold by the pound. If you never saw it, get a sample and quotations.

THOMAS MEEHAN & SONS, Germantown, Pa.

THE POMONA CURRANT.



The BEST SPECI-ALTY for the AGENTS for 1897 and

WHY? Because it is the best MONEY MAKER for the people to plant.

It is REST in OHALITY.

Its returns come in the *quickest* and surest.

These being the qualities the planter is after, be

Introduced and for sale by us. Seud for circulars, plates, terms, &c.

But also a COMPLETE GEN-ERAL ASSORTMENT of TREES, PLANTS, ORNAMENTALS, VINES. &c., in CAR-LOAD LOTS especially APPLE, PEAR, CHER-RY, PLUM; with good assortment of PEACH and other fruit trees

Also CAROLINA POPLAR, SOFT MAPLE, ELM, &c. APPLE STOCKS.

IMPORTED FRENCH PEARS

MAHALEB, MYROBOLAN and QUINCE stocks.

SEE TRADE LIST. ORDER SPADES EARLY.

A limited quantity of Natural PEACH PITS to offer.

Address. ALBERTSON & HOBBS, BRIDGEPORT, MARION CO., INDIANA.

For the Fall trade we offer

Apple Trees

2 years-gloved pruned-5; to 7 feet-An extra ch. ice lot of trees.

Peach Trees

All leading sorts.

Apple Seedlings

High grades-good packing-clean stocks.

We will make special prices on above stock for orders placed early.

F.W. WATSON & CO.

Box 58.

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Fruitland Nurseries,

P. J. BERCKMANS, Prop.,

AUGUSTA. GA.

Over One Acre under glass.

300 Acres in Nursery Stock.

Our Trees and Plants

Have been fully tested in every section of the United States during the past 40 years. The stock now growing is up to the usual past high grade, all of thrifty growth, no old rubbish, and free from scale or disease.

Fruit Department.

Apples, Cherries, Figs, Pears, (an extra fine lot of 100,000 standard 2 and 3 years, largely of Kieffer), Paper Shell Pecaps, Plums (Japan) on Marianna, English Walnuts, Grape Vines, etc. Peach Trees in car load lots.

EVERBEARING PEACH.
A valuable novelty now offered for the first time.

Ornamental Department.

150,000 Amoor Privet—Unsurpassed as an evergreen hedge plant.
 50,000 Citrus Irifoliata—Japan Hardy Lemon; best defensive hedge plant, stands 15 degrees below zero.
 150,000 Roses—Field grown, including 30,000 Marchael Niel budded upon Manetti, 3 to 5 feet.
 Two acres in Canna.

15,000 Camellias and Azaleas (home grown).
Broad leaved Evergreens, etc., etc., Biota Aurea Nana, Cedrus Deodora, Retinosporas and other rare conferme.
Manetti Rose Stocks, home grown.

Greenbouse Department.

100,000 Palms—(An especially fine lot of Latanias, Phœnix, Pandanus and Cocos Weddelliana.)

Ficus, Decorative Plants, Crotons, Bedding Plants, 10,000 Camphor Trees, Sub-Tropical fruits, etc.

Trade List ready in June.

Millions of Trees And Plants

are offered for sale by the

Snowhill Murseries

FOR FALL OF 1897 AND SPRING 1898.

600,000 Peach Trees-One year old from bud (embracing over 70 varieties.)

Strawberry Plants-From 30 acres set this spring (means millions of plants.)

25,000 Japan Plums-One year old from bud,

20.000 Grape Vines-One and two years old.

100,000 Asparagus-Conover's, Barr's and Palmetto, 2-year old.

20,000 Apple Trees-One and two years old.

2,000 Norway Maples.

4,000 Carolina Poplars.

Peach and Plum Buds ready June 20th.

Having 30 acres in Peach Seedlings from Tennesce seed, planted fall 1896, will contract to grow June Budded Peach Trees at special low price. Correspondence solicited. Special inducements offered to purchasers in car load lots.

Address

W. M. PETERS SONS.

WESLEY, Worcester Co., MD. When writing to Advertisers mention The National Nurseryman.



J.Horace McFarland Company,

HARRISBURG, PA.

PRINTERS,

Expert Catalogue Makers,

Engravers, Photographers,

For Nurserymen.

We photograph free any new new fruit delivered to us, prepaid, in good condition.

This is not an advertisement of Clyde strawberry. It only tells how Clyde was sold. See below. : : : :



HIS tells Nurserymen a true story of an effort and a result.

Last fall my good friend Hale, the Connecticut nurseryman and Georgia peach king, found that his two big fields of the new Clyde strawberry (a fine bright red sort, held under restrictions in 1896) had made plants most astonishingly. Indeed, when I went to South Glastonbury in September these Clyde fields formed veritable smooth lawns, the perfect foliage, of a vivid green, showing at a distance just as well-grown grass does. The photograph above, which I made then (except the single berry) shows how the ground was fully covered.

The question was What to do with shouts half Last fall my good friend Hale, the

The question was, What to do with about a half-million plants of a new variety, good but unknown. We talked it over, made careful plans, and mutually carried them out—Hale with his good account of the Clyde, written in his own inimitable style; on my side the camera, the artist's brush, and the long experience in catalogue display and printing.

There were used three pages all told of Hale's catalogue, for telling the Clyde story and showing its pictures. No other advertising was done.

Along in April of this year, 1897, I went up to Hale's again, and found those big fields all sold out, save a few plants allowed to stand for fruiting. The catalogue sales had taken the whole half-million, and orders had been turned down for over a hundred thousand more Clyde plants!

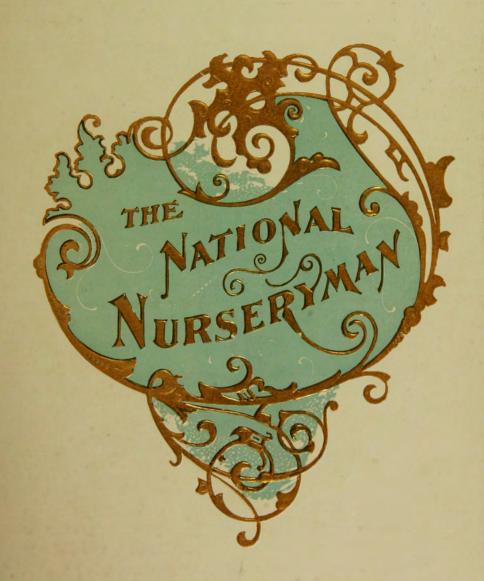
Here were the conditions: A big stock of a good thing, described by an honest man, skillfully illustrated and catalogued. The result—a clearing sale and a good profit.

I am printing the pictures here to say that the same skill in illustrating and catalogue making is at the service of any honest nurseryman who trusts me as fully as Hale does, and has a good enough stock to interest me—I can interest the public.

J. HORACE McFARLAND.

N. B.—'Tis worth remarking that this good piece of work wasn't done in a hurry, and that early work gets best attention and lowest prices. NOW is the time to write me.





August, 1897.

A large Stock and good assortment of



STANDARD APPLES,

STANDARD and DWARF PEARS.

PLUMS, CHERRIES,

PEACHES, SHRUBS,

BLACKBERRIES, "from root cuttings."

RASPBERRIES, CURRANTS,

600SEBERRIES, ROSES, and

APPLE SEEDLINGS, 2-years.

Our Stock is all young, well grown, and cannot be excelled.

APPLES AND PEARS IN CAR LOAD LOTS.

All we ask is your wants list, our prices will do the rest.

PEIRSON BROS.,

WATERLOO, N.Y.

A. WILLIS,

PROPRIETOR

Willis Murseries, Ottawa, Kans.

Offers a general assortment of choice nursery stock.

Apple, Pear,

Std. and Dwf. Cherries,

Plums, Apricots, Peaches,

Houghton and Downing Gooseberries,

Grapes, Raspberries,

Blackberries and Strawberries.

Choice Stock.

Best Assortment. Low Prices. Best of Packing.

Your correspondence and orders solicited.

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A. WILLIS,
Proprietor,

If you are in Want of

Standard and Dwarf Pear Trees

2-years, fiine; any size from 1/2 to 1 inch. Extra choice trees.

Cherry Trees

2-years. Leading Sweht and Sour varieties in large quantity. Extra medium and light grade.

Plum Trees

2-years, on plum. European and Japan sorts. Very smooth, handsome and thrifty. All grades.

Peach Trees

1-year. Strong. Leading and new kinds. 4 to 6, and 3 to 4 ft. grades.

Quinces

CHAMPION and ORANGE. 2-years. Strong.

Currants and Gooseberries

2-years. Strong and true to name.

Write us for the very LOWEST PRICES ever known.

Orders solicited for any quantity from 100 to 100,000 trees.

Car load lots a specialty. *

H.E. Hooker Company, Rochester, N. Y.

Painesville Nurseries.



NE of the most complete assortments in the world, including FRUIT and ORNAMEN-TAL TREES, GRAPE VINES, SMALL FRUITS, SHRUBS, ROSES, HARDY PLANTS, CLIMBING VINES, Bulbs and Greenhouse Plants, in all the leading new and old varieties, of all grades and sizes.

> Immense stock in storage cellars ready for immediate shipment.

Extra fine stock of Standard and Dwarf Pears, Plum, Peach, Cherries and Mulberries.

Best lot two-year (4 to 5 feet) Quince on the market.

NUT TREES-Large assortment.

Downing, Houghton and English Gooseberriesselected.

Strong, splendidly rooted Blackberries, from root cuttings.

Moss, Hybrid Perpetual, and Climbing Roses-strong two-year, clean, handsome stock.

ORNAMENTALS-all classes.

Get our prices before placing your orders, large or small. Special inducements for early orders.



Catalogues and Price Lists Free.

1,200 ACRES. 32 GREENHOUSES.

THE STORRS & HARRISON CO.

PAINESVILLE, OHIO.

FOR FALL 1897.

Gooseberries

and

Currants.

Leading Varieties.

Extra Fine Plants.

It will be to your advantage to write to us for prices before purchasing elsewhere.

Ellwanger & Barry, Mount Hope Nurseries,

ROCHESTER, N. Y.

200,000 Peach Trees, 2,000,000 Strawberry Plants, 100,000 Blackberry, 500.000 Raspberries.

Eldorado, Maxwell and Lucretia Blackberries.

MILLER, LOUDON and COLUMBIAN . .

TRIUMPH, GREENSBORO and EMMET.

and a full assortment of

Raspberries. Wickson, Red June and Giant

Peaches AND OTHER FRUITS.

BRIDGEVILLE, DELAWARE

Peach and Plum Trees

FOR FALL DELIVERY 1897.

All desirable leading old and new varieties of Peaches here in fruiting orchards. Have the new Triumph, Greensboro and Sneed fruiting orchards. Have the new iritimph, threensboro and sneed fruiting. Buds can be supplied in season at low rates. Large stock of Plum trees, all on Plum roots, one and two year. Buds in season from either nurseries or orchard trees. Have all the leading Japanese varieties, Abundance, Burbank, Chabot Satsuma, Willard and others. Also in good supply the new Red June and Wickson. Have the usual supply of Asparagus Roots to offer. Two and three years all strength. old. strong.

ALEXANDER PULLEN,

Milford Nurseries.

MILFORD. DEL.

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Jackson & Perkins Co...

NEWARK, Wayne Co., NEW YORK.

Growers of CHOICE SPECIALTIES for NURSERYMEN and DEALERS. NOVELTIES.

Yellow Rambler Rose • • The only Hardy Yellow Climber.

LORD PENZANCE'S

Hybrid Sweet Briars • Very valuable and pleasing novelties.

Cumberland (TRADE) Raspberry

The largest black-cap known.

Free plates of these valuable novelties furnished to all reliable houses who will handle them. Handsome

descriptive circulars at less than cost.

Annies.

ROSES, new and old; a splendid stock, of strong field grown plants, on their own roots and budded.

CLEMATIS, largest stock in this country. Strong 2 yr. plants; Mme. Ed. Andre, the new red and all the best older sorts.

SHRUBS, splendid blocks of Hydrangea, P. G., and Japan Snewball as well as a good assortment of other standard kinds.

Ornamental Trees. Asparagus, Rhubarb, Gooseberries. Blackberries.

Currants Raspberries.

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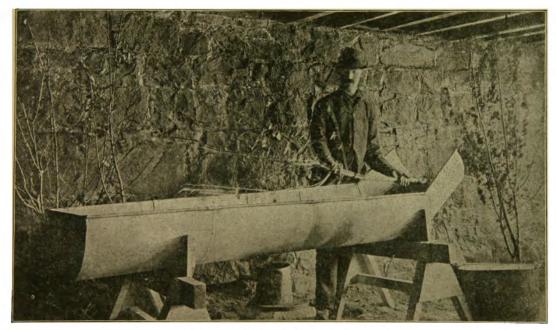
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VOL. V.

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No. 7.

THE NEW TARIFF.

TEXT OF NURSERY SCHEDULE—SENATOR VEST'S
SUSPICION OF A "CANADIAN CHERRY TREE"—
OPINION AS TO THE NEW RATES.

The nursery schedule of the new tariff passed through various changes during the discussion in house, senate and conference. As finally arranged, it reads as follows:

Stocks, cuttings or seedlings of Myrobolan plum, Mahaleb or Mazzard cherry, three years old or less, fifty cents per thousand plants and fifteen per centum ad valorem; stocks, cuttings or seedlings of pear, apple, quince and the Saint Julien plum, three years old or less, and evergreen seedlings, one dollar per thousand plants and fifteen per centum ad valorem; rose plants, budded, grafted, or grown on their own roots, two and one-half cents each; stocks, cuttings and seedlings of all fruit and ornamental trees, deciduous and evergreen, shrubs and vines, Manetti, Multiflora, and Briar rose, and all trees, shrubs plants and vines, commonly known as nursery or greenhouse stock, not specially provided for in this act, twenty-five per centum ad valorem.

Orchids, palms, dracaenas, crotons and azaleas, tulips, hyacinths, narcissi, jonquils, lilies of the valley, and all other bulbs, bulbous roots, or corms, which are cultivated for their flowers, and natural flowers of all kinds, preserved or fresh, suitable for decorative purposes, twenty-five per centum ad valorem.

SENATOR VEST'S SUSPICION.

During the discussion of the tariff in the senate, Mr. Vest of Missouri, said: "I would like to know why stocks of the Mahaleb or Mazzard cherry, three years old or less are put in with a specific tax upon them. I never heard of that cherry before, and I do not know what it is."

Mr. Allison of Iowa—"We are told that it is a very fine variety of cherry; that they are imported by the thousand, and that the duty ought to be a specific value, with a view—"

Mr. Vest-"To keep it out?"

Mr. Allison—"No; with a view to collect a real duty rather than a nominal duty. So we have provided for a compound duty here instead of a wholly ad valorem or wholly specific duty."

Mr. Vest—"I should like to ask whether this rate of duty was not suggested on this specific article by some nurseryman who did not want this Canadian cherry tree to come in here and compete with the cherry trees that he is selling. It never has appeared in any tariff bill before."

Mr. Allison—"I have no doubt it was suggested by nurserymen and others. We have suggestions coming all the time from people who are familiar with the subjects, and nurserymen are familiar with this subject."

Mr. White of California—"There is one word in this paragraph that is new to me. I am not very well versed in such matters. What is meant by 'Manetti' in this connection?"

Mr. Allison-" Manetti vine?"

Mr. White-" After vines, 'Manetti.' Then follows "Multi-flora"

Mr. Allison—"I suppose it is an Italian plant. I do not know what it is. I will say to my friend from Missouri I

think there is no trouble about this rate. The probability is that on some of these low-priced seedlings the ad valorem, if properly collected, will be more than 30 per cent. and on many of them it will be less. Therefore, we make a compound duty so as to equalize matters between the high-priced and the lower-priced article."

Mr. Platt, of Connecticut—"I think I can answer the inquiry of the senator from California. As I understand, it is the wild-rose stock, imported for the purpose of grafting old ones upon."

UNDER THE WILSON BILL.

Mr. Vest-"Under the Wilson bill as it came from the House there was as a duty upon 'plants, trees, shrubs and vines of all kinds commonly known as nursery stock, not specially provided for in this act,' 20 per cent ad valorem. I think it was upon my motion in 1894 that all nursery stock was stricken out of the dutiable list and put in the free list as paragraph 587. I have always, as a democrat and follower of Mr. Jefferson, boasted of his care for agriculture and his zeal in sending to this country European plants of every description that might help the people of the United States, both in articles of necessity and even of decoration. Here the whole system is reversed. A lot of nurserymen, to speak plainly, have gone before the controlling influence of the financial committee and shut out by enormous taxation superior trees, shrubs and flowers that come from Canada and from abroad. They have absolutely now, for the first time (and I have been somewhat familiar with tariff bills in the last twelve or eighteen years), singled out specifically competing products like this cherry, and they have had such a duty put upon it as they know will exclude it from competition with them; and the people of this country are to be made to use the cherries and plant the cherry trees that these gentlemen have on hand and in the market. If that is not protection run mad, I do not know what a financial and economic lunatic asylum is. They have absolutely selected a particular cherry tree and put an enormous duty upon it. If that is not class legislation, I should like to have some gentleman on the other side tell me what it is.

"I do not know what this cherry is. I have been under the impression, from observation and experience, that the finest cherries in the world are raised in the United States. I have never tasted any such cherries elsewhere It is said that they have cherries equal to them in France, but I have never seen them. The cherry of Washington and Oregon is the finest fruit, in my opinion, that was ever put in the mouth of mortal man. After eating them, which you can do in any quantity without any injury to your health, I have always thought if it had been a cherry in the Garden of Eden, instead of an apple, I would have gone very far toward excusing Adam for taking a bite. But it seems these gentlemen have discovered that there is a cherry in Canada which must be kept out of this country, and instead of having these improved fruit trees cultivated in the United States, in the Middle and Northern

States particularly, they are to be excluded by an enormous taxation, whereas they are now upon the free list."

Mr. Gear of Iowa—"The Mahaleb cherry is the stock. I do not recollect the cherry called the Mahaleb, but it is the stock on which cherries are grafted."

Mr. Vest—"I do not know, but I am as certain as I am that I am speaking in the Senate of the United States that some nurseryman had a job when he had that put in. It was not done by accident, and it was no rhetorical exhibition. There is money at the bottom of it. They never would have picked out this particular cherry tree and put this enormous duty on it except to answer their own purposes. The senator from Iowa very frankly tells us that he presumes it was done by some nurseryman."

THE POOR MAN'S FLOWER.

Senator Vest also strongly opposed the new clause relating to orchids, palms, etc. Said he: "The flower that adorns the humble home of the poor man, brightens the sick chamber, or goes upon the coffin of our dead is to be put up by this enormous duty to enable the nurserymen of the United States to rob and plunder, for that is the whole meaning of it in plain English. I hope the senate will vote the amendment down, but it is a faint hope."

Senator Allison: "Under the act of 1894, the existing law, the great necessity of life known as orchids, which are found in every poor man's home in great quantities, and lilies of the valley are already taxed 10 per cent. The senator from Missouri four years ago did not observe the absolute importance of these things to the poor man's home. If people go to the pains of importing flowers, expensive in their character for purposes of adornment and luxury, why should they not pay a little revenue?"

Senator Jones, of Arkansas: "Is it a crime that the people of the United States desire to have something that is beautiful for their children—something that will make their homes attractive—something that will add a charm to the cabin, and something which the children of the poor raise in this country."

OPINION OF THE TARIFF.

N. H. Albaugh, Tadmor, O., a member of the tariff committee of the American Association says: "The new tariff will certainly have a favorable effect on the nursery business of this country. With the cheap ocean freights and quick time, the cost of transporting all sorts of nursery stock from the western ports of Europe, was very little if any more than for transporting the same goods from New York to Ohio.

"The tariff on roses will tell much in favor of Eastern florists whose business was injured greatly by European importations. I think, however, that one dollar a thousand and fifteen per cent ad valorem, is a little high on evergreen seedlings, that often cost but fifty cents or less per thousand in Europe."

E. C. Peirson, proprietor of the Maple Grove Nurseries, Waterloo, N. Y., which have been established more than 30 years, has transferred the business to his sons, A. H. and F. J. Peirson, who have grown up in the business and thoroughly understand it. The firm name will hereafter be Peirson Brothers.

DROUGHT AT DANSVILLE.

Danville, July 15.—Nurserymen have suffered severely this season through the dry weather. Thousands of dollars worth of stock which gave great promise in early springtime, after a mild winter, has been destroyed by pests of various kinds which have defied the remedies prescribed by the most scientific experts of the state horticultural stations. The oldest nurserymen here say, with the drought and accompanying pests of aphis, lice and the destructive ravages of blighting mildew which seem to cover everything in nursery stock, the season promises to be most disastrous ever experienced in the history of the industry in the valley. With the heavy competition that has arisen in the South, and the partial failure of production here, accompanied by extremely low prices, the nursery industry this season promises to be one without remuneration to those engaged in it.

The woodchuck is the object of concerted attack on the part of the nurserymen of Dansville. This animal burrows in the broad fields of flat lands planted to nursery stock. While particularly fond of sweet clover, he prefers the tender shoots of the newly budded stock, and takes instinctive pleasure in bending down the young scions and nipping off the heads, and filling his plethoric maw with the best the season affords, regardless of expense. Of course every shoot thus tampered with is destroyed commercially, and whole rows of valuable stock are rendered worthless in a single night to satisfy the greedy appetite of this worthless poacher.

The ten cents bounty heretofore offered for dead woodchucks, while furnishing an active pursuit for a few vagabond hunters, has utterly failed in the grand desideratum sought to be accomplished—the extermination of the pest.

It is not an uncommon sight in Dansville to see two hunters, with a pole over their shoulders, carrying a string of twenty or twenty-five woodchucks, the result of half a day's sport.

The woodchuck as associated with the great nursery industry of Dansville, has become a serious subject, and united steps, as stated in the outset, have been taken for its eradication. Now the nurserymen have resolved to resort to the new formula for the extermination of the ground hog, as recommended by the highest authority in horticultural circles, namely: Salt and Paris green. The voracious woodchuck hankers after salt, and one part of the corrosive poison to ten parts of the sodium, is an inviting sediment, which he relishes with great gusto, and sacrifices his life to his greedy appetite. It is said the passing of the woodchuck may be safely announced as near at hand.

The fifth edition of the nurserymen's stock book revised to date is offered by Scrantom, Wetmore & Co., Rochester, N. Y.

John Charlton offers as usual a fine lot of clematis, paeonies and other ornamental stock and small fruits; also the Golden Glow flower.

Winfried and Joseph Rolker, doing business under the style of August Rolker & Sons, wholesale dealers and importers of bulbs, flowering plants and florist supplies at 136 and 138 West Twenty-fourth street, New York City, made an assignment July 9 to Francis Lawton, a lawyer, of 170 Broadway, without preference. The business was established in 1835 by their father, August Rolker, who died in 1877. The liabilities are \$17,000; nominal assets, \$18,000; actual assets, \$10,000.

GEORGIA HORTICULTURISTS.

The Augusta, Ga., *Herald* makes the following editorial announcement concerning the annual meeting of the Georgia Horticultural Society:

The twenty-first aunual session of the Georgia State Horticultural Society will be held in Savannah on August 4, 5, 6 and 7, 1898. The object of the association is first of all to promote the progress of horticulture in our state. To accomplish this, earnest workers must co-operate with their experience and scientific attainments. The reunion is, therefore, expected to be composed of working members, looking towards the material interests of this commonwealth. The society was organized in 1876 by a few public-spirited citizens, who have faithfully labored since to promote the fruit-growing industry of Georgia; and aid in the higher education of its people. The past work of the society has caused a wonderful development of the fruit-growing industry, which of late has given several sections of the state a most rapid increase in its land values, as well as an intelligent class of settlers from other states.

The officers of the organization are: P. J. Berckmans, president; L. A. Berckmans, treasurer; G. H. Miller of Rome, secretary. Under the leadership of such able officers the organization could not fail to prosper.

Among the papers which will be presented are the following: "The Time of Flowering of Varieties of Plums, and its Importance to the Plum Orchardist," by Professor T. V. Munson, Denison, Texas; "The Necessity of Enacting a State Law to Prevent the Introduction and Spread of Fruit Tree Insects," by Professor P. H. Rolf of the Florida Experiment Station, and Professor Wm. B. Alwood of the Virginia Station. Georgia is now the dumping ground of every other state which chooses to send infected plants and trees into the state. We are helpless and the horticulturists wish to remedy this condition of affairs. The proper discussion of the subject at the annual meeting will go a long ways towards arousing public opinion on the subject, and the next legislature, it is hoped, will pass a law placing Georgia on a level with other progressive states in this respect.

WICHITA NURSERIES.

One of the latest and most important Kansas institutions is that of the wholesale and retail establishment of the Wichita Nurseries, located at Wichita and Sedgwick, in Sedgwick county, Kansas, having the superior advantages of the natural and central location in the heart of the rich and fertile Arkansas River valley.

The men back of this enterprise mean business and their names will be sufficient guaranty of fair dealing. These men are Cash Henderson, L. S. Naftzger, W. E. Stanley, Henry Schweiter, T. D. Bruce, E. A. Bruce, and W. F. Schell. The latter is the immediate manager. The standing of these men would insure the success of almost any enterprise.

Cash Henderson is one of the foremost business men of Wichita L. F. Naftzger is the president of the Fourth National Bank, one of the solid money institutions of Wichita. W. E. Stanley is the senior member of the law firm of Stanley & Vermillion, and stands in the front ranks of his profession. Henry Schweiter is one of the most successful farmers as well as the best known in Sedgwick county, besides owning some

of the most valuable business property in the city. T. D. and E. A. Bruce were the owners of the Sedgwick Nursery, which has been merged into the large concern, and they are well-known and reliable men.

The Wichita Nurseries are fortunate in having for their manager W. F. Schell, who is one of the best known and most successful nurserymen and horticulturists of the West. He is a member of both the Western and National Associations of Nurserymen. He has been in the nursery business nearly all his business life; was foreman of the Lawrence Nurseries for five years, and manager of the Hart Pioneer Nurseries, at Fort Scott, for two years, and having make a special study of the practical requirements of Kansas and the West, this, his new company, is equipped to carry out this important idea for Western orchardists.

The Wichita Nurseries have for fall and spring trade 250,-000 two-year apple trees, 150,000 peach, 20,000 cherry, 15,000 pear, 15,000 apricot, 14,000 plum, all in splendid condition, smooth bodies and straight tops, also a large stock of small fruit and shrubbery.

NATIONAL CROP REPORT.

The United States Department of Agriculture gives the following fruit crop report for July:

PEACHES.

With few exceptions the reports on the peach crop are unfavorable. In New York it is said to be in rather poor condition; in New Jersey, not very good; in Pennsylvania, only moderate; in Delaware, less than 10 per cent. of an average crop; in Maryland, a small crop; in Georgia, less than half a crop; In Kentucky, as below last year; in Ohio, as almost an entire failure. On the other hand, the Arkansas crop is on the whole good; the California crop, fair; the Washington crop, never better; and that of Oregon, more promising than last season.

APPLES.

This crop also is below the average, except in the far West and on the Pacific coast. From all the North Atlantic states the reports are more or less unfavorable. In Ohio the fruit has dropped off badly, and the indications are that the present condition of 46 per cent. will prove to be too high rather than too low. Michigan has an average of only 53, as compared with 99 at this time last year.

GRAPES.

New York reports its crop as in rather poor condition; New Jersey as fairly good; Pennsylvania, as only moderate; Delaware, as generally fine; Maryland, as healthy and in good condition; Virginia, as generally abundant and thus far free from rot; Georgia, as promising well; Kentucky, as in good condition; Ohio, as having suffered less than other fruits, but still not indicating an unusually large yield; Indiana, as injured by late frosts; Missouri, nearly a normal crop of good quality; Kansas, as very satisfactory; Nebraska, as above the average both as to yield and quality; Washington, as never better; Oregon, as more promising than last year, and California, as promising to be exceedingly good.

The H. E. Hooker Co., Rochester, N. Y., is making a specialty for fall trade of standard and dwarf pear, cherry, plum, peach, quince, currants and gooseberries at lowest rates.

VICTORIAN ERA.

PROGRESS OF HORTICULTURE DURING THE SIXTY YEARS OF THE PRESENT REIGN IN GREAT BRITAIN—A MARKED ADVANCE.

In the outdoor culture of hardy fruits considerable advance has been made, and more correct views obtain as to the conditions under which the best results can be obtained. In the fifties a more rigorous system of pruning fruit trees was advocated, and the advocacy was so far successful that for about twenty years trees in gardens were so excessively pruned that in instances innumerable they did not produce one-half the fruit that they would have done had they been subjected to more rational treatment. In the seventies the late Shirley Hibberd entered on a crusade against the excessive use of the knife, and notwithstanding the fact that he had to contend with an immense amount of ignorance and prejudice from quarters where there should have been knowledge and an open mind, he fully succeeded in revolutioning the system of pruning, and immensely increasing the supplies. During the eighties a great impetus was given to fruit culture by the conferences instituted, and, having in view the highly beneficial influence they have exerted upon this important industry, it is eminently satisfactory the Royal Horticultural Society should have annually included a conference in the arrangements of its autumn fruit show.

Excessive pruning has been mentioned as a great hindrance to profitable fruit culture, but it has been by no means the only one. Leaving the trees severely alone has prevented the fruit garden and orchard becoming a source of substantial profit. Another great hindrance during the sixty years was the practice, which found so much favor from thirty to forty years ago, of planting collections comprising good, bad, and indifferent varieties. In carrying out this practice the fruit garden and orchard became crowded with trees that could not possibly give an adequate return, and to this fact, and the failure to fully appreciate the conditions under which the trees attain maximum productiveness, may be traced the foundation of the belief that fruit culture is not profitable in the United Kingdom.

Much has been done in the pages of the Gardeners' Magazine during the past thirty years in advocacy of planting selections only consisting of varieties of exceptional merit, and of giving the trees proper attention. Something has been accomplished in the improvement of fruit culture, but as these pages so well testify, much has yet to be done before the whole of the aspects of fruit culture can be regarded as satisfactory. Varieties of the several kinds of hardy fruits have been greatly multiplied during the period, and numerous valuable additions have been made to the several lists. In the case of apples, Cox's Orange Pippin and Dumelow's Seedling and Blenheim Pippin were introduced a short time previous to the commencement of the reign; but those fine varieties, Annie Elizabeth, Betty Geeson, Bismarck, Bramley's Seedling, Gascoyne's Scarlet, Lane's Prince Albert, Late Royal Cooking, Lord Derby, Lord Suffield, New Hawthornden, Newton Wonder, Potts' Seedling, Rivers' Codlin, and Worcester Pearmain. all belong to the reign. Pears of exceptional merit form a very small proportion of the varieties introduced, more par-

ticularly by the Belgian raisers, but these few must be regarded as decided gains. Especially noteworthy for their merit are Beurre Clairgeau, Beurre Superfin, Conference, Doyenne du Comice, Duchesse de Bordeaux, Fertility, Madame Treyve, Marechal de la Cour, Olivier de Serres, and Pitmaston Duchess. Plums have been enriched by several useful kinds, notably Grand Duke, Monarch, The Czar, and Early and Late Transparent, Autumn Compote, and Sultan. Victoria was in cultivation prior to the accession under the name of Sharpe's Emperor, but it was evidently unknown to George Linley in 1831, as it has no place in his "Guide to the Orchard and Kitchen Garden," published in that year. In 1844 it was introduced as a new variety under its present name, so that in some degree it is associated with the period. The strawberries now in cultivation wholly belong to the reign with the exception of Black Prince and Keen's Seedling, both of which have, after sixty years, retained their position in the garden. Changes have been less numerous amongst the raspberries, but several good varieties have been introduced, the most noteworthy of the introductions being Superlative .-Gardeners' Magazine.

SAN JOSE SCALE REMEDIES.

The following information as to remedies for the San Jose scale has been sent out from the office of the state entomologist at Albany, N. Y., by Professor J. A. Lintner:

This insect so richly merits its name of "pernicious" that every effort should be made to exterminate it in localities where it has gained a lodgment. If but a few trees have become infested, it would be wise to take them up and burn them. In cases where the scale has already spread to a large number of trees, the owner might not feel inclined to resort to this heroic measure, but at least, portions of the worst infested trees should at once be cut off and burned. That insect when under the scale is so well protected that all cannot be killed by spraying during the growing season with either kerosene emulsion or whale-oil soap solution, unless the insecticides be so strong as seriously to injure the trees or shrubs on which they occur. By the use of more concentrated washes in winter, it is possible to kill most, if not all, of the scales. Perhaps the best of those recommended are a whale-oil soap solution of 2 lb. to 1 gallon of water, or a wash compound of 120 lb. resin, 30 lb. caustic soda, 15 pints fish oil, and water enough to make 100 gallons. In preparing the latter, boil the constituents in just enough water to cover them "until the compound will mix properly in water without breaking up into yellow flakes." Dr. Smith has found a saturated solution of crude or commercial potash, applied with a cloth or stiff brush to the infested bark, to be entirely successful. Before applying any of these washes, cut the tree back freely and burn the excised twigs. The water washes should be used as soon as the leaves fall. In the southern states less concentrated insecticides than those above given have been found effective.

The treatment with hydrocyanic acid gas, which has been so popular and effective in California, will probably not be used to any large extent in the East, unless in the case of nursery stock. As it has recently been shown that this treatment cannot be relied upon in the eastern portion of the United States, it is likely that dipping nursery stock in whale-oil soap solution in a long tank, as practiced by the Parsons & Sons Nur-

sery Co. on Long Island, and some other nurserymen, will be preferred.

A fungus, Sphærostilbe coccophila, Tull., recently discovered by A. L. Quaintance of the Florida Agricultural Experiment Station, gives unusual promise of being an important factor in keeping this dreaded pest in check. Experiments recently conducted in Florida indicate that the disease is an effective and practical remedy for this scale in that state. The fungus is a native of Florida and was found to be quite generally distributed in the state. A forthcoming bulletin of the Florida Agricultural Experiment Station will give an extended account of this promising method of combating the San Jose scale.

HEAVY GRAPE CROP.

The June meeting of the Alton, Ill., Horticultural Society was held at the home of H. G. McPike who referred to vine-yards as follows: "The present outlook for grapes is very fine. Mr. Riehl claims that we can't afford to do so much pinching, and I admit that he is about right. The alternate system is the right one for the best quality of grapes. In my vineyard the Goethe is a perfect failure. The leaves are not equal to their work, while the Concord and its seedling and my new grape have great strong leaves. More depends on the health of the leaf than on anything else."

C. S. Curtice, Portland, N. Y., says the grape crop of Western and Central New York and of Northern Ohio will be very heavy.

THE "TOM THUMB" OF THE TREES.

The midget of the whole tree family is the Greenland birch. It is a perfect tree in every sense of that term and lives its alloted number of years (from seventy-five to one hundred and thirty) just as other species of the great birch family do, although its heighth under the most favorable conditions seldom exceeds ten inches Whole bluffs of the east and southeast coast of Greenland are covered with thickets of this diminutive species of woody plant, and in many places where the soil is uncommonly poor and frozen from eight to ten months in the year, a "forest" of these trees will flourish for half a century without growing to a hight exceeding four inches.—Lumber Trade Journal.

VICTORIA MEDAL OF HONOR.

In commemoration of the sixty years of the queen's reign he council of the Royal Horticultural Society decided to strike a new medal, to be called "The Victoria Medal of Honor in Horticulture," to be awarded solely honoris causa in the domain of horticulture, says the Gardeners' Magazine. The council, in preparing the scheme, decided to award not more than sixty of these medals during the present year, and that whenever the full number of sixty has been reached a further award will only be made on the death of one of the existing holders, in order that the number of living Victorian medallists may never at any time exceed sixty. It was further decided to confine the award to subjects of Her Majesty in the United

Kingdom or in the colonies. The council have now completed the list of horticulturists on whom they have conferred the medal for distinguished services rendered to horticulture. It will be seen from the list that the claims of all branches of horticulture have been fully considered, for the names include botanists, raisers, and hybridists, florists, collectors, and introducers, market growers, journalists, and writers on horticultural and botanical subjects, orchidists, cultivators of plants, flowers, fruits, and vegetables, and general workers. The following are the names of the Victoria medallists:

Baker, J. G., F. R. S., Keeper of Herbarium, Royal Gardens, Kew. Balfour, Professor Bayley, Director Botanic Gardens, Edinburgh. Barr, Peter, King Street, Covent Garden, W. C. Barron, A. F., Chiswick. Beale, E. J., 237 and 238, High Holborn, W. C. Boxall, William, Upper Clapton, N. Bull, William, King's Road, Chelsea. Bunyard, George, Maidstone, Kent. Burbidge, F. W., Curator, Trinity College Garden, Dublin. Crump, William, Madresfield Court Garden, Malvern. Dean, Richard, Ranelagh Road, Ealing. Dickson, George, Nurseries, Chester. D'ombrain, Rev. H. H., Westwell Vicarage, Ashford, Kent. Druery, C. T. Shaa Road, Acton, Middlesex. Dunn, Malcolm, Palace Gardens, Dalkeith, N. B. Ellacombe, Canon, Britton Vicarage, Gloucestershire. Elwes, H. J., F. R. S., Colesborne, Andoversford: Foster, Professor Michael, F. R. S., Cambridge University. Fraser, John, Nurseries, Woodford, Essex. Gordon, George, Editor Gardeners' Magazine. Heal, John, Messrs. J. Veitch and Sons, Chelsea, S. W. Henslow, Professor George, Ealing. Herbst, H. "Stanmore," Kew Road, Richmond. Hooker, Sir J. D., F. R. S., The Camp, Sunningdale, Berks. Horner, Rev. F. D., Kirkby Lonsdale, Westmoreland. Hudson, James, Gunnersbury House Gardens, Acton. Jekyll, Miss Gertrude, Munstead, Godalming, Surrey. Kay, Peter, Claigmar Vineyard, Finchley. Laing, John, Nurseries, Forest Hill, S. E. McIndoe, James, Hutton Hall Gardens, Guisboro', Yorkshire. Maries, Charles, Gwalior, North India. Milner, H. E., Victoria Street, S. W. Molyneux, Edwin, Swanmore Park, Bishop's Waltham, Hants. Monro, George, Covent Garden W. C. Moore, F. W., Curator, Glasnevin Botanic Gardens, Dublin. Morris, D., D. Sc., Assistant Director, Royal Gardens, Kew. Nicholson, G. Curator, Royal Gardens, Kew. O'Brien, James, Harrow-on-the-Hill. Paul, George, Nurseries, Cheshunt, Herts. Paul, William, Nurseries, Waltham Cross, Herts. Rivers, T. Francis, Nurseries, Sawbridgeworth, Herts. Rochester, The Very Rev. the Dean of, the Deanery, Rochester. Rothschild, Hon. Walter, Tring Park, Herts. Sander, F., Nurseries, St. Albans, Herts. Schröder, Sir Henry, Bart., The Dell, Englefield Green. Seden J., Messrs. J. Veitch and Sons, Langley. Sherwood, N. N., Houndsditch, E. C. Smith, J., Mentmore Gardens, Bucks. Smith, Martin R., Hayes, Kent. Speed, H. Sutton, Arthur W. Reading, Berks. Thomas, Owen, Royal Gardens, Windsor. Thomson, W., Ipswich. Thomson, David, Drumlanrig, N. B. Turner, H., Nurseries, Slough. Willmott, Miss Ellen, Warley Place, Brentwood, Essex. Wilson, G. F., F. R. S., Heatherbank, Weybridge, Surrey. Wolley-Dod, Rev. C , Edge Hall, Malpas, Cheshire. Wright, J., Editor Journal of Horticulture. Wythes, George, Syon House Gardens, Brentford.

TEXAS HORTICULTURE.

ANNUAL MEETING OF THE STATE SOCIETY—
PROGRESS IN THE GREAT COMMERCIAL
ORCHARD, THE COAST DISTRICT,

The eleventh meeting of the Texas State Horticultural Society was held at Belton, Texas, July 14th and 15th. The fruit display was quite diversified and creditable for so severe a season. Entries were made from the most distant part of the state and the show can be said to have been fairly representative. The address of the president, Dr. A. M. Ragland of Pilot Point constituted a well advised plea for a more systematic development of a southern horticulture, for which there is so much undeveloped and valuable material.

The rest of the evening was devoted to a discussion of apple growing in the Black Waxy Lands of the state. The discussion was led by E. W. Kirkpatrick of McKinney, who was ably assisted by C. L. Kidd of Waxahachie. The weight of evidence seemed to endorse planting at least sufficient for uses as a family orchard, care being taken not to plant upon lands on which cotton or sweet potatoes will die. In some of the more sandy black soil of the black belt commercial orchards in a small way are not only safe and advisable, but profitable.

On the second day there were reports of the state fruit committee. Beginning with the coast country Professor Frederick W. Mally of Hulen, reported that fig culture had received a great deal of attention during the past year, and that this fruit would be more largely planted another season upon the cooperative plan with canning factories, so that there would be no difficulty about disposing of the fresh fruit. He also reported that the tests of a greater variety of peaches had given good results, and that the coast country peach grower is certain to become a factor in the early peach markets. At least two good first early varieties were reported. They were Waldo and Pallas. Their usefulness is limited to the coast district and should not be widely planted over the state.

Concerning pears this fruit was still said to be the most profitable of all the orchard varieties to plant, the Le Conte and Keiffer still holding sway. Garber and Smith's as also more recently Bartlett, are gaining favor among the orchardists. The Japanese plums are succeeding as well as in other portions of Texas, though but two or three received favorable mention in a commercial way. First Burbank, followed closely by Abundance. The Americana and Chickasaw varieties, the society concluded, had been too much neglected and the encouraging reports all along the line will give a new impetus towards planting them more largely than they have been heretofore.

The coast country is evidently the commercial orchard district of Texas, as could be noted from the immense orchards which were reported by Professor Mally as having been recently planted, the Galveston Nursery and Orchard Co., of which he is manager, alone having planted between forty and fifty thousand trees, distributed among figs, pears, plums and peaches; many others in Galveston county alone having half that quantity in pear trees exclusively.

Professor Mally's report for South Texas was followed by J. S. Kerr of Sherman for North Texas, S. D. Thompson of Bowie, for Northwest Texas, and F. T. Ramsey of Austin, for

Middle Texas. Each discussed the fruits to be recommended for the family as well as the commercial orchard and their reports will be of great value for their respective localities.

The afternoon session was devoted principally to Professor Mally's report as chairman of the special commission of the society upon injurious insects and fungus diseases, as also the use of insecticides and fungicides and the best methods of spraying. A great many specimens were presented and questions asked, but every subject was promptly and satisfactorily disposed of and some special reports upon Texas fruits were taken up to complete the programme. The subjects given special consideration were the following and were ably presented by the authors: Stone fruits, by Ramsey; core fruits, by Kerr; small fruits, by Howell; vegetables, by John Graham of Waco; marketing, by C. Falkner of Waco. Mr. Falkner exhibited some newly improved packages for the shipment of peaches and plums.

At the evening session D. O. Lively of Fort Worth, discussed the possibilities of irrigation in Texas. The discussion was ably led by Mr. Kerr of Sherman, and the gist of the facts presented made it evident that if the fruit grower was industrious and understood his business he should make his crops in Texas pay a handsome return on the investment.

The report upon the Buckner Orphan's home orchard which was supplied by the nurserymen of Texas was reported to be in a highly satisfactory condition. A subscription was raised to build an orchard farm house, and employ a suitable keeper. Concerning the matter of the relations of shippers and the express companies and the rates established and demanded by each, Professor Mally simply added his own experience to that outlined by Messrs. Howell and Falkner in presenting their respective papers during the day session.

Election of officers followed, and resulted as follows: President, Dr. E P. Stiles, Austin; first vice-president, C. Falkner, Waco; second vice-president, F. T. Ramsey, Austin; secretary, E. L. Huffman, Ft. Worth; treasurer, D. O. Lively, Ft. Worth.

CANADIAN RESTRICTIONS.

Since the San Jose scale has been found at Chatham, on trees imported from New Jersey, and the evidence seems to show that it has lived through one Canadian winter, Mr. Craig advises the utmost caution in importing trees from our neighbors to the south. We think the least our country could do would be to enact that no trees, plants, buds, scions or fruits be allowed to enter the Dominion unless accompanied by a certificate from the Secretary of Agriculture for the United States or from a state entomologist, that they are free from the San Jose scale.—Canadian Horticulturist.

ORCHARD DUG UP FOR DEBT.

Amos Reynolds was tried last month at Metropolis, Massac county, Ill, on the charge of stealing a young orchard of growing fruit trees. Reynolds sold a bill of trees to Judge Benjamin O. Jones, for which he was never paid. After trying in vain to collect the account he simply dug up the trees and carried them off, as he says, in broad daylight. The judge had Reynolds arrested for theft, and says the trees were removed at night.

EDWARD Y. TEAS.

Edward Y. Teas in connection with his older brother, John C. Teas, began the nursery business in Indiana, their native state, fifty-five years ago. He has made that his business ever since. At that time there were few nurseries of much extent in the United States. Ellwanger & Barry at Rochester, N. Y.; W. R. Prince and Parsons & Co., Flushing, L. I.; A. H. Ernst, Cincinnati; and Mr. Coxe of New Jersey were the principal ones now remembered.

Mr. Teas has made the propagation and introduction of choice fruits and ornamentals a life study. He has made three trips to Europe, visiting the leading nurseries on the other side, and has traveled extensively in the United States.

He named and introduced the Garber hybrid pear, a close second to Keiffer; Smith's hybrid pear, a popular variety in the South; introduced the Lucretia dewberry, which has had an extensive sale; originated the President Wilder currant,

which is of unsurpassed quality; was the first person in America or Europe to catalogue and offer the Japan tree lilac, etc.

Mr. Teas is a charter member, and has been state vice-president of the American Association of Nurserymen; charter member and first vice-president of the Indiana Horticultural Society. He has now growing at Irvington, near Indianapolis, one of the largest collections of Gladiolus and other bulbs, lilacs, etc., in the United States, besides 5,000 paeonies and othes hardy herbaceous plants, 100,000 Loudon raspberries, with other leading fruits, large and small.

PEACH STOCK.

About eight or ten years ago, when the Marianna plum was first introduced and found to be comparatively free from root-knot, many nurserymen used it as a stock for peaches, says P. J. Berckmans in Rural New Yorker. The first year the buds grew off very vigorously, and this led to the

belief that, finally a stock had been found that was proof against the root-knot, and large quantities of trees were put upon the market. When these trees were planted in permanent place in orchard the growth was satisfactory during the first year; but less the second, and but few trees survived the third year. Of the many thousands of peach trees budded upon plum stocks which were planted within the past six or seven years, few are found alive. The deduction is that such trees seldom survive the third year, and no nurseryman who values his business will propagate these any longer. The Marianna stock suits the plum, but is worthless for budding peaches upon, and it would be useless to plant peach trees budded upon that stock with the expectation of seeing them arrive the first crop of fruit.

Professor Budd, Ames, Iowa, says: "In its natal home, in Asia, the peach has thriven for centuries on dry soil in a dry climate. Under culture in this country and Europe, it

has given best crops, and maintained most perfect health, on high and relatively dry soil. On the other hand, the Chickasaw plums, mainly grown in the Yazoo basin, are indigenous to relatively low land in the South, and are not seriously harmed by overflows. The same is true of the Americana species on our western bottoms, and of some of the types of the plum and prune in Europe and Asia. Without shadow of doubt, the peach will stand better on overflow lands if budded on the Chickasaw stocks. Our experience favors the belief that the union of the peach on the Chickasaw and Hortulana stocks is as perfect as on the peach, and our budding on these stocks has been as uniformly successful. In this line of budding on stocks adapted to special soils, we have at this time, a good illustration. As a matter of experiment, we budded the Pollock Improved Sand cherry on our native Americana plum stocks. These are loaded with perfect fruit, with every leaf and twig in perfect health, while those on own roots have no perfect fruit, and the foliage and wood are attacked by a fungus

resembling fire blight. We account for this difference by the supposition that our richer, moister soils are not adapted to the roots of plants from higher altitudes with drier, thinner soils and a drier air. Others in Iowa have had the same experience with the Sand cherry. On own roots it is nearly or quite fruitless and lacking in health of foliage, while on plum, it is perfect in fruit, leaf and twig. In Europe, this exact adaptation of stock to soil conditions is better understood than with us. In North Silesia, I asked Dr. Stoll, 'What stock do you consider best for the apple?' In answer, he gave a list for fully a dozen variations of soil and altitude."



EDWARD Y. TEAS.

MARYLAND PEACHES.

Berlin, Md., July 13.—J. G. Harrison & Sons: "We are having very favorable weather on nursery stock. It is showing up good, and prospects for sales look promising. The peach crop will be light here and on the peninsula north of us. A heavy

June drop is reported. Estimates on peach crop vary considerably from one million to five million baskets. It is likely the small estimate is even too high."

EUREKA RASPBERRY.

W. W. Farnsworth, Waterville, O., writes: "Eureka raspberry has again more than fulfilled our anticipations. The field which last year yielded 57 bushels per acre from one-year-old bushes, yielded, too bushels per acre this year in spite of a drought at the most critical period, and the young canes now present a remarkably fine appearance."

O. W. Blacknall & Son have begun the publication of the Strawberry Specialist, a monthly paper devoted exclusively to the strawberry. The illustrations are hand painted.

The National Nurseryman.

C. L. YATES, Proprietor.

RALPH T. OLCOTT, Editor.

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OFFICIAL JOURNAL OF THE AMERICAN ASSOCIATION OF NURSERYMEN.

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Payment in advance required for foreign advertisements.

**Drafts on New York or postal orders, instead of checks, are requested.

Correspondence from all points and articles of interest to nurserymen and horticulturists are cordially solicited.

Entered in the Post Office at Rochester, as second-class matter.

ROCHESTER, N. Y., AUGUST, 1897.

NO NEED OF OBNOXIOUS LAWS.

In another column we present some results from the use of gas and whale-oil soap on nursery stock, as noted by Professor F. A. Sirrine, entomologist of the New York Agricultural Experiment Station. Professor Sirrine has had large experience with the San Jose scale and fully knows whereof he speaks.

And this is what this entemologist of the great Empire State says of the attitude of the nurserymen on the question of San Jose scale:

"By the use of these two remedies (gas and whale-oil soap) Messrs. Keene and Foulk have finally reduced the San Jose scale, in a badly infected nursery, to a few scattering specimens in one small block of apple trees. This block of trees will be put through the fumugating-box the coming fall, and they will continue to use the boxes for a few years as a safeguard.

"Since we have a reliable measure for keeping this pest in check on growing stock and a sure means of killing it when the stock is dug, what need have we of expensive and obnoxious inspection laws?

"All we need is nurserymen who are energetic enough to get rid of this pest if they have it and keep free from it; while those who will not make an effort to keep free of the pest should be pushed to the wall by the trade."

DELAWARE SCALE LAW.

The Delaware legislature, just before adjournment, enacted a law that requires the governor "to appoint and commission some competent person whose duty it shall be to inspect any nursery, orchard or orchards in this state in which the insect

known as the San Jose scale is known or is believed to exist. The inspector shall have power to enter upon any lands in the state for the purpose of making any such examination, and should he discover the presence of the San Jose scale, it shall be his duty to inform the owner of such trees that the said scale exists therein, and shall recommend to said owner such remedies as he may deem proper for the extermination of the said scale."

The inspector is required to make a full report of his findings to the governor on the first day of January, 1898.

The new constitution, which will go into effect within a few months, provides that there shall be a state board of agriculture which shall have power to abate and prevent diseases of live stock, orchards, small fruits and other farm crops. The legislature will meet next January to enact legislation in accordance with this constitution, and then when the board of agriculture is in working shape it will be in possession of the information necessary to enable it to deal with the scale promptly.

No doubt the board will also take up the question of stamping out the peach yellows which has wrought devastation among the peach orchards of the state.

WESTERN WHOLESALERS.

The Western Wholesale Nurserymen held their regular semiannual meeting June 15th at Kansas City. The attendance was rather less than usual. Report of business for the past year was somewhat less than usual, but there was a general feeling of hopefulness for the future. Two new firms were admitted to membership in the association.

General reports are that stock prospects are encouraging, and owing to the market being overstocked the plant for the past spring has been somewhat reduced.

LOCUSTS ON NURSERY STOCK.

Professor M. V. Slingerland, of Cornell University, says that cicadas have very strong sucking beaks, with which they puncture foliage and bark, and suck out the sap. There is no question about their feeding to some extent, but they rarely do noticeable damage in this way. One or two instances are on record where they have injured young fruit trees by sucking out the sap. They do much more damage in laying their eggs than in eating, and several instances are known where they have ruined many young trees, and especially nursery stock, by ovipositing in the small branches.

WASHINGTON NURSERY LICENSE.

Nurserymen doing business in the State of Washington under the new law need give bonds to the amount of only \$1,000 instead of \$3,000, as under the previous law.

The horticultural board of seven commissioners has been replaced by one commissioner. He is J. E. Baker, of Tracyton. Mr. Baker was born in Oswego county, N. Y., in 1837. He established a business at Cobden, Ill., in 1858, as nurseryman and vegetable grower. During the civil war he was a member of Company I, Twelfth Illinois Cavalry, and continued in governmental service until 1866, being employed during the last three years of this time as distributing officer of the chief quartermaster of the department of Washington. He resumed horticultural occupations in 1866 near Norfolk,

Va., and for many years was a large producer of small fruits, being a pioneer in that industry directly after the war. He entered largely into vineyard cultivation of native grapes and the propagation of grape vines. During the French phylloxera scare in 1872-3 he was able to supply the demand for large quanties of American resistant stocks in the form of rooted vines and cuttings for export. He went to the Pacific coast in 1890.

PROFESSOR JOHNSON'S ENDORSEMENT.

Professor W. G. Johnson, state entomologist of Maryland, writes as follows from College Park, Md.:

"I have read with much interest the proceedings of the American Association of Nurserymen given in the last issue of your journal. I am particularly gratified at the outcome of the report of the committee on legislation. The proposed bill which received the unanimous endorsement of the convention is, I believe, one that will meet the approval of all thorough-going horticulturists and nurserymen.

"From what information I have gathered so far from nurserymen and from growers of this state, I feel assured that the bill will not meet any opposition from this section when it is presented to congress for passage. So far as I am concerned personally, the bill has my endorsement and I shall work for its passage, with such minor alterations as conditions might seem to necessitate."

PLANTED BY ROBERT DOUGLAS.

Charles H. Douglas, son of the late Robert Douglas, at Waukegan, Ill., writes: "I wish to give you some measurements of trees on the old homestead planted by my father 45 or 50 years ago. One that I refer to now is a Norway Spruce standing on sandy soil with no fertilizers used to induce growth. I have not accurate measure of height, but judge it to be about 50 feet. It measures eight feet around trunk, three feet from the ground, but the most remarkable is the measure from tip to tip of branches near the ground, which is 54 feet. The lower branches rest on ground and are over 25 feet long.

"Think of such a tree measuring 54 feet each way and branched to the ground and tapering gradually to a point at top. It is still thrifty and growing as fast as when young. It must be a mistake in calling the Norway a short-lived tree in this country."

AMERICAN STOCK BARRED OUT.

Sir Hercules Robinson, governor of Cape Colony, has issued proclamation relating to the importation of nursery stock into the colony which provides that stock must be inspected with regard to insects and disease, and when necessary disinfected or destroyed. Section 5 of the proclamation reads as follows:

"The importation or introduction of any stone fruit tree or any fruit scion, cutting, graft, root or seed, the growth or produce thereof, from the United States of America or the Dominion of Canada, is hereby absolutely prohibited, and anyone importing or introducing such fruit trees, or other article, the growth or produce thereof, as aforesaid, shall, upon

conviction, be subject to the penalty provided in the body of this proclamation; and in addition thereto, the fruit tree or other article imported shall forthwith be destroyed."

These regulations do not apply to canned or preserved fruits. Only such grape vines as the government of the Cape Colony shall designate may be imported.

THOMAS W. BOWMAN & Son, Rochester, N. Y., writes: "We think you should take great praise for the efforts you put forth in getting the bill introduced into congress in regard to the inspection of stock, etc., as we believe that it has been through your efforts this was accomplished."

PROFESSOR N. E. Hanson, of the horticultural department of the South Dakota Agricultural College is on a summer tour through North Russia and Siberia in search of fruits and ornamentals for the northwestern part of this country. The professor was appointed by Secretary of Agriculture Wilson, as special agent to make this tour. He will be absent all the summer and fall.

When the St. Louis convention was discussing the subject of the meeting place for 1898, it was suggested that if Omaha were selected, it would soon be asked that the Association hold a meeting in the Hawaiian Islands! Well here is a starter. Leonard Coates, Napa, California, asks: "The American Association of Nurserymen holds its next convention at Omaha. Why should we not endeavor to get the 1899 convention in California?"

THE Fruit Growers' Journal, published by A. M. DuBois at Cobden, Ill., severely criticised the proposed Illinois state insect bill, as did Our Horticultural Visitor, published by E. G. Mendenhall, Kinmundy, Ill. The former publishes the federal bill prepared at St. Louis by the nurserymen and says: "The proposed bill for enactment by congress to check the ravages of the San Jose scale, is a very different affair from that which an attempt was made to have enacted into law by the Illinois Legislature. The national bill is in the interest of the horticulturist."

PROFESSOR Frederick W. Mally, Hulen, Tex., general manager and secretary-treasurer of the Galveston Nursery and Orchard Co., and formerly assistant entomologist of the U. S. Department of Agriculture, writes: "I beg to congratulate you upon the liberal stand you have taken with reference to the agitation of the federal bill intended to regulate the distribution of injurious insects and fungi.

"The discussion of this question in your journal has been watched in detail by the members of our company and the manner in which it has been conducted has made it worth many times the price of subscription both to us and to some of our friends in the North."

INDISPENSABLE TO NURSERYMEN.

T. C. THURLOW, WEST NEWBERRY, MASS.—Enclosed please find \$2 for the NATIONAL NURSERYMAN for two years, commencing June 1, 1897. I consider the NATIONAL NURSERYMAN a very valuable journal, indispensable to every nurseryman.

TREATING STOCK.

SOME RESULTS FROM THE USE OF GAS AND WHALE-OIL SOAP IN NURSERY ROWS—VALUABLE EX-PERIENCE IN A LONG ISLAND NURSERY.

Professor F. A. Sirrine, entomologist of the State of New York, notes the following results from the use of gas and whale oil soap on nursery stock: "During the fall of 1895, spring and fall of 1896, and spring of 1897 Messrs. Keene and Foulk of Flushing, N. Y. have used hydrocyanic acid gas one and one-half times as strong as usually recommended for fumigating nursery stock; the per cent. of purity of the potassium cyanide used and the space occupied by the trees in each case being known. During each of these periods I have managed to find stock that was infested with San Jose scale. Have had this infested stock put through the gasbox with other stock, and carried over to determine the effect of treatment on the San Jose scale and on the stock itself.

"In only one case has the above strength of gas been found not to kill all the San Jose scale on treated stock. This failure was during the fall of 1895, and was found to be due to the fact that the workmen had neglected to place timbers upon the ground for the trees to rest upon when the box was inverted. In this particular case the infested stock was currants, and as they were placed on top of the other stock they were forced into the loose dist to such a depth by the weight of the stock when the box was inverted, it was impossible for the gas to reach them. After discovering the cause of this failure, care was taken to prevent the trees being pressed into the dirt when the box was inverted and no further failures have resulted. I have recently examined a lot of Pyrus japonica that had been badly infested. This stock was fumigated the past spring while dormant. Although Pyrus japonica usually carries a quantity of dirt on the lower branches which interferes with fumigation, no trace of living scales could be found upon it.

"In no case have I found stock which was fumigated while dormant that has shown the least evidence of injury from the use of one and one-half times the quantity of hydrocyanic acid gas usually recommended.

"On the same date that the Pyrus japonica stock was inspected, had an opportunity to inspect apple trees in nursery row which had been washed with whale-oil soap solution for two years in succession. Occasionally a living specimen of San Jose scale was found on this washed stock.

"The above fact should not condemn the use of whale-oil soap, as it has its place and is excellent for some purposes; but it must not be expected to be a perfect remedy as a wash when used for trees in nursery row, especially in the hands of day laborers.

"I believe that in whale-oil soap carefully applied we have a good means of keeping the San Jose scale under control on growing stock, and in the fumigating box rightly used we have a sure means of exterminating this pest in nurseries. I strongly recommend the use of one and one-half times the usually recommended amount of hydrocyanic acid gas in fumigating dormant stock."

Among Growers and Dealers.

Dry baled moss is Z. K. Jewett's specialty.

Nelson Bogue, Batavia, N. Y., was in Rochester recently.

Wing R. Smith of Syracuse was in Rochester on July 24th.

Tree roses are a specialty with Keene & Foulk, Flushing,

Nelson Bogue, Batavia, N. Y., wants a man to assist in running agents.

L. C. Bobbink and Miss Schmidt were married in New York City on June 23.

Irving Rouse and family are spending the summer at Gananoque, Canada.

Paeonies are grown in large quantities by T. C. Thurlow, West Newbury, Mass.

George W. Park, a pioneer nurseryman of Lansing, Mich., is dead, aged 65 years.

A large assortment of fruit trees is offered by Peirson Brothers, Waterloo, N. Y.

A rare opportunity for an energetic young man is offered by J. W. Kerr, Denton, Ind.

Storrs & Harrison Co., Painesville, Q., grow 750,000 roses and 1,000,000 plants annually.

Brewer & Stannard, Ottawa, Kan., offer an immense stock of select fruit and ornamental trees.

In another column is announced the offer of one of the best equipped nurseries in the country.

Upland grown apple seedlings delivered in prime condition may be had of J. A. Gage, Fairbury, Neb.

A. Willis, Ottawa, Kan., has as fine a general assortment of nursery stock as can be found in the West.

L. L. May & Co., St. Paul, Minn., are looking for a young man to run salesmen for the nursery trade.

Clematis and a large line of other ornamental stock is offered by George Brothers, East Penfield, N. Y.

Apple seedlings and a full line of ornamental stock is offered by Peters & Skinner, North Topeka, Kan.

Nurserymen's tools and supplies of the best quality are sold by Weaver, Palmer & Richmond, Rochester, N. Y.

R. C. Stoehr, of the Dayton Fruit Tree Label Co., Dayton, O., visited Western New York nurserymen last month.

E. Moody & Sons, Lockport, N. Y., makes a specialty of peach, plum, cherry and pear; also quinces and currants.

Frederick W. Kelsey, the well-known importer of New York city, called on Western New York nurserymen last month.

'The thirteenth annual convention of the Society of American Florists will be held at Providence, R. I., August 17-19.

Hoopes, Brother & Thomas, West Chester, Pa., have a fine assortment of high-grade stock which is always the cheapest.

J. C. Evans of the Olden Fruit farm is president of the newly formed Ozark Fruit Growers Association, of Missouri.

The Spaulding Nursery & Orchard Co, Spaulding, Ill., offer special inducements for the fall trade is nursery stock and supplies.

A new nursery office is to be opened at Rochester or New York City. A nurseryman to take charge of it is asked for in another column.

E. Y. Teas, Irvington, Ind., writes: "My sales were better the past spring than for years. I think the prospect is better than in the past."

Peach trees by the 1,000 or carload and a heavy stock of root cuttings of blackberry plants is held for fall sale by D. Baird & Son, Baird, N. J.

Mechan's Monthly and the Rural New Yorker record the fact that the Logan raspberry-blackberry vines need covering to protect them in winter.

Tree roses, hydrangea, rhododendron, azalea and other ornamental stock is offered for early fall delivery by L. C. Bobbink, Rutherford, N. J.

The assignee's schedule shows that the assets of Frederick E. Young, Rochester, N. Y., are nominally \$6,983.87, actually \$3,173.77; liabilities \$6,100.88.

The Dayton Fruit Tree Label Co., Dayton, O., is creating quite a demand for its labels. Its display at the St. Louis convention was very attractive.

S. D. Willard says the indications are that the apple crop in Western New York will be light. Similar reports are made from other parts of the Empire State.

The Manitoba Horticultural Society has been organized in the interest of horticulture, especially in the region between Lake Superior and the Rocky Mountains.

Charles T. Smith of Smith Brothers, proprietors of the Concord Nurseries, Concord, Ga., is editor of the Concord Enterprise, a weekty paper just established there.

Ethan Chase, Riverside, Cal., was in Rochester on July 15. After a brief visit at his old home he started on an eastern trip. He will return to California in October.

Ex-President Silas Wilson is a member of the committee on legislation of the American Association of Nurserymen, in place of Irving Rouse, who asked to be relieved.

A. T. Remer, Aulne, Kan., endorses the sentiments in the paper presented by C. L. Watrous at the St. Louis convention on the subject of sending wholesale lists to planters.

C. F. McNair has returned from Moorestown, N. J., to Dansville, N. Y. He has been manager for the Rogers Nursery Company at Moorestown, N. J., which has gone out of business.

Samuel Henshaw, the well-known landscape gardener, of West New Brighton, S. I., N. Y., has been appointed head gardener in the new botanic garden at Bronx Park, New York.

John M. Samuels, Clinton, Ky., is reported to have purchased the Mississippi Valley Nurseries, at Chilton, which his father, the late W. M. Samuels, established many years ago, for \$25,000.

Special quotations on fruit seedlings, ornamentals, roses, etc., will be given by Andre L. Causse, New York City, agent for Brault & Son, directors of the Andre Leroy Nurseries, Angers, France.

During the past few years manuals on fruit farming have been written by the following nurserymen of England: G. Bunyard, Maidstone; J. Cheal, Lawfield, Crawley; and Mr. Cranston, Hereford.

Choice specialties have long been a feature of the large trade of Jackson & Perkins, Newark, N. Y. Yellow Rambler roses, Lord Penzance's Hybrid Sweet Briars and the Cumberland raspberry are among them. On another page J. G. Harrison & Sons, Berlin, Md., in connection with an attractive statement as to their extensive stock, suggest that nurserymen visit their grounds on the way to Ocean City, on the seashore, which is only seven miles away.

The Sparta greenhouses, owned by N. Grievelding, have been purchased by Z. K. Jewett, Sparta, Wis., and they will in future be operated by Miriam Jewett. The place now contains 3,500 feet of glass and at least one new house will be added as soon as possible.

The European fruit crop is summarized as follows: Apples—England, fourth crop, will require large importations; France, light crop in the south, fair crop in the north, can export some; Belgium, third crop; Holland, fair crop; Germany, fair; Italy, good. Pears—England, worse crop for many years; France, good crop of late kinds; Germany, good crop of ordinary fruit.

The St. Louis Republic says: "The fruit crop of Missouri this year is roughly estimated to be worth \$20,000,000 and many who ought to know say that the figures are too low. The importance of the crop may be understood when it is stated that it is worth more than the wheat crops of Illinois and Missouri combined, with the cotton crop of Missouri thrown in for good measure."

A writer in *Meehan's Monthly*, referring to the Gravenstein apple, says: "In my father's fine orchard, in Western New York, no apple stood higher in our estimation than this. It was not only a beautiful apple, but a first-class apple in every way, always keeping well, sound, brittle and aromatic to the last. But not until I removed to Nebraska did I know of its rare virtue as a canning apple."

Nelson Bogue, Batavia, N. Y., has donated to the state of New York one specimen of every desirable variety of ornamental trees and shrubs grown in his nursery on condition that the board of trustees of the State School for the Blind furnish competent help to plant and care for after planting and also provide each tree and shrub with a proper label that shall give both the botanical and popular names.

Jacob Moore, Vine Valley, N. Y., urges the importance of protecting the introducer of a new fruit. He refers to the contract made at Portland, N. Y. June 28, 1880, between Lincoln Fay and George S. Josselyn, by which the former was protected for ten years in the introduction by Mr. Josselyn of Fay's Prolific currant. Mr. Moore urges that a new variety should not be the common property of the trade, as is now the case.

H. S. Anderson of Elizabeth, N. J., until lately of Union Springs, N. Y., is representing Hiram T. Jones (formerly of Jones & Rouse of Rochester), proprietor of the Union County Nurseries, Elizabeth, N. J. Mr. Jones is favorably known as importer of French grown seedlings of high standard of grading, and has extended his line by accepting the position of sole American representative for Messrs. J. B. Tanner & Co., Boskoop, Holland, and the Yokohama Nursery Co., Yokohama, Japan, for which lines Mr. Anderson is soliciting orders. Mr. Jones visits Europe annually to give the necessary personal attention to his orders that will guarantee to his customers the careful grading they have always received in orders entrusted to his care; as an experience covering many years proves that this is the only method that enables him to guarantee satisfaction to his customers.

Recent Publications.

The report of the chief fire warden of Minnesota, C. C. Andrews, is an important addition to recent literature on the preservation of forests-

An interesting catalogue of 76 pages for the season of 1897-8 has been issued by D. Hay & Son, proprietors of the Auckland, New Zealand, Montpelier Nurseries.

The third annual year book of the U.S. Department of Agriculture has been issued. This is the volume for 1896 It has considerable mat ter of interest to the nurseryman. Ask your congressman for it.

The Gardener's Chronicle, London, England, published during June several commemoration numbers in recognition of the queen's jubilee. The progress of horticulture during the more than half century which marks the Victorian period was reviewed. It is a most interesting retrospect.

Professor Willis G. Johnson, entomologist of the Maryland Experiment Station, in a valuable bulletin on common injurious plant lice gives directions for coping with the black peach louse which has been abundant in Maryland this year. Professor Johnson contributes timely notes on methods of controlling destructive insects, in American Gardening.

On July 10th the Gardeners' Magazine, London, England, published a special rose number which admirably commemorates the metropolitan exhibition of the National Rose Society. There were articles by William Paul on the grouping of roses at exhibitions; by G. L. Paul on selection and cultivation of pillar roses; by E. Mawley on the use of roses in decoration; by Alexander Dickson on the merits of several sections of roses adapted especially for the garden; by George Burch on the Manetti as a stock for roses; by the editor, George Gordon, on rose culture during the last sixty years, illustrated by old and new types; an illustrated account of the Princess of Wales' rose garden at Sandringham; a short story by W. Pes, showing how a roserian vicar won a valuable prize, and an examination of the pretty myth associated with the rose and the nightingale, by Mr. Gordon. The many illustrations include portraits of eminent rosarians and page engravings of two new roses.

All who secured a copy of the first volume of "An Illustrated Flora of the Northern United States, Canada and the British Possessions" have been awaiting with much interest the appearance of the second of the three volumes of the work. This valuable publication has received the highest praise from botanists and all who are interested in the flora of this country. Nothing like it has been attempted before-It is both timely and comprehensive. The editors, Nathaniel Lord Britton and Hon. Addison Brown, are especially qualified for the work. The former is emeritus professor of botany in Columbia University and director-in-chief of the New York Botanical Garden: the latter is president of the Torry Botanical Club. The second volume just issued fully bears out what we said of the work upon the appearance of the first volume. It covers the field from Portulacaceæ to Menyanthaceæ The work is a striking example of thoroughness and accuracy. Every detail is carefully worked up under an easily understood system which is adhered to strictly. The descriptions of varieties upon the plan already outlined places one at once in possession of information upon any subject connected with the work, according to the latest research. The illustrations are a most noteworthy feature. They present the appearance of the root, stem, leaf, flower and fruit upon a scale indicated in each case and with the utmost care to attain accuracy. This publication merits the highest praise. Nurserymen who would be thoroughly informed on the subject of the flora of this country from Newfound land to North Carolina and from the Atlantic coast to Colorado should obtain this work. It is handsomely and durably bound.. Paper and type are the best. In three volumes. Large 8vo. Two volumes ready. pp. XII-612 and 643. \$3 per volume. New York; CHARLES SCRIB. NER'S SONS. Rochester, N. Y.: SCRANTOM WETMORE & Co.

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For the Fall trade we offer

Apple Trees

2 years-gloved pruned-51 to 7 feet-An extra choice lot of trees.

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All leading sorts.

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High grades-good packing-clean stocks.

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Over One Acre under glass.

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Have been fully tested in every section of the United States during the past 40 years. The stock now growing is up to the usual past high grade, all of thrifty growth, no old rubbish, and free from scale or disease.

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Apples, Cherries, Figs, Pears, (an extra fine lot of 100,000 standard 2 and 3 years, largely of Kieffer), Paper Shell Pecans, Plums (Japan) on Marianna, English Walnuts, Grape Vines, etc. Peach Trees in car load lots.

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150,000 Amoor Privet- Unsurpassed as an evergreen hedge plant.
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Two acres in Canna.

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Broad leaved Evergreens, etc., etc., Biota Aurea Nana, Cedrus
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100,000 Palms—(An especially fine lot of Latanias, Phœnix, Pandanus and Cocos Weddelliana,)
Ficus, Decorative Plants, Crotona, Bedding Plants, 10,000 Camphor Trees, Sub-Tropical fruits, etc.

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FOR FALL OF 1897 AND SPRING 1898.

600,000 Peach Trees-One year old from bud (embracing over 70 varieties.)

Strawberry Plants-From 30 acres set this spring (means millions

25,000 Japan Plums-One year old from bud.

20,000 Grape Vines-One and two years old.

100,000 Asparagus-Conover's, Barr's and Palmetto, 2-year old.

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2,000 Norway Maples. 4,000 Carolina Poplars.

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Peach Trees 36 36



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We have probably the largest block of 1-year from bud there is to be offered this season, from a list budded last season of over

ONE AND ONE-HALF MILLION.

We think we can please you. They cost a little more to grow them this way, yet it is the dealer and planter who has the pleasure of handling good stock.

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- ONE MILLION -

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VARIETIES OF PEACHES NOW FOR SALE

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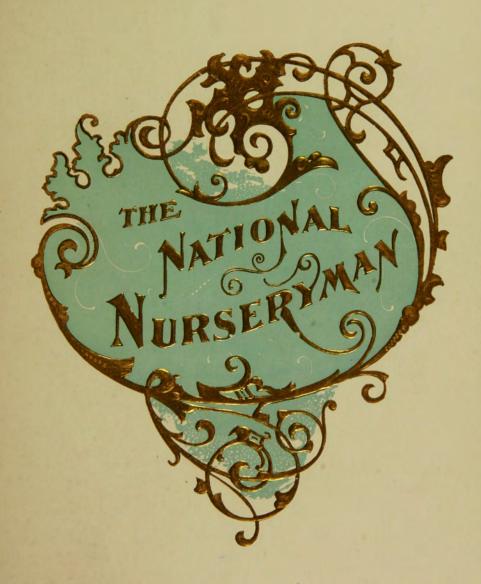
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BLACKBERRIES, "from root cuttings."

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Peach and Plum Trees

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ALEXANDER PULLEN.

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Also a very complete line of Shrubs. TEA'S WEEPING MULBERRY.

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P. S.—I had almost forgotten to mention our Roses—we are now growing one hundred varieties, and for thriftiness and vigor they cannot be surpassed.

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FOR GROWERS AND DEALERS IN NURSERY STOCK.

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Vol. V.

ROCHESTER, N. Y., SEPTEMBER, 1897.

No. 8.

A SCALE FUNGUS.

PARTICULARS OF ITS DISCOVERY BY PROFESSOR
P. H. ROLFS, OF FLORIDA — NOW BEING
TESTED IN THE NORTH AND EAST.

Attention was called in the last issue of this journal to the discovery by Professor P. H. Rolfs, entomologist of the Florida Experiment Station, Lake City, Fla., of a fungus disease of the San Jose scale. Special interest is taken in anything which may prove destructive of so pernicious a pest. In response to an inquiry by the NATIONAL NURSERYMAN, Professor Rolfs has kindly furnished the following detailed account of the discovery and application of this fungus:

It is difficult and probably impossible to say just at what time the San Jose scale were introduced in Florida, but these insects were doubtless brought here from California on nursery stock. In several instances the introduction of this insect has been traced directly to that source. Such a misfortune could not now occur under the present horticultural laws of California. It is certainly a credit to that state, as it would be to any other, to have such rigid laws regulating the introduction and dissemination of material so dangerous to the horticultural interest of the state, and at the same time to protect other states from receiving infested material from its own borders. The genial climate and long summers make the State of California an especially fine habitat for this insect.

In Florida this insect flourishes and is disseminated very rapidly from February or March until about the first of July. About the latter date the summer rains commence. During this season myriads of young crawling San Jose scale are washed from the host plant down into the soil and destroyed. While it multiplies very rapidly and moves on to the newer growth of the trees, the rapid increase which took place during the months of May and June is now somewhat suspended; though to the unskilled eye it appears that July and August are the months when the scale spreads the most rapidly. After the summer rains cease, during the months following September, the wood and bark of the fruit trees harden so much that the young scale have greater difficulty in locating themselves. From the foregoing it will be seen that the scale insect in Florida has a chance to increase about as much in one season as during three in our Northern states. It has been observed repeatedly that a peach tree which was perfectly free from San Jose scale when planted into the infested orchard became so infested with San Jose scale before the end of the year that there was not a spot as large as a dime, excepting on the leaves, where none of the scale were present. It has been observed repeatedly that a few trees planted in an orchard could so infest it that only a small per cent. of the trees were alive at the end of three years when the orchard was treated in the normal way.

While working in orchards during the summer of 1895 I noticed what seemed to be a mortality among these insects. A careful search for the cause was instituted, but nothing could be discovered that gave definite information regarding the subject. During the summer of 1896 the search was renewed. This time greater care was taken and more time used for careful observation. Several orchards that were badly infested with San Jose scale in 1894 were found to be free from this pest, but usually the orchard had been sprayed or otherwise treated. Finally an orchard was found which had not been treated, and yet was almost free from scale insects. It was in this instance where the fungus was found. Immediately upon the discovery, specimens of diseased insects were transferred to an orchard about two miles away where the scale insects were flourishing and healthy. At the end of six weeks' time this mortality became noticeable among the insects of the orchard where the fungus had been introduced.

Specimens of the fungus were taken to the Experiment Station laboratory and cultures begun with the view of propagating it artificially. After many repeated trials it was finally discovered that stale bakers' bread was the best medium at hand. It produced spores in unlimited quantities and in excellent condition for artificial infection.

The spores thus produced are short-lived, and must be applied under favorable conditions. It is imperative that moist atmosphere must follow such an application for several hours. The natural time would be during an evening or night following an afternoon rain. Happily this condition may be artificially brought about. The spores may be applied to the portion of the tree infested with this insect, and that portion of the tree then wrapped with wet burlap or other coarse cloth.

The all-important point is to get the infection to take, for when a few insects are once diseased the fungus will produce spores in countless numbers, beside sending the mycelium from one insect to the adjoining one. Thus the infection may be carried on until three-fourths of the insects of the tree are dead before the most practiced eye would discover the fact. It is only under certain conditions that the fungus produces the orange-colored protuberance that led to its discovery, the greater amount of good being done by invisible spores and the mycelium. This may be discovered, however, by the use of a compound microscope. In summing up it may be said:

This fungus is doubtless a native to Florida, but it has also been discovered in several other states and at least three continents. It has been known in Europe for more than thirty years. It may be transferred to trees affected with San Jose scale and the disease produced among these. Material may be produced in the laboratory at slight expense. The laboratory-grown material may be applied successfully by fruit-growers. This fungus cleared the orchards more effectually of San Jose scale than could have been done by insecticides. It is now being tested by the best entomologists in the North and East, who will report on the subject in proper time.

GEORGIA HORTICULTURE.

STATE SOCIETY'S ANNUAL MEETING—PROFESSORS ROLFS AND ALWOOD ON SAN JOSE SCALE— PRESIDENT BERCKMANS RE-ELECTED.

The twenty-first annual meeting of the Georgia Horticultural Society was held August 4-5 at Savannah. Nearly 200 members were present. Among those present were President P. J. A. Berckmans and his sons, of Augusta; Professor P. H. Rolfs of the Florida Experiment Station, and Professor W. B. Alwood of the Virginia Experiment Station.

The delegates were welcomed by Mayor P. W. Meldrim. Dr. George H. Stone, chairman of the Savannah Park and Tree Commission, whose boyhood was passed in the fruit regions of Western New York, talked interestingly on horticulture.

PRESIDENT'S ADDRESS.

President Berckmans gave an interesting review of the development of horticulture in the state and the work of the horticultural society since its organization in 1876. The rapid progress in fruit growing and diversified farming generally was alluded to and the statement was made that Georgia is more largely engaged in fruit growing than any other southern state. The conditions which have arisen with the development of the industry and the dangers confronting the fruit growers and the necessity of availing themselves of all means of combating plant diseases and enemies were dwelt upon and the failure of this year's peach crop alluded to. Other states, he said, have adopted laws to prevent the importation of diseased plants, but Georgia is without any inspection law whatever. A caution was given against the slaughter of insect-destroying birds. The work of the society in maintaining a careful list of the varieties of fruits grown in the state was alluded to. The list to day is but little larger than when the society was first organized, eighty-five varieties having been eliminated and 112 added.

Professor S. F. Earle of the Alabama experiment station, attributed the failure of the peach crop this year in Middle Georgia and Alabama to a fungus, commonly called the rot or ground fungus, superinduced, he held, by the moist and foggy weather which prevailed during the budding season. Mr. Miller of Rome, said that the peach crop in the "Piedmont" section of the state had been good. The season was dry with but little rain when the trees were in bloom.

Professor P. H. Rolfs of the Florida experiment station at Lake City, gave the results of some experiments which he has made in combating the destructive work of the San Jose scale with a fungus found upon the water oak. A description is given in another column of this journal.

ALWOOD ON THE SCALE.

Professor W. B. Alwood of the Virginia Experiment Station discussed "Enemies of the Fruit Grower." Professor Alwood devoted himself chiefly to the discussion of the San Jose scale, giving its general history. "The most fruitful source of dissemination has been and will continue to be the nurseries," he said. "In the nurseries the scale crawl from from one plant to another and are thus distributed far and wide throughout the country, not knowingly by the nurserymen, but unknowingly. The scale are produced so rapidly that efforts for its

extermination must be begun immediately on discovery, if the orchard is to be saved. The results of experiments for the destruction of the scale were given. A strong solution of fish oil soap has been found effective, but does not completely eradicate the scale. Kerosene emulsion has been used, but will not kill the scale unless used very strong, but there is danger to the plant in this. Pure kerosene has been used, but the results have not been determined." The best plan, Professor Alwood said, was to grub up the trees and burn them.

If it should be possible, Professor Alwood said, that Professor Rolfs' discovery of a fungus enemy of the scale disease should prove effective, it would make his name famous as long as fruit is grown, but he was very much afraid that this would not be the case. This scale attacks such a wide list of trees that if it once obtains a hold upon the forests of the country it will be with the fruit growers of the country as long as fruit is grown. A new scale, known as the new peach scale, or Persian scale, which is very dangerous to peach and plum trees, was described and methods of extermination were given.

Another peach enemy known as the peach maggot, which prevails in Bermuda, was described. The eggs are laid in the fruit, where the young develop and destroy the fruit.

Professor Von Henf mentioned an instance of the successful eradication of the San Jose scale by the gas treatment at Southern Pines last May. Professor Alwood replied that the gas treatment has proved a failure in the treatment of orchards in Virginia, the result proving that the scale were destroyed for one season only.

SCALE IN GEORGIA.

Some twigs bought in by Paul LeHardy of the Persian purple plum were submitted to Professor Alwood, who said that the twigs were effected by two varieties of scale, one of which closely resembled the San Jose scale, and would certainly destroy the tree, sooner or later. It was important, he said, that the park and tree commission should be watchful lest these scales should take hold upon and destroy the trees of the streets and parks. A gentleman from Irwin county submitted a plum twig, which Professor Alwood promptly pronounced to be one of the worst cases of San Jose scale he had ever seen. This almost produced a stampede in the convention, and the delegates crowded forward to view the disease twigs. This instance satisfied the members that the San Jose scale does prevail to a greater or less extent in Georgia and that the fruit growers have a dangerous enemy to fight.

The discussion of the preventive measures to be taken against the San Jose scale was reserved until the night session when Professor Alwood read a paper, giving his experience in dealing with the scale in Virginia. His experience showed the scale to be a most difficult enemy to deal with and his conclusion was that the only sure means of eradication was to dig up the affected trees and burn them. Plants in nurseries could be successfully disinfected by means of hydrocyanic gas, he said, and this had not proved successful in the open air except to the extent of greatly reducing the ravages of the pest. He advocated legislation, both state and national, to provide for the inspection of nurseries and orchards, to prevent the shipment of diseased plants and to provide for the treatment and destruction of diseased orchards.

This subject was discussed at some length and the president was instructed to appoint a committee of seven, of which he should be a member, to take the question of legislation

under consideration. The following committee on legislation and insect pests was appointed by the president: Bowdre Phinizy of Augusta, Hugh M. Starnes of Griffin, John D. Cunningham of Atlanta, George H. Miller of Rome, P. J. Berckmans of Augusta, J. M. Rawls of Cuthbert and S. H. Rumph of Marshallville.

LE CONTE PEARS.

J. B. Wright's paper on "Le Conte Pears" was a strong exposition of the abuses that prevent this fruit attaining the success anticipated for it. His paper negatived the question, "Is the LeConte Pear a Failure?" He emphasized several causes that conspired to make it a failure, but held that with proper care and attention and an intelligent use of fertilizers and precautionary measures in a number of ways, the fruit should be a pronounced success. Among some of the causes to which he assigned the blame of what elements of failure there may be about the pear, were mentioned a too great area, shipping to New York when the market is congested, a lack of care for the trees, an expectation of too much when fertilizers are withheld, the time and manner of shipping, commission houses and the trouble incident to finding good ones.

President Berckmans was unanimously re-elected. The secretary is J. H. Miller of Rome; the treasurer, L. A. Berckmans, Augusta. The society will meet next year at Americus. The display of fruit this year was particularly fine.

AMERICAN POMOLOGICAL SOCIETY.

In response to an invitation of the Ohio State Horticultural society, the twenty-fifth biennial session of the American Pomological society will be held in Columbus, O., September 1, 2 and 3. G. C. Brackett, Lawrence, Kas., is secretary; P. J. Berckmans, Augusta, Ga., president.

An address of welcome to the state will be given by Governor Bushnell, and an address of welcome to the city by Mayor Black, with responses by President P. J. A. Berckmans of the American Pomological Society and by Hon. N. H. Albaugh of the Ohio Horticultural Society. Professor Fred W. Taylor of the Nebraska Experiment Station will speak of Russian fruits, and new fruits of interest and value will be discussed by George W. Campbell, O. W. Aldrich, Professor W. R. Lazenby, Professor W. I. Green and others.

Professor F. M. Webster of the Ohio Experiment Station will discuss the subject, "Insect Legislation: Can It Be Beneficial and Practical Without Being Detrimental?" and Professor W. B. Alwood of the Virginia Experiment Station, the subject, "State and National Legislation for the Suppression of San Jose Scale." G. B. Brackett, Washington, D. C., will endeavor to point out what should be the relation between the society and the Division of Pomology, United States Department of Agriculture.

The thirteenth annual convention of the Society of American Florists was held August 17-20 at Providence, R. I. The society followed the nurserymen's lead and decided to meet in Omaha in 1898. William F. Gude of Washington, was elected president; Wm. J. Stewart, secretary.

THOROUGH APPRECIATION.

THE HOOVER & GAINES CO., DAYTON, O.—"The NATIONAL NURSERYMAN is all right as an advertising medium, and doubly so as an organ and trade journal. We wish you much success."

HAMBURG FRUIT EXHIBITION.

Louis Ritz, of the board of managers of the Hamburg Horticultural Exhibition, which opened May 1st, and which will close with a fruit exhibit commencing September 24th, writes:

"There will be exhibits from nearly all civilized nations. It is of the highest importance for your fruit growers, who are large exporters to the Continent, to keep their fine fruit prominently before our buyers and consumers, by sending an exhibit of fine apples and pears, in competition with those of other countries, to convince visitors of the superiority of their fruit. Most Continental countries have slight and inferior fruit crops this season, and they will have to depend on supplies from the United States and the British Provinces.

"About a dozen of each variety of apples should be sent, carefully picked, and wrapped in tissue or soft paper, packed so that they do not touch or rub each other in the boxes, that should contain air-holes to avoid fermentation.

"They should be shipped to Lunham & Moore, 461 Produce Exchange, New York, who will place them on board of our Hamburg steamers, thereby saving ocean freight and charges to the shipper, as all Hamburg steamers take exhibits free of charge. Exhibits should reach here about September 24th. The board of managers will take charge of all exhibits and see that justice is done them."

Ellwanger & Barry, Rochester, N. Y., expected to have an exhibit at Hamburg next month, but the season is so backward it is doubtful that an attempt will be made.

Commissioner J. A. Filcher, the accredited state representative at the Horticultural Exhibition, returned from Hamburg, Germany, on August 5, after an absence of three months, says the California Fruit Grower. He is enthusiastic over the affair. The exposition enjoys an average attendance on week days of 50,000 and on Sundays of from 110,000 to 130,000. With three months yet to run, the management of the big horticultural exhibit finds itself with every debt paid and a surplus in hand of \$100,000. It is expending its surplus and profits in added features of an attractive nature.

WHITEWASH FOR SCALE.

Mr. Saunders' note in regard to destruction of scale by lime wash, and remarks that he practiced it successfully a half century ago, adding, however, a little soot with the lime wash in order to take away its glaring color. It has also been in use by the old German settlers of Pennsylvania for a couple of centuries, who applied it not merely for the destruction of scale, but for all other insects and injurious fungus. No trees can be healthier than those old-fashioned people can present. No one need fear the San Jose scale, or any other scale, who applies annually a coat of whitewash as described.

So many of these admirable horticultural practices of our fore-fathers have been suffered to fall into disuse to be replaced by other more complicated and less satisfactory applications that correspond. Like Mr. Saunders, those who bring these old, worthy practices again to the fore-ground deserve more thanks that those who are continually talking of new notions.—Mechan's Monthly.

E. H. RICKER, ELGIN, ILL.—"Enclosed please find \$1.00 for our subscription. We could not do without the NATIONAL NURSERYMAN."

THE NEW TARIFF.

OPINIONS OF THE MEMBERS OF THE TARIFF COM-MITTEE-A LONG WAY IN ADVANCE OF ANY PREVIOUS TARIFF MEASURE.

In the last issue of this journal the opinion of Hon. N. H. Albaugh, Tadmor, O., regarding the new tariff schedule on nursery stock was given. Mr. Albaugh believes that the new tariff will certainly have a favorable effect on the nursery business of this country, and that the tariff on roses will tell much in favor of Eastern florists, whose business was greatly injured by European importations.

Herewith are presented the opinions of other members of the tariff committee of the American Association:

President Irving Rouse, Rochester, N. Y.: "While the new tariff law on nursery stock is not all that we could have wished, or that we tried to obtain, it is a long way in advance of any bill that we have ever had, the specific part alone being the greatest advance. The combination of specific and ad valorem duties will enable parties using small-sized stocks to import them on a more equitable basis that if the duty had been strictly specific alone. The present schedule also does away, in a great measure, with the conflicting and contradictory clauses that have always appeared in former bills.

"The whole law is the outcome of a hard and long fight made by the nurserymen, and if we have not got exactly what we asked for, we have, I believe, received a fair measure of protection."

Ex-President Silas Wilson, Atlantic, Ia.: "The tariff on nursery stock, as provided for in the Dingley bill which has recently gone into effect, is by far the best tariff on nursery stock that the nurserymen of America have ever had. Of course it is not just what the nurserymen asked for, but I believe it will contribute largely to the value of the nursery business of the country. I believe it will tend to discourage many small farmer nurserymen who have been growing more or less stock for the trade who had no trade, thus breaking the market and injuring the regular nurserymen, and at the same time the farmer nurseryman was all the while playing a loosing game; also doing the general nursery business an injustice by growing a lot of poorly grown and graded stock and putting it upon the market at less prices than good stock could be produced for.

"I believe when this new tariff is fully understood by the nurserymen of the country it will be generally accepted as satisfactory. I further believe that we are now on the eve of a period of prosperity. I believe the continued increase in the output of gold ore in this country, and the large and growing demand for American grain in Europe, and the settling of the tariff question, will all contribute to a revival of business, and I believe this revival will be permanent, but it may be gradual in coming."

President J. J. Harrison, of the Storrs & Harrison Co., Painesville, O.: "There seems to be somewhat of a diversity of opinion among our directors as to the results of the new tariff bill. Some look upon its probable effect with anything but optimistic views; others are hopeful that it will work for the good of the profession, not all at once, but making gradual improvement as time passes, until the nursery business will assume a healthy condition. All would have been better pleased

if full specific duties had been granted on stocks, cuttings and seedlings, as asked for by the Association of American Nurserymen, as it would have prevented undervaluation by dishonest importers."

OUTDOOR ART ASSOCIATION.

Gentlemen interested in park management met recently at Louisville, Ky., and formed the "Park and Outdoor Art Association." The committee on organization presented the following report, which was adopted:

"Your committee reports that an organization be formed on the lines suggested by Mr. Charles Eliot shortly before his death, to wit: A general association to be made up of all who desire the advancement of 'art out of doors,' including amateurs, land owners, writers, park commissioners and officers, village improvement societies, foresters, gardeners and others interested. An organization corresponding somewhat to the American Association for the Advancement of Art."

The following were elected as officers and on committees: President, John B. Castleman, of Kentucky; vice-president, L. E. Holden, of Ohio; secretary and treasurer, Warren H. Manning, of Massachusetts. Executive committee—R. H. Warder, Ohio; T. L. Ridgeley, Missouri; W. H. Manning, Massachusetts; W. S. Edgerton, New York; L. E. Holden, Ohio; Lewis Johnson, Louisiana; Harry W. Jones, Minnesota; Andrew Cowan, of Kentuckey; P. Thomas, Kentucky; Robert Kinkead, Kentucky.

Committee to prepare constitution and by-laws (to report at next meeting): C. S. Sargent, Massachusetts; E. N. Haskell, Massachusetts; John C. Olmsted, Massachusetts; W. H. Manning, Massachusetts; W. S. Edgerton, New York; L. H. Bailey, New York; Mrs. M. G. Van Rensselser, New York; William Falconer, Pennsylvania; Colonel Bingham, Washington, D. C.; Charles W. Garfield, Michigan; Charles H. Shinn, California; F. L. Ridgeley, Missouri; Professor Trelease, Missouri; A. R. Mayer, Missouri; Andrew Cowan, Kentucky; L. Johnson, Louisiana; C. Peck, New York; W. W. Folwell, Minnesota; C. M. Loving, Illinois; O. C. Simonds, Illinois; J. F. Foster, Illinois; Sol Claypool, Indiana; J. M. Waddick, Ohio; W. M. Canby, Delaware.

The next annual meeting of the new association will be held at Minneapolis June 22, 1898.

TREES FOR PITTSBURG PARKS.

The Pittsburg Dispatch publishes the following:

"The contract for furnishing trees, shrubs, etc., for the parks has been awarded to Ellwanger & Barry, of Rochester, N. Y., at \$1,200. An agent, who buys wherever he can, bid \$3 lower, but this bid was rejected because Director Bigelow thought it was desirable to have the best trees and shrubs for the parks, delivered promptly. Ellwanger & Barry is the largest firm of its kind in the country."

James Vick's Sons, Rochester, N. Y., writing of a visit to David Miller, originator of the Cumberland black raspberry, say: "We were greatly pleased with the Cumberland black raspberry as seen at your place in Newark. The berry is extra large, the quality better than the Gregg, and the plants very productive. We think there is a future for it."

SCALE IN ILLINOIS.

EARNEST EFFORTS TO ERADICATE IT—STATE AP-PROPRIATES \$3,000 FOR EXRERIMENT—PRO-FESSOR FORBES WILL INSPECT GROW-ING AND IMPORTED STOCK.

Professor S. A. Forbes, state entomologist of Illinois, at Urbana, Ill., has issued a circular notice concerning the San Jose scale and other fruit insects, in which he says:

An appropriation of \$3,000 was made to the state entomologist of Illinois by the General Assembly at its last session, "for experiment, publication, and instruction concerning the San Jose scale, and for the inspection and disinfection of orchards and nurseries." It is the earnest desire of the entomologist that this sum may be used to the best advantage to disclose the present condition of the fruit interest of the state with reference to this pernicious insect; to exterminate the scale promptly wherever in Illinois it has been or may be found; to protect the nurseryman and fruit grower as far as practicable against the chance of future invasion; and to assure the customers of Illinois nurserymen and of other dealers in fruit plants that Illinois stock offered for sale is free from this pest.

It was the evident purpose of the legislature to trust the control of this important matter to the public spirit and enlightened business enterprise of the private citizen, aided in every practical way by the official entomologist. It is the purpose of this circular to make to all interested a cordial offer of information, advice, aid, and supervision of insecticide operations, as far as the resources at our disposal will permit; and also to ask early and full information from all concerned with reference to the occurrence or introduction, known or suspected, of the San Jose scale in Illinois.

LOCATION OF COLONIES.

It must be our first endeavor to discover promptly and to locate exactly all the colonies of this insect now established in the state. Eighteen such colonies have already been found, nearly all by an inspection of premises to which we have had reason to believe that nursery stock was imported at a time when the nurseries from which it came were infested by this scale. A considerable number of such suspected importations known to us remain for inspection, but these are now being examined by an experienced agent from this office. It is of great importance that we have at once full information concerning all other importations into the state from places and at times such as to make it possible that the San Jose scale was conveyed by their means. I consequently earnestly request all to whom this notice may come that they will send to this office prompt and precise information with regard to the importation into Illinois of nursery stock or other trees or plants subject to its attack, which were grown in any of the following localities within the time mentioned after each: California, since 1873; Eastern New Jersey, between 1886 and 1894; Maryland, since 1887; Florida, since 1889; Washington State and Ohio, since 1890; Georgia and Louisiana, since 1891; Long Island, N. Y., since 1892; Delaware and Eastern Massachusetts, since 1893.

The plants thus far found subject to injury by the San José

scale are the apple, pear, peach, apricot, plum, cherry, quince, grape, raspberry, blackberry, gooseberry, currant, and persimmon among our fruits; the hickory, pecan, English walnut, and almond among the nut-bearing trees; the oak, basswood, elm, chestnut, birch, and willow among our shade and forest trees; and a large miscellaneous list of trees and shrubs, including the rose, thorn-apple or red-haw, crab-apple, wahoo, spiræa, loquat, cotoneaster, flowering quince, flowering currant, acacia, alder, and sumach. This insect also seriously infests the osage orange, spreading with the greatest facility through the thick growth of the wayside hedge.

It is very important that all supposed or possible cases of the appearance of the San José scale in Illinois be reported at once to this office, accompanied by twigs or pieces of bark illustrating the supposed attack. To all communications accompanied by such specimens prompt reply will be made, and energetic measures for its destruction will be taken wherever the scale is thus detected.

EXTERMINATION OF THE SCALE.

To owners of premises on which this scale is found the entomologist will give all information and assistance necessary to the prompt extermination of the pest, sending an agent to inspect the situation and surroundings, to give personal instruction as to methods of procedure, and to supervise and direct insecticide operations. An efficient spraying apparatus will also be furnished for use where this cannot otherwise be readily obtained. This proposition is made on the sole condition that the owner will destroy stock hopelessly diseased, and will provide the necessary insecticide and the labor for its preparation and for its distribution to infested stock, and that the whole operation will be carried on and continued to the satisfaction of a representative of this office. Experience elsewhere has shown that expert assistance of this sort is, as a rule, necessary to insure success; and expenditure of public money in such an interest can be justified only on condition that everything is done needful to the accomplishment of the end desired.

INSPECTION OF NURSERIES.

As a guarantee of the freedom of Illinois nursery stock from this and other notably injurious insects likely to be conveyed in trade, the entomologist further offers to inspect the premises of nurserymen and other dealers at least once each year, and to give the owner after such inspection a certificate setting forth the precise facts apparent with respect to the presence or absence of the San José scale and other insects dangerous to the property of customers. Such inspections will be made and such certificates issued only on application to this office. and on condition that the actual traveling expenses of the inspector and a per diem of three dollars is paid by the owners of the inspected property. Special inspections of nursery stock imported for sale will also be made, so far as this may be practicable, on the same conditions and terms; but to insure such inspections requests should be made as long as possible in advance of the receipt of importations, with at least an approximate indication of the time when they are, expected to arrive. Trips may thus be arranged which will provide for the largest possible number of inspections, and reduce the cost of each Statements of receipts and expenditures under this head will be reported to the governor and published in the regular reports of the state entomologist of Illinois.

Among Growers and Dealers.

The Sioux City, Iowa, Nursery & Seed Co. has been reorganized.

Budded Pecans to the number of 1,600 are wanted by A. W. Newson, Nashville, Tenn.

Peirson Brothers, Maple Grove Nurseries, Waterloo, N. Y., are successors to E. C. Peirson.

Albert Brownell succeeds Brownell & Morrison as proprietor of the Albany Nurseries, Albany, Ore.

Iowa Smith, of the Smith Nursery Co., Springfield, O., spent several days in Rochester last month.

Gooseberries and currants are among the speciaities offered by Ellwanger & Barry, Rochester, N. Y.

Peach trees by the 100, 1,000, or car-load, are offered by the West Jersey Nursery Co., Bridgeton, N. J.

Eugene Willett & Son, North Collins, N. Y., makes a specialty of grape vines and small fruit plants.

C. L. Longsdorf, Floradale, Pa., presents his list in another column. It should help out several wants.

E. Stoner, Westminster, Md., offers apple and peach trees that have been inspected by the state entomologist.

Mr. George, of Storrs & Harrison Co., Painesville, Ohio, called on Western New York nurserymen last month.

The American Seed Trade Association has obtained concession from the express companies for the transportation of seeds

J. Frank Norris presents an unusually attractive list of fruit and ornamental stock for the fall season. His trade list is ready.

Stephen Hoyt's Sons, New Canaan, Conn., have a surplus of 200,000 apple, 150,000 peach, and 50,000 Green Mountain grape vines.

Frederick W. Kelsey, 150 Broadway, New York, is agent for Colombe Brothers, Ussy, France, who offer French stocks in full assortment.

California privet and Osage orange, Carolina poplars, maple trees, asparagus roots and peach trees are ready at Josiah A. Roberts', Malvern, Pa.

The Knox, Nurseries, H. M. Simpson & Sons, Vincennes, Ind., were established in 1851. They have apple, peach and cherry trees at unusually low prices.

The largest stock of apple seedlings in the West is the claim of D. S. Lake, Shenandoah, Ia. He has a large surplus of scions, and will make to order any style of grafts.

F. M. Hartman, Dansville, N. Y., guarantees that his stock has not been damaged either by drought or woodchucks. He offers standard and dwarf pears, plums, cherries and apples.

E. Albertson, of Albertson & Hobbs, Mrs. Albertson, and Wilson Peters, of George Peters & Co., Troy, O., visited in Rochester, Geneva, Dansville, N. Y., and Painesville, O., last month.

Professor H. E. Van Deman, Parksley, Va., will superintend the fruit department of the American Institute Fair, to be held in Madison Square Garden, New York city, September 28 to October 23.

The Kinsey nurseries, Kinsey, O., were established forty-five years ago. The proprietors, Samuel Kinsey & Co., offer fruit

and ornamental stock at attractive prices in large and varied

The secretary of the National Apple Shippers Association, which held a convention at Buffalo August 5th, estimates this year's apple crop of the United States to be about 60 per cent, of a full crop.

D. H. Patty, Geneva, N. Y., has been twenty years in the business, and he has 75 acres in nursery stock. He believes he can save money for those who order pears, cherries, plums or quinces of him.

The frontispiece of the August issue of the National Nurseryman was loaned by the New York Agricultural Experiment Station at Geneva, through the kindness of Professor F. A. Sirrine, entomologist of that station.

Dr. Edward Moore, Londonville, N. Y., highly recommends the growing of the English gooseberries. He recently imported bushes of several varieties and fruited them with great success. He says he has seen no signs of mildew.

Joseph Meehan, Germantown, Pa., argues in favor of planting Eleagnus longipes for the fruit, the tart taste of which is agreeable, he says, to most people. He also advocates the planting in gardens of the dwarf Juneberry and the huckleberry.

Stephen Hoyt's Sons, New Canaan, Conn., write: "We think we have the largest and finest stock of apple trees in the country. This is saying a good deal, but we believe it to be the truth. We never had finer peach trees, and we have an immense stock of ornamentals."

William Murdoch, one of the pioneer nurserymen and florists of Western Pennsylvania, died at Pittsburg August 4th. Mr. Murdoch was born near Belfast, Ireland, in 1801. His parents were Scotch-Irish. In 1826 his father, John Murdoch, emigrated to America with his family.

E. G. Mendenhall, Kinmundy, Ill, writes: "We are pleased to know that the legislature before adjourning appropriated \$3,000 to the state entomologist towards defraying expense of looking after the San Jose scale. The nurseryman will do his part in getting rid of it and all other pests."

Until recently the firm of Sears, Henry & Co., Geneva, N. Y., was composed of James S. Sears, David H. Henry and Lemuel Herendeen. James S. Sears and Lemuel Herendeen died this year. David H. Henry and Albert H. Herendeen will continue the business under the old firm uame.

Victor H. Lowe, deputy inspector of the New York Agricultural Experiment Station, certifies that he has examined the nursery stock of Sears, Henry & Co., Geneva, N. Y., and finds no indication of the presence of San Jose scale, peach yellows, rosette, or other injurious insects or fungous diseases that might be transferred on nursery stock from the nursery to the orchard.

L. A. Goodman, secretary of the Missouri Horticultural Society, says: "Reports from nearly every county of the state give the crop ranging from 50 per cent. to 100 per cent. making an average of about 75 per cent. for the state. Some of the orchards, which had such a heavy crop last year, of course, will not be so full, but there are thousands of young orchards all over the state that are just beginning to bear and the crop is not only a good one, but the apples will be extra fine and very perfect."

THOMAS W. BOWMAN.

Thomas W. Bowman, whose photograph is reproduced on this page, was born in Sidney, Maine, December 31, 1837. In the fall of 1859 he commenced the canvass in the sale of nursery stock, continuing at it for a few weeks; during the following year he devoted a part of his time to this work inpartnership with another well-known nurseryman; also in 1861 he sold for a short time. In 1870 he opened an office in Canada in company with one of the largest firms in the country. This business continued for thirteen years, when it was dissolved by mutual consent, during which time a very large trade was built up, and undoubtedly of greater magnitude than has

In 1883 Mr. Bowman came to Rochester, N. Y., starting on his own account not only the selling through salesmen in the United States, but also the growing of stock. Since then he

has continued to give his careful attention to all branches of the work, having it done on sound principles, dealing honestly and squarely with all, and can now look with pleasure on his extended retail trade in the states and the many acres of stock under cultivation. The growing consists largely of fruit trees and small fruits, a few ornamentals and shrubs, and so extensively has this been entered into that a great deal will be offered at wholesale for late fall and spring shipment. The ample facilities for packing consist, among other things, of an excellent frost-proof storage cellar in which can be placed stock for early spring delivery.

been done by any one firm since.

Mr. Bowman has not only attended to his own business, but has endeavored to help the nursery trade in general by his willing services in the organizations to which he belongs, Western New York Horticultural Society, Eastern Nurserymens Association and American Association of Nurserymen. Although advanced in

years, he is still very active, and much more so than many of those younger, exercising the same watch-care over all details of the work as has characterized his business dealings, and judging from the communications we are shown it can be seen that the methods are giving satisfaction to all.

During the past few years his son, Claude V. Bowman, has been giving his entire attention to office affairs, and since February last the business has been conducted under the name of Thomas W. Bowman & Son. The main office and packing grounds of the firm are located corner of East Main and Culver streets, Rochester, N. Y. They have a branch office at Toronto, Ont., in the Canada Life Building, managed by Charles L. Trotter, who has been with them many years.

P. D. Berry, Dayton, O., makes a specialty of small fruit plants of all the leading varieties.

SCALE IN INDIANA.

Bridgeport, Ind., Aug. 23.—Albertson & Hobbs: "As yet we have no legislation in our state regulating or limiting the shipment into the state or the handling of nursery stock infested or not with San Jose scale, or anything else, and as we have no legislature this year, will probably have no legislation until a year from the coming winter. But the nurserymen in this state are getting so thoroughly stirred up that with many of them at least it will require a clear certificate and guarantee before they will purchase stock or will risk handling it.

"Our own nurseries were inspected carefully last week and we are glad to say were found free from infection, but we are sorry to say that in a number of orchards in the state in which trees have been planted that were secured in New Jersey in the past three or four years they have proven to be

badly infected. Some orchards it is going to almost completely ruin. Others, where it has been discovered before it has had time to spread much, will probably be saved by the destruction of the trees infected and careful treatment of others.

"We understand from experts that in some places it is found on the fruit trees, while in some places it may be found only on the ornamental stock, and that the ornamental stock is almost as likely to be infested as the fruit trees.

"What we think we want or should have is national legislation with supplementary state legislation to assist in the enforcement of the national laws in such a manner as will best tend to stamp it out; for most certainly, unless it is fought and everything possible done to stamp it out, it will mean the destruction of the fruit business of the country."



THOMAS W. BOWMAN.

The King of Siam, Khoulalon-korn, on August 1st visited the Royal

Gardens at Kew, England, and was conducted through them by the director, W. T. Thiselton Dyer. The king evinced knowledge of no mean order concerning many of the rarer plants.

A. Willis, Ottawa, Kan., writes: "Reports in general indicate an improvement in the matter of sales over the past year.

All in all, while the business has suffered, the nurserymen have their faces toward the rising sun and are hopeful for the future."

John P. Campbell, entomologist of the Georgia Experiment Station, certifies that he has personally inspected the nursery grounds of P. J. Berckmans at Augusta, Ga., and the growing stock and orchard trees were found free from San Jose and other scale insects, black knot, peach and plum rosette, and all other infectious pests, and are apparently in every respect healthy. He adds: "I find that the greatest care is taken in the use of measures for preventing the introduction of injurious or fungus diseases."

The National Nurseryman.

C. L. YATES, Proprietor.

RALPH T. OLCOTT, Editor.

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Drafts on New York or postal orders, instead of checks, are requested.

Correspondence from all points and articles of interest to nurserymen and horticulturists are cordially solicited.

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ROCHESTER, N. Y., SEPTEMBER, 1897.

TRADE CONDITIONS.

There are indications upon all sides that business conditions throughout the country are improving. Whether or not it is admitted that this improvement is the result of a change of federal administration, it is certain that the settlement of the tariff question has been the chief cause of effects now noted. And aside from the particular tariff schedules enacted, it is admitted that confidence has been restored in business circles by a knowledge of where we stand; that the assurance of even four years of freedom from tariff changes, regardless of the nature of the measure itself, will give a new lease to business life.

So far as the nursery schedule is concerned, the new tariff is a compromise. Opinions of leading nurserymen, the members of the tariff committee of the American Association, are given in another column. All national tariff measures must be compromises so long as present tariff-making methods prevail. It is far better, generally speaking, for the stability of the country, that there should be a compromise, and so avoid, as far as possible, radical changes corresponding to the extreme views of either of the dominant parties. But the next revision of the tariff should be scientific rather than partisan. To Senator William B. Allison, of Iowa, much credit is due for the retention of as many of the nurserymen's suggestions as appear in the new schedule, in spite of the opposition headed by Senator Vest. One of the principal points in which the new tariff differs from the old one is the substitution of specific for ad valorem duties to a considerable extent. This is noticeable in the nursery schedule. It is argued that the specific system is a more certain producer of revenue, and prevents fraudulent valuations at the custom house. With an ad valorem duty the protection is less as foreign prices decrease, and that is just the time protection is most needed.

It is believed that there are better days in store in the immediate future for the American farmer, upon whose prosperity depends the welfare of the country. No trade is more directly affected by the farmers' adversity or prosperity than is the nursery trade. There is a prospect of a very large European demand upon this year's wheat crop of the United States. which is expected to be at least 30,000,000 bushels larger than that of last year, while the average price is likely to remain twenty cents per bushel higher than that of last year. The farmers of the Western states have been driven to the u'most economy by the experience of the last few years. The tendency among them will be to devote attention to making investments only where profits appear to be reasonably sure. This tendency will easily be directed to the planting of commercial orchards as the result of the marked success in fruitgrowing of recent years, when fruit-growing is made a specialty; and as the result, also, of improved conditions which will supply means for procuring the trees.

In addition to the favorable conditions in internal affairs, there is promise of largely increased returns from our foreign trade. For the year ended June 1st, our export trade was the largest in the history of the country, exceeding \$1,050,000,000. That of the preceding year was \$880,000,000. The balance of trade for the fiscal year would have been nearly \$400,000,000, had it not been that during the last four months many large importations were made in anticipation of new tariff rates.

The nursery trade will share the feeling of confidence in the promise of better times.

DANSVILLE STOCK IS PRIME.

In the August issue of the NATIONAL NURSERYMAN our Dansville, N. Y., correspondence was to the effect that drought had affected nursery stock at that point. Leading Dansville nurserymen at once declared that they had experienced no drought, and that all Dansville stock was in unusually fine condition.

We were at a loss to account for the conflicting statements, but upon investigation found that the correspondent under date of July 15th had exaggerated the effect of the extremely hot weather of the preceding fortnight, when the Genesee valley was the hottest place in the United States, the mercury reaching 98° and 99°. It was fear that was not realized.

The fact is, that nursery stock at Dansville was not in the least affected, and that under the copious rains of the latter half of July the stock has the appearance of the finest in Western New York. Nurserymen who have been going to and from Dansville lately from various parts of the country bear testimony to this effect.

TRADE BRIGHTENING UP.

M. J. Wragg, of John Wragg & Sons Co., Waukee, Ia.: "The outlook for trade is brightening up, and there seems to be a healthy demand for the time of year. Our sales to date are better than they have been in some years. The fruit crop with us is better than we have had in several years past. All kinds of small fruits in abundance. Cherries were a heavy crop. Grapes and blackberries promise well. Plums and apples we believe will be above the average."

THE NATIONAL NURSERYMAN.

SHIPPING RESTRICTIONS

REGULATIONS THAT MUST BE OBSERVED IN SEND-ING OUT STOCK THIS FALL—MICHIGAN AND MARYLAND LAWS THE SEVEREST.

So much has been said and written concerning the laws proposed by the states for the regulation of the sale and distribution of nursery stock with regard to San Jose scale that the subject has become confusing now that the shipping season is near at hand.

For this reason attention is called briefly to the requirements in such states as have definitely acted upon propositions regarding nursery stock shipped in from other states. It is found upon examination that in only two states, Michigan and Maryland, have special restrictions been imposed. Following is the summary:

MINNESOTA.—Restriction bill killed.

Wisconsin.—Restriction bill killed.

GEORGIA.—Restriction bill to be introduced next winter.

LOUISIANA.—All fruit trees introduced into the state shall be inspected by the state entomologist.

DELAWARE.—Inspector appointed to inspect all orchards and nurseries and report to the governor January 1, 1898.

Illinois.—There is a law requiring outside corporations to maintain a public office in Illinois if they do business there and file a copy of incorporation certificate. The nursery stock restriction bill was killed.

PACIFIC COAST STATES.—An inspector of fruit pests, or quarantine guardian, must inspect all nursery stock, and if the latter is infested it is a misdemeanor to offer it for sale, gift, distribution or transportation until it is disinfected.

NORTH CAROLINA.—A commission consisting of the state commissioner of agriculture, the director of the Experiment Station and the president of the Horticultural Society, has power to destroy at the expense of the owner any infested stock.

MICHIGAN.—A law combining the provisions of the Maryland law and those of the bill which did not become a law in Minnesota, providing for a license fee and a bond of \$1,000. Nurserymen shipping stock into Michigan this fall should procure a copy of this act.

MARYLAND.—Nurserymen shipping goods into this state must label every package on the outside with the names of the consignor and consignee, the contents and a certificate showing that the contents have been inspected by a state or government officer and that the stock is free from all San Jose scale, yellows, rosette or other injurious insect or disease. The consignor must also send on each package a written statement, signed by him, that the stock has been inspected and is free from insect or disease: Without the certificate the stock may be seized and burned.

New Jersey.—Professor John B. Smith, state entomologist, says: "Nothing has been done to prevent the importation into this state of nursery stock, with reference to the San Jose scale. I do not believe in the efficiency of laws on that point, and prefer to trust to the vigilance of the purchasers. Furthermore, I am convinced from my experience during this year that I can control the scale without any trouble. I will not make any effort whatever to secure the passage of an act in New Jersey looking toward the specific control of this insect. As to legislation in the country at large, there will be a reaction when it is discovered that thousands of trees have been needlessly sacrificed where a little conservative study and patience would have been more in place."

VIRGINIA.—Nursery stock known to be infested with San Jose scale cannot be offered for sale or transportation. Professor Alwood, state entomologist, says: "We have no power to in any wise reach those nurserymen without the state who are sending scale-infested stock to our people, except we could apprehend their agents in the act of delivering such stock. Concerning nurseries situated without the state, we

believe that our duty demands that hereafter we shall publish widely the names of all parties who send this scale into the state. As a repressive measure, nothing can be more effective than this. Also all fruit tree agents should take warning that it is our intention to prosecute to the full extent of the law all who sell scale-infested stock in this state hereafter." Professor Alwood advises all purchasers in Virginia to demand entomologist's certificate.

The San Jose scale has been discovered at work in Massachusetts, Connecticut, New York, Pennsylvania, New Jersey, Delaware, Maryland, Virginia, North Carolina, Georgia, Florida, Alabama, Mississippi, Louisiana, Texas, West Virginia, Ohio, Michigan, Indiana, Illinois and Missouri.

EVERBEARING PEACH.

One of the most remarkable peaches of the season is the Everbearing, introduced by P. J. Berckmans, Augusta, Ga. 1ts claims are outlined as follows:

First. Its long-continued bearing period. The first ripening begins about July 1st, and successive crops are produced until the beginning of September. Fruit in all stages of development—ripe, half grown, and just set—may be seen upon the tree at the same time.

Second. As the tree blossoms during a period of four to five weeks, a complete failure of fruit has, therefore, never happened since the original tree first began to bear, eight years ago.

Third. The fruit is creamy white, mottled and striped with light purple and with pink veins; oblong in shape, and tapering to the apex; flesh white; with red veins near the skin, very juicy, vinous, and of excellent flavor; quality very good to best. Freestone, of the Indian type.

The first ripening averages 3½ inches long by 8 inches broad. The size of the second and following crops diminishes gradually, until that of the last ripening is about 2 inches in diameter. A supply of fruit may, therefore, be secured from the same tree for nearly three months in succession.

The introducers say: "We do not recommend the Everbearing peach for commercial orchards; but for family use, or small gardens, where there is room for only a few trees, its value is unquestionable. We offer it with confidence, as we have known the original tree for the past three years, and gathered the fruit in its various stages of development."

RATHBUN BLACKBERRY.

Undoubtedly the Rathbun blackberry is, as has been claimed, the most desirable blackberry known. Samples sent to this office by James Vick's Sons, Rochester, N. Y., caused much comment by all who saw and tasted the fruit.

It is by far the largest and finest flavored blackberry we have seen. The berries measured an inch and a half in length and an inch in diameter. The fruit is glossy jet black, juicy, of the most delicate flavor, and with but small core. The berries melt in the mouth, the acini being very large and juicy and the seeds comparatively small.

The Rathbun is said to command the highest price in the market. The plants are reported vigorous, hardy, and very productive. The branches droop and root at the tips.

CANNOT WELL DO WITHOUT IT.

T. E. Burroughs, New London, Conn.—"Enclosed find \$1 to renew my subscription. Your journal is a good one, and I feel that I cannot well do without it."

A FUMIGATORIUM.

STRONG ARGUMENT IN FAVOR OF GAS TREATMENT INSTEAD OF WHALE OIL SOAP—PROFES-SOR W. G. JOHNSON'S VIEWS.

I believe the day is near at hand when every nurseryman in this country will find a fumigatorium as necessary a part of his equipment as seeds, buds and grafts. For his own safety and the protection of his customers it is now absolutely indispensable in many localities. Some nurserymen are now fumigating with hydrocyanic gas every bud that is used, whether it is cut from their own trees or comes from some other nursery. The trees are then passed through a fumigatorium before they are delivered to their customers. My experience and experimental work for the past two years leads me to conclude that the gas treatment is the only satisfactory and inexpensive method known at present that is at all practicable for the destruction of the San Jose scale and other insects upon nursery stock. Dipping in tanks of whale oil soap, of course, has been done very successfully by some nurserymen; but who could afford to expend the money necessary to get ready for the dipping of a million trees, to say nothing of the cost of materials and labor required to carry the operation through?

In a fumigatorium 10,000 trees, or as many as the room will hold, can be treated as easily as one; but how about the dipping? Every solitary tree must be handled, or a vat large enough to take several, say a dozen at the most, must be constructed, and then a derrick and pulley block would be necessary to handle them, to say nothing of the stench and disagreeableness of handling the trees afterwards. To me, at least, the dipping process is out of the question, so far as the suppression of the San Jose scale is concerned, upon nursery stock. The chances of a scale surviving this treatment are many times greater than that following gas.

Last fall and this spring I selected several extreme cases of badly infected apple, pear and plum trees, and passed them through a fumigatorium. They were then set out near my house, where I could keep them under constant observation. All the trees have made a beautiful growth, and at the present time not a living scale can be found upon any of them; while an apple tree (Ben Davis) that was not fumed, and set out as a check on the other lot, was literally alive with young scale some weeks ago, and was destroyed to avoid the spread of the pest to other trees some distance away. From many other tests I have made this summer upon trees infected with this scale, I am convinced that hydrocyanic gas, properly handled, is the most satisfactory and inexpensive method of treating nursery stock.

A building suitable for fumigating nursery stock need not necessarily be an expensive affair, one in which from 25,000 to 60,000 trees, according to size, can be fumed at once. The building is about 32 feet long by 15 feet wide, and is divided into four compartments. In front there are two rooms about 14 feet square by 7 feet high; and two smaller rooms on the end 4x7 feet. These latter rooms are used for small lots of stock. The building is made of rough pine boards, with batting ourside, and lined with a good quality of flooring, with tarred paper between. The ceiling and floor are also double lined between with paper. Between the rooms there is a double flue opening from above, which is reached by a ladder in the

rear of the building. When the process of fumigation is over the cap on the flue is removed and the door opened a few minutes later. The size of the fumigatorium must be made according to the amount of nursery stock handled. The one I have in mind has a capacity of from a million and a half to two million trees annually. The trees are hauled from the nursery, and from 10,000 to 25,000, according to size, are packed loosely flat on the floor, with the roots against the opposite sides of the room. The chemicals are then prepared by the director or superintendent, and the door is closed and guarded for half an hour. In the meantime the other room, which had been similarly packed, has been aired, and the trees removed to the heeling-in grounds or packing sheds, as the case may be.

The only expense incurred is in the double handling of the trees and a few cents for chemicals. So far as the gas is concerned, it can be generated for less than two cents per thousand trees. The materials used are water, commercial sulphuric acid and fused potassium cyanide (98 per cent., pure). In generating the gas an old earthernware vessel, holding about a gallon, is taken, into which is placed the water, then the acid, and, finally, the cyanide in lumps; the door is then closed and the operation is complete in from 30 to 40 minutes. For every 150 cubic feet of air space in the enclosure, I ounce by weight of cyanide, I fluid ounce of acid and 3 fluid ounces of water should be used.

The nurseryman who resorts to this method of fumigation is sure to command public confidence, and the only essentials necessary for success are (1) a good tight house, (2) the chemicals, and (3) careful supervision by some reliable person during the operation.

W. G. Johnson.

College Park, Md.

Another volume of the Rural Science Series, edited by Professor L. H. Bailey, has been issued by The Macmillan Co., New York. It is entitled "The Principles of Fruit Growing," and is by Professor Bailey himself. All who know Professor Bailey's manner of imparting useful information will appreciate at once from the following summary of the contents how valuable is the book to the fruit-grower: An introductory discussion, comprising an inventory and classification of fruits, the fruit zones, the outlook for fruit-growing; the location as to climate, with a full discussion of frosts; the tilling of fruit lands; the fertilizing of lands; the planting of orchards; secondary care of orchards; why are orchards barren; diseases; insects and spraying; picking. packing, and storing fruits, shipping, etc.; photography and nomenclature. A very useful bibliography comprising all the American books in the author's library, which are devoted to the general principles of fruit growing, is also appended. The author's remarks upon the purchase of plants and trees from nurserymen will be of special interest to readers of this journal. He gives the orchardist good advice, but at the same time gives the nurseryman the credit due him. With this book the orchardist may answer any of many questions continually arising. And it is as entertaining as it is instructive. "The United States now leads all countries in the extent, variety, excellence and abundance of fruits, and our people are pronounced fruit consumers, and this desire for fruit is very rapidly increasing" says Professor Bailey: "That kind of fruit usually sells the best of which there is the least. It may not be intrinsically the best. It is simply that in which there is the least com petition. The key-note to the business, therefore, is diversification or individuality. The grower should aim to have something or to do something which his neighbors do not do, although it may really not be any better than what they do. We are apt to be discouraged by being told that 'there is room at the top,' for if we all get to the top then we are all at the bottom. It is better to say that 'there is room at the top and on the sides.' The best, as commonly understood, is really the unlike." The book is illustrated, pp. 508, \$1.25. New York. THE MACMILLAN COMPANY.

THE NATIONAL NURSERYMAN.

Thomas W. Bowman & Son, Rochester, N. Y., have to offer at wholesale an excellent stock of apples, crabs, standard and dwarf pears, cherries, plums, peaches, currants and gooseberries for late fall and spring shipment.

The New Zealand legislature has passed an act quarantining all trees and plants likely to cause infection with phylloxera, apple scab and codlin moth.

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PEACH, (including Crosby, Champion, Sneed) STANDARD PEAR, } Large Stock. APPLE,

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High Grade Nursery Stock for Spring of '97.

Apples, Standard and Dwarf Pears, Cherries, Plums, Quinces, Cut-Leaf Wéeping Birch, Purple-Leaf Birch, Silver Maple, Elms, Catalpa, Black Walnut and Butternut.

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Strawberry plants for August and Septembershipment. Potted and layer plants. Newer kinds, Carrie, Margaret, Glenn Mary, Clyde, Wm. Belt, Brunette, Champion of England, etc., etc. All standard kinds in immense quantities.

Eureka, best early black Raspb'y 200,000 Currants, 1-1. 100,000 Eldorado R. C. " late Munger, 100,000 Eldorado R. C.
rbr'ng" 50 000 Ohmer.
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e 25,000 Wauchusett.
50,000 Stone's Hardy. " everb'r'ng" Gault. Columbia, " purp Miller, " early London. " late purple early red 100,000 Houghton, 2-1.

We grow a complete stock of all small fruit plants and can quote as low prices as any firm in the United States, stock considered. Get our prices on your wants for fall.

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Loney Locust Hedge, Most Ornamental for Parks and Lawns.

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It is BEST in QUALITY.

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2 years-gloved pruned-51 to 7 feet-An extra choice lot of trees.

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All leading sorts.

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Millions of Trees And Plants

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600,000 Peach Trees-One year old from bud (embracing over 70 varieties.)

Strawberry Plants-From 30 acres set this spring (means millions of plants.)

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We think we can please you. They cost a little more to grow them this way, yet it is the dealer and planter who has the pleasure of handling good stock.

ONE MILLION

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VARIETIES OF PEACHES NOW FOR SALE

(ONE YEAR FROM BUD.)

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New Prolific, Triumph, Greensboro, Conet's So. Early, Bokara No. 3, Connecticut, Lorentz, McIntoch, Lewis, Willet, Kalamazoo, Fitzgerald and Sneed.

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Elberta, Old Mixon Free, Fox Seedling, Smock Free, Geary's Holdon, Reeve's Favorite, Stephen's Rare Ripe, Chair's Choice, Old Mixon Cling, Crawford's Late, Moore's Favorite, Yellow St. John, Lemon Free, Champion, Hale's Early, Golden Drop, Mt. Rose, Crosby, Snow's Orange, Bray's Rare Ripe, Wilkin's Cling, White Heath Cling, Chinese Cling, Waterloo, Troth's Early, Early Rivers, Hill's Chili, Levy's Late, Stump the

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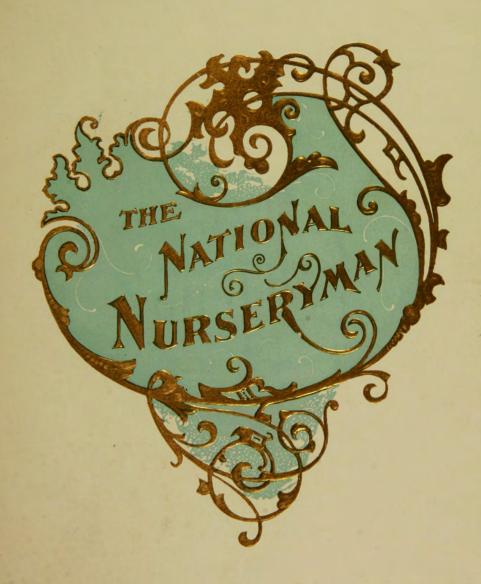
Over 50 acres in plants of the most desirable varieties grown. Plants ready in September.

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P. S.—Come and see our peach before you buy, and take a rest at Ocean City on the sea shore, only 7 miles from Nurseries.



October, 1897.





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200,000 APPLE TREES. Splendid Stock.

150,000 PEACH TREES, A superb lot.

50,000 GREEN MOUNTAIN VINES,

One and two-years.

Ten acres of shrubbery, young, thrifty and unexcelled. The largest stock of Maple and Purple Beech in the country. Also a full assortment of Evergreens; a large stock of Cali-fornia Privet, 2½ to 3 ft.; fine young plants and much other nursery stock.

For quality this stock is not excelled. Our nursery has been examined by the State Entomologist and pronounced free from "San Jose Scale."

Send your list of wants. Address

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APPLE SEEDLINGS-carefully graded. PEACH TREES-No Yellows or Rosette in Nebraska. LARGE SHADE TREES-2 to 3 inch and smaller sizes. FOREST SEEDLINGS-Black Locust, Box Elder. ASH AND SILVER MAPLE. OSAGE HEDGE PLANTS.

Everything the best and prices right. Apple Grafts made to order. Our stock is all grown on new land and free from insects or disease.

YOUNGERS & CO.,

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If you are in need, please write me for prices on the following first-class ORNAMENTALS .and.

FRUITS for the coming season HYDRANGEA-Tree shape and bush; | elegant goods.

AZALEAS-Tree shape and bush.

RHODODENDRONS, WHITE FRINGE. BECHTEL'S CRAB-Double flowering. ELEGANS LONGIPES.

ELDER GOLDEN.

ROSE TREES—Home grown, two colors on each stem.

"—Holland grown.

Also a very complete line of Shrubs. TEA'S WEEPING MULBERRY.

ELM-Camperdown.

WILLOW-Kilmarnock.

BIRCH-Zang's Weeping, Birch Cut-Leaved Weeping, Ash Weeping.

MAPLES-Norway, all grades; Silver, all grades; Wier's Cut-leaved.

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MAGNOLIAS - Acuminata, Speciosa, oulangenna, Lennei, Nobeterina,

ASH-Oak-leaved and Mountain.

BEECH-Purple.

CHESTNUTS-American and Spanish. WALNUTS-English; Black Walnut.

CATALPA-Speciosa.

POPLARS-Carolina and Lombardy.

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DUTCHMAN'S PIPE, CLEMATIS, HONEYSUCKELS, AMPELOPSIS-Veitchii. IVY-American.

FRUITS.

APPLES, PEARS--Dwf. and Std. CHERRIES, PLUMS, PEACHES. **OUINCES. APRICOTS.**

COOSEBERRIES—Chautauqua, the fin-est and largest grown; Downing, Houghton.

CURRANTS—The Pomona is the coming new Red currant, and without a doubt will supersede all others when fully known; nice share, elegant goods, Cherry, Fay's, North Star, Victoria.

Trade list ready in September.

P. S.—I had almost forgotten to mention our Roses—we are now growing one bundred varieties, and for thriftiness and vigor they cannot be surpassed.

FRANK BRIGHTON. NORRIS.

Painesville Nurseries.



NE of the most complete assortments in the world, including FRUIT and ORNAMENTAL TREES, GRAPE VINES, SMALL FRUITS, SHRUBS, ROSES, HARDY PLANTS, CLIMBING VINES, BULBS and GREENHOUSE PLANTS, in all the leading new and old varieties, of all grades and sizes.

Immense stock in storage cellars ready for immediate shipment.

Extra fine stock of Standard and Dwarf Pears, Plum, Peach, Cherries and Mulberries.

Best lot two-year (4 to 5 feet) Quince on the market.

Nut Trees-Large assortment.

Downing, Houghton and English Gooseberries—extra selected.

Strong, splendidly rooted Blackberries, from root cuttings.

Moss, Hybrid Perpetual, and Climbing Roses—strong two-year, clean, handsome stock.

ORNAMENTALS--all classes.

Get our prices before placing your orders, large or small. Special inducements for early orders.



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"The most complete Nurseries on the American Continent."

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MOUNT ·· HOPE ·· NURSERIES.

ROCHESTER, N. Y.

ELLWANGER & BARRY, Proprietors.

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The largest and most complete collections of General Nursery Stock ever offered; the most approved varieties of FRUIT TREES, new and old, Grape Vines, Currants, Raspberries, Gooseberries, etc.

Superb collections of ORNAMENTAL TREES and SHRUBS, both deciduous and evergreen. HARDY ROSES, HARDY HERBACEOUS PLANTS, HERBACEOUS PÆONIES. HARDY PHLOXES.

Fine stock of Gooseberries and Currants.

Wholesale catalogue mailed free on request.

200,000 Peach Trees, 2,000,000 Strawberry Plants, 100,000 Blackberry, 500,000 Raspberries.

Eldorado, Maxwell and Lucretia Blackberries.

MILLER, LOUDON and TRIUMPH,

GREENSBORO and EMMA,

and a full assortment of

Raspberries.

COLUMBIAN . .

Peaches

Wickson, Red June and Giant PLUMS.

.... AND OTHER FRUITS.

It will be to advantage of those in the trade to correspond with us.

Our Catalogue will save you money.

MYER & SON.

BRIDGEVILLE, DELAWARE.

Peach and Plum Trees • • •

FOR FALL DELIVERY 1897.

All desirable leading old and new varieties of Peacheshere in fruiting orchards. Have the new Triumph, Greensboro and Sneed fruiting. Buds can be supplied in season at low rates. Large stock of Plum trees, all on Plum roots, one and two year. Buds in season from either nurseries or orchard trees. Have all the leading Japanese varieties, Abundance, Burbank, Chabot Satsuma, Willard and others. Also in good supply the new Red June and Wickson. Have the usual supply of Asparagus Roots to offer. Two and three years old. strong.

ALEXANDER PULLEN,

Milford Nurseries.

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Yellow Rambler Rose • •

The only Hardy Yellow Climber.

LORD PENZANCE'S

Hybrid Sweet Briars • Very valuable and pleasing novelties.

Cumberland (TRADE) Raspberry

The largest black-cap known.

Free plates of these valuable novelties furnished to all reliable houses who will handle them. Handsome

descriptive circulars at less than cost.

ROSES, new and old; a splendid stock, of strong field grown plants, on their own roots and budded.

CLEMATIS, largest stock in this country. Strong 2 yr. plants; Mme. Ed. Andre, the new red and all the best older sorts.

SHRUBS, splendid blocks of Hydrangea, P. G., and Japan Snowball as well as a good assortment of other standard kinds.

Ornamental Trees, Asparagus, Rhul Gooseberries, Blackberries, Plums. Cherries.

s, Rhubarb, Currants, erries, Raspberries, Apples,

Cherries, Quinces, Peaches, Etc.

EFif wanting Peaches we can interest you. We have a large stock of extra fine strong trees, guaranteed free from scale or disease, and we will not be undersold. Trade List will be malled soon. If not received early this month write us for it.

JACKSON & PERKINS CO., NEWARK, YORK.

Smiths & Powell Co.

Syracuse, N. Y.,

offer a large and choice stock of

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BUDDED APPLES, STANDARD AND DWARF PEARS, PLUMS, CHERRIES, PEACHES, ROSES, ORNAMENTAL TREES, SHRUBS AND VINES.

Our stock is of superior quality and most carefully graded. Send us your want list or come and see our stock. We issue no trade price list, but will make low prices by letter.

Do not forget the OLD RELIABLE SYRACUSE NURSERIES.

Andre Leroy Nurseries

BRAULT & SON. Directors.

ANGERS, FRANCE.

Offer for shipment Fall 1897 and Spring. 1898, their large stock of fine, well graded Fruit Seedlings, Ornamentals, Roses, etc.

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THE MCPIKE GRAPE.

INTRODUCED BY SILAS WILSON COMPANY, ATLANTIC, IOWA.

The National Nurseryman.

FOR GROWERS AND DEALERS IN NURSERY STOCK.

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VOL. V.

ROCHESTER, N. Y., OCTOBER, 1897.

No. 9.

TO FIGHT THE SCALE.

PLAIN TALK BY P. OUWERKERK—CO-OPERATION IN A COMMON INTEREST MAY DO MORE THAN COMPULSORY MEASURES—HIS PLAN.

P. Ouwerkerk, of Jersey City, representing Boskoop, Holland, nurserymen, sends to the National Nurseryman a long communication in which he makes some very sensible suggestions regarding treatment of the San Jose scale question, which is one of the chief subjects under discussion by nurserymen. We regret that we have not space to publish the communication, but we will give the substance of it. Mr. Ouwerkerk says:

"I have many times read something in your valuable paper or in others about this scale and remedies to prevent the spreading of this pest, but nearly always were those epistles spiced with the words Eastern and Western nurseries, and always the same remedy, to inspect the nurseries and erect barriers between the different states, each state making its own laws about shipping nursery stock over the boundaries and using certain certificates that the stock has been inspected and found free of pests. Sometimes was there speaking of a license. Probably on this account, or some other, I got the impression that the whole San Jose scale question was only a pretext, and the real fact was that some of the nurserymen wanted some hostile legislation, with which people make life so pleasant to others, for no other reason than their own benefit, to keep competitors out of what they called their territory. This impression made me feel tired of the whole matter.

GLAD TO HELP.

"Only recently I met Professor Webster, from the Ohio Experiment Station, and had a conversation with this gentleman about the San Jose scale and its distribution in the United States. And now, of course, I am fully aware that it is not a matter of politics, not a question between East and West, but that there is real danger for the orchards and ornamental trees and that the men who know this danger look towards the government for some laws for protection. While formerly I was only a looker on at your effort to get rid of this pest, now I am with you in your strife and would be glad if I could do anything to help you; but I greatly differ with you about the measure which must be taken to keep this pest in check."

Mr. Ouwerkerk details experience when he was a boy attending school in Holland. A large number of strange bugs were found at the Holland docks. It was believed to be the Colorado potato beetle, and it was feared that it had spread through the country. Glass or wax imitations of the bug were made; also lithograph plates of it, together with a brief description. These were sent by the government to the mayor of each city with instructions to distribute the plates among the school children and let them search the fields for the bug and destroy it. The wax or glass imitations were placed on

exhibition in town halls and school houses. The fields were searched but the Colorado beetle was not found. The plan, however, served to convince the government in a very short time that the pest had not spread and that it was only necessary to watch the imports. The plan prevented the adoption and enforcement of obnoxious laws in the interior when there was no necessity for them.

"The San Jose scale had been spreading for several years before it was observed," writes Mr. Ouwerkerk, "and since July, 1893, the American scientist has been at work with the insect and tried to destroy it wherever it is found. Being unable to cope with it they ask their respective state governments for some legislative act to proceed with the good work. Naturally the suggestions differ in nearly every state, but the general idea seems to be to draw a cordon around every state and have all nursery stock shipped from other states inspected or have it shipped under accompaniment of a certificate that the nursery from which the stock is shipped has been inspected by the State Agricultural Experiment Station and found free of scales.

"A few words about the measure. Will it give any safety against the distribution? I am afraid not, especially under the present circumstances, as Professer Webster told me that he, with his assistants alone, had to cope with this pest in the state of Ohio, to inspect nurseries and orchards, and do all that is needed to keep it out of that state and that the government did not give a cent to help him. To stamp it out in this way is impossible. It can be checked, but not stamped out. The process will be slower certainly, but it will spread just he same, because there are so many ways in which insects ttravel. And what will become of the nursery trade in the future if you make it depend on politicians who know very little and care less. In the first excitement, of course, they will under leading of the scientists, appoint able inspectors; but when the people have become accustomed to the scales and the fever has partly vanished, the office will be a political job where the inspector has to go out with every change in the administration, and, not counting the delay in shipping, it will become a menace to the trade and the tradesman will need to have a political pull to get along in his trade.

A FEW COMPARISONS.

"Let me make a few comparisons between these two systems of defense against disastrous insects. In Holland the people did the work and the government and scientists lent their aid. Here you ask the government to pay the scientists to do the work and the people to take the leading part. In Holland the scientist remained at home and with his usual daily work examined in short time all doubtful cases, and here your professors have to tramp through the nurseries and orchards looking for scales and spending weeks in which they find not even a doubtful case. Here they give publicity on every case and make the tradesman fear inspection, because he may be placed on the blacklist; and fearing this more than the scales

he will probably mislead the scientist or inspector to avoid the ruination of his trade. Over there every farmer sent his doubtful cases to the scientist because he knew that he would find there a friend and helpmate in his distress.

"If you will combat with this invading enemy successfully every one should put his hand to the plough. Do not be discouraged, but much must be done. Not in dividing the country but in unity lies the victory. The plain fact is that the San Jose scale, a native from California, has been spread accidently through some Eastern states, and that is not a reason to be alarmed. With a little common sense and perseverence we can stamp it out without making obnoxious laws. But these must be worked for, it is not enough that we know the history of the scale and its distribution and that only professors know how it looks. It is necessary that every farmer and every man who works in the nurseries know the scale at sight, especially the latter, for they are the men who get every tree separately in their hands and come in corners of the nurseries where the nurseryman seldom comes himself. But how can we get him to know? The task is not so impossible and the cost is not so great if only good measures are taken.

PLAN OF PROCEDURE.

"Let the American Association of Nurserymen combine with other farmer and gardener societies, and if the funds are not sufficient let them say so. We all are willing to put our hands in our pockets and give according to our means and interest, for we know that it is for our orchards and homes, but above all for the liberty of our trade. Let them make lifesized samples of the scale in color from glass or wax, just as it attacks the tree, and also lithograph plates as they did in Holland, and you will see the result. The government which at this moment hesitates for a task where it sees no end of the trouble and cost, will be eager to help you in the good work. place the official business stamp on your packages and send them to every mayor in every place in the country from New York to California and from Maine to Mexico-free of charge. The mayor in his turn will put them in every place and in every home where it can do any good. Your boys do not love their country less than we did, are willing to tramp through the orchards and parks and fields and see if they can find any scales, and when they do, show them to their teachers who can compare them with the samples in the boxes, and when they are in doubt bring them to the mayor, who can send them to the experiment station, and the gentlemen who for four years so gallantly fought in the uneven battle will be found ready to aid with advice. In this way you can find the breeding nests of these pests in very short time, and can take the measures according to circumstances.

"You will hardly find a farmer who is not willing to sacrifice his infested trees to save those which can be saved, as he knows he has to give them up to the insect in the near future, so to oppose will do no good to him, and for the same reason you will not find a gentleman who is not willing to give up his most loved tree as he can not save it in any way, and if he opposes, the condemnation of his neighbors will compel him to submit.

"The nurseryman will not longer submit to the inevitable inspection, but will be eager to inspect every corner of his nursery and have it free of disease, because he is afraid to lose his trade and to be stigmatized as a traitor who sells his

country for a few dollars. For those reasons he will do more than for all forcible means together. He will burn his infested stock and teach his help how to detect scales, and if he finds a doubtful case he will not dare to send it out for fear that his customers may detect his fraud.

"You may say some of the nurserymen may be hit too hard and have to burn more than they can afford to do. Well in such a case, gentlemen, we all remember well the time that we were children and divided our candy with our playmates and in later years we divided our pennies and our pocket money with our chums. In such a case let him call on the trade in his distress and we will be boys again. A carload of trees is soon loaded.

"I do not need to say that there is little danger of importing this scale from European shores, and by this plan of defense you have no need for any obnoxious interstate laws, but you can work united, and in unity lies the victory.

"Now, gentlemen, I have stated my opinion plainly and it is open for discussion; but do not talk about the incompetence of our mayors and our teachers; there is not such a lot of knowledge needed to compare the scales found with the samples in the boxes or on the plates and if they are in doubt the experimental stations are there to decide and bring advice and enlightment.

"I do not think that I have common sense alone in my possession, but I expect you will help me to bring this plan to perfection and into action. Do not talk long; there has been talking enough. The scale has a long start, so that it is time to act and act quickly. Think that the beauty of the country, your homes and orchards, but above all the liberty of the trade is at stake."

THE SCALE IN MARYLAND.

A despatch to the Baltimore Sun from College Park, Md., dated September 16, says: "Professor W. G. Johnson, state entomologist, has completed inspection of the nurseries of the state and says that, on the whole, they are in very much better condition than one year ago. He has issued certificates to all the nurserymen covering their stock. All trees that were diseased in any way have been destroyed. He also says that every suggestion and recommendation made by him has been carried out to the letter.

"The largest peach orchard in the state was recently found to be infested with the San Jose scale," says Professor Johnson. "The orchard contains over 28,000 trees, about 13,000 of which are leafless and dead from the attacks of this insect. The most of the remaining trees are in such an unhealthy condition they will all be pulled out and burned this fall. The orchard was set out in 1890-91. Another orchard consisting of 2,500 trees, planted five years ago, was discovered last week in a very badly infested condition. About 1,000 trees are now dead and the balance so badly infested they cannot be saved. In both instances these orchards could have been saved if they had been inspected shortly after the first trees showed signs of disease. If a tree dies the first, second, or even the third year after it is set in an orchard, a careful examination should be made to ascertain, if possible, what caused death. If it is due to the San Jose scale, then the other trees should be looked after without delay."

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NORTH CAROLINA LAW.

OUTSIDE SHIPPERS MUST OBTAIN STATE COM-MISSION CERTIFICATE UPON FILING AN OFFICIAL ENTOMOLOGISTS' CERTIFICATE.

The North Carolina Commission for controlling crop pests, has issued circulars to common carriers in that state and to nurserymen and dealers who ship stock into that state. The commission is composed of W. A. Withers, director of the North Carolina Agricultural Experiment Station, chairman of the commission; J. M. Mewboorne, commissioner of agriculture, and J. Van Lindley, president of the State Horticultural Society and a well known member of the American Association of Nurserymen; with Professor W. F. Massay, botanist and entomologist.

Following is the circular to common carriers of the state:

TO COMMON CARRIERS.

RALEIGH, N. C., Aug. 31, 1897.

To all Railroad, Express, and Steamship Companies and Common Carriers doing business in North Carolina:

You are hereby notified, by virtue of chaper 264 of the acts of the general assembly of 1897, entitled "An Act to Prevent the Introduction and Dissemination of Dangerous Insects, Fungous and Weed Pests of Crops," which act empowers this commission to prescribe rules for governing the transportation within the state of trees, shrubs and vines, liable to harbor and disseminate dangerous insect pests, that the annexed rules have been adopted and will be enforced on and after the 1st day of July, 1897. Inasmuch as the interests of all transportation companies doing business in North Carolina are bound up with the interests and general prosperity of the commonwealth, and that prosperity is seriously menaced by the introduction from other states and countries of destructive scale insects and other similar pests, it is hoped and believed that all companies will themselves cheerfully observe these rules, and endeavor by all the means in their power to uphold the commission in the work devolving upon it They will thus serve to protect fruit growing along their lines, and the future business involved.

It is not the intention or desire of the commission to interfere unnecessarily with traffic in nursery stock, nor to prevent the bringing of such freight into the state. It only desires to insure the freedom of such stock from destructive parasites. The rules adopted by the commission are reasonable and not onerous. If faithfully observed, the rules will for the future prevent the dissemination of these dangerous pests in our state.

The rules below will be strictly enforced as far as it lies in the power of the commission:

Rule 1. No transportation company or common carrier shall deliver to any consignee at any station point located in North Carolina any package, bale, box or single specimen of any tree, shrub or woody vine, nor accept such for transportation from any point in the state, unless each separate package, bale, box, or single specimen has attached a label stating the name and address of the grower, preceded by the words, "Grown by." Said plants or packages of plants shall also have affixed a certificate from this commission that the nursery wherein the plants were grown had been examined and found free from San Jose scale and all other dangerous insects. The date of the certificate must not be more than six months from date of shipment of such stock. Certificates from others will not be recognized.

The necessity for certifying does not extend to seeds, roots or herbaceous plants, nor to strawberry plants.

Rule 2. If by any oversight, negligence, or otherwise, any invoice of uncertified trees, shrubs or woody vines, is received at any station, depot, wharf or warehouse within this state, such stock must not be delivered or removed from the place where the same was first stored, but shall within 48 hours after receipt be sent out of the state, if brought from without the state, or if shipment originated within the state, the plants, with their containing cases and packing, shall be

destroyed by fire; such shipment being held unlawful by this commission. No person other than a duly authorized agent of this commission shall be permitted to open or inspect such plants, further than may be necessary to determine the absence of a label and certificate as required by law. Transportation companies will immediately report to the commission any violation of this regulation, together with the action of the company. Said report is to include the name and address of the shipper and of the consignee.

Rule 3. Any transportation company or common carrier or other person wilfully disregarding the said law and the above rules prescribed in pursuance thereof, will be guilty of a nuisance and liable to action for damages, punishable with fine or imprisonment.

Very truly yours,

W. A. WITHERS, Chairman.

TO NURSERYMEN.

Following is the circular to nurserymen and dealers:

To Nurserymen and Dealers who Ship Nursery Stock into North Carolina:

Your attention is called to inclosed copy of Circular No. 7 of this commission, relating to the shipment of nursery stock into North Carolina.

You will notice that there is a modification in the regulations previously adopted, in that each package, etc., shipped into the state must have the certificate of this commission attached thereto, instead of the certificate of the official entomologist of the state in which your nursery is located. The certificate of this commission, together with one hundred fac simile copies* will be issued without charge to each nurseryman, upon filing with this commission a certificate from the official entomologist of the state in which the nursery is located that said nursery was, within six months, personally examined by him, and the growing stock found free from San Jose Scale, West India Scale, Black Knot, and other infectious pests, and apparently healthy in every respect. The certificates of this commission will be good for only six months.

It is not the purpose of this commission to interfere in any way with the sale of good nursery stock in the state. It is not believed that the rules and regulations of this commission will be found onerous to those who fully appreciate the necessity of protecting our horticultural interests. I trust we shall have your cordial co-operation.

Very truly yours,

W. A. WITHERS, Chairman,

*Additional copies may be obtained at forty cents per hundred upon application.

SEPTEMBER CROP REPORT.

The September crop report of the U.S. Department of Agriculture states:

APPLES.—As regards the apple crop, all the New England States, with New York, Michigan, Indiana, Kansas, Missouri, and West Virginia, show a very marked decline. Kentucky and Ohio show a slight decline; Virginia a marked improvement, and North Carolina and Iowa a slight improvement.

Grapes.—The grape reports are on the whole somewhat less favorable than a month ago. Among eastern states, New Jersey reports its crops as below the average, while the Delaware and Maryland crops are respectively 87 and 70 per cent of the normal. In Michigan and Indiana there has been a slight decline. In Georgia it is reported that yield is scarcely up to the average. In West Virginia there is some rotting, but in Tennessee the fruit is about holding its own. In Wisconsin the crop is practically a failure. In Jowa it lost six points, and in the adjoining state of Nebraska an enormous crop is accompanied by exceedingly low prices. In California the crop has been somewhat injured by hot weather, and large quantities of table grapes are being dried.

MICHIGAN LAW.

STRINGENT MEASURE REGARDING SHIPMENT OF NURSERY STOCK—LICENSE FEE REQUIRED —PROFESSOR HEDRICK INSPECTOR OF NURSERIES AND ORCHARDS.

Professor U. P. Hedrick, Agricultural College, Mich., has been appointed State Inspector of Nurseries and Orchards, to inspect under the provisions of the new Michigan scale law, which is as follows:

AN ACT.

To prevent the introduction or spread of San Jose scale or other injurious insects or infectious diseases of trees, vines, shrubs or plants grown in this state or imported from other states, provinces or countries:

SECTION 1. The people of the State of Michigan enact, that it shall be the duty of the state board of agriculture, immediately upon the taking effect of this act, to appoint some competent person who shall be known as state inspector of nurseries and orchards, who shall hold office during the pleasure of said board, whose duty it shall be to inspect any and all nurseries in the State of Michigan as to whether they are infected by San Jose scale or other injurious or contagious diseases, and if upon such inspection he find no such dangerous insects or diseases, he shall upon payment of per diem fee hereinafter provided, give to the owner of such nurseries a certificate to that effect, and shall file a duplicate certificate with the state board of agriculture: and in case he shall find present in any such nursery any of said dangerous insects or diseases, he shall notify the owner thereof in writing, and shall direct him within five days to use such means as will exter minate such dangerous diseases or insects, and the owner of such nursery shall not ship nor deliver any such trees, vines, shrubs or plants affected by such dangerous insects or diseases until he shall have secured from said inspector a certificate as aforesaid.

SEC. 2. The owner of such nursery, trees, vines, shrubs or plants shall, within the time specified in such notice, take such steps for the destruction of such insects or diseases as will exterminate the same, and he shall not ship nor deliver any such trees, vines, shrubs or plants affected with such dangerous diseases or insects under the penalty of a fine of one dollar for every tree, vine, plant or shrub so affected, when shipped or delivered from such nursery, which fine shall be collected by suit by the prosecuting attorney of the county in which such nursery is located.

SEC. 3. Whenever it shall happen that the state inspector of nur series and orchards shall give the notice heretofore required to the owner of the nursery, for the destruction of the insects or diseases mentioned, and said owner shall fail or neglect to take the measures necessary for the destruction thereof, within the time mentioned in the notice given him, it shall be the duty of the state inspector of nurseries and orchards to have the proper remedies applied to such nursery for the destruction of such diseases or insects, and shall employ all necessary assistance and may enter the premises of said owner of such nursery for the purpose of treating and exterminating such insects or diseases and the said owner of such nursery shall be liable for the costs of such proceeding, for the services of the inspector at a rate per diem to be fixed by the state board of agriculture, not to exceed three dollars per day, and for such number of days as said board shall determine, which said charge must be paid before the delivery of the certificate in section one of this act.

SEC. 4. Whenever any trees, shrubs, plants or vines are shipped into this state from another state, county or province, every package thereof shall be plainly labeled on the outside with the name of the consignor, the name of the consignee, the contents, and a certificate showing that the contents have been inspected by a state or government officer, and that the trees, vines, shrubs or plants therein contained appear free from all injurious insects or diseases. Whenever any trees, shrubs, vines or plants are shipped into this state without such certificate plainly fixed on the outside of the package, box or car containing the same, the fact must be reported within twenty-four

hours to the state board of agriculture by the railway, express or steamboat company, or other person or persons carrying the same; and any agent of any railway, steamboat or express company, or any other person or persons who shall violate the provisions of this section shall be deemed guilty of a misdemeanor and upon conviction thereof shall be fined in any sum not less than twenty-five nor more then one hundred dollars, or imprisoned in the county jail not less than five nor more than thirty days, or may be so fined and imprisoned in the discretion of the court, and any such fine shall be paid to the state board of agriculture.

SEC. 5. Any person or persons growing or offering for sale in this state any trees, vines, shrubs or plants, commonly known as nursery stock, shall, on or before the first day of August of each year, apply to the state board of agriculture, for inspection of said stock under the provisions of this act and a license for its sale, and shall deposit with said board a fee of five dollars as a license fee for himself as principal. and one dollar as a license fee for each and every one of the local or traveling agents or employes there engaged in selling such stock or soliciting orders for the same, and a similar license shall be obtained for each and every similar agent or employe subsequently engaged. Such license shall be good for one year and shall not be transferable, and each of such persons, principals, shall execute to the state board of agriculture a bond, in the sum of one thousand dollars, with two good and sufficient sureties of this state, satisfactory to said board, conditioned that he will comply with all the provisions of this act, and that upon demand he will file with the state board of agriculture. a list of persons to whom he has sold or delivered any such nursery stock giving the species together with the postoffice address of each purchaser. Failure on the part of any nurseryman, grower, agent or dealer to comply with the provisions of this section shall render him or them liable to the penalties of a fine of not more than one hundred nor less than twenty-five dollars, or imprisoned in the county jail for not more than ninety nor less than thirty days or both such fine or imprisonment in the discretion of the court for each and every such sale. Such information shall be preserved and be for the sole use of the nursery and orchard inspector and his deputies : Provided, That the provisions of the preceding sections shall not apply to persons engaged in fruit growing, who are not nurserymen, who desire to sell or exchange surplus trees or plants of their own growing,

MUST OBTAIN LICENSE.

SEC. 6. No person, firm or corporation resident of another state, province or country shall engage or continue in the business of importing any trees, plants, shrubs or vines, commonly known as nursery stock, into this state, or of selling such importations within the state, or of selling such articles within the state, for subsequent importation into it, without first having obtained from the state board of agriculture a license to do business in this state as provided in section five of this act, and shall have filed with the state board of agriculture the bond therein required, together with a certificate of inspection by a state or government inspector or that of some person designated by the Michigan state board of agriculture for such purpose.

SEC. 7. The state board of agriculture shall, upon receipt of the fee referred to in this act, together with the required bond and a satisfactory certificate of inspection, issue licenses to the applicant according to the provisions of this act.

SEC. 8. Whenever the commissioners under acts number one hundred and eight and one hundred and nine, session laws of eighteen hundred and ninety-five, known as yellows commissioners, shall be uncertain as to the existence or nature of any infectious or contagious disease or dangerous insect pest in an orchard or elsewhere, or in case any dispute shall arise between owners and commissioners, it shall be the duty of said commissioners to notify the state inspector of orchards and nurseries, who shall at once investigate or inquire into the matter and suggest or recommend the proper remedies, and give all the information he can to sid in exterminating such insects or disease, and his decision of the case and recommendation shall be final.

SEC. 9. It shall be the duty of the state inspector, whenever it shall come to his knowledge that any destructive insects or infectious or con tagious diseases exist in any orchard in this state, or are supposed to exist, to investigate the case, and if such dangerous insects or diseases are found, he shall have authority to enter upon the premises and proceed according to the provisions of section one, two and three of this

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act, in exterminating the same. In case the owner or occupant of the premises shall refuse or neglect to comply with the orders of said inspector within five days, the inspector shall employ such aid as may be necessary to carry out his orders and recommendations, the expense of which procedure shall be certified to the township board and by them allowed, who shall cause the same to be assessed as a special tax upon the premises concerned.

SEC. 10. The state inspector of orchards and nurseries shall have power to appoint such number of deputy inspectors as may be required, subject to approval by the state board of agriculture.

SEC. 11. All expenses incurred under the provisions of this act, not otherwise provided for, shall be audited by the state board of agriculture, and paid out of the general fund of the state, and the auditorgeneral shall draw his warrant for the same: Provided, That all moneys collected by the state board of agriculture, under this act, shall be paid into the general fund of the state treasury.

THE McNAIR ORCHARDS.

J. G. McNair of St. Louis is president and general manager of the St. Elmo Fruit Land Co. at Koshkonong, Mo., which has 20,000 Elberta peach trees in orchard at that point. The operations of this company bid fair to rival those of the big fruit land companies of the South.

Mr. McNair has the executive ability to manage large affairs, says *The Southwest*. He has the largest apple orchard in Illinois, 800 acres, and when he is through planting at St Elmo, where he has 2,000 acres, 800 of which are now in orchard, he will be the largest grower of fruit in the country. He has exported apples to Liverpool and intends to send over a few car loads this year.

The pear orchard contains 3,000 trees and the vineyard 6,000 vines. Twenty-one acres have been planted to strawberries. One hundred acres are being cleared and will be planted to peach trees this fall. The packing house is 92x80 feet and is a model for business and convenience, there being room for 137 men and women to pack. There are seventeen houses in all on the plantation.

Mr. McNair gave one order for peach carriers that amounted to \$3,270 and he will have to buy \$1,000 worth more before shipping is over. During the height of the season 300 men will be employed to pick the peaches. Only careful hands can hold a position on this farm. The finest peaches will be wrapped in handsome paper. This farm has a trade mark and its fruit will be known as the Buffalo Brand. On every crate will be pasted the handsome card with the picture of a buffalo in bas relief on a peach with the name of the company and address encircling it.

One of the most interesting features of the big farm is a herd of fourteen buffalos, one of the few herds on the continent.

PROFESSOR BAILEY AT HAMBURG.

Professor L. H. Bailey, writing of his visit to the Hamburg exposition during the summer just closed, says: "The exhibit impresses the American, perhaps, as being weak on the pomological side; but one is to remember that America is unusually strong in its fruits, and that the fruit season is not yet fully arrived. The vegetables also occupy a small space. In floriculture, however, the exhibition is little less, it seems to me, than a marvel."

Professor Bailey believes that a good horticultural exhibition in New York or Philadelphia would prove most successful.

AMERICAN HORTICULTURE.

In that admirable compilation, "One Hundred Years of American Commerce," compiled under the editorial supervision of Dr. Chauncey M. Depew, and published by D. O. Haynes & Co., New York, is included an article on "American Horticulture," covering the period from 1795 to 1895. The article is by Alfred Henderson, of Peter Henderson & Co., New York.

In looking over the field of literature on horticulture during the past one hundred years nothing very coherent or comprehensive is found until Downing's "Treatise on the Theory and Practice of Landscape Gardening Adapted to North America" (1841), together with his "Rural Essays," is reached. It is interesting to note that as long ago as 1858 Frederick Law Olmsted, the well-known landscape architect of the present day, in collaboration with Calvert Vaux, published a "Description of a Plan for the Improvement of Central Park." As pioneers who have helped in a large measure to bring the time-honored pursuit to its present state of importance, are cited Marshal P. Wilder, Robert Manning, Peter Henderson, Charles Downing, S. B. Parsons, P. Barry, George Ellwanger, John J. Thomas, Thomas Meehan, John C. Teas, F. K. Phoenix, A. S. Fuller.

William Prince, Flushing, N. Y., was the pioneer nurseryman in the New World. In 1767 he offered for sale a large variety of fruit trees, "so packed that they can safely be sent to Europe." It may not be too much to say that A. J. Downing created American ornamental horticulture. He had worthy pupil in Frederick Law Olmsted. To Jacob Bigelow, of Boston, is due the original conception of the rural cemetery.

CRIMSON RAMBLER ROSE.

Writing from the Edinburgh Botanic Gardens to the Gardeners' Magazine, R. L. Harrow says: Although this Japanese rose has proved itself perfectly hardy and of easy culture out of doors in this country; if grown as a greenhouse climber its season is lengthened, and it forms certainly one of the most attractive of plants to be seen under glass during May and June. A large plant has been in flower for more than a month in the corridor here, where it has eclipsed all the other occupants grown as climbers, and has attracted the attention of visitors. The bed it occupies is a somewhat restricted one (about two feet wide and as much in depth), and the rose is planted in pure loam of a rather heavy character. In that it seems to be perfectly established, and the long growths are produced in quantity, from which the large clusters of extra dark crimson flowers are formed at the apex. Where room can be afforded little pruning will be required, and at all times a good quantity of flowering growths should be left. When in flower they should be allowed to hang loosely and free, as in this way the full beauty of this variety is best displayed.

It may be of interest to some to know that this plant first became generally known in a garden near Edinburgh, viz., that of the late Mr. Jenner, of Ester, Duddingston Lodge, by whom it was given to a nurseryman in Lincoln in 1889. But to Charles Turner is due the credit of introducing it to the public under the above name.

Among Growers and Dealers.

D. Baird & Son, Baird, N. J., has peach trees by the 1,000 or car load.

There is a short crop of seeds all over the country except on the Pacific coast.

Black walnut trees are offered by estate of August W. Cutler, Morristown, N. J.

J. H. Hale, of Connecticut, is vice-president of the Farmers' National Congress.

Missouri claims to be the first state to open a school of horticulture in its agriculture college.

Samuel Miller, Bluffton, Mo., makes a strong plea for the revival of fruit growing in Missouri.

Moore's Early and Concord vines in large quantity are offered by John S. Barnhart, Denton, Md.

The Greenville apple is ready at E. M. Buechly's, Greenville, Ohio. He has a fine stock of one, two and three year trees

E. F. Stephens, Crete, Neb., makes a strong plea for the growing of fruit in his state. He gives figures to prove his success.

Thomas B. Meehan, Germantown, Pa., called upon Western New York nurserymen on his way back from a Canadian trip last month.

William Warner Harper, who has for years been manager of the Andorra Nurseries at Chestnut Hill, Philadelphia, is now proprietor.

Professor L. H. Bailey, of Cornell University, and Professor Otto Lugger, entomologist of Minnesota, spent a portion the summer in Europe.

Hiram T. Jones, Elizabeth, N. J., representing J. Blaauw & Co., Boskoop, Holland, has French grown fruit and ornamental seedlings.

George Peters & Co., Troy, Ohio, have an exceptionally fine stock of fruit and ornamental trees. They are headquarters for apple seedlings.

Ellwanger & Barry, Rochester, N. Y., are at the front as usual with the largest and most complete collections of general nursery stock ever offered.

Apple grafts are made to order by Youngers & Co., Geneva, Neb. All their stock is grown upon new land and is declared free from insects or disease.

Fresh Mazzard cherry seed is offered by Thomas Meehan & Sons, Germantown, Pa. Stocks or seeds of many fruit and ornamental kinds in large quantities.

Ellwanger & Barry, Rochester, on September 4th shipped 125 varieties of pears to the horticultural exhibition at Hamburg which opened on September 24th.

The Horticultural Company, Boskoop, Holland, at their branch in this country, situated at Rutherford, N. J., have planted out 6,000 standard H. P. roses.

- G. B. Brackett, of Iowa, is the new chief of the U. S. Division of Pomology. His predecessors were Professor H. E. VanDeman and Professor S. B. Heiges.
- P. J. Berckmans, Augusta, Ga., last month advertised 15,000 camelias. Now he asks us to cut out that item. Advertising in the NATIONAL NURSERYMAN pays.

The Society of American Florists, at its annual convention at Providence, R. I., in August, added to its title "and Ornamental Horticulturists," for the purpose of including the gardener and the amateur.

Missouri, Kansas, Nebraska, Iowa, Minnesota, Wisconsin and Illinois will join in making a big fruit display at the Omaha exposition next year. A grand apple parade and carnival will be held in October, 1898.

"The interest in fruit growing is on the increase, sure and safe, in all parts of Missouri more truly now than at any other time in her history," says secretary L. A. Goodman of the Missouri State Horticultural Society.

The largest orchard in Great Britain is at Toddington, in the county of Gloucester. It is five hundred miles in extent and in some seasons yields its owner, Lord Sudley, a profit of \$50,000. The trees are chiefly apple and plum.

The San Jose scale has not reached England, but the Gardener's Magazine suggests that British fruit growers become acquainted with its habits and the means for its extermination, as its importation is not an impossibility.

Secretary L. A. Goodman, general manager of the Ozark Orchard Company, says that this company has now planted 1,600 acres to apple trees and 500 acres will be set to trees next spring, which will make the Ozark Orchard the largest in Missouri.

At the state fair at Newark, N. J., last month there were exhibited 1,600 varieties of grapes, pears and peaches. Among the exhibitors was Hiram T. Jones of Elizabeth. The Elizabeth Nursery Co. took first prize for groups of hardy shrubs and conifers.

E. H. Pratt, for the last ten years, secretary and general manager of the T. S. Hubbard Co., is now associated with George S. Josselyn, of Fredonia, N. Y. Mr. Pratt has had large experience in the nursery business and is a valuable accession to Mr. Josselyn's business.

The low market prices for fruit, garden, and field crops has greatly retarded tree planting in California and as a result the nursery business has been almost at a standstill, hence a number of nurserymen have gone out of the business. The sale for economics has been light, but in the way of ornamentals, propagators of first-class stock have done fairly well.

The liabilities of the Highlands Nursery, Kawana, North Carolina, having been satisfied in full, the entire property has been re-deeded to Harlan P. Kelsey, the proprietor, by his late assignee, Thômas F. Parker. Mr. Kelsey has opened an office at 1123 Tremont building, Boston. Stock will be shipped direct from Highlands Nursery, in Western North Carolina.

E. H. Ricker has resigned his position as superintendent of the Ricker National Nursery Company, at Elgin, Ill. A corporation has been formed under the name of the Elgin Nurseries, with a capital stock of \$10,000. Mr. Ricker is manager of this company, which has purchased a large lot of the nursery stock in the Ricker National Nursery Company's nurseries and has leased a portion of the ground on which the nurseries are located. The growing of evergreens from seed will be made a specialty.

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CATALPA BUNGEL

The cut here shown is from a photograph of a tree as grown in the park of the U. P. R. R. at Lawrence, Kansas. It is one of the six original trees grown as an experiment in that form as standards by A. H. Griesa. After they were one year old he received a catalogue from P. &. E. Transom of Orleans France, with an illustration of the tree, describing it in high terms, with the prophecy that it would be largely used when better known.

It has been distributed quite largely in all the remote parts of this country, from the east to the west; and where grown seems to do well. The trees thrive on the sandy lands of New Jersey, in the north of Iowa or Illinois and in California and New Mexico. They assume that compact form naturally without the help of man, and the wind influences them but little. The photograph was taken from the west side to show how little

it leans to the north. Its form is entirely new among tree tops; it is unique and conspicuous on any lawn, for its form, color and shade of foliage, always a bright fresh green. It endures the droughts and frosts in a remarkable manner.

From a nursery man's standpoint it has features of great value in several respects. It will stand long exposure out of ground, is well supplied with strong and fibrous roots, transplants readily and grows in most any soil, and bears transportation. The trees are reasonable in price. They are a standing advertisement for the progressive dealer that supplied them. Mr. Griesa can supply them on liberal terms.



CATALPA BUNGEL

McPIKE GRAPE.

This mammoth production is a seedling of the Worden and partakes of all the good qualities of this splendid grape in a marked degree, perfectly hardy, with a leaf unprecedented, ripens same season of the Worden, bunches large, even, and compact. Berries even in size, covered with beautiful bloom, blue black in color, ripen uniformly, have generally the appearance of the Worden. The berries are of mammoth size, being one inch and an eighth in diameter. Superb quality, by far the best grape grown, has taken all premiums wherever exhibited.

These are the claims made for a fine grape illustrated in the frontispiece of this issue. Colman's Rural World says of it: "This mammoth production, which we personally examined, together with its grand leaf, was originated by H. G. McPike,

at his home place, Mount Lookout Park, Alton, Ill. Mr. Mc-Pike has been seeking, if possible, to find a better grape from every point than the Concord; one that should be wholly reliable and furnish annually untold tons of superior fruit. He has worked with the Alton Horticultural Society for thirty years with this object particularly in view. Now it is accomplished, the grape is here, and will be propagated in 1896-7, and be offered to the public. This grape has taken the premium wherever shown, and did so again at last Saturday's meeting of the Alton Horticultural Society, held at the residence of F. Hoffmeister, where was a magnificent show of fruit and a large attendance of fruit growers and vineyardists."

CHANGE OF TREATMENT.

Professor John B. Smith, state entomologist of New Jersey, in a bulletin issued September 1st, says: "Though the 1897

experiments with insecticides against he San Jose scale are not yet completedthe results so far obtained indicate the desirability of a change in the treatment heretofore recommended, Instead of winter applications, summer work will, it is believed, prove most satisfactory, and kerosene, undiluted, most effective."

He recommended all who had scale infested trees or plants to spray thoroughly in September, all infested bearing apple, pear, plum and peach trees with undiluted kerosense, during the middle of a clear sunshiny day.

"Treating nursery stock or very young trees with undiluted kerosene is not now recommended, since it is not yet certain that serious injury may not be caused. The scales will continue

active throughout September, and kerosene has proved uniformly fatal to all stages in all experiments made thus far. No injury has been caused on any treated trees except on plum after a spraying made in early spring, and this injury was temporary. In addition to the plants above named, Purple beech, Rosa rugosa and two species of Spiræa have been sprayed with undiluted kerosene without resulting injury. By 'undiluted kerosene' is meant the ordinary burning fluid used in lamps, in exactly the condition in which it is purchased. It should be applied in the finest possible spray, and every part of the plant should be thoroughly wet, but no more. One application should be sufficient, and it may be delayed, if necessary, until the fruit has been removed. The earlier the application is now made, however, the better it will be."

J. C. BOYD, GUY'S MILLS, PA.—"Enclosed find \$1 for the journal. I find the NATIONAL NURSERYMAN very instructive and full of information."

The National Nurseryman.

C. L. YATES, Proprietor.

RALPH T. OLCOTT, Editor.

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OFFICIAL JOURNAL OF THE AMERICAN ASSOCIATION OF NURSERYMEN.

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Payment in advance required for foreign advertisements.

De Drafts on New York or postal orders, instead of checks, are requested.

Correspondence from all points and articles of interest to nurserymen and horticulturists are cordially solicited.

Entered in the Post Office at Rochester, as second-class matter.

ROCHESTER, N. Y., OCTOBER, 1897.

POINTER FOR THE ADVANCE AGENT.

The nurseryman should neglect no opportunity to call the attention of the prospective purchaser of fruit trees and small fruit plants to the comparison which obtains in every city and in many of the villages of the eastern section of this country between the "home grown" fruit and that which is being shipped into this section by the fruit growers and shippers of California and the South. The markets of what is known as Eastern United States form an object lesson daily.

A study of these markets must convince anyone that the fruit growers of the East are losing ground in their own markets. George T. Powell, in a recent article, pointed out what has occurred to many when he said that the advantages that ought naturally to be very great to the eastern fruit growers are more and more being possessed by the growers of several thousand miles away.

It is conceded that California fruit which is leading the trade does not equal that of the Eastern United States in point of fine flavor and high quality. It is stated that seventy-five carloads of California fruit find quick sales in New York weekly.

As has been shown by Mr. Powell, the fruit grown in the Atlantic and New England states is grown too largely in connection with general farming, and under such conditions will always be subject to neglect. It is necessary to cultivate, prune and spray an orchard and pay great attention to the manner of packing, storing and shipping the fruit, so that it may be put upon the market in the most attractive form. Competition is going to be even greater than anything yet experienced.

Nothing herein said should be construed as being antagonistic to the production of fruit under methods which prevail in the extreme West and South; there is room for all in this great country; the production of fruit is by no means overdone; the poor man was able to buy peaches for his family this year and the enormous crop was easily disposed of.

There are lessons in this subject for the nurseryman's advance agent.

THE WESTERN FARMERS.

During the recent financial depression the collections on sales of nursery stock were very slow all over the country. Particular complaint was made regarding western collections, because of the straits in which western farmers found themselves.

One of the most encouraging signs of the revival of business, therefore, is the following summary of conditions by the American Agriculturist, a recognized authority on matters of interest to the farmer:

"While newspaper stories have been somewhat exaggerated, it is an absolute fact that the western farmer's financial condition is wonderfully improved. During the past three years he practiced such economy that with a slight improvement in wheat prices last fall and fairer values for cattle, sheep, hogs, the thrifty farmer gradually reduced his debts. With good prices this fall, he is indeed paying off the mortgage, or if it is continued it is at a lower rate of interest and for the purpose of improving the farm or buying more land. The fall in the interest rate is quite as remarkable as the other features of the rising tide. The era of over-speculation that was threatened by the too rapid 'booming' in the wheat market, has been nipped in the bud. Farmers everywhere seem determined to pay their debts first of all. Many thousands of them will then have a comfortable surplus left."

PASSES FOR MEMBERS.

Inasmuch as the members of the American Association of Nurserymen annually have to count noses carefully in order to get together enough railroad certificates to secure the rate of one and a third 'are to the conventions, it is interesting to note that down in Georgia the railroads furnish free transportation to the members of the State Horticultural Society upon the occasion of the annual convention.

Regarding this subject the Savannah, Ga., News says:

The delegates to the Georgia State Agricultural and the Horticultural Socities' conventions will be accorded the same privildges and courtesies by the railroads of the state as in the past. For a number of years it has been customary for the roads to furnish free transportation to these meetings, and no exception will be made on the occasion of the annual meetings held here this month.

Through the advertisement some time ago by the railroads of a one-fare-for-the-round-trip rate to the conventions from points throughout the state, the inference was drawn that the delegates would not be extended the privileges of former years and would have to pay for their transportation. These advertisements are of rates intended for the general public. Conventions representing so strongly, as do these of the Agricultural and Horticultural Societies, the interests of a large proportion of the population of Georgia can readily be understood as likely to draw a great many visitors, and the reduced rates were put in effect for their convenience. The tickets will have limits of some five or six days, and visitors will have ample time and opportunity to enjoy the pleasures of the sea side resort in addition to attending the convention.

The passes for the delegates have already been issued. Both the Agricultural and Horticultural societies have had passes to the number

of nearly 200 issued. These passes were made out from lists of those entitled to them, furnished by the presidents of the societies.

President H. M. Comer of the Central, in speaking of the report that the road would not give the delegates passes this year, said that such a departure from the custom that has prevailed for years had not even been contemplated. He regarded the work of the societies as of great benefit to the state, and for that reason considers that the railroads should withhold no assistance that may tend to render this work less effective. The results of the work of the societies may readily be discerned through a comparison of the conditions of agriculture and horticulture in this state with those in which similar organizations do not exist.

CERTIFICATES FOR DEALERS.

The question of certificates for dealers who wish to ship stock into states that have adopted restrictive laws regarding the San Jose scale has caused much inquiry. One method would be to ask wholesalers to give dealers duplicate certificates bearing the dealer's name, so that the dealer could attach these certificates to stock re-shipped by him, inasmuch as the stock would have been inspected at the expense of the wholesaler. Unless this is done the dealer must go to the trouble and expense of re-inspection of the same stock.

Dealers in New York state who grow some stock have been having their stock inspected by E. P. Felt, assistant to State Entomologist J. A. Lintner of Albany. Original certificates are furnished for filing in the office of the dealer and grower, and duplicates may be printed, bearing the entomologist's name printed, the duplicates to be marked, "Duplicate Copy" in brackets at the top. This has been the practice, too in other states.

It is probable that in each case in which a certificate is issued an affidavit will be exacted to the effect that the certificate or duplicates thereof will be used only upon inspected stock.

NEW YORK STATE FAIR.

There was lively competition at the New York State fair this year in the matter of fruit exhibits. The season was two weeks late and the fair was held one week earlier than usual, therefore the fruit was not in the best of condition. But Horticultural hall never contained a more superb collection of plums, for every one of the 160 varieties in fruit in the state was represented, including all the newer sorts as well as many Japans. S. D. Willard showed 120 varieties and Ellwanger & Barry 60. The three especially instructive exhibits were those of the New York Experiment Station at Geneva, the Western Horticultural Society and the Central New York Horticultural Society, but such magnificent collections of fruit as were shown by Ellwanger & Barry were of great value and beauty. This firm also showed 147 varieties of pears.

The Western New York society showed 1,115 plates of fruit in 160 varieties, the Central New York Society 940 plates and 120 varieties—15 species of fruit. The newly formed Eastern New York Horticultural Society was expected to exhibit, but at the last moment found it impossible. Some of the novelties shown included the President Wilder currant, the Dykeman cherry, Red June plum and a new seedling grape by B. J. Heddon.

FOR SHIPPERS TO MARYLAND.

The following has been prepared for nurserymen outside of Maryland:

COLLEGE PARK, Md., September 20, 1897.

As the shipping season is near at hand I desire to call your attention to that part of our "Trees and Nursery Stock Law" relative to stock coming from other states, which is as follows: (Laws of Maryland, 1896, Chapter 290, Section 58). Whenever any trees, plants or vines are shipped into this state, from another state, every package thereof shall be plainly labeled on the outside with the name of the consignor, the name of the consignee, the contents, and a certificate showing that the contents have been inspected by a state or government officer, and that the trees, plants or vines therein contained are apparantly free from all San Jose scale, Yellows, Rosette or other injurious insect or disease. Whenever any trees, plants, or vines are shipped into this state without such a certificate plainly fixed on the outside of such package, the fact may be reported to any justice of the peace of this state, and said justice shall issue a summons for the consignee of such package, and the agent of the consignor, if he be known, to appear before him on a certain day, to be therein named, to show cause why such trees, plants or vines should not be seized as being in violation of the provision of this act, and on trial thereof, if said justice be satisfied that the provisions of this act have been violated, said justice shall order said agent or consignee to return said package of trees, plants or vines immediately to the shipper or consignor; unless said consignee or agent shall forthwith have said trees, plants and vines examined by the state entomologist of this state, and he certify to such justice of the peace that the said trees, plants or vines are apparently free from all insects or disease, and if such agent or consignee shall fail to have such nursery stock examined by the state entomologist, or fail to return such packages to consignee thereof, then said justice of the peace shall order and direct the constable or sheriff to burn and destroy all such trees, plants and vines as have been shipped into this state in violation of law.

It is not our purpose to inforce this section for any selfish motive; but experience has taught us it is necessary for the protection of our nursery and horticultural interests. Our own nurserymen have had their stock critically inspected, and it is due them and their interests that they should be protected. We therefore respectfully request that outside nurserymen who have stock to deliver in this state this fall or next spring send us a copy of their certificate of inspection, to avoid any unnecessary delay in the delivery of any trees, etc., that may be shipped into this state.

WILLIS G. JOHNSON, State Entomologist.

SOUTHERN PEACH LANDS.

Fort Valley, Ga., to-day presents an unbroken scene of peach plantations. Within a radius of ten miles, including Marshallville, Perry, Myrtle, Powersville, Everett, and Lee Pope, there are 12,295 acres of land devoted to the culture of fruit, on which there are 1,221,000 peach trees, 18,000 pears, 49,000 grape vines, 5,000 plums, and 900 apples.

AMERICAN POMOLOGICAL.

TWENTY-FIFTH BIENNIAL SESSION OF THE SO-CIETY—C. L. WATROUS THE NEW PRESIDENT —SUMMARY OF THE PROCEEDINGS.

The twenty-fifth biennial session of the American Pomological Society was held at Columbus, O., September 1 to 3, by invitation of the Ohio Horticultural Society. An address of welcome on behalf of the city was made by Mayor Black, while N. H. Albaugh gave the welcoming address for the state society. He "pointed with pride" to the progress made in pomology in Ohio. As in addition to large orchards of apples, pears, and plums, there is a large area along Lake Erie entirely given up to grapes, while peaches are largely grown in the northwest portion of the state and along the Ohio River-The Ohio State Horticultural Society is even older than the American Pomological Society, having some years since celebrated its semi-centennial, and it has a number of old and thriving county societies; among them is that of Montgomery county, which for thirty-one years has not missed a monthly meeting. He also commented on the benefits to pomology of the works of Elliott, Warder, Kirtland, and Weltz. In the way of varieties of fruit Ohio has furnished the Stark and Rome Beauty apples, the Governor Wood and other cherries originated by Dr. Kirtland, and the Diamond peach, besides numerous other sorts.

PRESIDENT BERCKMANS' ADDRESS.

In his biennial address, President Berckmans referred to the great increase in the number of plant diseases and insects, and the benefits that had come from the work of the experiment stations in furnishing methods of combatting them. They have also been of much value in testing the new varieties of fruit that are introduced and in learning their adaptation to the different parts of the country.

Among the members who have passed from earth since the session of 1895 are Dr. C. V. Riley, A. S. Fuller, H. M Engle, W. W. Adams, Franklin Davis, John Saul, Robert Douglass, David Allen, John S. Harris, and David Scott.

In the discussion on new varieties of fruit, George W. Campbell of Delaware, O., gave the history and description of Campbell Early grape, specimens of which were on exhibition.

W. A. Taylor, assistant in the division of pomology, said that although the list of edible fruits and nuts about to be issued by the society showed 1,112 varieties, belonging to 57 species, many of the foreign countries have undeveloped species that will be well adapted to cultivation in some place in this country, either as fruit trees or as stocks upon which to grow other kinds. He named a list including a number of palms, pineapples, eugenias, chestnuts, bananas, myrtles, plums, cherries, oranges, lemons, and various species of Ribes, Rubus, and Vitis that seemed promising.

Professor Van Deman said that in addition to the large number of native species and the many foreign species that had been introduced, many others should be secured. He called particular attention to the many hardy and promising fruits found in Armenia.

Professor Berckmans of Georgia and Professor Craig of Ontario reported that they had tested peaches, plums, and apricots from Armenia, which had been carefully selected as most promising, but none of them had any value here.

DIVISION OF POMOLOGY.

The recently appointed chief of the U. S. Division of Pomology, Colonel G. B. Brackett of Iowa, urged the utmost harmony between the division and the American Society of Pomology. The society has done valuable work, but pomology has grown beyond the means of the society. The division is provided with ample means, and directed by practical men it can do much good. During the past year it has prepared and printed the fruit list for the society.

C. L. Watrous of Des Moines, Ia., referred to benefits that were given to pomology by the botanical, entomological, and mycological divisions of the U. S. Division of Pomology.

Professor H. E. Van Deman of Parksley, Va., formerly chief of the division, claimed to have been the originator of the division, having suggested the idea to Secretary Norman J. Colman, and as the first chief of the division, mapped out the line of work that should be followed.

SECRETARY WILSON TALKS.

Secretary James Wilson of the U. S. Department of Agriculture, said the government stood ready to aid pomological interests. He said he had just come from the West and had inspected the orchards about Grand Junction, Colo., where the climate and soil are especially adapted to the growing of the peach and other tender fruits. In many parts of the West the land can be had for nothing, the water of the rivers is free, but by carrying the water upon the land the latter becomes worth \$100 per acre, and when planted to orchards, will readily sell for \$1,000 per acre, and yet they ask the fruit growers of the East to allow themselves to be taxed to supply water for irrigating, with which this immense profit can be made, and also enable them to grow fruit with which they will compete with the eastern fruit grower in the markets.

SAN JOSE SCALE.

Spraying was discussed by professors W. J. Green of Ohio, and W. B. Alwood of Virginia, and L. A. Goodman. Needed state and national legislation for the suppression of the San Jose scale was discussed by Professor Alwood. He said that this insect is so likely to be distributed on nursery stock that state and national legislation is necessary. The law should clearly define the authority which should be vested in a board, with power to appoint a responsible inspector, who shoul I have the right to go upon any premises to inspect suspected trees, and the power to quarantine within the state. It should also outline the full machinery for carrying out the law and of enforcing penalties against selling or giving away infected stock. The state authorities cannot take cognizance of stock in transit from one state to another, as that would interfere with interstate commerce, while the national law would not take cognizance of cases actually existing in a state. Both classes of laws are then necessary, and with them it will be possible to secure the rigid inspection of orchards and nursery stock, so that the insect can be eradicated where it has established itself, and be prevented from spreading to uninfested sections.

PROFESSOR WEBSTER TOO.

Professor F. M. Webster of Wooster, O., said that many of the most restrictive state laws have been found unconstitutional, as they interfere with interstate commerce, and for this reason state laws cannot be entirely effectual unless there is a

THE NATIONAL NURSERYMAN.

strong national law. A national law is needed to control stock subject to interstate commerce rules, and a rigid state law that will take cognizance of cases occurring in orchards and nurseries, and they should be so prepared that they would be uniform in different parts of the country.

Professor A. D. Selby of the Ohio Experiment Station said that a nursery tree bearing galls is worse than worthless, as it will not come to fruiting, nor will an older plant continue bearing if attacked, while it is likely to spread the disease. The trouble seems to spread, and is more serious than any insect or disease now known. Affected nursery trees are the chief source of contagion to new orchards or new lands, and should not be sold. The presence of the disease can be readily detected at digging time, and all affected trees should be collected and burned. Trees in close proximity to diseased trees are also likely to become infected and should not be

ELECTION OF OFFICERS.

The election of officers resulted as follows: President, C. L. Watrous, Des Moines, Ia.; vice president, George W. Campbell, Delaware, O.; secretary, W. A. Taylor, Washington, D. C.; treasurer, Professor L. R. Taft, Agricultural College, Michigan.

P. J. Berckmans had served the society as president for ten years, having succeeded the lamented Marshall P. Wilder, and resolutions were adopted expressing the regret of the society that he had declined re-election.

The membership fee of the society was reduced from \$4 to to \$2. The question of holding annual instead of biennial sessions was left with the executive committee, as was also the selection of a place for the next meeting.

Invitations were received to hold the next meeting at Niagara Falls, St. Louis, Kansas City, Omaha, and Boston.

Wilder silver medals were awarded to George W. Campbell, Delaware, O., for the Campbell Early grape, and H. G. M'Pike, Alton, Ill., for the M'Pike grape.

TRANSPORTATION RATES.

At the St. Louis convention of the American Association, A. L. Brooke, North Topeka, chairman of the committee on transportation, urged the formation of a Southern Nurserymen's Association. "If you do not succeed the first year or two in obtaining relief," said he, "you surely will by working on. Railway men are gentlemen. They are always glad to have you bring them information."

An illustration of the truth of Mr. Brooke's remarks is the result of a meeting of the Gulf Coast Horticultural Association at League City, Tex., on August 7th. H. M. Stringfellow, of Galveston, said the fruit growers must have better rates or go out of the business. To P. H. Goodwin, of the general freight department of the Gulf, Colorado and Sante Fe railroad, Mr. Stringfellow said:

"Please explain why it is that the potato which sells for \$3 per barrel should have a 35-cent rate and the pear which has been selling for \$1 per barrel should be charged a rate of 85 cents." This was not answered.

R. T. Wheeler, of Hitchcock—"Can you give any promise in the future of a cheaper rate and better transportation?"

Mr. Goodwin-"Better rates, no; better transportation, yes."

Mr. Stringfellow—"Your road ought to do something for the growers. When I started my peach orchard here the railroad was not getting anything out of this country, and now it is getting thousands of dollars annually."

Mr. Goodwin—"The railroads cannot live without the support of the farming communities. We want your support if we can deserve it. We are neither of us here for our health. Unless we can get together in harmony, we can do no business together. If you cannot do business at the present rate it will be reduced to a point where you can do business, and we can furnish you transportation and each have a margin of profit."

NO SCALE IN WISCONSIN.

Waupaca, Wis., Sept. 10.—Asa D. Barnes: "The San Jose scale bill was killed in our state legislature last winter owing to numerous attached unwarranted and uncalled for riders. No doubt but what a clean, straight bill could have been passed all right. Yet we have never had a San Jose scale in our state, except some specimens which were imported for inspection at our last winter's meeting by parties particularly interested in the creating of an office of nursery and orchard inspector.

"I believe that I am the owner of more apple trees to-day than any other man in this state, and certainly would be glad to see clean legislation on this matter, if it is really dangerous to our cold and short seasons—which I very much doubt."

NEW VARIETIES.

Rossney Pear.—We received from the Pioneer Nurseries Co., Salt Lake City, Utah, samples of their Rossney pear. It is certainly a most desirable fruit. The pears were of handsome form with creamy yellow skin and crimson blush, truly a tempting appearance. And when they were cut, one was impressed at once by the remarkably fine grain; indeed, there seemed to be no grain. The flesh is melting, juicy and very sweet and tender. The flavor is superior. We doubt that this pear can be excelled. The Rossney was raised from seed at Salt Lake City. It is medium to large, ripens two weeks after the Bartletts in Utah and is said to be an excellent keeper and shipper. The tree is said to be much stronger than Kieffer. Luther Burbank has spoken in high praise of it.

LARGE PEACH.—J. O. Kelly & Sons, Jeff, Ala., sent us a sample of a peach of which they give no name nor description. It was a remarkably large, fine appearing fruit measuring eleven inches in circumference. It was nearly round, with deep suture and pronounced flavor. But it had evidently been picked when quite green and it did not ripen, so that we could judge nothing of its flavor. The flesh was deep yellow in color, red at the pit which was large.

Campbell's Early Grape.—We received from George S. Josselyn, Fredonia, N. Y., samples of Campbell's Early grape. The fruit was from one year old vines planted in 1895 and this was the first year of bearing. Old exhibitors say they cannot get good clusters from first year bearing vines. In this case, however, the clusters were of good size and the fruit is of fine flavor, very firm and evidently a good shipper. This grape is receiving, deservedly, high praise.

BLIGHT-PROOF STOCKS.

When the writer visited the Australian colonies in 1888 and 1889, considerable trouble was being experienced by nurserymen and orchardists in devising means to protect apple trees from attacks of wooly aphis, there termed "The American Blight." It had been learned that the roots of some varieties of apple, notably the Northern Spy, seemed to be proof against the attacks of this insect which, by the way, is vastly more injurious to apple trees than in America, and nurserymen were using what were then termed "blight-proof stocks," almost exclusively, upon which to start nearly all other varieties of apple.

As the injuries of this pest are of minor importance in this country, confined as they are almost exclusively to young seedling stock and to a less degree to the nursery row, I did not look into the matter very closely at the time, merely noting it down as one of the usages of that country that would be worth watching, after I returned home.

A few months ago, when I had occasion to explain the mode of procedure in securing this blight-proof stock, my memory failed me and my notes were too indefinite to help me out. Of course the sowing of Northern Spy seed would not produce that variety of stock, and I knew that there was some method of double working, but could not say just how it was done. I wrote to a correspondent in Adelaide, South Australia, for the desired information, and being personally acquainted with the secretary for agriculture for the colony, Mr. A. Molineux, the information was very kindly given in Garden and Field, the official organ of the department, as follows:

"No one now thinks of planting a tree except on a blight-proof stock, so that the badly affected trees are all old. To obtain a blight-proof stock is quite a simple matter. Two essentials are necessary: First—the blight-proof root; second, blight-proof wood. The best roots are undoubtedly those of the Northern Spy apple tree.

"A piece of root, say as thick as a lead pencil, and four inches long, with a few root fibers, is taken and grafted by whip or cleft grafting on to a scion of any blight-proof variety. The two sorts usually used are either the Northern Spy or Majestin, and bound with a piece of soft twine or strip of calico.

"This is planted in the nursery bed, and from the upper bud of the scion a strong shoot is allowed to grow, and at the same time roots frequently grow from the lower end of the scion. If the growing shoot is strong enough, a bud is inserted in the summer, at about six inches from the ground, and allowed to remain dormant until the next winter, when the shoot is cut away, and a tree is formed in the following season from the bud. In this method the roots and stock are blight-proof to six inches above ground, and above that it does not so much matter, as the aphis can be easily treated with kerosene emulsion."

It is questionable if it will pay our nurserymen to go to this trouble, especially in the North, but as so much is now being made of this mode of fighting the insect in Australia, it seemed proper to give this explanation where it would be likely to reach the greatest number of those who would be interested and possibly experiment with it in future.

Wooster, Ohio. F. M. Webster.

Storrs & Harrison Co., Painesville, O., have one of the most complete assortments of nursery stock in the world.

Charles Greening, of Greening Brothers, Monroe, Mich., visited Rochester Nurserymen during the closing days of last month

Nursery stocks of all kinds are offered by Barbier Brothers & Son, successors to that well known establishment Nason Brothers' Nurseries, Orleans, France. The American representatives are Knauth, Nachod & Kuhne, 13 William Street, New York city.

Jesse Kersey Sharpless, the originator of the Sharpless strawberry, died at his home in Catawissa, Pa., on September 10, aged 80 years. The berry which bears his name was the result of a series of experiments conducted by Mr. Sharpless, who at an early age became interested in small fruits, and was obtained from mixed seed of Jacunda, Charles Downing, Wilson, and Colonel Cheney.

APPLE SEEDLINGS

200,000 Apple Seedlings, 2 Years Old, also One Acre of Dwarf Box for Edging.

ADDRESS Stephen Hoyts Son, New Canaan, Ct.

Miller New Raspberry, Strawberry, and Other Plants, genuine home-grown at right figures.

In Exchange for_____

STANDARD and DWARF PEARS and Other Stock.
P. EMERSON, WYOMING, Kent Co., DELAWARE.

Nursery Stocks of all Kinds and Varieties,



Such as Maples, Alder. Althea, Aucuba, White Birch, Catalpa, Honeysuckles, Nuts, Japan Quince, Deutzia, Ash, Broom, Walnut, Ligustrum, Philadelphia, Acacia, Currants, Willows, Sambucus, Spirea, Lilacs, Tamarix, Viburnum, Weigelia, and all sorts of Fruit Tree Stocks, all 1, 2 and 3 years old or stronger plants, now offered at very low prices by

TRANSON BROTHERS NURSERIES, BARBIER BROS. & SONS. Success.

For Price List Apply to • ORLEANS, FRANCE.

KNAUTH, NACHOD & KUHNE, 13 William St., NEW YORK.

A SURPLUS OF 125,000 MOORE'S EARLY
AND CONCORD VINES.

One and two years, must be reduced and the prices must suit the buyer.



Equally tempting prices will be made on Peach Trees by the 1,000 or car load. TRIUMPH included in the special offers.

Abundance and Red June Plums, 5 to 7 feet, must also go at bargain rates.

This stock has been examined by the State Entomologist, and certified to be free from San Jose scale and disease. Write me for prices.

JOHN S. BARNHART,

Extra Fine Plants

It does not pay to buy poor stock. Get my prices for Fall of '97 and Spring of '98 on

GOOSEBERRIES, CURRANTS,
RASPBERRIES, BLACKBERRIES.
(Transplants.) BLOKBERRIES.

I offer all the STANDARD VARIETIES, including COLUMBIAN, LOUDON, CONRATH RASPBERRIES and POMONA CURRANT.

..NOVELTIES

Strawberry-Raspberry, Golden Mayberry Logan Berry, Raspberry-Blackberry.

ALLEN L. WOOD, ROCHESTER, N. Y.

Introducer of the "Pearl Gooseberry."

Send for my Wholesale Trade List.

Plates for Plate books free.

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*

(And there are none better grown.)

APPLE, STB. PEAR

AND CHERRY.

OUR GOLDEN ANNIVERSARY.

THE MONROE NURSERY.

I. E. Ilgenfritz' Sons,

MONROE, -

місн.

50 years in business proves our reliability.

Fairmount Nurseries

TROY, OHIO.

For Fall and Spring trade we have an exceptionally fine stock of

Apple, Std: Pear,
Plum, Dwf. Pear,
Cherry, Peach,
Quince, Grape,
Apricot, Currants,
Gooseberry, Evergreens
and Ornamentals.

HEADQUARTERS FOR

Apple Seedlings

which will be extra fine, and can be shipped either from Troy, Ohio, or Topeka, Kansas.

Favor us with a list of your wants, and we believe we can quote prices that will suit you.

GEO. PETERS & CO.

TROY, OHIO.

When writing to Advertisers mention The National Nurseryman.

The Geneva Nursery,

GENEVA, N.Y.

....SPLENDID STOCK OF....

Roses.

Industry Gooseberries,

Clematis.

Columbian Raspberries,

Rhododendrons,

Mulberries.

Herb. Pæonias,

Peaches.

Ampelopsis Veitchii,

Quinces.

We supply everything needed by dealers.

SEND FOR WHOLESALE TRADE-LIST.

W. & T. SMITH CO.

A. WILLIS,

PROPRIETOR

Willis Nurseries, Ottawa, Kans.

Offers a general assortment of choice nursery stock.

Apple, Pear,

Std. and Dwf. Cherries,

Plums, Apricots, Peaches,

Boughton and Downing Gooseberries,

Braves. Raspberries,

Blackberries and Strawberries.

Choice Stock, Best Assortment. Low Prices.

Best of Packing.

Your correspondence and orders solicited.

A. WILLIS,

Proprietor.

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BREWER & STANNARD.

THE —

Ottawa Star Nurseries.

OTTAWA, KANSAS.

Offer a full and complete stock of FRUIT and ORNAMENTAL TREES, and call your attention especially to

APPLE-Well rooted; good assortment in all grades.

PEAR-Standard and Dwarf, 2-years; good assortment.

PLUM ON PLUM-One and 2-years; American, Japan and European sorts.

PEACH-A fine lot and good assortment.

APRICOTS-Russian and American sorts.

GOOSEBERRIES-2-year; strong plants, mostly Houghton and Down-

CURRANTS-One and 2-years; good assortment, very fine.

FOREST SEEDLINGS—Russian Mulberry, Maple, Box Elder, Black Locust, Ash, Elm, Catalpa and Osage Hedge.

APPLE SEEDLINGS-All grades, fine healthy plants.

ORNAMENTAL TREES-Strong on Mountain Ash and Maple, 5 to 6 and 6 to 8 feet.

We have also a good assortment of Ornamental Shrubs, Roses and Vines.

For a more complete list we refer you to our semi-annual trade list and solicit correspondence.

FOR EARLY FALL DELIVERY, Planted on our Trial Grounds at Rutherford, N. J.

Tree Roses, Hydrangeas P. Grandiflora, Dutchman's Pipe, H. P. Roses, Hardy Azaleas, Etc., Etc.

Above stock is in splendid condition.

Above stock is in splendid condition.

Ask for prices on all-fine nursery stock, such as Clematis, Magnolia, Rhododadron, Hardy Azaless, etc., for fall or spring importation.

L. C. BOBBINK,

Branch of the Hortfeultural Company, Rutherford, N. J.

PEACH TREES by the 1000 or car load, in all the standard varieties, including Sneed, Triumph and Greensboro.

JAPAN PLUM, including Hale, Red June and Wickson.

HEAVY STOCK of root cutting, Blackberry plants, Eric (100,000), Eldorado, Lovetts' and Wilson.

Our prices will interest you.

Note the change in our Postoffice address.

D. BAIRD & SON, Baird, Mon. Co., N. J.

PETERS & SKINNER,

North Topeka, Kansas.

CAPITAL NURSERIES.

APPLE SEEDLING

Japan Pear Seedling, Russian Mulberry, Box Elder, Silver Maple, Elm, and Osage Seedling.

APPLE, PEACH, CHERRY, PLUM AND APRICOT.....

Keiffer, Garber and Koonce Pear.

BECHTEL'S DOUBLE FLOWERING CRAB.

Remember we are extensive growers of APPLE TREES and APPLE SEEDLING, and can supply in large lots.

NORTH TOPEKA, PETERS & SKINNER, 📽

...High Grade Stock

Is always the cheapest, and such is the quality we aim to supply in every order.

Our Ornamental Department is without exception in the finest condition we have ever seen it, owing largely to the exceptional favorable season for growth.

In Fruits, our list is very complete, and we are making special inducements to purchasers in carload

Our new Trade List contains every article we can supply. Send for a copy.

HOOPES. BRO. & THOMAS,

Maple Avenue Nurseries,

WEST CHESTER, PA.

QUINCE. CURRANTS.

A General Line of Nursery Stock

AT LOW PRICES.

E. MOODY & SONS, LOCKPORT, N. Y. Niagara Nurseries.

Established, 1839.

1,000 BLACKWALNUT TREES, 8 ft. to 20 ft. in height, with FOR SALE branches.

CALIPSES, 11 in. to 3 in. Will be sold at a bargain.

ESTATE AUG. W. CUTLER, MORRISTOWN, NEW JERSEY,

NURSERYMEN Should read this, I have just stock, a nice clean article of dry baled SPHAGNUM MOSS. delay or freight charges from branch roads. Orders for less than large car load shipped the first day received.

L. G. THOMPSON, TOMAH, WIS.

Write me for easy terms and prices.

nox Nurseries,

Established 1851.

Send us a list of your wants of Apple, Peach and

Will make you unusual low prices for early fall shipment.

Vincennes, H. M. SIMPSON & SONS.

SHENANDOAH

Largest stock in the West.

PEAR, PLUM AND CHERRY STOCKS.

Osage Orange, Russian Mulberry and Forest SEEDLINGS. Nursery grown.

Apple, Pear, Plum, Peach and Cherry Trees by the car load. Acres of Shade and Ornamental Trees of all sizes.

Small Fruits, Ornamental Shrubs and Evergreens

in quantity to suit the purchaser. Scions, large surplus. Grafts of any style made to order.

Our stock has made a fine growth, and is free from all injurious insects, and includes all the leading varieties and will be graded up to the highest standard grades.

D. S. LAKE, PROPRIETOR, SHENANDOAH, IOWA.

Fine Thrifty Stock for Fall '97 and Spring '98.

PEACH TREES, all sizes CAROLINA POPLARS, 8 ft. up

CALIFORNIA PRIVET, 2-yrs. OSAGE ORANGE, 1, 2, and 3-yrs.

ASPARAGUS ROOTS, Barr's Mammoth, and Moore's X Bred. 1,000 FINE W. BIRCH, 12 to 15 ft.

JOSIAH A. ROBERTS, Malvern, Pa.

pe Vines. • • \$ Small Fruit Plants. \$ rape Vines.

20,000 extra heavy Downing.

All stock guaranteed to give the best of satisfaction.

Send list of wants for special Fall Prices.

EUGENE

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Hiram T. Jones, "Sole representative for Dnited States and Canada. J. Blaauw & Co., BOSKOOP, HOL.

French Grown Fruit and Ornamental Seedlings. Grades carefully maintained. Prices upon application.

ROSES on own roots. Field grown, and of unusually good growth.

union county Elizabeth, N. J. HIRAM T. JONES.

rnament

FLOWERING SHRUBS in great variety. and Price-List free.

SAMUEL C. MOON, Morrisville, Bucks County, Pa.

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N. Y.

ISKED 1865. ***** *************

OFFER to my customers and the general trade, for fall of 1897 and spring of 1898, 25,000 strong 2 and 3 years out door nursery grown Clematis, viz: Jackmannii, Henryii, Ramona, Duchess of Edinburg, Baron Veillard, Vit Rubra Grand, Coc. Crispa and Paniculata.

Of Mad Ed. Andre, the acknowleged queen of all Clematis, I have strong 3-year olds, also strong 2-years in great quantity.

GOOSEBERRIES AND CURRANTS.

Strong 2-year plants. All the leading kinds. Prices low.

RASPBERRIES.

Columbian, Miller, Superlative, Etc.

ROSES, FLOWERING SHRUBS, PÆONIES, and CLIMB-ING PLANTS in great variety.

THE MONARCH PLUM.

Truly monarch of all new Plums. Fruit arge, round, purple, excellent quality. Ripens in September. My specimen trees are full of fruit. I have a large stock of fine trees. The best of Thos. Rivers introductions.

GOLDEN GLOW FLOWER.

I have a very large stock of strong plants. Dealers should push it. It sells well. Also Apples, Pears, Plums, Cherries, Quinces, etc. Quality unsurpassed. Prices reasonable.

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Established 1852.

Before placing your orders elsewhere, try us for prices on:

CURRANTS-2-yrs. old. Red Dutch, White Grape, Cherry, North Star, Fay's, Victoria.

GOOSEBERRIES-2 and 8-yrs. Principally Houghton.

APPLES, PEACHES, DWF. and STD. PEARS, CHERRIES. Leading varieties.

QUINCES-2 and 3-yrs. old. Champion and Orange.

KIEFFER PEARS-2 and 8-yrs. old.

BLACKBERRIES, STRAWBERRIES, RHUBARB and ASPARAGUS in quantity.

MAPLES. in assortment.

CATALPA, HORSE CHESTNUT, MOUNTAIN ASH, TULIP TREE.

ALTHEAS, CALYCANTHUS, DEUTZIAS, EUONYMUS, HYDRANGEA.

LILACS-Purple Fringe, Snow Ball. SPIREAS.

CLEMATIS, PÆONIAS and ROSES.

AMERICAN ARBOR VITÆ, SIBERIAN ARBOR VITÆ, PYRAMIDALIS. BALSAM FIR, IHISH JUNIPER, NORWAY SPRUCE, BLACK SPRUCE.

We solicit patronage and guarantee satisfaction.

Samuel Kinsey & Co.

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FRENCH FRUIT TREE STOCKS AND ORNAMENTALS

Grown especially for the American trade by

MR. CHAS. DETRICHE, Angers, France,

JACKSON & PERKINS CO., Newark, N. Y., Sole Agents for the U.S. and Canada.

Mr. Détriché is one of the oldest and most reliable of French growers and goods ordered from him can be depended upon to be of exactly the quality, variety and grade ordered. Especially fine stocks of young ornamentals.

Old Dominion Nurseries-350 acres.

PEACH, (including Crosby, Champion, Sneed)
STANDARD PEAR, Large Stook.

A FULL LINE OF GENERAL NURSERY STOCK. A VERY FINE STOCK OF JAPAN PEAR SEEDLINGS.

Very large packing sheds. Cold storage barn. The best facilities for proper packing, and prompt shipping,

W. T. HOOD & CO., - - RICHMOND, VA.

ESTABLISHED 1852.

600 Acres. Phoenix Nursery Co., 13 Greenhouses.

(SUCCESSORS TO SIDNEY TUTTLE & CO.)

NURSERYMEN AND FLORISTS & Wholesale and Retail.

Correspondence solicited and promptly answered. Send list of wants for prices. Salesmen wanted.

P. O. BOX 1215.

BLOOMINGTON, ILL.

THE SEDCWICK NURSERY CO.

SEDGWICK, KANSAS.

(Successor to CHAUNCEY A. SEAMAN,)

Offer SHADE TREES in car lots at bottom prices.

High Grade Nursery Stock for Spring of '97.

Apples, Standard and Dwarf Pears, Cherries, Plums, Quinces, Cut-Leaf Weeping Birch, Purple-Leaf Birch, Silver Maple, Elms, Catalpa, Black Walnut and Butternut.

Write for Special Prices,

JAY WOOD, KNOWLESVILLE, N. Y.

THE GREENVILLE (Downing's Wint.) APPLE M. Blush.



Has come to stay, and you may as well help in its introduction Its fine habit of growth at once make it desirable for your sales men, as it is a tree that will de liver well. To this add its fine color, good size of fruit, pro ductiveness, good keeping qual ities, and remarkable healthy foliage, and we have a very desirable combination.

Only give it a trial and you will be convinced. A fine stock of one, two and three year trees on hand.

For terms address

E. M. BUECHLY, Greenville, Ohio.

OUR SPECIALTIES FOR '97.

Strawberry plants for August and Septembershipment. Potted and layer plants. Newer kinds, Carrie, Margaret, Glenn Mary, Clyde, Wm. Beit, Brunette, Champlon of England, etc., etc. All standard kinds in immense quantities.

200,000 Currants, 1-1. 100,000 Eldorado R. C. 50.000 Ohmer. 500,000 Snyder. 200,000 Early Harvest. 25,000 Wauchusett. 50,000 Stone's Hardy. Eureka, best early black Raspb'y Munger, late Gault, Columbia, "purple Miller, "early red late" " everb'r'ng" 100.000 Houghton, 2-1. 25,000 DOWNING, I.

We grow a complete stock of all small fruit plants and can quote as low prices as any firm in the United States, stock considered. Get our prices on your wants for fall.

W. N. SCARFF, New Carlisle, O.

Most Ornamental for Loney Locust Hedge, Parks and Lawns.

Strong and handsome for farm fencing. Hardy for cold climates. Easy seller at good profits. Put your agents on to it. Plates of this beautiful Hedge to sell from, furnished cheap. Osage Orange Hedge and plates also. WRITE FOR PRICES AND TRY THEM.

- HAVANA, ILLS. A. E. WINDSOR,

SPECIALTIES for '97-'98.

POMONA CURRANT, 1 and 2 yrs., No. 1. 50,000 POMONA CURRANT outtings.
LOUDON RASPBERRIES, suckers and transplants.
MUNGER, the new, large BLACK CAP RASPBERRY.
OHMER and ELDORADO BLACK BERRIES.
Ornamental Trees and Sbrubs. Piconias, Hardy Herbaccous Plants, &c.
1887EOTION OF STOCK DESIRED.

E. Y. TEAS. IRVINGTON, IND, (near Indianapolis).

Stoner's Nurseries, WESTMINSTER, Md.

I offer, for Fall '97 and Spring '98, Apple trees, 2 and 3-year, No. 1, 5 to 7 feet, 34 and up.
Peach trees, 1 year from bud, by the 1,000 or car lots, budded on Kansas and Tennessee pits, all staple varieties.
Nursery inspected by the State Entomologist.

Standard and Dwarf Pears, unexcelled lot of Plums, Cherries and Apples

at prices to suit the times. Guaranteed to be free from injurious insects and damage from drought or Woodchucks. We grow for the wholesale trade. Correspondence solicited.

F. M. HARTMAN, DANSVILLE, N. Y.

Apple, Peach Standard Pears, Plum, Apricots, Grapes. Shade Trees. Evergreens, Shrubs.

HEADQUARTERS FOR NURSERY STOCK.

Baltimore and Richmond Nurseries, BALTIMORE, MD.

FRANKLIN DAVIS NURSERY CO.

Tennessee Natural Peach Pits and selected Smook. 1000 ACRES. 50 YEARS. LOW PRICES ON PEACH TREES FOR EARLY ORDERS.

Nut Trees, Japan Pear Seedlings, Gooseberries, Roses, General Supplies, &c., &c., &c.

Strawberries,

Our Tree Labels







ARE CONCEDED BY NURSERYMEN TO BE THE BEST LABEL MADE.

Sample and Prices on application to

BENJAMIN CHASE, 15 Mill St., Derry, N.H.

..For..

Park and Street Planting __

American, Scotch and English Elm, Silver, Sugar and Norway Maples, Carolina aud Lombardy Poplars, Horse Chestnuts, American White Ash, Cut Leaved Birch, Catalpa, American and European Lindens.

Extra Size, 6 to 20 Feet.

Heavily stocked with Kilmarnock and New American Willow, Camperdown Elm, Tea's Weeping Mulberry, Siberian and American Arbor Vitæ, Norway Spruce and a great variety of SHRUBS and ROSES. Apples, Pears, Plums, Cherries, Currants and Gooseberries extensively grown.

Batavia Nurseries.

BATAYIA.

NORTH • TOPEKA • NURSERIES,

A. L. BROOKE, PROPRIETOR.

Write for Prices on

APPLE, CHERRY, PEACH, PEAR, PLUM, APPLE AND FRENCH PEAR SEEDLING, AND JAPAN PEAR STOCKS.

Remember you get

FINE STOCK. GOOD GRADE. WELL PACKED.

A. L. BROOKE,

Small Fruit Plants, of all the leading varieties, and at prices to suit the

2.000,000 Strawberry Plants,

All from new beds.

200,000 Red and Black Raspberry, Blackberry, Gooseberry, Currants, Etc.

Correspondence Solicited. Address

P. D. BERRY, DAYTON, OHIO. P. O. Box 412.

ESTABLISHED 1866 BY BLAIR BROS.

R. H. BLAIR & CO.,

Office N. W. Cor. 11th and Walnut Sts., - Kansas City, Mo.

Proprietors of the LEES SUMMIT NURSERIES.

Apple and Peach, new and leading varieties by the car lots.

Russian and American Apricots and native Plums by car lots.

Pears, Cherries and a general assortment of Small Fruits and Ornamentals.

We are not surpassed by any Nursery in the west, in number of acres or quality of stock. We have the only practical box-clampin use. Price reduced.

100,000 Peach trees; all leading varieties. 8000 Plum trees.

1000 Apricot.

10,000 Apple trees, 3-year, 4 up, Ben Davis and York Imperial.

The following stock will be sold very cheap to close out that part of my business. 10,000 Norway Maple; imported seedlings, twice transplanted, from 3 to 6 ft.

200 American Sweet Chestnut, 5 to 7 ft. 100 Ridgely Chestnut; 5 to 7 ft. 200 Cut Leaf Birch; 7 to 9 ft. 150 American Linden; 10 to 12 ft.

1000 Norway Spruce; 2 to 3 ft. 1000 Irish Juniper; 2 to 4 ft. 1000 American Arborvitæ; 2 to 8 ft.

500 Norway Maple; 8 to 9 ft. 500 Silver Maple; 10 to 14 ft. 200 Sugar Maple; 10 to 12 ft.

300 Sugar Maple ; 8 to 10 ft.

* A OAK HILL NURSERIES A *

C. L. LONGSDORF.

Floradale, Adam Co., Pa.

.PEAGH TREES . By the 100, 1000 or Carload.

150,000 of the best leading varieties, including Elberta, Greensboro, Sneed, Triumph and Prolific. Also about 50 of the best old kinds, grown from natural southern Tennessee and Georgia pits, free from disease and scale. 10000 Apples, Baldwin. Ben Davis, Wolf River, Gano, M. Blush, Red Astrachan, etc. 20000 Quinoe Meech's Champion, Orange, Rees' M. 100000 Asparagus, Barr's Mammoth, 2-3 yr. 150000 Blackberry Plants, Wilson, Jr., Early Harvest, Wilson E. 50000 Raspberry Plants, Miller's Red, Cuthbert, Turner. We are prepared to make low prices on the above.

Stanton B. Cole, Prop.

WEST JERSEY NURSERY CO., BRIDGETON, N. J.

Apple Seedlings.



I have an elegant stock of upland grown Apple Seed-lings to offer for the coming season. Will make favorable prices or large or small lots to early buyers. Grades and prime condition on arrival guaranteed. Eighteen years experience in the business.

 $^{ ext{Address}}$ J. A. GAGE, Fairbury, Neb.



Choice 2 yr. Apple, Peach, Plum, Cherry and Apricot by the Car Lot. Be sure and get our prices before purchasing elsewhere. Will exchange for Pear, Raspberies, Roses, Grapes, Evergreens.

Give Us a Trial Order.

Satisfaction Guaranteed. References: Fourth National Bank, Bank of Commerce.

Correspondence Solicited.

The Wichita Nurseries. W F. SCHELL, Mar.

Address: 152 North Main St. WICHITA, KANSAS. 1000000000000000000

French Fruit Tree Stocks

Grown and Exported by

LENAULT HUET, Ussy, France.

For Prices, address

C. H. JOOSTEN, Sole Agent, - 193 Greenwich Street, NEW YORK.

CLEMATIS Heavy 2-year field grown plants as fine as ever grew.

JACKMANI, HENRYI, RAMONA, DUCHESS OF EDINBURG, FAIR ROSAMOND, ALEXANDER and KERMESINA, also MAD ED. ANDRE, JACKMANII, ALBA and PRINCE OF WALES

from pots. Fine strong plants. Write for prices.

GEORGE BROTHERS.

East Penfield. New York.



GOOD TOOLS are always the Cheapest. WE SELL THAT KIND.

and our prices are no higher than those at which many inferior goods are sold. We publish an illus-trated catalogue of Nurserymen's Tools and Supplies which we will be pleased to mail you.

WEAVER, PALMER & RICHMOND, Rochester, N. Y.

ERY B. DRCHARD

FOR FALL WHOLESALE TRADE

Apple, Std. and Dwf. Pear, Plum, Cherry Peach, Apricot, Currante, Blackberries Grapes, Ornamentals, Etc.

MANY NEW VALUABLE SORTS.

SUPPLIES Tying Cordage, Sewing Twine, Manufacturers Agt. for Burlaps, Etc.

Write Us AND FIND OUT WHAT OUR SPECIAL INDUCEMENTS ARE. SEND LIST OF WANTS.

Fresh Mazzard Cherry Seed.

The new Tariff Law imposes a duty on Mazzard Stocks, making it more than ever profitable for the grower to raise his own stocks. As the difficulty in gathering quantities of this seed makes the supply small, the necessity for placing early orders is apparent, without even considering the benefit to seed in early planting. Send 30c. for SAMPLE POUND, postpaid.

TENNESSEE AND VIRGINIA NATURAL PEACH PITS, MAHALEB CHERRY.

Stocks or seeds of Myrobolan Plum, Mahaleb and Mazzard Cherries, French Craband Native Apples, French and Japan Pears, Quince, Manetti Rose, and general ornamental nursery stock. RAFFIA.

THOMAS MEEHAN & SONS,

GERMANTOWN, PA.

P. SEBIRE & SONS, NURSERYMEN, Ussy, Calvados, France.

A general assortment of Fruit Tree Stocks, such as Apple, Pear, Myrobolan Plum, Mahaleb and Massard Cherry, Angers Quince, Small Evergreens, Forest Trees, Ornamental Shrubs, Roses, Etc. The largest stock in the country. Prices very low. Packing secured. Send for quotations before placing your orders elsewhere. Catalogue free. Agents for U. S. America and Canada.

C. C. ABEL & CO., P. O. Box 920, NEW YORK.

ALL OLD AND NEW VARIETIES.

Immense Stock, Warranted True. QUALITY UNSURPASSED. Prices lower than ever before. Send list of wants for prices.

CURRANTS, GOOSEBERRIES, SMALL FRUIT PLANTS

T. S. HUBBARD CO., FREDONIA, N.Y.

The Sparta Nurseries have to offer their Dunal stock of dry baied Moss book build bu

Herbaceous Pæonies.

A large quantity—the best to be obtained in this country or Europe. Those wishing to stock up with finest varieties abould write me for circulars. Also **Tree Pæonies**, including best new Japan varieties.

T. C. THURLOW, WEST NEWBURY, MASS.

W. W. FARNSWORTH,

WATERVILLE,

Kureka Black Raspberry and Victoria Current

ARE THE MONEY MAKERS.

LEVAVASSEUR

USSY (Calvados) AND ORLEANS, FRANCE.

Exporters of all kinds of Nursery Stocks to the United States.

Send your List of Wants for Special Prices to

HERMAN BERKHAN, Sole Agent, 39 and 41 Cortland Street, NEW YORK. -Sole Agent for the United States and Canada.

THE POMONA CURRANT.



The BEST SPECI-ALTY for the AGENTS for 1897 and

WHY? Because it is the best MONEY MAKEIt for the people to plant.

It is BEST in QUALITY.

Its returns come in the quickest and surest.

These being the qualities the planter is after, be

Introduced and for sale by us. Send for circulars, plates, terms, &c. Not only have we a good stock of

But also a COMPLETE GEN-ERAL ASSORTMENT of TREES, PLANTS, ORNAMENTALS, VINES, &c., in CAR-LOAD LOTS especially APPLE, PEAR, CHER-RY, PLUM; with good assortment of PEACH and other fruit trees and plants.

Also CAROLINA POPLAR. SOFT MAPLE, ELM, &c.

APPLE STOCKS. IMPORTED FRENCH PEARS

MAHALEB, MYROBOLAN and QUINCE stocks.

SEE TRADE LIST. ORDER SPADES EARLY.

A limited quantity of Natural PEACH PITS to offer.

Address. ALBERTSON & HOBBS, BRIDGEPORT, MARION CO., INDIANA.

For the Fall trade we offer

Apple Trees

!!**^~~~~~~~~~~~~~~~**

2 years-gloved pruned-5; to 7 feet-An extra choice lot of trees.

Peach Trees

All leading sorts.

Apple Seedlings

High grades - good packing-clean stocks.

We will make special prices on above stock for orders placed early.

F.W. WATSON & CO.

Box 58.

TOPEKA, KAN.

-----When writing to Advertisers mention The National Nursery man.

ESTABLISHED IN 1856.

R. C. BERCKMANS. P. J. A. BERCKMANS, JR.

Fruitland Nurseries,

P. J. BERCKMANS, Prop.,

AUGUSTA. GA.

Over One Acre under glass.

350 Acres in Nursery Stock.

Our Trees and Plants

Have been fully tested in every section of the United States during the past 40 years. The stock now growing is up to the usual past high grade, all of thrifty growth, no old rubbish, and free from scale or disease.

fruit Department.

Apples, Cherries, Figs, Pears, (an extra fine lot of 100,000 standard 2 and 3 years, largely of Kieffer), Paper Shell Pecans, Plums (Japan) on Marianua, English Walnuts, Grape Vines, etc. Peach Trees in car load lots.

EVERBEARING PEACH. A valuable novelty now offered for the first time.

Ornamental Department.

150,000 Amoor Privet— Unsurpassed as an evergreen hedge plant.
50,000 Citrus Trifoliata—Japan Hardy Lemon; best defensive hedge plant, stands 15 degrees below zero.
150,000 Roses—Field grown, including 30,000 Marchael Niel

budded upon Manetti, 8 to 5 feet.

Two acres in Canna.

Azaleas (home grown).

Broad leaved Evergreens, etc., etc., Biota Aurea Nana, Cedrus

Deodora, Retinosporas and other rare conferæ.

Greenbouse Department.

100,000 Palms—(An especially fine lot of Latanias, Phœnix, Pandania and Cocos Weddelliana.)

Ficus, Detorative Plants, Crotons, Bedding Plants, 10,000 Camphor Trees, Sub-Tropical fruits, etc.

Send for trade list and descriptive Catalogue.

Millions of Trees And Plants

are offered for sale by the

nowhill urseries

FOR FALL OF 1897 AND SPRING 1898.

600,000 Peach Trees-One year old from bud (embracing over 70 varieties.

Strawberry Plants-From 80 acres set this spring (means millions of plants.)

25.000 Japan Plums-One year old from bud.

20,000 Grape Vines-One and two years old.

100,000 Asparagus-Conover's, Barr's and Palmetto, 2-year old. 20,000 Apple Trees-One and two years old.

2,000 Norway Maples.

4.000 Carolina Poplars.

Peach and Plum Buds ready June 20th.

Having 30 acres in Peach Seedlings from Tennesee seed, planted fall 1896, will contract to grow June Budded Peach Trees at special low price. Correspondence solicited. Special inducements offered to purchasers in car load lots.

Address

W. M. PETERS SONS,

WESLEY, Worcester Co., MD.

When writing to Advertisers mention The National Nurseryman.

Peach Trees & &



HAT are grown from natural seed, and on land that has not been peached, in a locality with no San Jose scale or peach yellows, is what we offer the trade.

We have probably the largest block of 1-year from bud there is to be offered this season, from a list budded last season of over

ONE AND ONE-HALF MILLION.

We think we can please you. They cost a little more to grow them this way, yet it is the dealer and planter who has the pleasure of handling good stock.

We have to bud in August over

ONE MILLION

thrifty seedlings from natural seed. Do you want to contract for peach—delivery '98 and '99—if so, send list to be priced at once. Personal inspection solicited.

VARIETIES OF PEACHES NOW FOR SALE

(ONE YEAR FROM BUD.)

NEW ONES.

New Prolific, Triumph, Greensboro, Conet's So. Early, Bokara No. 3, Connecticut, Lorentz, McIntoch, Lewis, Willet, Kalamazoo, Fitzgerald and Sneed.

GENERAL LIST PEACHES.

Elberta, Old Mixon Free, Fox Seedling, Smock Free, Geary's Holdon, Reeve's Favorite, Stephen's Rare Ripe, Chair's Choice, Old Mixon Cling, Crawford's Late, Moore's Favorite, Yellow St. John, Lemon Free, Champion, Hale's Early, Golden Drop, Mt. Rose, Crosby, Snow's Orange, Bray's Rare Ripe, Wilkin's Cling, White Heath Cling, Chinese Cling, Waterloo, Troth's Early, Early Rivers, Hill's Chili, Levy's Late, Stump the World, Ford's Late White, Alexander, Morris White, Walker's Vara Free, Globe, Early Michigan, Wager, Salway, Bilyeu's Late October, Won'derful and Wheatland.

JAPAN PLUMS

on plum root and peach root. One and 2-year general list varieties.

Strawberry Plants.

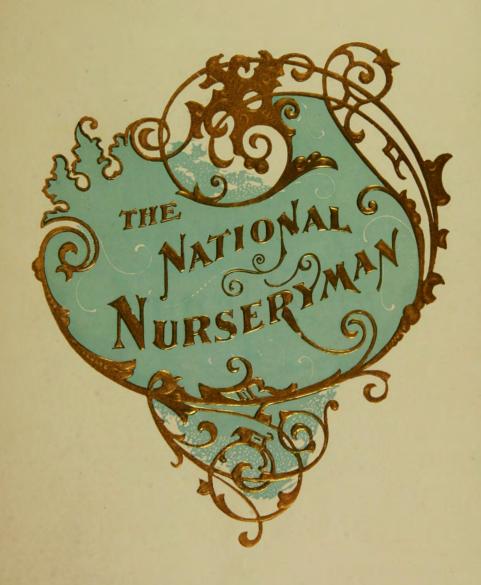
Over 50 acres in plants of the most desirable varieties grown. Plants ready in September.

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P. S.—Come and see our peach before you buy, and take a rest at Ocean City on the sea shore, only 7 miles from Nurseries.



November, 1897.

Painesville Nurseries.



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Immense stock in storage cellars ready for immediate shipment.

Extra fine stock of Standard and Dwarf Pears, Plum, Peach, Cherries and Mulberries.

Best lot two-year (4 to 5 feet) Quince on the market.

NUT TREES-Large assortment.

Downing, Houghton and English Gooseberries—extra selected.

Strong, splendidly rooted Blackberries, from root cuttings.

Moss, Hybrid Perpetual, and Climbing Roses—strong two-year, clean, handsome stock.

ORNAMENTALS-all classes.

Get our prices before placing your orders, large or small. Special inducements for early orders.



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"The most complete Nurseries on the American Continent."

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ROCHESTER, N. Y.

ELLWANGER & BARRY, Proprietors.

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The largest and most complete collections of General Nursery Stock ever offered; the most approved varieties of FRUIT TREES, new and old, Grape Vines, Currants, Raspberries, Gooseberries, etc.

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Wholesale catalogue mailed free on request,



APPLE SEEDLINGS—carefully graded.

PEACH TREES—No Yellows or Rosette in Nebraska.

LARGE SHADE TREES—2 to 3 inch and smaller sizes.

FOREST SEEDLINGS-Black Locust, Box Elder.

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Our stock is of superior quality and most carefully graded. Send us your want list or come and see our stock. We issue no trade price list, but will make low prices by letter.

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The National Nurseryman.

FOR GROWERS AND DEALERS IN NURSERY STOCK.

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Vol. V.

ROCHESTER, N. Y., NOVEMBER, 1897.

No. 10.

FALL SALES.

IN MOST CASES UP TO THE AVERAGE—IN SOME CASES CONSIDERABLY INCREASED—ENCOURAGING SIGNS FOR SPRING TRADE.

Following are reports regarding fall trade and the prospects for spring trade, received from various points throughout the country, especially prepared for the NATIONAL NURSERYMAN:

IN THE WEST.

CRETE, NEB., Oct. 16.—E. F. Stephens: "The wheat crop in Nebraska this year has been fairly good, and in price it has been 60 to 100 per cent. higher than a year ago. The marketing of this crop of wheat has been a great help to all lines of business in the state, and the nursery business has had its fair share of the increase. The corn crop of the state has been over-estimated. The drought of the last eight weeks has helped to cut it short. The crop, however, is worth in our local markets from 50 to 100 per cent. more than a year ago. While the corn crop this year is not nearly as large as last year, the higher price helps to compensate for the lessened yield.

"But above all, in accounting for the different aspect of business, is the fact that, the presidential year having passed by and the election interests of this year being of little importance, confined to one Supreme judge and two regents of the State University, very little interest is taken in politics this year by people of any party. There is a general disposition to work with might and main to grow, handle, harvest, and sell the fine crop which we have in the state; a general revival of confidence; a general disposition to enter heartily into business; no time for the bitter distrusts and enmittes which poisoned everything last year; hidden capital has come out into sight; small country banks have deposits in some cases two or three times as large as their capital; eastern loans are being freely made to those who have good property; the business outlook is much better than last year.

"We judge the nursery business will be 50 per cent. better than last year. In our own case it is probably 100 per cent. better in the form of orders already secured for spring business. All kinds of nursery stock have made a good growth, and there is a much larger stock of apple trees, and some other lines than can be sold within the state. We think most of the nurseries in the state have a surplus they would be glad to ship to eastern nurseries or any other market. We think more merchantable cherries, peaches, and plums have been grown in the state in the past year than in any other in our history, there being a general disposition to grow their own stock rather than to depend on eastern parties.

"The apple crop, where orchards were young and carefully cultivated and handled, is fairly good. In the hands of the average farmer, from lack of proper and judicious cultivation, dry weather has caused heavy loss by dropping. Threefourths of our farmers have not yet learned to spray to guard against codlin moth.

"We do not think there are any more apples in the state than the state is willing to buy and pay for, although a good many apples will be shipped out of the eastern counties which ought to be retained for our own trade. We think that choice winter apples will bring at least \$1.00 per bushel this winter."

TOPEKA, KAN., Oct. 16.—F. W. Watson & Co.: "A little early for an estimate of fall sales yet, though so far we think there is quite an improvement on last year at this time. Trade through the West and the Northwest has greatly improved over last year, showing the beneficial results for the nurserymen of a large wheat crop at a fair price. While prices for nursery stock are still at the very lowest point, there seems to be a feeling all around that they will be higher by spring; and in consequence we have booked more spring orders at this date than for any previous year in our business."

SALT LAKE CITY, UTAH, Oct. 16.—M. E. Callahan, treasurer and manager Pioneer Nurseries Company: "Fall sales are no better than last year. Only a fair outlook for spring.

"We are waiting for the McKinley prosperity to come along and help us out."

CENTRAL STATES.

Dayton, O., Oct. 13.—When two or three Miami Valley nurserymen are gathered together in one place, they naturally become confidential and, prompted by a common bond of sympathy, quietly acknowledge to one another that business is not quite up to the "hard times average" even. They then quickly turn to the prospects, so luxuriantly fringed and decorated with dollar wheat and fifteen cent tobacco, and with one accord, boldly undertake to live over another season on "prospects."

The revival in business came too late in the year to help nurserymen to any great extent, and the extraordinary dry weather has had the effect of deferring a great deal of business until spring. However, in view of the prevailing conditions at the time when most of the retail sales were made, the business in a wholesale way is quite as good as could be expected. The business already done for spring is very encouraging, and the indications are we will have a lively trade with shortage on a great many lines of stock.

BRIDGEPORT, IND., Oct. 14.—Albertson & Hobbs: "The excessive dry weather has delayed fall digging and packing until we are now just getting fairly started into it. Some, we understand are pretty well through with packing, not having waited on account of drought.

"Agents' trade about same as last year. Wholesale trade, so far, light; but we think indications are good for surplus being used up closely by spring and, if we get good rains, for considerable wholesale trade yet this fall. So far as we have had reports from others they seem to be about the same as our experience.

"If prices can be made a little more steady, buyers will not

be so afraid to take hold, and we think trade will not be held back so much."

New Carlisle, O., Oct. 16.—W. N. Scarff: "Business in the early part of the season was very dull and looked rather discouraging, but about Oct. 1st, it began to mend very materially, and we now feel confident we will do our usual amount of business. The chances are that our sales will exceed those of any other fall season. As to trade in spring we are unable to say as we never count orders until we get them; but we see no reason why spring trade should not be good. Our fall trade is strictly wholesale."

NEW HAVEN, Mo., Oct. 14.—R. J. Bagby, Treasurer New Haven Nurseries: "Our business up to date is about one-half of what it was at this time last year. We attribute this falling off to the extremely dry weather that has prevailed here since July. We have really not begun to dig stock at all, except on some few orders. The bulk of our customers are waiting for it to rain and so are we. The early part of the summer was exceptionally good for growing, and stock consequently made up all right and is well ripened, although we have had no frost here, and at this writing the thermometer stands at 90 in the shade. So you see we are hardly having suitable weather for handling nursery stock at present.

"We look for the trade in the end to be fully as good this fall as last in bulk, although prices are somewhat lower and not at all encouraging. But the large fruit crop, which has been sold at profitable prices, would indicate that we must have an increase in demand; and a scarcity, we think, will be felt on many items long before spring. The fact that orders are running larger this year than last shows the improved condition in demand. We think the remark of one of our customers, in ordering a car of peach trees, about covers the present situation: 'If it ever rains so that we can make shipments and deliveries we want the peach trees, but the outlook is certainly blue at this writing. We would not want trees that were dug in this heat and drought.' This covers the local condition here, but as our season for shipment runs late into November, we are not at all alarmed, but delayed."

SHENANDOAH, IOWA, Oct. 15.—D. S. Lake, Shenandoah Nursery: "In regard to fall sales we would say that they are heavier than they were a year ago, but prices are no better. We are glad, however, to see the surplus stock going out and we think when it is all cleaned up, then we will be able to get better prices."

NORMAL, ILL., Oct. 21.—W. A. Watson & Co.: "Sales are better than last fall in spite of the dry weather. An unusual number of orders are being booked for spring and were it not for the surplus of pear, cherry, native plum and blackberry we should look for a material advance in prices, which are now too low. With this exception the outlook is good for a large spring business."

ATLANTIC, IOWA, Oct. 18.—Silas Wilson: "Fall trade with us this year is quite a good deal better than last fall. Orders already received for spring delivery will fully double the orders for the same date of last year. We are handling quite a good deal of stock, but prices are too low to have much profit in it.

"The outlook for spring trade is indeed quite flattering. We look for good strong trade during the winter and spring. There seems to be a marked improvement in all lines of business

throughout the country and I believe the nurserymen will get fully their share."

GREENVILLE, O., Oct. 18.—E. M. Buechly: "Our trade has been larger this fall than it has ever been and the outlook for spring is good, if the drought that is now on is not continued so as to discourage planting.

"Glad to see you keep us posted on the new state laws. I regret to see that Michigan is following up the steps of California in framing almost prohibitory laws against other states. I think a certificate from our state entomologists should be accepted anywhere in any state and can see no other than selfish motives that prompt such legislation as that, especially when a state is as sorely afflicted with the scale as our sister Michigan."

IN THE SOUTH.

AUGUSTA, GA., Oct. 15.—Fruitland Nurseries, P. J. Berckmans: "The number of orders booked at this date is fully 50 per cent. larger than last season at this date, which shows an excellent prospect for fall and winter trade, but as regards an estimate for the spring, this is rather difficult to state. However, we believe from the present outlook the spring trade will be equally as good as our fall trade.

"The state of Georgia will soon enact a law in reference to the prevention of the spread of San Jose scale, noxious insects and plant diseases. Stringent measures will be enacted to prevent the introduction in the state of diseased nursery stock. This has been the trouble in our state. Cheap job lots indiscriminately sold in certain sections of the state have disseminated the San Jose scale in Southwest Georgia, and in order to stop further damage this law when enacted in a very few days is likely to go into effect at once."

Denison, Texas, Oct. 16.—T. V. Munson & Son, Denison Nurseries: "Fall orders in nursery stock to date, better than for several seasons at this time. Prospects for winter's trade, excellent, as stock is never properly ripe here before Nov. 1st. We do not begin digging before then, and continue from then until about March 15th, to make shipments almost daily, November, December and February being our best months. Our trade is all done direct with our customers through our catalogue and correspondence."

POMONA, N. C., Oct. 18.—J. Van Lindley: "Fall sales 20 per cent. better than last fall, but prospects for collections this fall much worse than last. We fear the drought, yellow fever and 5½ cent cotton will make collections poor. Last fall we had none of these to contend with and cotton was 7 to 8 cents.

"As to future sales we see nothing specially encouraging. Prosperity has not yet struck the South. Send it along. No matter from what source it may come, we will welcome it."

IN THE NORTH.

LAKE CITY, MINN., Oct. 14.—J. Cole Doughty, Secretary Jewell Nursery Co.: "Business is coming to us in as large volume as we had anticipated, but trade prices are so cut and disfigured that there is no satisfaction in it. The retail trade has been very slack, orders averaging small. This arises largely from the fierce competition existing between the home nurserymen and those from other states. There is hardly a nursery of any size or repute north of the 38th parallel that is not represented in Minnesota and Northern Iowa, either directly or through dealers.

"Our wholesale trade is quite satisfactory. We do not look

THE NATIONAL NURSERYMAN.

for any better conditions in the near future, as crop reports from this state have been greatly over-estimated in almost every locality, and prices are now declining. In view of these facts, we do not anticipate any increase of trade for spring. These are the conditions as we see them."

KALAMAZOO, MICH., Oct. 13.—The Central Michigan Nursery reports an increase for fall over a year ago, of 50 per cent. with better prospects for spring than for five years. The dry weather during the past six weeks, has interfered with the digging, but a good rain came before packing began. This nursery made a very complete display at the street fair held in Kalamazoo, October 12-14. They are increasing their facilities, by adding new buildings and increased planting. A good degree of prosperity is evident.

L. G. Bragg and James Jeffrey add to the reputation of Kalamazoo as a nursery town of no small pretentions.

WAUPACA, Wis., Oct. 18.—Waupaca Arctic Nursery and Fruit Farm: A. D. Apple Tree Barnes: "Nursery sales in this state for fall delivery never so light for years past, about one-half usual amount sold. Prospect for spring sales are a little better.

"Drought and hard times have demoralized the trade. Very little rains for four weeks past; ground very dry now; will be hard on fruit trees and crops in general if it freezes up in this condition. Small fruits and cherries when grown were a good crop in Wisconsin. Very few apples and these only in sections. State and county fairs generally a success this fall.

"I took first prize at state fair on apples, pears and plums; also for handsomest apples. Am selling apples from trees now at \$1.00 per bushel. If we get rain before ground freezes up, will get an immense crop of fruit in Wisconsin next year.

"Crops generally good, except in the old potato district. Potatoes are very poor, owing to the continued cropping to this one kind. In the newer territory they are fine and a good yield, selling at 35 to 50 cents. Will get 1,600 to 2,000 car loads for Waupaca market from this crop. Live stock in fine condition and prices fair, except on horses."

IN THE EAST.

GENEVA, N. Y., Oct. 13.—The Geneva Nursery, W. & T. Smith Company: "As to our fall sales we would say that we are having all we can do on account of the very hard digging. We think the quantity of trees shipped by us will be equal to last fall's business, but prices are ruling very low."

WEST CHESTER, PA., Oct. 15.—Hoopes, Bro. & Thomas, Maple Avenue Nurseries: "We can see a marked improvement in this fall's business over that of the autumn of 1896, and look for a good trade in spring of 1898. If nurserymen would only stiffen up on prices there would be just as many trees sold, and the advance would pay for the cost of growing them."

RICHMOND, Va., Oct. 16.—W. T. Hood & Co., Old Dominion Nurseries: "Our agency department this year has done a very satisfactory business in amount; our sales are somewhat larger than they have been at any time before, but the increase in business has been secured by hard pushing. The trade demand for trees is very light, and trade prices are too low for profit. We consider the outlook far from bright.

"We are having the driest season for digging we have ever experienced. This will make our digging very expensive and delay our shipments.

"The San Jose scale in our opinion has deterred many persons from embarking in the orchard business who otherwise would have planted freely. This has been a help to depress business."

Berlin, Md., Oct. 18.—J. G. Harrison & Sons: "Our fall trade is usually light. Up to this date we have sold more stock than any previous year. Peach trees being our specialty, we budded in 1896 over one and one-half million; in 1897 over eleven hundred thousand. We have a heavy stock and the past favorable growing season makes our peach very fine, fully up to the standard. The outlook is very good for the sale of perfectly healthy trees. Our nurseries are very favorably located within seven miles of the Atlantic ocean, near Ocean city, and there has not been a case of yellows or scale found in our county. The only objection to the trade we see is that some are offering peach so very low they cannot afford to sell at such prices and stay on their feet. Some one will have to go with the low prices."

Germantown, Philadelphia, Pa., Oct 18.—Thomas Meehan & Sons: "The dry weather has been a great check to business in this part of the country this fall. As a rule we do quite an extensive fall trade; but this year it has been very poor. At the present time it is picking up a little, and probably if winter does not set in until late, we may handle our usual amount of stock. What orders are coming in are for quite small amounts."

READING, MASS, Oct. 16.—Jacob W. Manning: "The prospects seem quite flattering at present. What the result will actually be, remains to be seen. However, we expect a good fall trade."

BAIRD, N. J., Oct. 15:—David Baird & Son: "Our sales for fall delivery are not up to average, but our line of goods is largely wanted for spring."

IN THE GENESEE VALLEY.

ROCHESTER, N. Y., Oct. 13.—Irving Rouse, Lake View Nurseries: "The season has been so extremely dry, that fall digging has been greatly retarded, and much stock that would have been handled this fall, held over until spring. Our impression is, that the smallest fall's business in the history of the trade will be done this season. Prices continue extremely unsatisfactory; in fact, ranging lower than ever before, and we see nothing very encouraging for the business, in the immediate outlook."

ROCHESTER, N. Y., Oct. 13.—Brown Brothers Co., Continental Nurseries: "We consider the outlook for retail spring business more favorable than it has been in some time. Since August 1st every week shows improved sales over the corresponding weeks of 1896. As to the wholesale business we cannot see any reason for expectation that prices will strengthen very much. In some lines they will stiffen up some, but in general prices will be so low at wholesale for some time to come as to preclude profit.

"The wholesale trade is suffering from a bad and prolonged case of over-production and until much more conservative plantings are made, the increased demand that will come with better times will not have much effect on wholesale values."

ROCHESTER, N. Y., Oct. 14.—Chase Brothers Company, New England Nurseries: "Our fall shipments figure about the same in value as those of a year ago, but as prices are somewhat reduced, possibly the volume of business is a little greater.

"Judging from present indications, our sales for delivery next spring will be larger than for several years past. We hear no complaints from our agents about hard times, but on the contrary every man seems to feel that the prospects are good for a satisfactory business during the fall and winter, and the sales for spring delivery are running away ahead of last year's figures. We certainly feel that the worst has been passed and that the nurserymen are now on the road to business prosperity."

Dansville, N. Y., Oct. 18.—James M. Kennedy: "Early fall shipments has been very light here thus far, even lighter than a year ago at this date, and prices have been lower, in many cases below the cost of production. In the retail trade very little stock has been shipped yet. We anticipate a good late fall and spring trade after we get a good rain. I judge that about all the stock here will be pretty well used up by next spring's trade, with the exception of standard pears.

"As to the planting here next spring, very little, if any, seedlings thus far have been ordered. This is something unusual. And if prices do not advance ere long very few seedlings will be planted here, compared with former years. But we are confident that we will have better times before long. The nurserymen are waiting patiently. I trust by next spring I will be able to give a more favorable report."

THE COLUMBUS GOOSEBERRY.

This is one of the most valuable introductions of recent years in small fruits, and it fully sustains the high opinion first formed of it, as will be seen from the reports given below from high and competent authority. It was introduced by Ellwanger & Barry a few years ago. The fruit is of largest size, handsome, of a greenish yellow color, and the quality is excellent. The plant is vigorous and productive and does not mildew. It merits a place in every garden.

The editor of the Rural New-Yorker says: "It is the best variety yet introduced and seems close to a perfect gooseberry for our climate."

Again, in a later issue of the paper, he says: "There is little to be said that has not already been said respecting gooseberries at the rural grounds. Columbus is, this season, all that it was last. We have three bushels all laden—overladen—with large, smooth berries, as large as the average foreign kinds. There is not a trace of mildew upon either fruit or foliage, and the Columbus seems to us this year, as last, the best variety in the market for those with whom the foreign kinds do not thrive."

From the Canadian Horticulturist a correspondent writes: "I planted this variety in the spring of 1893. They fruited that year, just enough to show the form and quality. This year the bushes were heavily loaded, and the fruit was of the best quality, very large in size, oval in shape, quite smooth, and greenish yellow in color. It is greatly superior to the Industry. No trace of mildew, and a most abundant bearer."

MICHIGAN LAW.

The secretary of the Eastern Nurserymen's Association, William Pitkin, is advised by U. P. Hedrick, inspector under the State Board of Agriculture of Michigan, that it is held by said board in relation to the nursery inspection law: "that only foreign nurserymen who sell stock in Michigan through agents can be required to give bonds and obtain a license, and that wholesale dealers are exempt from the bond and license, but will be required to affix an inspector's certificate to every car, box, or bale of trees shipped into the state."

Among Growers and Dealers.

Howard Chase of Philadelphia, was in Geneva, N. Y., for the fall packing.

- C. S. Curtice, Portland, N. Y., was among visitors to Rochester nurserymen last month.
- P. J. Berckmans had a rare exhibit of southern fruit at the American Institute fair in New York.
- W. W. Woolen has announced his intention of presenting to Indianapolis 56 acres for a botanic garden.

The Elizabeth Nursery Co. took first prize for hardy shrubs and conifers at the recent New Jersey state fair.

Entomologist John P. Campbell has pronounced the Smith Brothers', Concord, Ga., nurseries free from San Jose scale.

William C. Wilson, the father of the florist's trade as now conducted, died at Woodside, L. I., October 9, aged 70 years.

The fortieth annual meeting of the Missouri State Horticultural Society will be held at Moberly, Mo., December 7, 8, 9.

Premiums to the amount of \$5,000 are to be distributed at the American Institute Fair, New York city, under the direction of Dr. F. M. Hexamer.

William Augustus Stiles, park commissioner of New York city, and managing editor of *Garden and Forest*, died on October 6, in Jersey City, aged 60 years.

Albert H. Herendeen who recently became a member of the firm of Sears, Henry & Co., Geneva, N. Y., has just been elected mayor of Geneva.

N. L. Britton one of the editors of the "Illustrated Flora of of the Northern States and Canada," has been elected president of the Botanical Society of America.

Joseph M. Neil, a dealer in nursery stock at La Porte, Indiana, was sold out at constable's sale, September 28th, to satisfy a claim for purchased nursery stock in the fall of 1896.

W. H. Hartman and J. B. Morey, Jr., Dansville, N. Y., have patented a tree digger which was inspected last month by Lewis Chase of Rochester, and Charles E. Ilgenfritz of Monroe, Mich.

Ellwanger & Barry, Rochester, N. Y., were awarded six valuable medals for their exhibit of fruit at the Hamburg exhibition. Two of these medals are gold, two silver and two bronze, the total value of which is \$100.

Harrisons at Berlin, Md., offer to exchange peach trees grown from natural seed for 10,000 pear trees mostly Kieffer, and for 100,000 apple seedlings, 50,000 pear seedlings, 50,000 Mariana plum seedlings. Peach can be delivered at once.

The property owned by Briggs Bros. & Co., Rochester, N. Y., florists and seedsman, was seized last month to secure an indebtedness of '\$30,000. The firm's liabilities are estimated at \$60,000. The failure is laid to the free seed distribution by the government.

Samuel Miller, Bluffton, Mo., said this fall of the McPike grape: "A basket of the above received Sept. 9th. One bunch weighs 13 ounces; some berries are an inch in diameter. Thin skin, melting pulp, delicious flavor, small seeds, and but few of them, usually but two, sometimes three, and often but one in a berry. This grape would make a gallon of wine to ten pounds of the fruit, and as it is like the Worden, it will be a good wine. I can hardly conceive why such a valuable grape has been kept from the public so long."

SAN JOSE SCALE IN OREGON.

The San Jose scale is making great headway this year in the districts including Portland on the Oregon side, and Vancouver on the Washington side of the Columbia river. It is probable that it has increased rapidly in all parts of the Northwest, where it has established itself unless it be in vicinity of the Dalles, where the ladybirds introduced by Mr. Schanno may be keeping it in subjection. Two years ago, owing to almost universal spraying in infected districts and the destruction of many old worthless trees the scale appeared to be nearly cleaned out. Last winter the fruit growers, disheartened by the failure of crops last year, failed to spray to a great extent. The season has been unusually favorable to the propagation of the San Jose scale and the results are to be seen in all directions. There are many apple and pear trees in the city limits of Portland on which it would be hard to find an apple or pear which is free from scale, and in some cases the fruit is literally covered. A similar condition is reported at Vancouver. If any fruit grower notices bright red spots on any of his apples and pears he had better examine for scale, as this pest is by far the most common cause of these spots. It is evident that a spraying with lime, sulphur and salt or lime, sulphur and vitriol compound will be in order this winter.-Oregon Agriculturist.

THE CANADIAN TARIFF.

The portions of the new Canadian law (the full text of which has officially been received by the State Department, Washington) that bear particularly upon the seed, plant, and tree trade, and kindred lines, says the *Florists' Exchange*, read as follows:

DUTIABLE.

Seeds, viz., garden, field and other seeds for agricultural or other purpose, n. o. p., sunflower, hemp, and millet seed, when in bulk or in large parcels, 10 per cent. ad valorem. When put up in small papers or parcels, 25 per cent. ad valorem.

Trees, viz., apple, cherry, peach, pear, plum, and quince of all kinds, and small peach trees known as June buds, 3 cents each.

Grape vines, gooseberry, raspberry, current and rose bushes; fruit plants, n. o. s., and shade, lawn, and ornamental trees, shrubs and plants, n. o. s., 20 per cent. ad valorem.

Blackberries, gooseberries, raspberries, strawberries, cherries, and currants. n. o. s., the weight of the package to be included in the weight for duty, 2 cents per pound.

All goods not enumerated in this act as subject to any other rate of duty, nor declared free of duty by this act, and not being goods the importation whereof is by this act or any other act prohibited, shall be subjected to a duty of 20 per cent. ad valorem.

FREE LIST.

Florists' stock, viz., palms, bulbs, corms, tubers, rhizomes, araucaria, spiræa, and lilies of the valley; seedling stock for grafting, viz., plum, pear, peach and other fruit trees; seeds, viz., annotto, beet, carrot, flax, turnip, mangold, mustard, sowing rape seed and mushroom spawn; aromatic seeds which are not edible and are in a crude state, and not advanced in value or condition by grinding or refining, or by any other process of manufacture, viz., anise, anise star, caraway, cardamon, corriander, cumin, fennel, and fenugreek; seed pease and seed beans from Britain, beans, viz.: tonquin, vanilla, and nux vomica, crude only, locust beans and locust bean meal and cocoa beans, not roasted, crushed or ground; fruits, viz., bananas, plaintains, pineapples, pomegranates, guavas, mangoes, and shaddocks; wild blue berries, wild strawberries, and wild raspberries; and trees, n. o. s.

Foreign Motes.

The Logan berry has reached England where its growth is being tested

James Cocker, long a well known rose grower at Aberdeen, Scotland, died September 15th.

Extensive improvements have recently been made in the erection of greenhouses at Ghent, Belgium. The supply of Azalea Indica there is very large.

Seven days and four hours after leaving New York city a cargo of 440 packages of California fruit, via the American liner, St. Paul, was delivered, September 22, in London.

Among the apples in cultivation in Great Britain at the time of Queen Victoria's accession, in 1837, are: Blenheim Pippin, Duchess of Oldenburg, Gravenstein, Golden Russet, Newton Pippin, Ribston Pippin, Royal Russet, Winter Pearmain.

The Canadian government has subsidized the owners of seventeen steamers plying between London, Liverpool, Bristol, Glasgow and Canadian ports, though chiefly from Montreal, to carry pears, peaches, grapes and tomatoes to Great Britain, and has fitted the vessels with the latest types of refrigerators

In its issue of October 2, the Gardeners' Chronicle, London, features a raspberry blackberry, the result of a cross by James Veitch & Sons, of the Royal Exotic Nurseries, Chelsea, Eng., between the raspberry Belle de Fontenay, and the common blackberry, the raspberry being the seed parent. Fruits of a purplish, black color with gray bloom were abundant.

Nepenthes are attracting much attention in this country and in Europe. At the last meeting of the Royal Horticultural Society in England, Harry J. Veitch read a paper giving the history of the genus and tracing the discovery of the various species. Messrs. Veitch & Sons were the first nurserymen to collect these plants, and most of the hybrids now in cultivation, of which there are about forty, were raised in their nursery. The largest specimens were found in Borneo.

FUMIGATING STOCK.

Professor William B. Alwood of the Virginia Polytechnic Institute, Blacksburg, Va., has issued the following circular:

"In our further experience with the fumigation of nursery stock we have found it best to modify the order of handling the chemicals as follows: rst. Pour into each vessel the proportionate amount of water to be used. 2nd. Add to this cautiously the proper proportion of acid. 3rd. Weigh out and place by each vessel the right quantity of cyanide. When all is ready, add the latter to the water and retire quickly. Observe general directions as already published.

"The necessity for this change comes from the fact that if the water and cyanide are permitted to stand for a few moments before the acid is added, the cyanide dissolves and an explosion is likely to occur which might easily do serious harm to the operator. If the charge is heavy, this danger is very serious. Do not fail to observe order indicated above."

D. HAY & SON, AUCKLAND, N. Z.:—"We value your paper highly and would not be without it now; as an advertising medium we think it has no equal among horticultural publications."

ALARM OF INSECTS.

CALM CONSIDERATION OF A SUBJECT THAT IS AGITATING HORTICULTURISTS AND NURSERYMEN—HIGH AUTHORITY UPON INSECT LEGISLATION.

In his latest work on horticulture "The Principles of Fruit Growing," Professor L. H. Bailey devotes several pages early in the discussion of his subject to the geography of fruit growing, determinants of which are temperature, moisture, soil and parasites. Of the latter he says:

"As a matter of practice, the energetic and intelligent fruitgrower will think last and least of the parasite factor when
locating his plantation, for this factor is variable and migratory, and, moreover, there are means of keeping most fruit
pests under control. Insects and fungi are apt to be bugbears—
sometimes literal bugbears—to the fruit-grower, but, after
all, they are rarely to be counted upon as permanent factors,
and they are the direct and perhaps the most efficient means
of keeping the farmer in a state of mental alertness.

"There are a few cases, of course, to which these remarks will not well apply, but they are clearly exceptions. One of these is the dreaded nematode root-knot of the southern states, and one might seriously hesitate in planting peaches where the ground does not freeze deep enough to destroy the pest. The professional experimenters can determine the course of the life-histories of the various pests, and can point out their most vulnerable points, and may even devise general means for their eradication; but the final application of this knowledge is a local problem, which each man must work out for himself.

"Laws are generally of little avail for the destruction of pests, except in those few cases in which disease is more or less permanent or perennial, and in which there is no practicable rec urse but to destroy the plant or the part affected. Such troubles are peach yellows, and black-knot of the plum and cherry. A law cannot be enforced unless public sentiment is behind it, and when public sentiment is aroused the law is not needed. Yet a law is often useful for a time to awaken public sentiment and to call attention to the evil. The final recourse is always greater knowledge and enlightenment.

"There are also insurmountable difficulties in the enforcement of laws designed to control the spread of noxious insects and fungi, because it is practically impossible to detect the eggs of insects or spores of fungi.upon a large number of plants, and because there are so many natural and uncontrollable ways in which the parasites may spread. The recent Maryland law, designed to prevent the introduction of fruit tree diseases and pests, is a case in point. It requires that whenever any trees, plants or vines are shipped into this state from another state, every package thereof shall be plainly labeled on the outside with the name of the consignor, and a certificate showing that the contents had been inspected by a state or government officer, and that the trees, plants, or vines, therein contained are free from all San Jose scale, yellows, rosette, and other injurious insect or disease.

"It would be impossible for any botanist to certify that a dormant tree were free of all disease; and even in the matter of San Jose scale, an entomologist could not give a clean bill of health without giving more time to the examination of a tree than it is worth. In the operating of this law, trees are allowed to pass if an officer certifies that he has examined them, and has found no evidence of disease thereon, which is a very different matter from asserting that they are free from disease, and which is a virtual acknowledgement that this clause of the law really cannot be enforced.

"It is probably advisable to provide for inspection of plants at ports of entry, but too much should not be expected of such examinations. The examination soon comes to be largely a perfunctory matter, and the most serious pests may easily slip through the hands of officers. It is probable that no law could be devised which could have kept the codling-moth, Hessian fly, gypsy-moths, and a score of other pests, out of the country, to say nothing of the fungous diseases which are more difficult to detect. Then, again, one can never tell what insects are likely to become troublesome upon introduction into a new country. Many insects comparatively innocuous in their native country, and against which, therefore, no suspicion exists, may become scourges in another country. A comparatively harmless insect in France becomes the dreaded horn-fly in America.

"Again the demand for legislation usually arises because of the incursion of some new intruder, but a pest is commonly worst when newly introduced, for, like a prairie fire, it finds its course unimpeded. After a time it reaches an approximate limit to its furious spread, parasites overtake it, and other pests contest its feeding grounds. Nearly all insect pests lose much of their terrors after they have once run over the country. This is admirably illustrated in the potato-bug.

"In other words, the first appearance of a pest in formidable numbers is apt to result in a scare, to which, it is to be hoped the San Jose scale, which is now attracting so much attention in the East, is no exception. The fact is, that insect and fungous pests are inevitable; and the farmer can have no peace of mind until he accepts the fact, and then resolutely prepares to meet them, both by strategy and direct battle. Yet, if now and then a serious pest can be kept out of the country, even for a few years, by means of inspection upon the frontiers, the effort may be eminently worth the while."

ENGLISH FRUIT CULTURE.

The Royal Horticultural Society of England recently closed its fourth annual exhibition of fruit at the Crystal Palace, London. These annual displays of British-grown fruit exercise a great influence upon English horticulturists. They tend to raise the average standard of excellence in fruit culture.

George Burnyard, the prominent English nurserymen and horticulturist, of Maidstone, delivered a lecture on this occasion upon "Progress in Fruit Cultivation During Queen Victoria's Reign." The comparison between the fruits grown in 1837 and in 1897 was most interesting and showed remarkable progress.

Prizes were won by nurserymen as follows: For fruit trees bearing fruit in pots, T. Rivers & Sons, Sawbridgeworth; hardy fruits, George Bunyard & Co., Maidstone, and "J. Colwill, Sidmouth; H. Berwick, Sidmouth; apples, John Basham, Bassaleg, Monmouth.

THE NATIONAL NURSERYMAN.

C. L. WATROUS

The subject of this sketch is of New England stock, the first of the name having come from England with Governor Winthrop and settled near Boston about 1630. He was born in Cortland Co., N. Y., January 13, 1837, on a farm. At age 17 he began teaching. He worked continuously as teacher and student until the breaking out of the civil war. He was graduated from Cortland Academy, Homer, N. Y., and from the University of Michigan in the scientific course. In September, 1861, he enlisted in the 76th N. Y. V. Infantry, raised a company, and was elected captain; served in that capacity till disabled by three bullets, August 29, 1862, in the second battle of Bull Run : was mustered out of service December 20. 1862, under orders, "for disability from gunshot wounds re. ceived in battle," and was not fit for further service during the war. Graduated from University of Michigan Law School in

1865, and later in the same year settled in Winchester, Va. Was there during reconstruction and till 1868, serving as prosecuting attorney, and as U. S. registering officer during the time.

He gave up practice of law in 1868 by reason of broken health from the wounds and other disabilities contracted in the army. Being advised that out-door life was a necessity, he settled in 1869 at Des Moines, Ia., and has since followed horticultural pursuits. In 1872, he was elected director of the State Horticultural Society and has since been an active worker, serving many years as director, and four years as president.

Captain Watrous has always been active in civil affairs, holding some minor offices and serving in the state legislature from 1884 to 1886; has read extensively along scientific and historical lines, and has a library of several hundred volumes of the best authors: has been a worker in

the American Association of Nurserymen from the beginning, serving twice as president and for many years, and still as president of its protective association; has contributed freely to the horticultural literature of the Northwest, strongly advocating the origination and testing of American fruits instead of relying upon foreign ones.

Having early tested hundreds of Russian fruits and found them unreliable, he has for many years protested earnestly against their wholesale recommendation, and sale by interested parties, spending more time and labor than any other one man in putting the facts before the people. The practices so opposed are now substantially checked.

He has been many years a working member of the American Pomological Society, and for the last six years first vice-president. He was elected president of this society at Columbus, September 2, 1897.

At the annual conventions of the American Association of Nurserymen, Captain Watrous is a welcome and prominent worker. His wide experience and executive ability are appreciated, and his advice is invariably sought in all matters of importance before the association. He is chairman of the important committee on insect legislation, which has in charge the nurserymen's bill relating to the shipping regulations for nursery stock with reference to San Iose scale.

WHOLE OR PIECE ROOTS?

Some time ago the Kansas State Horticultural Society passed resolutions against "whole-root apple grafts," and their conclusions appear to be sustained by the state experiment station. The controversy which arose several years ago over the relative merits of whole roots and piece roots, and long or short root pieces, long or short scions, and grafting low or

> high on seedling stock, etc., led the experiment station to enter upon a series of elaborate experiments, which have been carried through the intervening years. Judge Wellhouse, president of the Kansas State Horticultural Society, the most extensive individual apple grower in the world has also experimented for many years in the same line, and a recently issued bulletin, gives the results reached by him.

> The conclusions arrived at are as follows: Whole root grafts possess no advantage over piece roots. On the contrary unless the whole

root stock is very hardy, sever: winter freezes, or drought may kill it. Especially is this tru: where the graft is set above ground on the seedling stock. In the colder extreme northwestern states the hardiest trees are made by grafting a hardy scion eight or ten inches long upon a short root piece and setting it down to the top of the bud. The short root piece keeps the hardy scion alive

until it grows out a good root system of its own, like a cutting, and these roots strike deeper than the lateral systems of whole roots. Judge Wellhouse finds the two-inch root piece best, but at the station pieces five inches long gave slightly better results than those half that length.

The longer the scion, up to two feet, the stronger the growth probably because of a larger leaf surface; but the difference is not sufficient to cover the extra expense on a large scale. Probably eight to twelve inches are best .- Western Fruit Grower.

A special trade catalogue of the Wyomanock Nurseries, William H. Harrison & Son's, Lebanon Springs, N. Y., for 1897-8, lists a large variety of ornamental stock, and calls special attention to Lord Penzances Hybrid Sweet Briars. The Rathbun blackberry is also a specialty.



C. L. WATROUS.

The National Nurseryman.

C. L. YATES, Proprietor.

RALPH T. OLCOTT, Editor.

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THE FALL TRADE.



Special reports to the NATIONAL NURSERYMAN regarding fall sales indicate the usual amount of business was done in most instances, and in many there was a marked increase. Prices remain low, but there is a general feeling of confidence that the spring business will be much better. Trade throughout the West and Northwest has greatly improved over that of last year. Crops have been large and the growth of nursery stock has been good.

The revival in business conditions generally came too late this year to help nurserymen to a marked extent. The long spell of dry weather deterred much business until spring, and the San Jose scale talk may have had some effect upon the plans of planters in certain localities. But the business already contracted for spring is very encouraging, and the promise of a shortage in certain lines of stock gives hope that prices may materially improve in the spring.

We take this occasion to thank our correspondents for their active interest in reporting conditions in their respective localities, and the outlook generally as it appears to them. We are assured by nurserymen that our trade reports are of much interest. Their co-operation in this matter produces a feature that represents in a marked degree the advantages of a trade journal.

LAWS AND PESTS.

The subject uppermost in the minds of nurserymen during the present year has been insect legislation. The history of the nursery business must record that in 1897 the chief topic that engaged the attention of nurserymen, horticulturists and entomologists was that relating to fruit and tree pests, and particularly the San Jose scale.

is And now, just at this period of cessation in law making, it is well to pause and review the situation. As the result of the rapid increase of injurious insects and plant diseases, many of the states have adopted laws governing the treatment of orchards or nursery stock, or both. And an effort has been made to secure federal legislation upon the subject. A bill prepared by the American Association of Nurserymen at its last annual convention, in St. Louis, is awaiting introduction in congress, endorsed by the leading nurserymen of the country and by leading entomologists.

In the meantime nurserymen are cheerfully complying with the provisions of state laws regarding the shipment of stock and entomologists are studying the subject of insect pests with great vigor in the endeavor to present to nurserymen and horticulturists additional information whereby the progress of the pests may be retarded, and the pests if possible exterminated.

As the result of a calm consideration of the subject, which the NATIONAL NURSERYMAN was foremost in advocating, entomologists, horticulturists and nurserymen have evinced a disposition to get together and by every means in their power co-operate for the common object.

Pending the resumption of active measures in the direction of additional legislation, it may be of advantage to consider the views of those who have made a long study of the subject, in the light of special knowledge and experience upon their part. Reports of the discovery of pests in certain localities are apt to concentrate attention upon a special pest or a special locality and cause the general situation to be overlooked. The question has reached a stage where it is necessary to take a broad view of the field and endeavor to settle upon a plan systematic and somewhat permanent as against the desultory action that has prevailed.

In the October issue of this journal the views of a contributor upon the subject suggested strongly the idea of co-operation which we have earnestly advocated from the outset and which, we believe, is now admitted by all to be the proper method. And while laws are doubtless necessary, it appears to be the general opinion among those who have given the subject the most thought and who are best qualified to judge, that obnoxious laws are unnecessary.

No one, we believe, will controvert for a moment the assertion that Professor Liberty H. Bailey of the horticultural department of Cornell University is one of the most prominent specialists in the country, and that he has proved by his earnest work and prolific results that he is heart and hand in sympathy with the fruit growing interests of the Union. In his latest book, "The Principles of Fruit Growing," which has received the highest commendation by the horticultural press of two continents, he has devoted some of the early pages to the subject under consideration.

In Professor Bailey's remarks, reproduced in another column of this issue, he calls attention to the insurmountable difficulties in the enforcement of laws designed to control the spread of noxious insects and fungi, and suggests that the best laws of this nature are probably those which are not mandatory, but which provide a protection or a legal remedy in case any person considers himself to be endangered or injured by the perverseness or the negligence of another. "And," he adds

"it is a question if the common law does not provide ample redress for such grievances."

"There are instances," says Professor Bailey, "in which it may be wise to make a general effort to stamp out a pest when it first obtains a foothold in America, but this is a very different matter from the endeavor to control the spread of insects and fungi between the different parts of the country. The fact is that most insects and diseases are beyond the reach of legislative fiats, and it is time the facts were fully learned."

SCALE INSPECTOR'S REPORT.

Professor Hedrick, of the Agricultural College, has returned from a trip through the southern and southwestern parts of the state, says the Michigan Farmer, where he has, during the last week, been inspecting nurseries under the San Jose scale law. Nurseries were visited at Monroe, Niles, Benton Harbor and Kalamazoo but all were free from the scale. He expects to be engaged for about two months yet in the inspection of nurseries alone, when work on orchards will begin. He has been investigating all the probable sources of introduction of the San Iose scale in the orchards of the state, and now has a list of about 200 persons who have bought nursery stock from nurseries having infected stock. From his experience with this orchard pest, the inspector believes that the only expedient and safe way of dealing with an infested orchard is to destroy by burning. During the coming season, Professor Hedrick expects to begin a rigid inspection for peach yellows, and will also have a number of other minor orchard pests to deal with

PITCHER & MANDA SOLD OUT.

The stock of the United States Nurseries, Short Hills, N. J., Pitcher & Manda, proprietors, was sold at auction October 4-7, as the result of lack of demand for the extraordinary supply of specialties carried. The enterprise had absorbed \$500,000 of the capital of James R. Pitcher before it was placed in the hands of a receiver in September, 1896.

Considering the large amount of orchids, and rare plants thus thrown upon the market at one time, good prices were realized at the sale. Thomas Meehan & Sons, Germantown, Pa., secured for \$290 the firm's mailing list of 62,000 names, wholesale and retail.

The stock of plants sold included over 100,000 palms, the finest stock of Adiantum Farleyense in this country, and a general assortment of other ferns; also a large lot of ornamental foliage plants. There were included 80,000 feet of glass, 6½ acres of herbaceous nursery, and 62 acres adapted for nursery purposes.

A NEW HYBRID.

Wizard Burbank has produced a new berry known as the "Primus Hybrid," a cross between the blackcap raspberry and a blackberry. The fruit is said to be large, some being an inch and a half in diameter, and it possesses the color and flavor of the raspberry. It ripens late and the vines are prolific in bearing and thrifty in growth. The right to this production has been sold to a New York man.—Rural Californian.

HYDROCYANIC ACID GAS IN ORCHARD.

A special despatch to the Baltimore Sun is as follows:

CHESTERTOWN, MD., Oct. 15.—Professor W. G. Johnson, state entomologist, held what he calls a field meeting this afternoon, in the extensive orchards of Capt. R. S. Emory. The meeting was for the purpose of illustrating an extensive series of experiments with hydrocyanic acid gas for the destruction of San Jose scale. The results will be watched with great interest by the owners of the vast fruit interest of the East. The treatment in California has been made exclusively upon citrous trees, and has proved partially successful, whereas the experiments to-day were upon deciduous trees.

The trial was witnessed by Dr. John B. Smith, state entomologist of New Jersey; Prof. G. Herald Powell, entomologist of the state experiment station, Newark, Del.; Dr. A. F. Woods, assistant chief division vegetable pathology, Washington, D. C.; Wesley Webb, department of nursery and orchard inspection, Dover, Del.; Dr. John J. Black, of New Castle, one of the most extensive agriculturists of the peninsula; Dr. Arthur T. Neal, director of Delaware College Agricultural Experiment Station; Franklin Sherman, Jr., of the Maryland Agricultural College, a special student in entomology; Dr. W. Frank Hines, Dr. C. P. Gilpin, W. S. Walker, Senator C. T. Westcott, Wilbur Eliason, Charles S. Hill, C. C. Hopper, Edward W. Emory and others of Kent.

The scale was discovered in Captain Emory's orchard of over twenty thousand trees about three years ago. Captain Emory's long series of experiments with whale oil soap have been partially successful, serving at least to keep the trouble in check. The failure of the spraying treatment has been due largely to the impossibility of reaching every insect and the prolific nature of the pest. One female scale is capable of producing in a single season three billions of young.

It is claimed for the new treatment that no scale can escape, so searching is the gas. From an economic standpoint the gas treatment possesses a decided advantage. The full results of the test cannot be positively known until next year. Prof. Johnson is prosecuting his experiments upon a scale and with a thoroughness which should render his results to a great extent conclusive. Captain Emory entertained his guests hospitably.

DYING BIRCHES.

A correspondent recently asked what was the cause of the dying of European birches in various parts of the country. Supt. C. C. Laney, of the Rochester, N. Y., park system, has received replies to his inquiry from the following, the causes assigned being briefly appended:

C. S. Sargent, Arnold Arboretum, and F. L. & J. C. Olmsed, Brookline, Mass., landscape gardeners, think the cause is borers. Thomas B. Meehan, Germantown, Pa., and Dr. William Trelease, Missouri Botanical garden, think drought is the cause. Superintendent J. H. Pettigrew, of the Boston park system, thinks a disease of a fungoid character is the cause.

Trees for immediate shipment are offered by J. G. Patterson & Sons, Stewartstown, Pa. They make a specialty of peaches and plums, and in another column name the varieties.

TIDE IS CHANGING.

DR. SMITH MAKES TIMELY SUGGESTIONS—VEXA-TIOUS SAN JOSE SCALE RESTRICTIONS ADMIS-SABLE ONLY UNDER GREAT NECESSITY— DOES THAT NECESSITY EXIST?

Dr. John B. Smith, entomologist of New Jersey, the author of a valuable work on economic entomology, and one of the highest authorities in the country on the subject of the San Jose scale, has made the following timely suggestions in an article in the American Agriculturist:

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 re-action, when it comes, as it inevitably must, destroy confidence in the warnings of the entomologist altogether.

The results, thus far, 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 reaches 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 admissable under stress of the clearest necessity.

Does such a necessity really exist?

The San Jose scale (Aspidiotus perniciosus, Comstock) is one of the so-called "armored" scales, the insect itself being hidden and protected by a covering of a tough tissue, secreted by the insect itself and supplemented by its cast skins. There are other species of the same and allied genera, with equally dense coverings, that occur in the Atlantic states; but this perniciosus is an importation from the Pacific coast—which is all that we really know of its nativity. Professor Cockerell argues that it is a native of Japan, and his arguments are weighty, but there is no real proof; all is inference, based, I admit, on established facts, but the facts are insufficient and inconsistent with other conclusions.

But that we have to deal with an imported insect is nothing really new—we have others that have come to us and have done us woful harm—cabbage butterflies, elm leaf beetles, asparagus beetles, horn flies, and others too numerous to mention. Even from the great West we have an immigrant in the form of the Colorado potato beetle that is "no slouch," as the boys would say.

Is it so much more destructive than other pests? Not at all. Let the potato beetle alone, and the potato harvest can be easily gathered in most years. Allow the cutworms free range in any planted crop, and see how much is left for the farmer. Permit the canker worms to range as they will in an apple chard, and how much fruit will be gathered? These are

cases imperiling either fruit only or an annual crop; but how about peach borers or round headed apple or quince borers? Let them go unchecked and how long a lease of life has a tree? No, 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

It is no more of a menace to fruit culture than the codling moth or plum curculio, which must be annually and persistently fought to secure a crop that will pass muster and bring remunerative prices. It does not compare with fungus troubles in rapidity of effect. Note the fire blight and other blights in apple and pear orchards. Almost over night a thrifty orchard may be practically ruined, and the various forms of rots, molds and smuts are infinitely worse than San Jose or any other scale insect.

Its coming does add a new pest to be dealt with. It is a new factor in fruit growing that makes it increasingly difficult and more expensive, and adds to the demand for intelligence and ability on the part of the grower.

Other insects have offered problems apparently as difficult. For instance, the "pear midge," which oviposits in the blossom, whose larva feeds in the pear fruit beyond reach of insecticides, and emerges from its shelter only to drop to the ground and go beneath the surface. Yet we have mastered this species and control it easily; so easily indeed and withal so completely that in some places it has been apparently—note the word—exterminated.

CALIFORNIA FRUIT PESTS.

A despatch from Tacoma, Wash., to the San Francisco Pacific Rural Press under date of September 23d says:

"Horticultural inspector P. W. Tonneson to-day began a rigid inspection of California fruits shipped into this city. The steamer Walla Walla arrived this morning from San Francisco, bringing considerable fruit, including apples, grapes, quinces and lemons, which Inspector Tonneson had piled up in the warehouses for inspection before delivery. One shipment of apples was condemned because found wormy and unfit for market. Other shipments are undergoing careful examination. The object of the inspection is to prevent the importation of the San Jose scale, the codlin moth and poor fruit.

"The Tacoma authorities are right about this, as were the authorities at Victoria and Seattle a few weeks back. It is a grave outrage to ship infected fruits, not only to those who are expected to receive them but to the interest of our fruit people. Whoever the guilty shippers are, they deserve to lose their stuff, and there is nobody in California to sympathize with them. And not only should no bad fruit be allowed to leave the state, but none should be allowed to be sold at home. The back streets of San Francisco swarm with hawkers whose wagons are filled with the disgusting product of infected orchards. As long as this is allowed, we shall not soon stamp out the pests which trouble fruit growers."

Samuel Smith, Carbondale, Ill., offers Southern Illinois natural peach pits.

Peach and plum are specialties with Flemer & Felmly, Springfield, N. J. They guarantee stock good and prices right.

THREE SCORE YEARS.

PROGRESS OF HORTICULTURE IN AMERICA FROM 1836 TO 1896—SAMUEL MILLER'S RESUME —A VERY MARKED ADVANCE.

In the August issue of the NATIONAL NURSERYMAN was presented a retrospect of horticulture in England during the sixty years of the Victorian era. Remarkable and interesting changes were noted. Of equal interest is the resume of the advances in horticulture in America during the same period, as noted by Samuel Miller, of Bluffton, Mo., in Colman's Rural World. Judge Miller says:

Within the last century there have been more inventions and greater advances made in the arts and sciences than in any former period of the same length of time in the history of this globe. Horticulture has kept pace with these, and is to-day more advanced than ever before. Sixty years ago the word horticmlture was hardly mentioned. Now it stands next to grain-raising in importance—not only in the pleasure and comfort that it gives to the human family, but also in a commercial point of view.

To go back three-score years seems a long look to the rear; yet that is what some of us can do, and remember well the condition of our fruits, and compare them with those of the present day. Then about all the strawberries we saw were found in meadows and fence corners, small but high-flavored. Now we have more than 100 varieties—large, luscious ones in abundance.

One might be safe in stating that there is now a car-load of strawberries grown to every quart grown then. I remember when they were first taken to market in buckets and baskets, and were measured out in tin quart measures. Now they are put up in neat quart boxes, shipped in crates of twenty-four and thirty-two quarts each, all over the country. Not long since a friend in Southwestern Missouri wrote to me that he sent a crate of Captain Jack strawberries one time to Albuquerque, New Mexico, that had to go sixty miles by stage to reach its destination, yet they arrived in eating condition, and, by the way, I may tell that same variety originated here not twenty yards from where I write this. It is still a favorite with some growers. Another yaluable one was raised by a brother of mine, the Cumberland, which has but few superiors if properly grown.

Quite recently another brother has raised a black-cap raspberry that surpasses anything of the kind yet produced in this country. He has receutly sold the stock for \$1,000. I have been a little personal in this, to show that the spirit of horticulture was born in the family, hence no wonder that it is still my hobby.

Then the black-cap raspberries were chiefly gathered in old clearings, strung on a stem of timothy, and carried home in that way. Now the improved varieties are planted by the 100 acres. The only red ones then were what we called Purple Cane and the Red Antwerp. Now the varieties can be named by scores.

Blackberries were all wild, and the planting of them in gardens was not thought of. Now hundreds of plantations, large and small, can be seen all over the country. Currants were then the white and red Dutch (and they are still grown). Now we can count the varieties by the dozens.

Cherries—The Mayduke, Oxheart and Bleeding Heart were the improved varieties. The English Morello was a wayside tree. The Black Morello was common, but nearly abandoned on account of the black knot. Of the Mazzard, a black and red, there were trees sixty feet high, and three feet in diameter at the base, and trees that would bear a two-horse wagon-load in a season. These were small, however, and by no means choice. Now we have a hundred varieties of select fruit of these.

Peaches.—Early York was then the earliest we had of budded trees, but plenty of good seedlings. The Early York ripened in August, and was the earliest. Now we have a host of varieties, ripening from June until November.

Grapes.—The Alexander was the pioneer; then Isabella and Catawba, soon followed by the famous Concord, from which has descended a host of valuable varieties, both white and black. The Martha was the first seedling from it that became famous. It was sold to Mr. Knox, of Pittsburg, Pa., for \$500. He made a nice thing out of it, not less than \$10,000. Since then other white ones from it and from the Concord have crowded it out in a measure. Apricots we had growing on the terraces, but they seldom bore fruit. Of prunes and plums we had a few, but the main crop of plums was from the native wild trees. Now, orchards of ten acres of Wild Goose alone are planted.

Pears.—We then had mostly seedling, and of very ordinary quality. Now we have double the number of varieties, which can be in eating nearly the whole year. Apples were then grown mostly for home use, and there were but few varieties compared with the legion we now have.

But to refute the idea that fruits run out, I will state that the Rambo, Red Romanite, Prince's Harvest, Winesap, Newton Pippin and Yellow Bellflower that have been grown for 100 years still hold their place in every good collection. But what a multitude of new and valuable ones have been produced since then, and still they come.

Then each farmer raised principally for his own use and to sell in the towns near him. Now tens of thousands of acres are planted, and it gives railroads considerable work hauling them to their destinations, and mighty steamers to transport the fruit to foreign countries (3,000,000 barrels in 1895).

Then California was a Mexican state, and its future greatness as a fruit country was not dreamed of. Now she sends train-loads of it across the Rocky Mountains to the East, and her grapes and wine to foreign lands. It is to-day the greatest fruit country on the globe.

Next comes Missouri, my adopted state, of which I am proud, and why not, when she was admitted into the Union the same year that I was first allowed to breathe the air of this great Republic? May the good work of horticultural progress go on, and the time come when every man, woman and child will have all the choice fruit they need—a condition that at this time does not exist, for not one man in ten who owns land enjoys what he might if he possessed the true spirit and love of horticulture.

And here I will state that I do not see why agriculture and horticulture should not be taught in our common schools. In one hour I can show 100 boys how to bud or graft, so that they can change any worthless fruit tree into a good variety.

Recent Dublications.

The new catalogue of the Storrs & Harrison Co., Painesville, O., comprises in its 168 pages a remarkable variety of fruit, vegetable and ornamental stock.

Thomas Meehan & Sons, Germantown, Philadelphia, have issued a handsome catalogue for the fall of 1898. It presents in most attractive style lists of the desirable things in fruit and ornamental stock, particularly the latter.

Lenault-Huet, Ussy, France, represented in America by C. H. Joosten, 193 Greenwich street, New York city, has issued his usual comprehensive wholesale catalogue of nursery stock. The list indicates at a glance the extensiveness of this well known nursery.

In every respect the new catalogue of W. & T. Smith Co., Geneva. N. Y., is up to date. Its attractiveness is enhanced by the knowledge, wide spread, that this is one of the oldest and most reliable nurseries in the world. For more than 50 years the Geneva Nursery has been before the public.

Recent numbers of the Experiment Station Record cite bulletins on "Effect of Stem Ringing on Broadleaved Deciduous Trees," "Fruit Statistics of New Jersey," "Fruit Culture in South Dakota," "Promising New Fruits," "Testing Fruits," "Small Fruit Culture," "Principles of Pruning," "San Jose Scale in Delaware."

Secretary L. A. Goodman, of the Missouri State Horticultural Society, has issued the thirty-ninth annual report of the society, comprising the meetings held in June and December, 1896. It is a volume of 407 pages, substantially bound, and like all of the Missouri Society reports it is of much interest and value as it must be, considering Missouri's importance as a fruit state.

"Glen St. Mary Nurseries, 1898, Geo. L. Taber, Proprietor, Glen St. Mary, Fla." is the wording on the front cover of one of the most unique, handsome and valuable catalogues that has ever been published in the South. These nurseries, established fifteen years ago, by the present proprietor, are well and favorably known by the horticulturists of the lower South. In addition to the full description of 300 varieties of fruits and ornamentals listed, there are many pages of valuable cultural information, the result of practical orchard experience—not theory.

The eighth annual report of the Missouri Botanical Garden has been issued. Renewed interest in this institution is taken by the members of the American Association of Nurserymen, because of the most enjoyable feature of the St. Louis convention last June, occasioned by the invitation to visit the garden and attend the annual banquet, extended to the members by Dr. William Trelease, the director of the garden. All who are interested in botany should be proud of this institution representing as it does the growing interest in the subject in this country. Europe has had great botanical gardens many years. Notwithstanding the loss occasioned at the Missouri garden by the tornado of May 27th, amounting to \$12,000, the trustees are planning for the gradual execution, without serious lapse of time, of the wishes of the founder Henry Shaw, The annual report shows an extension throughout the garden. Dr. Trelease contributes a most interesting scientific paper on his botanical observations during trips to the Azore Islands in 1894 and 1896. He has contributed a valuable catalogue of the plants of the Azores with excellent illustrations.

Extra Fine Plants

It does not pay to buy poor stock. Get my prices for Fall of '97 and Spring of '98 on

GOOSEBERRIES, CURRANTS, RASPBERRIES, BLACKBERRIES. (Transplants.) (Root Cuttings.)

l offer all the STANDARD VARIETIES, including COLUMBIAN, LOUDON, CONRATH RASPBERRIES and POMONA CURRANT.

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ALLEN L. WOOD, ROCHESTER, N. Y.

Introducer of the "Pearl Gooseberry."

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Plates for Plate books free.

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I offer, for Fall '97 and Spring '98, Apple trees, 2 and 3-year, No. 1, 5 to 7 feet, ¾ and up.
Peach trees, 1 year from bud, by the 1,000 or car lots, budded on Kansas and Tennessee pits, all staple varieties.
Nursery inspected by the State Entomologist.

ARE CONCEDED BY NURSERYMEN

TO BE THE BEST LABEL MADE.

Sample and Prices on application to

BENJAMIN CHASE, 15 Mill St., Derry, N.H.

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GENEVA, N.Y.

....SPLENDID STOCK OF....

Industry Gooseberries, Roses,

Columbian Raspberries, Clematis.

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Mulberries,

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Peaches.

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YOU CAN GET THEM OF US

(And there are none better grown.)

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50 years in business proves our reliability.

200,000 Peach Trees. 2.000,000 Strawberry Plants, 100.000 Blackberry, 500,000 Raspberries.

MILLER, LOUDON and

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TRIÚMPH. GREENSBORO and EMMA.

Raspberries.

and a full assortment of

Wickson, Red June and Giant PLUMS. Peaches

... AND OTHER FRUITS. It will be to advantage of those in the trade to correspond with us.

Our Catalogue will save you money.

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Peach and Plum

FOR FALL DELIVERY 1897.

All desirable leading old and new varieties of Peaches here in fruiting orchards. Have the new Triumph, Greensboro and Sneed fruit ing. Buds can be supplied in season at low rates. Large stock of Plum trees, all on Plum roots, one and two year. Buds in season from either nurseries or orchard trees. Have all the leading Japanese varieties, Abundance, Burbank, Chabot. Satsuma, Willard and Also in good supply the new Red June and Wickson. Have the usual supply of Asparagus Roots to offer. Two and three years old, strong.

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A. L. BROOKE, PROPRIETOR.

Write for Prices on

APPLE, CHERRY, PEACH, PEAR, PLUM, APPLE AND FRENCH PEAR SEEDLING, AND JAPAN PEAR STOCKS.

Remember you get

FINE STOCK. GOOD GRADE. WELL PACKED.

A. L. BROOKE, NORTH TOPEKA;

100,000 Peach trees; all leading varieties. 8000 Plum trees.

1000 Apricot.

10,000 Apple trees, 3-year, 2 up, Ben Davis and York Imperial.

The following stock will be sold very cheap to close out that part of my business.

10,000 Norway Maple; imported seedlings, twice transplanted, from 3 to 6 ft. 500 Norway Maple; 8 to 9 ft. 500 Silver Maple; 10 to 14 ft. 200 Sugar Maple; 10 to 12 ft. 300 Sugar Maple; 8 to 10 ft. 200 American Sweet Chestnut, 5

to 7 ft 100 Ridgely Chestnut; 5 to 7 ft. 200 Cut Leaf Birch; 7 to 9 ft. 150 American Linden; 10 to 12 ft 1000 Norway Spruce; 2 to 3 ft.

1000 Irish Juniper; 2 to 4 ft. 1000 American Arborvitæ; 2 to 3 ft.

OAK HILL NURSERIES.

C. L. LONGSDORF.

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OFFER to my customers and the general trade, for fall of 1897 and spring of 1898, 25,000 strong 2 and 3 years out door nursery grown Clematis, viz: Jackmannii, Henryii, Ramona, Duchess of Edinburg, Baron Veillard, Vit Rubra Grand, Coc. Crispa and Paniculata.

Of Mad Ed. Andre, the acknowleged queen of all Clematis, I have strong 3-year olds, also strong 2-years in great quantity.

GOOSEBERRIES AND CURRANTS.

Strong 2-year plants. All the leading kinds. Prices low.

RASPBERRIES.

Columbian, Miller, Superlative, Etc.

ROSES, FLOWERING SHRUBS, PÆONIES, and CLIMB-ING PLANTS in great variety.

THE MONARCH PLUM.

Truly monarch of all new Plums. Fruit large, round, pur-ple, excellent quality. Ripens in September. My specimen trees are full of fruit. I have a large stock of fine trees. The best of Thos. Rivers introductions.

GOLDEN GLOW FLOWER.

I have a very large stock of strong plants. Dealers should push it. It sells well. Also Apples, Pears, Plums, Cherries, Quinces, etc. Quality unsurpassed. Prices reasonable. ************

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WANTED--APPLE SEEDLINGS.

100.000 No. 1.

75,000 No. 2, 50.000 No. 3.

J. J.,

Care National Nurseryman.

TREES FOR IMMEDIATE SHIPMENT.

50,000 Elberta Peach Trees, 41 to 6 ft. p up.

10,000 Hill's Chili Peach Trees, 41 to 6 ft. 16 up.

100,000 Other Sorts, strong on, Reeves Favorite, Globe, Chair's Choice, Triumph and Crawford. 10,000 Japan and European Plums, mostly Willard, Abundance, Bur-

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50,000 Marianna Plum Seedlings, 1 in. up, home grown, and free from those troublesome root galls or knots. PRICES UPON APPLICATION, ALSO SAMPLES.

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FLEMER & FELMLY, SPRINGFIELD, N.J.

OUR SPECIALTIES PEACH AND PLUM.

JAPAN WALNUT, SHADE TREES, CAL. PRIVET and SHRUBBERY. STOCK GOOD AND PRICES RIGHT.

PEACH PITS: S. III. Naturals.

SUPPLIED BY

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Apple and Peach, new and leading varieties by the car lots. Russias and American Apricots and native Plums by car lots. Pears, Cherries and a general assortment of Small Fruits and Ornamentals. We are not surpassed by any Nursery in the west, in number of acres or quality of atock. We have the only practical box-clamp in use. Price reduced.

.. PEAGH TREES . By the 100, 1000 or Carload.

150,000 of the best leading varieties, including Elberta, Greensboro, Sneed, Triumph and Prollife. Also about 50 of the best old kinds, grown from natural southern Tennessee and Georgis pits, free from disease and scale. 10000 Apples, Baldwin. Ben Davis, Wolf River, Gano, M. Blush, Red Astraban, etc. 20000 Quince Meed's Champion, Orange, Rees' M. 100000 Asparagus, Barr's Mammoth, 2-3 yr. 150000 Blackberry Plants, Wilson, Jr., Barly Harvest, Wilson E. 50000 Raspberry Plants, Miller's Red, Cuthbert, Turner. We are prepared to make low prices on the above.

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Apple, Pear, Plum, Peach and Cherry Trees by the car load. Acres of Shade and Ornamental Trees of all sizes.

Small Fruits, Ornamental Shrubs and Evergreens

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Scions, large surplus. Grafts of any style made to order. Our stock has made a fine growth, and is free from all injurious insects, and includes all the leading varieties and will be graded up to the high-cet standard grades. ES WHITE FOR PHICES.

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Fine Thrifty Stock for Fall '97 and Spring '98.

PEACH TREES, all sizes CAROLINA POPLARS, 8 ft. up

CALIFORNIA PRIVET, 2-yrs. OSAGE ORANGE, 1, 2, and 3-yrs.

ASPARAGUS ROOTS, Barr's Mammoth and Moore's X Bred. NORWAY MAPLES, 7 to 9 ft.; stocky. 1,000 FINE W. BIRCH, 12 to 15 ft.

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Trape Vines. 20,000 extra heavy Small Fruit Plants. & Downing.

All stock guaranteed to give the best of satisfaction.

Send list of wants for special Fall Prices.

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French Grown Fruit and Ornamental Seedlings. Grades carefully maintained. Prices upon application.

ROSES on own roots, Field grown, and of unusually

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Ornamental

FLOWERING SHRUBS in great variety. Descriptive Catalogue and Price-List free.

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Best Grading, Quality, and Packing. Send your List of Wants for Special Prices to

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Offer a full and complete stock of FRUIT and ORNAMENTAL TREES, and call your attention especially to

APPLE-Well rooted; good assortment in all grades,

PFAR-Standard and Dwarf, 2-years: good assortment.

PLUM ON PLUM-One and 2-years; American, Japan and Euro pean sorts.

PEACH-A fine lot and good assortment.

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GOOSEBERRIES-2-year; strong plants, mostly Houghton and Down-

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FOREST SEEDLINGS—Russian Mulberry, Maple, Box Elder, Black Locust, Ash, Elm, Catalpa and Osage Hedge.

APPLE SEEDLINGS-All grades, fine healthy plants.

ORNAMENTAL TREES-Strong on Mountain Ash and Maple, 5 to 6 and 6 to 8 feet.

We have also a good assortment of Ornamental Shrubs, Roses and Vines.

For a more complete list we refer you to our semi-annual trade list and solicit correspondence.

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Apple, Plum. Std: Pear. Dwf. Pear,

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Gooseberry, Evergreens

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Japan Pear Seedling, Russian Mulberry, Box Elder, Silver Maple, Elm, and Osage Seedling.

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Keiffer, Garber and Koonce Pear.

BECHTEL'S DOUBLE FLOWERING CRAB.

Remember we are extensive growers of APPLE TREES and APPLE SEEDLING, and can supply in large lots.

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A general assortment of Fruit Tree Stocks, such as Apple, Pear, Myroborn Plum, Mahaleb and Mazzard Cherry, Angers Quince, Small Frances, Forest Trees, Ornamental Shrubs, Roses, Etc. The largest stock in the country. Prices very low. Packing secured. Send for quotations before placing your orders elsewhere. Catalogue free. Agents for U.S. America and Canada.

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QUALITY UNSURPASSED. Prices lower than ever before. list of wants for prices.

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AND OTHER SMALL FRUIT PLANTS. S. HUBBARD CO., FREDONIA, N. Y.

The Sparta Nurseries have to offer their Usual stock of dry baled Moss, both burlap and wired bales, and of the finest quality on the market. Also a full line of small fruit plants, high Z. K. JEWETT & CO., Sparta, Wis.

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Strawberry plants for August and Septembershipment. Potted and layer plants. Newer kinds, Carrie, Margaret, Glenn Mary, Clyde, Wm. Belt, Brunette, Champion of England, etc., etc. All standard kinds in immense quantities.

Eureka, best early black Raspb'y Munger, " everb'r'ng" Gault. Columbia, " purple

200,000 Currants, 1-1. 100,000 Eldorado R. C.

Miller, early red late 100,000 Houghton, 2-1. 50.000 Ohmer. 50.000 Snyder. 500,000 Snyder. 200,000 Early Harvest. 25,000 Wauchusett. 50,000 Stone's Hardy.

25,000 DOWNING, I.

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We grow a complete stock of all small fruit plants and can quote as low prices as any firm in the United States, stock considered. Get our prices on your wants for fall.

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Very large packing sheds. Cold storage barn. The best facilities for proper packing, and prompt shipping.

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Offer SHADE TREES in car lots at bottom

High Grade Nursery Stock for Spring of '97.

Apples, Standard and Dwarf Pears, Cherries, Plums, Quinces, Cut-Leaf Wesping Birch, Purple-Leaf Birch, Silver Maple, Elms, Catalpa, Black Walnut and Butternut.

Write for Special Prices.

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Nursery Stocks of all Kinds and Varieties,

Such as Maples, Alder. Althea, Aucuba, White Birch, Catalpa, Honeysuckles, Nuts, Japan Quince, Deutzia, Ash, Broom, Walnut, Ligustrum, Philadelphia, Acacia, Currants, Willows, Sambucus, Spires, Lilscs, Tamarix, Viburnum, Weigelia, and all sorts of Fruit Tree Stocks, all 1, 2 and 8 years old or stronger plants, now offered at very low prices by

TRANSON BROTHERS NURSERIES. BARBIER BROS. & SONS, Succes.,

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Write me for easy terms and prices.

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Miller New Raspberry, Strawberry, and Other Plants,

GENUINE HOME-GROWN at RIGHT FIGURES.

In Exchange for

STANDARD and DWARF PEARS and Other Stock. P. EMERSON, WYOMING, Kent Co., DELAWARE.

Most Ornamental for Loney Locust Hedge. Parks and Lawns.

Strong and handsome for farm fencing. Hardy for cold climates Easy seller at good profits. Put your agents on to it. Plates of this beautiful Hedge to sell from, furnished cheap. Osage Osage Hapge and plates also. WHITE FOR PRICES AND TRY THEM.

A. E. WINDSOR, - HAVANA, ILLS. - . -

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POMONA CURRANT, 1 and 2 yrs., No. 1. 50,000 POMONA CURRANT cuttings.
LOUDON RASP BERRIES, suckers and transplants.
MUNGER, the new, large BLACK CAP RASP BERRY.
OHMER and ELDORADO BLACK BERRIES.
Ornamental Trees and Shrubs. Pasonias, Hardy Herbaceous Plants, &c.
INSPECTION OF STOCK DESIRED.

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A limited quantity of Natural PEACH PITS to offer.

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2 years-gloved pruned-5; to 7 feet-An extra choice lot of trees.

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All leading sorts.

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We will make special prices on above stock for orders placed early.

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350 Acres in Nursery Stock.

Our Trees and Plants

Have been fully tested in every section of the United States during the past 40 years. The stock now growing is up to the usual past high grade, all of thrifty growth, no old rubbish, and free from scale or disease.

fruit Department.

Apples, Cherries, Figs, Pears, (an extra fine lot of 100,000 standard 2 and 3 years, largely of Kieffer), Paper Shell Pecans, Plums (Japan) on Marianna, Euglish Walnuts, Grape Vines, etc. Peach Trees in car load lots.

EVERBEARING PEACH.

A valuable novelty now offered for the first time.

Ornamental Department.

150,000 Amoor Privet—Unsurpassed as an evergreen hedge plant. 50,000 Citrus Trifoliata—Japan Hardy Lemon; best defensive hedge plant, stands 15 degrees below zero.

150,000 Roses-Field grown, including 30,000 Marchael Niel budded upon Manetti, 3 to 5 feet.

Two acres in Canna.

Azaleas (home grown).

Broad leaved Evergreens, etc., etc., Biota Aurea Nana, Cedrus
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Greenbouse Department.

100,000 Palms—(An especially fine lot of Latanias, Phœnix, Pandanus and Cocos Weddelliana.)
Ficus, Decorative Plants, Crotons, Bedding Plants, 10,000 Camphor Trees, Sub-Tropical fruits, etc.

Send for trade list and descriptive Catalogue.

Millions of Trees And Plants

are offered for sale by the

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FOR FALL OF 1897 AND SPRING 1898.

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600,000 Prach Trees-One year old from bud (embracing over 70 varieties.

Strawberry Plants-From 30 acres set this spring (means millions of plants.)

25,000 Japan Plums-One year old from bud.

20,000 Grape Vines-One and two years old.

100,000 Asparagus-Conover's, Barr's and Palmetto, 2-year old.

20,000 Apple Trees-One and two years old.

2,000 Norway Maples.

4,000 Carolina Poplars.

Peach and Plum Buds ready June 20th.

Having 30 acres in Peach Seedlings from Tennesee seed, planted fall 1896, will contract to grow June Budded Peach Trees at special low price. Correspondence solicited. Special inducements offered to purchasers in car load lots.

Address

W. M. PETERS SONS.

WESLEY, Worcester Co., MD.

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Peach Trees 36.36





HAT are grown from natural seed, and on land that has not been peached, in a locality with no San Jose scale or peach yellows, is what we offer the trade.

We have probably the largest block of 1-year from bud there is to be offered this season, from a list budded last season of over

ONE AND ONE-HALF MILLION.

We think we can please you. They cost a little more to grow them this way, yet it is the dealer and planter who has the pleasure of handling good stock.

We have to bud in August over



thrifty seedlings from natural seed. Do you want to contract for peach—delivery '98 and '99—if so, send list to be priced at once. Personal inspection solicited.

VARIETIES OF PEACHES NOW FOR SALE

(ONE YEAR FROM BUD.)

NEW ONES.

New Prolific, Triumph, Greensboro, Conet's So. Early, Bokara No. 3, Connecticut, Lorentz, McIntoch, Lewis, Willet, Kalamazoo, Fitzgerald and Speed.

GENERAL LIST PEACHES.

Elberta, Old Mixon Free, Fox Seedling, Smock Free, Geary's Holdon, Recve's Favorite, Stephen's Rare Ripe, Chair's Choice, Old Mixon Cling, Crawford's Late, Moore's Favorite, Yellow St. John, Lemon Free, Champion, Hale's Early, Golden Drop, Mt. Rose, Crosby, Snow's Orange, Bray's Rare Ripe, Wilkin's Cling, White Heath Cling, Chinese Cling, Waterloo, Troth's Early, Early Rivers, Hill's Chili, Levy's Late, Stump the World, Ford's Late White, Alexander, Morris White, Walker's Vara Free, Globe, Early Michigan, Wager, Salway, Bilyeu's Late October, Wonderful and Wheatland.

JAPAN PLUMS

on plum root and peach root. One and 2-year general list varieties.

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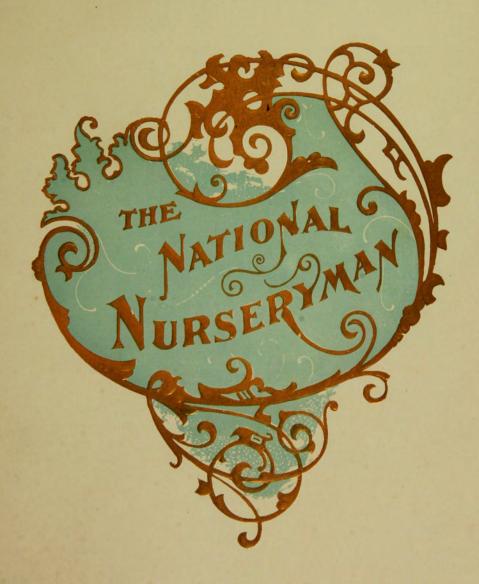
Over 50 acres in plants of the most desirable varieties grown. Plants ready in September.

Asparagus Roots.

Donald's, Elmira, Palmetto, Barr's, Conover's, Columbian, White.

HARRISON'S NURSERIES, BERLIN, - MD.

P. S.—Come and see our peach before you buy, and take a rest at Ocean City on the sea shore, only 7 miles from Nurseries.



December, 1897.

Painesville Nurseries.



NE of the most complete assortments in the world, including FRUIT and ORNAMEN.
TAL TREES, GRAPE VINES, SMALL FRUITS,
SHRUES, ROSES, HARDY PLANTS, CLIMBING VINES,
BULBS and GREENHOUSE PLANTS, in all the leading new and old varieties, of all grades and sizes.

Immense stock in storage cellars ready for immediate shipment.

Extra fine stock of Standard and Dwarf Pears, Plum, Peach, Cherries and Mulberries.

Best lot two-year (4 to 5 feet) Quince on the market.

NUT TREES-Large assortment.

Downing, Houghton and English Gooseberries—extra selected.

Strong, splendidly rooted Blackberries, from root cuttings.

Moss, Hybrid Perpetual, and Climbing Roses—strong two-year, clean, handsome stock.

ORNAMENTALS-all classes.

Get our prices before placing your orders, large or small. Special inducements for early orders.



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Catalogues and Price Lists Free.

43rd YEAR. 1,200 ACRES. 32 GREENHOUSES.

THE STORRS & HARRISON CO.,

PAINESVILLE, OHIO.

"The most complete Nurseries on the American Continent."

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MOUNT ·· HOPE ·· NURSERIES,

ROCHESTER, N. Y.

ELLWANGER & BARRY, Proprietors.

Established over fifty years ago, and still under the same management.

The largest and most complete collections of General Nursery Stock ever offered; the most approved varieties of FRUIT TREES, new and old, Grape Vines, Currants, Raspberries, Gooseberries, etc.

Superb collections of ORNAMENTAL TREES and SHRUBS, both deciduous and evergreen. HARDY ROSES, HARDY HERBACEOUS PLANTS, HERBACEOUS PÆONIES. HARDY PHLOXES.

Fine stock of Gooseberries and Currants.

Wholesale catalogue mailed free on request.

70,000 Berberry, 18 to 24 inch.

12 to 18 inch. 100,000 do 8 to 12 inch. 200,000 do 6 to 8 inch. 150,000 do 1,000,000 Gardner Strawberry. 100,000 Silver Maple, 2 to 3 ft. 75,000 do 1 to 2 ft. 200,000 Picea Pungens, all sizes. 100,000 Ponderosa Pine, 4 to 6 inch. 50,000 Mt. Ash, stocky, for lining out, 2 ft.

Write for prices to,

GARDNER & SON, PROP'S.,

Osage Nurseries, Osage, Ia.

APPLE SEEDLINGS—carefully graded.

PEACH TREES-No Yellows or Rosette in Nebraska.

LARGE SHADE TREES-2 to 3 inch and smaller sizes.

FOREST SEEDLINGS--Black Locust, Box Elder.

ASH AND SILVER MAPLE.

OSAGE HEDGE PLANTS.

Everything the best and prices right. Apple Grafts made to order. Our stock is all grown on new land and free from insects or disease.

YOUNGERS & CO.,

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Growers of CHOICE SPECIALTIES for NURSERYMEN and DEALERS:

Yellow Rambler Rose •

The only Hardy Yellow Climber.

LORD PENZANCE'S

Hybrid Sweet Briars •

Very valuable and pleasing novelties.

Cumberland (MARK,) Raspberry

The largest black-cap known.

Free plates of these valuable novelties furnished to all reliable houses who will handle them.

descriptive circulars at less than cost.

ROSES, new and old; a splendid stock, of strong field grown plants, on their own roots and budded.

CLEMATIS, largest stock in this country. Strong 2 yr. plants; Mme. Ed. Andre, the new red and all the best older sorts.

SHRUBS, splendid blocks of Hydrangea, P. G., and Japan Snowball as well as a good assortment of other standard kinds.

Ornamental Trees, Gooseberries, Plums. Asparagus, Rhubarb, Blackberries, Raspl Cherries. Qui

arb, Currants,

Raspberries, Apples, Quinces, Peaches, Etc.

EFIf wanting Peaches we can interest you. We have a large stock of extra fine strong trees, guaranteed free from scale or disease, and we will not be undersold. Trade List will be malied soon. If not received early this month write us for it.

JACKSON & PERKINS CO., NEW YORK.

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offer a large and choice stock of

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BUDDED APPLES, STANDARD AND DWARF PEARS, PLUMS, CHERRIES, PEACHES, ROSES, ORNAMENTAL TREES, SHRUBS AND VINES.

Our stock is of superior quality and most carefully graded. Send us your want list or come and see our stock. We issue no trade price list, but will make low prices by letter.

Do not forget the OLD RELIABLE SYRACUSE NURSERIES.

Andre Leroy Nurseries

BRAULT & SON, Directors,

ANGERS, FRANCE.

Offer for shipment Fall 1897 and Spring 1898, their large stock of fine, well graded Fruit Seedlings, Ornamentals, Roses, etc.

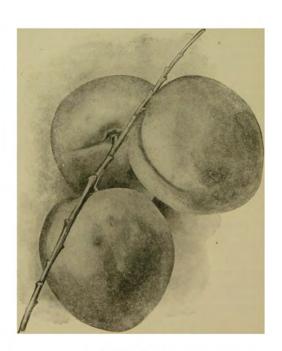
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EUREKA PEACH.

INTRODUCED BY L. T. SANDERS & SON., - PLAIN DEALING, LA.

The National Nurseryman.

FOR GROWERS AND DEALERS IN NURSERY STOCK.

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VOL. VI.

ROCHESTER, N. Y., DECEMBER, 1897.

No. 11.

TO EXTERMINATE SCALE.

DR. JOHN B. SMITH ADVISES ACTION, NOT DEPENDENCE UPON LAW AND CONVENTIONS
TO DO THE IMPOSSIBLE—RESULT OF RECENT RESEARCH.

Dr. John B. Smith, New Jersey's noted entomologist, makes the following timely observations on San Jose scale in a continued article in the *American Agriculturist*:

The San Jose scale multiplies with enormous rapidity; but so do plant lice, and some other insects, as melon growers know to their cost, acres of vines becoming covered with plant lice in a few weeks, from a few scattering individuals noticed in early summer. Is the scale so hard to kill? Yes, and no! It is no worse in this respect than some of our native scales, because on some trees infested by both San Jose and "scurfy" scales, winter treatment killed nearly all the pernicious form, while the tree is now coated with the common species which the application left unharmed. It was simply a matter of the time of treatment. The unprotected larva in the San Jose scale is just as easy to kill as that of any other armored scale, onlyand the difference is important—in scales with one annual brood one or two sprayings will reach the entire crop of larva; in the San Jose scale, which breeds continuously for several weeks, treatment against the larvæ must be made at frequent intervals during the life of the breeding scales. Another very important matter is, that if a single brooded scale is reduced by proper treatment to insignificant numbers, it takes it several years to recover. The San Jose scale, on the contrary, from the same nucleus becomes as bad as ever by the end of summer. But do we not get the same thing with the potato beetle? Kill them off in spring and then let them alone, as is the usual practice, the balance of the season, and next spring there will be just as many as before to be dealt with.

The truth is that we have not taken these facts into proper consideration, and have attempted the impossible—extermination by a single treatment or at one single season.

Now, I will make the very radical assertion that the San Jose scale is a very easy species to deal with, and that its practical extermination in an infested orchard is not particularly difficult. I will admit, however, that the treatment to accomplish this result is heroic and somewhat expensive; but if the trees are not worth the labor and expense involved, they might as well be taken out altogether, because the scales will sooner or later kill them and will at once reduce the value of the fruit, if they do not make it actually unsalable. To accomplish the result above indicated will require treatment both in winter and in summer, because winter treatment alone, whatever the medium, will, I am convinced by experience, prove ineffective, and repeated summer treatment alone might prove injurious to the trees. After January 1st, and at any time before the trees become in the least active, spray with

pure kerosene of the ordinary 150 degrees test. Be thorough, but not wasteful; use enough to make a film of kerosene capable of penetrating into the smallest crevices; but let that film be of the thinnest possible description. Do the work on a dry bright day with enough air stirring to favor rapid evaporation and do it yourself, or at least superintend, so that carelessness in the application be not charged against the insecticide as inefficiency.

Whale oil soap, two pounds in one gallon of water, will do almost as well on smooth-barked young trees; but not on rough or scaly-barked older ones, because of its much smaller penetrating power. Ten days or two weeks thereafter, trim out the trees thoroughly and carefully; cut out all the wood not absolutely needed, but do not risk spoiling or even injuring the tree. Leave enough to carry a moderate crop of fruit if the trees are in bearing. Do not trim before spraying, to avoid cut surfaces into which the kerosene might penetrate. The trimming is to remove that wood least easily reached by the spray and thus to reduce to the lowest possible point the chance of surviving scales. A few will survive almost certainly. A few trees will probably be entirely cleared; but most of them will harbor a few survivors, no matter how many treatments are made. Watch closely during the following July for traces of the scales on fruit, and as soon as such are noticed, spray again with undiluted kerosene. If applied as above directed, so as to afford a chance for rapid evaporation, no harm will be done to fruit or tree, while in nine out of ten cases the scales will be completely destroyed. Thereafter a close watch each summer and a prompt use of kerosene when scales are noticed, will not only prevent injury but will in not too great a time "exterminate" the scale. Try it! Don't rely upon laws and conventions to do the impossible!

EUREKA PEACH.

Regarding this peach, illustrated in the frontispiece of this issue, the introducers, L. F. Sanders & Son, Plain Dealing, La., say: "Eureka! Yes! We have found it one of the finest early peaches yet introduced. It originated in Bossier's Parish (Northwest), Louisiana. It is a seedling of the Chinese Cling, is medium to large, oblong; creamy white, with red blush; a very beautiful peach. Flesh tender, juicy, and of very delicious flavor; semi-cling. Ripens perfectly to the seed. Ripe 5 to 8 days before Mamie Ross, 10th to the 20th of June. The nurserymen who saw and tasted this peach in St Louis in June, 1897. pronounced it remarkable, and we have sold several thousand buds since the meeting.

J. Horace McFarland, of Harrisburg, Pa., the well-known horticultural printer, wrote us on the 25th of June in regard to peaches sent him:—

"J. H. Hale, the noted peach man, was with me Tuesday and together we ate the Eureka peach. Mr. Hale's opinion was a decidedly favorable one to this peach. The peach seemed to be of unusually good quality for so early a f uit"

DIVISION OF POMOLOGY.

Secretary of Agriculture James Wilson presents the following report of the chief of the Division of Pomology for 1897:

Descriptions of more than 550 fruits have been added to the files of the division during the year, and 175 water-color paintings, 100 photographic negatives and about 200 wax models of fruits have been made.

Large sets of fig cuttings from the collection furnished to this department in 1894 by the Royal Horticultural Society of England, have been placed in 10 of the southern states for testing. Small trees of Corsican citron have been placed with more than 100 fruit growers in California and Florida, and 350 seedling trees of Chinese persimmon, grown from seeds obtained from Pekin, were distributed to growers who gave them a careful test. Scions of 18 varieties of apples of New Zealand and Australian origin, received through the kindness of the pomologist of New Zealand, were distributed in June, 1897, to a number of growers for testing. Seeds of the "rough lemon" of Jamaica, valued in that island as a stock for orange trees, were also distributed.

Work on the descriptive card catalogue of fruits has been continued during the year, and the usefulness of the catalogue as a work of reference has been fully demonstrated.

The nursery period of a comparative test of methods of root grafting the apple, was completed during the year. The trees resulting from it were distributed to experiment stations and private planters in several states, where they can be kept under observation during the orchard period, to determine the effect of the method of propagation upon vigor, productiveness and longevity.

In addition to work already under way, it is important that a systematic effort in the preparing of maps which will show the areas where the principal fruits grown in the country are capable of being commercially produced shall be begun, and that certain fruit-producing species, which are believed to be adapted to cultivation here, either as stocks or for their fruit, shall be introduced from foreign countries.

ROOT-GRAFTING THE APPLE.

C. H. Andrews of the Minnesota School of Agriculture, gives the following directions for root-grafting the apple, in the Minnesota Horticulturist:

The object of root-grafting the apple is to propagate varieties true to name, and to get the union of the cion and the stock under the ground, where it will be somewhat protected.

The stocks used for root-grafing are seedlings, either one or two years old, the age depending on the size required for the cions. The seedlings for this purpose are best grown on a rich, moist, sandy soil, so as to get a straight, vigorous growth. In autumn, the seedlings are dug and packed in sawdust in a cold cellar, where they remain until wanted for grafting.

The cions must be wood of the previous season's growth, and should be cut late in autumn when the temperature is above freezing and, after being labeled, packed in sawdust in a cool place.

Grafting may be done any time during the winter. A cion five or six inches long is cut off at one end in an oblique direction making the cut surface about an inch or so long, then a tongue is made by splitting down across the face of the cut about one-third of its length, beginning at a point about that far from the end of the cion. A piece of root four or five inches long is treated the same way as the cion was, and the two are then united, care being taken that the inner or cambium layer of the bark of the cion and the root coincides on at least one side of the union. The graft is now wrapped wink waxed twine, or wax may be spread upon cloth or paper, which is then cut into strips and firmly wrapped around the union, also above and below it, so as to exclude all air. The latter method keeps the graft from drying out and does not cut into the bark after the plant grows. The grafts are packed in boxes in a mixture of sand and sawdust, and are kept until planting time in a cold cellar to callous over and grow together.

The land where they are to be set should be finely pulverized and rolled or planked to level the surface. As soon as there is no danger of a severe frost, the grafts may be planted. They are usually put six or eight inches apart in rows three or three and one-half feet apart, running the rows north and south. All sprouts that may have started from the root should be rubbed off. In planting, the earth must be packed very firmly around the graft, which ought to be set deep enough so that only one or two buds will show after the ground has settled.

Cultivation should be frequent in order to kill the weeds and to keep a dust blanket on the soil, but it should not be continued later than the tenth or the middle of July, as it is likely to induce a late fall growth than cannot be ripened up.

The grafts require no pruning the first year. Early in the spring of the second season, they are cut back to one or two buds, and a strong, straight shoot is sent up, which is pruned later to make it head properly. The third season, the pruning done is merely enough to keep the tree in proper shape.

The growth the trees make depends a good deal on the soil, the season and the variety. Yearlings run from one foot or less to two feet in height; two year olds, from three to five feet, and three year old trees, from five to six feet. These trees after the first year develop some roots of their own, and they are thus better able than they otherwise would be to withstand a rigorous climate.

•SCALE IN KANSAS.

Professor E. A. Popenoe has been inspecting the nurseries of Kansas for San Jose scale and other injurious pests, and in writing to the Kansas *Farmer* regarding his work, he says:

"In the course of my inspection of nursery stock, during the past two months, I have found nowhere any indication of the San Jose scale, but I found in one locality two apple trees badly infested with a species that may prove but little less dangerous if allowed to gain a foothold in our state. It is so nearly like the San Jose sale in most superficial features, except that of color, that it would likely be confused with it by the casual observer. It is, however, a light gray color, instead of a dark dusty gray, as is the San Jose scale. The species I found was determined for me by Mr. Pergande, of the United States Division of Entomology, as the "cherry scale" (Aspidiotus Forbesii), described not long ago in Illinois. The trees on which I found this scale were at my suggestion dug out and burned, along with others standing near, which might be infested. I examined all surrounding growth very closely, however, and found, as stated, but two trees infested."

THE NATIONAL NURSERYMAN.

THE APPLE CROP.

Detailed information direct from the field only emphasizes the very great shortage in the apple crop of the middle states, says the American Agriculturist. The cutting down of the yield of winter fruit from last year's record breaking total, to a tenth to a third of a crop is due to reasons easily discerned. Overproduction in 1896, unfavorable weather conditions and lack of proper attention to orchards were the chief of these. Some of the oldest apple counties say that only with one or two exceptions has there been such a poor showing in fifteen years, and farmers who always depend upon apples as a money crop are realizing but little this season. Too often such crop as has been secured is very poor in quality, possessing little merit for market. Some leading sections had a very fair crop of early varieties against a meager yield of winter fruit. Greenings, and Spys seem to have done better than Russets and Baldwins, but in many instances the kind first named ripened unusually early, turning yellow when they should have remained true to their name. In a great many commercial orchards Baldwins are a practical failure, although this is such a favorite that a quantity liberal in the aggregate has been secured, even though scattered over wide sections.

The apple exports in barrels for the week ended Oct. 23d were:

	Liverpool	London	Glasgow	Other Pts	Total
New York,	8,247	3,752	6,540	6,391	24,930
Boston,	15,063	149	_	-	15,212
Montreal,	6,07.1		2,169	210	8,450
Halifax,	_	9,146			9,146
Total,	29,381	13,047	8,709	6,60 I	57.738
Corweek last y	r, 87,859	36,934	12,916	11,070	148,779
Tot'l this sea'n	, 115,985	34,670	39,197	18,803	208,655
Tot'l last sea'n	, 622,308	232,099	202,458	25,782	1,081,647

For the week ended October 30th:

	Liverpool	London	Glasgow	Other Pts	Total.
New York,	9,092	3,836	5,420	5,889	24,237
Boston,	13,284	6,376	_		19,660
Montréal,	4,265	433	9,199	2,909	16,806
Halifax,	.,	5,410	_	_	5,410
Total,	26,641	16,055	14,619	8,798	66,113
Corweek last	yr, 65,788	50,552	28,955	11,480	156,775
Tot'l this sea	n,142,426	50,725	53,816	27,601	274,568
Tot'l last sea	n,688,096	282,651	231,413	36,262	1,238,422

Cables from Liverpool quote: Fancy Pippins \$5 40 to \$7.50 per bbl, No. 2. \$3.50 to \$5.40, fancy N Y Imperial \$4.80 to \$5.65, good \$4.30 to \$5.00, Wine Saps \$4.25 to \$4.80, Baldwins \$4.25 to \$5.40, Ben Davis \$4.30 to \$5.00.

SEED DISTRIBUTION.

Much has been said and printed regarding seed distribution by the government. Following is the comprehensive statement of the Secretary of Agriculture, issued on November 15:

—"The appropriation of \$150,000 for the distribution of seeds for the fiscal year ending June 30, 1897, provided that \$130,000 must be expended for the purchase of seeds, leaving \$20,000 for putting up and mailing the same. The seeds were purchased already put up in packages and mailed from the different cities where the contracts were held. The appropri-

ation for the present fiscal year is \$130,000, of which amount, \$110,000 must be expended in the purchase of seeds. The conditions of the law will require contracting with the smallest possible number of seed houses. The purchase of bulbs, plants, cuttings, etc., must be paid from the remaining \$20,000.

"The spirit of the law requires that the seeds, plants, bulbs, etc., be rare and valuable. Efforts are being made by the present Secretary of Agriculture to spend the appropriation for seeds, plants, etc., by purchases through agents and representatives abroad, through seed houses and scientific associations. The Old World contains many things that would be valuable to the New World. All this work, however, must be paid for out of the \$20,000 appropriated and not required to be expended for the purchase of seeds. The distribution of imported seeds and plants to the several experiment stations throughout the country and otherwise must be paid for out of the \$20,000 fund. This will necessarily circumscribe efforts in this direction. It is desirable that more of the appropriation given for seeds should be available for the introduction of what is new and rare."

The government contract for the supply of seeds for free distribution has been awarded to Henry Philips Seed and Implement Co., of Toledo, Ohio. There were 42 bids, ranging from \$69,000 to \$144,000.

NATIONAL PEACH EXPERIMENTS.

At the last meeting of the Association of Agricultural Colleges and Experiment Stations' a paper prepared for the section by R. H. Price of Texas, was concluded by the following memorial: "In view of the importance of this classification to successful peach culture in the United States, I wish to make the following recommendations:

"That a committee of three be appointed to be known as a committee on co-operative work in testing the different races of peaches.

"This committee shall consist of one horticulturist from one Northern station, one from one Southern station, and one from one Central station.

"The work of this committee shall be to find out, as far as possible, the isotherm in which each race is adapted.

"The committee may recommend to as many stations as may be thought necessary a list of varieties from the races, to test and report upon.

"The committee shall make out a suitable blank to be printed by the United States Department of Agriculture, and also to be distributed by this department to the stations engaging in the work.

"Each station will be asked to pay for its own trees. The results of this work, together with the description of the races will be written up by the committee, and will be published by the United States Department of Agriculture."

After being read, the memorial was referred to a committee consisting of Professors Goff, Mason, and Munson. The recommendation of the committee was that the following named gentlemen be made a permanent committee to carry on the co-operative work of testing the several races of peaches in the various sections of the United States. The permanent committee is as follows: Prof. R. H. Price, Texas; Prof. B. J. Wickson, California; Prof. G. H. Powell, Delaware, and Prof. L. R. Taft, Michigan.

Among Growers and Dealers.

Paraffine paper is offered by R. M. Myers & Co., Rochester, N. Y.

A. H. Herendeen is the first mayor, and S. D. Willard is the first postmaster of the city of Geneva, N. Y.

Columbian, Conrath and Cuthbert raspberry plants are offered by T. G. Ashmead, Williamson, N. Y.

Benjamin Chase, Derry, N. H., is prepared to supply the nurserymen of the entire country with labels.

Ellwanger & Barry, Rochester, N. Y., shipped 125 varieties of pears to the exhibition in Hamburg and received six valuable medals.

Irving Rouse, Rochester, N. Y., reports a marked improvement in his business. Between November 1st and 15th he shipped twelve carloads of stock.

Berberry, Gardner strawberry, Silver maple, Picea pungens, Ponderosa pine and Mountain ash in large quantities may be procured of Gardner & Son, Osage, Ia.

M. J. Graham, Adel, Ia., suffered severe loss to some of his stock by a hail storm. He has a few hundred one-year Hunt plum trees and more in prospect.

Sir Wilfried Laurier, premier of Canada, favors a reciprocity treaty with the United States, believing that Canada would be greatly benefited by seeking the nearest and most profitable market.

Letellier, Son & Go., Caen (Calvados) France, are making a specialty of Araucaria imbricata seed. C. H. Joosten, Greenwich street, New York city, is the agent for the United States and Canada.

Apple root grafts that will grow are a specialty with F. W. Watson & Co., Topeka, Kan. They put up either whole or piece root grafts for wholesale trade and offer special prices on large early orders.

It is reported that the family of Edwin Hoyt, of Stephen Hoyt's Sons, New Canaan, Conn., was poisoned through the action of a crazy servant on November 11th. All the members recovered after serious illness.

E. O. Orpet of South Lancaster, Mass., a well known and acknowledged authority on hardy plants, and E. W. Breed, a nurseryman of Clinton, Mass., recently made a tour about the country examining the parks of different cities.

O. W. Blacknall is president and general manager of the Continental Plant Co., at Kittrell, N. C., which offers 20,000,000 to 30,000,000 strawberry plants at extremely low prices so packed as to carry long distances, for delivery by freight up to March 1st.

C. E. Howland, formerly with L. L. May & Co., St. Paul, Minn., as manager of their retail nursery department, has removed to Los Angeles, Cal., and engaged in business there under the firm name of Howland Nursery Co., dealer in fancy ornamental stock.

Silas Wilson, of Atlantic, Ia., says: "The Pearl gooseberry is a great sight. There could be no more berries on the stem without crowding off the leaves. It is wonderfully productive, and I am pleased to find the quality so good. The best gooseberry I ever saw; nearly sweet. There is no question about its future."

R. J. Coryell, superintendent of parks of the city of Detroit, while on an extensive trip among the principal cities of the East recently for the purpose of buying stock for the Detroit

parks, expressed the opinion that because of its favorable latitude there is no city in the United States better situated for gardening and nursery business than Rochester.

George J. Kellogg, from Fulton, N. Y., landing where Kenosha, Wis., now stands August 2, 1835 established the Belle Cottage nurseries in 1854. He has had two years roughing it in Wisconsin pinery, three years in California and doesn't need to go to Klondike. He is a rabid prohibitionist and does not want any whiskey party man to come to his funeral; will sell you anything you want in the nursery line, and lots of things you don't want if you order them.

BETTER THAN COMMISSIONS.

Regarding the articles by Professor John B. Smith which we have reprinted, the *American Agriculturist* says:

"Certain enomologists are up in arms against Professor John B. Smith's articles in our issues of Oct. 30, and Nov. 6, on the San Jose scale. They still maintain that it is the most frightful of all pests, that state commissions to guard against it are more than necessary, and that the kerosene spray will kill most of the younger and more tender plants to which it is applied even in winter. We would magnify the necessity of teaching the public that this and other insect and fungous pests, must largely be dealt with by each individual farmer.

"A whole kingdom of commissions can't do for every farmer and fruit grower what he must do for himself in fighting pests. The tendency in a 'scare' is to overdo officialism and underdo individual effort."

HAMBURG EXHIBITION.

Regarding the recent Hamburg Horticultural Exhibition Garden and Forest says:

"The greater number of exhibitors have been Germans, but there has been conspicuous co-operation on the part of Belgians, English, Italians, French and other nationalities. America has been represented by but few displays, the most prominent being a very large and fine exhibit of evaporated and prepared fruits from California, and displays of various florist's stock by W. A. Manda. The Americans have certainly lost a distinct opportunity to push their fruit and inventions into European markets. We are looking to Europe to consume our apples and evaporated and canned fruits; and cranberries and other fruits must eventually find an outlet there. The authorities of the exhibition urged the Americans to exhibit, and certain Americans endeavored to second their efforts.

"The influx of American apples into Germany last year has thoroughly aroused the people there, and the pomological display at Hamburg represented the abundance and excellence of the fruits of Germany and the Tyrol. The effort was made largely for the purpose of showing that the pomological resources of the Old World are competent to meet the advances of the New World. A thousand barrels of American apples and twenty-five barrels of American cranberries should have been placed in storage in Hamburg in 1896, and the entire course of the exposition should have seen these products on exhibition, and every public function should have seen them supplied to the tables. It would be inexcusable if such another great European exhibition should be so completely ignored by the American public."

THE NATIONAL NURSERYMAN.

H. S. WILEY.

Horace Scott Wiley whose likeness is herewith presented resides at Cayuga, N. Y., where he was born in 1852. He has the general oversight of the Cayuga Nurseries, of which he is half owner. These nurseries, now all under the control and ownership of Wiley & Co., were primarily established by Morse & Mersereau in 1847, just half a century ago. In the extensive fruit orchards and nurseries of these early founders Mr. Wiley served his apprenticeship and gained there the practical knowledge, which has been so helpful to him in conducting his business.

The stock distributed from these justly celebrated nurseries has brought to many homes an abundant harvest of delicious fruits all over this country. Their chief specialty has been the production of stock constitutionally strong, holding that trees, as well as men, have constitutions and that the parentage

of a tree needs guarding in order to promote its vigor and fruitfulness. This needs no argument to support it. It has brought to Messrs. Wiley & Co., scores of letters congratulating them on the principle adopted by them—having received endorsements by such noted men, as Professor Bailey, of Cornell University; F. E. Dawley, director farmers' institutes; E. G. Fowler, editor New York Farmer; George T. Powell, orchardist, Ghent, N. Y.

As a side issue, during the past.ten years, Wiley & Co., have made the importation of fruit tree stocks something of a specialty.

The subject of this sketch is also a very enthusiastic member of the Western New York Horticultural Society. He has been on the executive committee for years and has had charge of this society's fruit exhibit at the state fair every year but one, since they have competed for the \$200 prize offered by the State Agri cultural Society, and every year but

one has carried off first prize. His association in this connection has placed him in touch with more members of this society perhaps than any other member, Secretary Hall excepted. And the knowledge he has gained by studying this marvelous exhibit year after year in a comparative way may be the envy of any one who has aspirations along those lines.

Mr. Wiley is frequently called to different parts of the state to judge collections of fruit. There are few who are better qualified to do this work.

Harrisons, at Berlin, Md, are offering some specialties, the Star strawberry, McIntock peach, Columbian White asparagus roots, and offer to exchange peach trees, leading varieties, best grades, for apple, standard Keiffer pear, apple and plum seedlings.

TEXAS SALES.

AUSTIN, Texas, Nov. 14.—F. T. Ramsey, proprietor Austin Nursery: "I have just commenced filling orders and have nearly three times as many as last fall. I find I have less second grade trees than ever before. While we had a long summer drouth, it rained in the spring during our best growing season, and trees were as large as I could desire by the 10th of July and but few of them made a leaf after that date. The August rains started just a few, mostly plums. This gives ripe wood and the experience of past years makes it very desirable. About 75 per cent. of my trade is in peaches and plums. Of the latter I am growing a hundred varieties, but am barred from using any Gages, as they are practically worthless here.

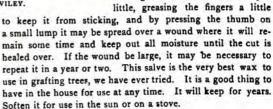
"The extremely low price of cotton has caused a great many early orders to be countermanded. I have been fearing that delivering and collecting would be very hard, but reports

from the few deliveries are quite favorable.

"The low price of cotton has a secondary effect that is favorable. It creates a desire to diversify crops and to produce home comforts at home, and so some buy trees who would not if cotton were a good price."



For a tree wash for bruised bark, or where limbs have been sawed off, say Stephen Hoyt's Sons, New Canaan, Conn., we sometines paint the wounds with gum shellac, which is quickly done; yet we think a salve made of four parts of resin, two parts of beeswax and one part of tallow, melted together, poured into water and immediately worked as one would work molasses candy, and made up into rolls of, say, a half pound each, would be a good thing to have ready for such use. By holding it in the hand to soften up a little, greasing the fingers a little





One hundred thousand hardy roses are offered by C. H. Joosten, importer for the Boskoop-Holland Nursery Association, 193 Greenwich street, New York. Notwithstanding the high tariff, Mr. Joosten is in a position to supply the trade at low rates. He has tree roses and extra hardy rhododendrons, hardy azaleas, strong-rooted clematis, standard and dwarf hydrangeas, snowballs, magnolias, etc.

The National Nurseryman.

C. L. YATES, Proprietor.

RALPH T. OLCOTT, Editor.

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COMMERCIAL FRUIT GROWING.

The close of the nineteenth century discloses conditions a study of which should be of special interest to the nurseryman. Never has there been a time when there was greater activity in the direction of meeting intelligent inquiry on the part of planters of trees. The old manner of doing business is rapidly running its course. The dissemination of knowledge is producing results in the nursery business as surely as in other branches of trade. It is an era of information; and the more the public receives, the more it seeks. Nurserymen have not been slow to adopt most modern means for the extension of business along such lines as would honestly meet the demands of the planters. Less and less is it becoming possible to practice substitution in an unfair manner; only rarely can the "model orchard" man deceive the people; planters are demanding that novelties shall bear a certificate of good character; catalogues of the present day contain photo-engravings giving actual representations of varieties, instead of highly colored lithographs. Competition and an educated public, combined with the wonderful spirit of progress of the present day is placing the nursery business, like other businesses, upon a very practical basis; and such a basis is always a sound basis. Theory is a good thing in its way, often; but practice is essential. Tales of the glittering promises of the impossible told by tree agents to prospective customers will do very well as stories of the past; but those who have started in the nursery business at a comparatively recent date have found that the sound business methods which have proved successful all along with the most substantial concerns are the only methods by which present conditions can safely be encountered.

What, then, is the future of commercial fruit growing and the part the successful nurseryman is to play in its development? It seems to us that the excellent advice given by Professor H. E. Van Deman before the Michigan Horticultural Society last summer applies equally as well to the nurseryman as to the fruit grower. Professor Van Deman said: "It is in following just one line that it may be said there is a bright future for the commercial fruit grower; and that is in doing it most thoroughly and in raising a high grade of fruit. If we will do as some are doing, after having made a good selection of locality and soil and all that sort of thing, and then do as Mr. Hale and Mr. Morrill are doing, for instance, cultivate thoroughly and thin severely and fertilize abundantly, there is no doubt that we will come out in the right place." Thorough work and a high grade will command the highest market price even in times of depression, and is that really not the only sure way of raising prices. There will always be choicer stock as compared with other stock, and the price of such stock may be raised in accordance with the demand, provided always that the purchaser knows and appreciates the difference in quality And we have argued that the tendency of the times is stronglyin the direction of such knowledge and appreciation on the part of the purchaser.

The market is seldom, if ever, glutted with exceptionally fine stock. Upon this very subject two prominent nurserymen who attended the Michigan meeting at which Professor Van Deman spoke, bear witness. J. Van Lindley, Pomona, N. C., said regarding his manner of packing peaches: "I suppose it didn't cost us ten cents more per crate, and it paid us fifty to seventy-five cents extra. We have a big reputation on our package and the manner in which we put it up, and I don't believe in the future we will have any trouble in finding a market for our fruit. Of course, the object is to have only fine peaches, and we expect to continue receiving fancy prices." A. L. Brooke, N. Topeka, Kan. said: "In Denver a man went into a packing-house and asked for Wild Goose plums. The packer didn't have any, but had some Oregon and Sand Hill plums. He asked the price. The Sand Hill plums were priced twenty cents per basket more than the Oregon plums. He took the Sand Hill plums. They were what he wanted, and though the Oregon plums were fine they were not worth anything except to look at."

If attention to details pays in fruit growing, certainly it will in tree growing, for the public is rapidly learning to discriminate. There is much more money in an earnest exposition of the value of a valuable tree than in the elaboration of a promise which it is known cannot be fulfilled.

The success of fruit growing in recent years by reason of advanced methods will surely create an increasing demand for choice nursery stock, and there are many reasons for believing that there is a prospect of increased activity in the nursery trade.

A TREE'S CONSTITUTION.

In another column reference is made to the constitutionality of trees to which a prominent New York state firm has given special attention. No doubt all nurserymen claim to give special attention to this subject; but it may be of interest to know just what this firm has to say on the question. Following is the basis upon which they claim to have secured a national reputation for the production of superior stock:

"Trees, as well as men, have constitutions. Some men are

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strong, healthy and vigorous and capable of doing what they would otherwise not be, if they had not a vigorous constitution with which to begin life's work. It is not possible for all men to start life with the blessing of a healthy constitution; it is quite possible to so start all trees and plants if the simple requirements of the plant or tree are carefully sought out. After many years of practical work and most careful observation we are absolutely certain that the chief cause of so many shortlived, sickly and unfruitful trees is caused by improper plant food in the early life of the tree. Long ago we discarded the use of commercial and other fertilizers in starting our trees and plants, as having a most disastrous effect on the long life, hardihood and fruitfulness of trees. The direct result is to produc soft wood in the early life of a plant, which the rigor of an ordinary winter will effect and so reduce the vitality of the tree, leaving it with a weakened constitution at an early age, from which it never fully recovers.

"A tree of weak constitution from any cause whatever, is much more subject to attack from insect pests than a tree constitutionally hardy. There is nothing that will so shock a tree as to stimulate it to an unnatural, forced growth up to the time of transplanting and then remove it to a soil, the fertility of which is much weaker, causing the tree or plant practically to stand still a year or more; by which it receives a shock, from which it is difficult to recover. After transplanting to the orchard where the tree is to remain, we advise fertilizers of such a character as the soil and tree may require, and applied at such times as not to produce growth late in the season; as the wood should be well ripened and hardened before going into winter.

"The temptation now, with the present low price for stock is greater than ever to get trees on the market at the earliest possible moment after the foundation stock is planted, regardless of a'ter results. We have grown fruit for the different markets a good many years and our aim is to make a tree that for hardiness, long life and productiveness, will prove valuable, not only for our own orchards, but for those of our customers near and far who, from year to year, favor us with their orders, many of them located in the great fruit districts of this country, whose sole business is to grow fruit. Our stocks, upon which our different varieties are worked, are selected with the greatest care, looking to the hardiness and longevity of the tree.

"Take one example, our cherries are budded on Mazzard (native cherry seedlings) stocks. While it takes a little longer to make a tree, examples are not wanting where trees budded on Mazzard stocks are still vigorous and fruitful at 40 years of age, while cherries grown on miserable, worthless, French (Mahaleb) stocks, the roots of which are soft and porous, 8 to 10 years is the life of the tree. The same principle of livlihood and hardiness is looked after in the propagation of our apple, pear and plum trees, all being worked on the best stocks. The truthfulness of our varieties can also be depended on, as our buds are cut largely from fruiting trees, and always attended to by one of our firm and not delegated to some one with less interest."

AN ADMIRABLE MEDIUM.

THE CRETE NURSERIES, E. F. Stephens, Manager, Crete, Neb.—
"We are very pleased with your journal and regard it as an admirable
medium for nurserymen. Enclosed find draft for \$1.00 to renew my
subscription, which expires as you state with the October issue."

NURSERY BILL ENDORSED.

At the annual meeting of the West Virginia Horticultural Society at Lynchburgh, October 14th, Professor William B. Alwood stated, "Only in a few instances is the scale spreading in West Viginia in a serious manner; in fact, most of the cases have been so well treated as largely to check the further spread of the trouble, but in some few instances an alarming spread is still going on and unfortunately, the inspector is without funds properly to execute the law. Wherever the law has been properly executed the danger is subsiding.

The discussion resulted in the society fully endorsing the inspection law and resolving to ask the legislature for an appropriation of \$2,000 to be expended in a more thorough inspection and enforcement of the present law.

A resolution was also adopted endorsing the proposed congressional enactment to prevent shipment of scale-infested stock between the states.

WHOLE ROOTS.

Editor NATIONAL NURSERYMAN:

I am glad to see this subject so sensibly treated as on page 141 of November number of your increasingly valuable paper. I have always held that to get any benefit from "whole root grafting" the seedling should never be transplanted. The seed must produce the root and the graft be inserted at the crown or a little below where the seed was planted: this is impracticable.

We have experimented along the line of first, second and fourth cuts or sections of the root; first and second are most vital and produce a better and more uniform stand; but if the fourth cut is strong, it produces just as good a tree as the first. The second is best.

Short roots and 7-inch cions are the secret of success in the trying climates of the West.

Janesville, Wis.

George J. Kellogg.

PAYING 100 CENTS ON THE DOLLAR.

Editor NATIONAL NURSERYMAN:

In the last issue of THE NATIONAL NURSERYMAN I notice an item referring to my being closed out at constable's sale on September 28th. This is interesting, inasmuch as the statement that it was for bill of nursery stock contracted in fall of 1896, is positively untrue. No nurseryman with whom I have had any dealings has ever brought an action of this nature.

I admit that I am considerably in arrears brought about by stock winter-killing and other misfortunes during the winter and spring of 1896 and 1897, and farther I am cancelling obligations as quickly as existing conditions will permit, and one hundred cents on the dollar. No doubt many of the readers of this journal have been in the same boat, realize that it is an unpleasant situation; and a large per cent. of them no doubt condemn the motives that prompted such a report, or think that the policy that when a man is down give him a kick is not honorable competition.

Laporte, Ind.

Joseph M. Neil.

Obituary.

M. Pierce, Chowen, Minn., died October 8th, of typhoid pneumonia, aged 71 years.

J. B. Spaulding, president of the Spaulding Nursery and Orchard Co., died November 10th, aged 73 years. While in his nursery he suffered a stroke of paralysis which proved fatal in a few days.

James Benedict Spaulding was the second son of Daniel and Thankful Spaulding, and was born at Marlborough, Mass., October 19, 1824. On June 1, 1848, Mr. Spaulding was united in marriage with Mary C. Smith. She died May 13, 1852, leaving two sons, Louis H. Spaulding and Milton E. Spaulding, both of whom reside here. On September 20, 1854, Mr. Spaulding was married to Cynthia A. Ewing of Rochester, N. Y., who survives him. Four children were born of this marriage. They are: Frank E. Spaulding of Denver, Col.; Albert S. Spaulding of St. Louis, Mo.; Irving E. Spaulding of Springfield, and Mrs. Cynthia E. Fisher, wife of F. R. Fisher of Springfield. Besides his widow and children, Mr. Spaulding is survived by a brother and a sister, Benjamin Spaulding of Andover, N. Y., and Mrs. Seymour Watson of Des Moines, Iowa.

Mr. Spaulding's life was a busy one, says the Springfield Journal. At the age of twenty-two years he engaged in the business of manufacturing, buying and shipping lumber from Western New York to Albany and surrounding towns. In the fall of 1857 he came to Springfield and established the nursery business which bears his name. Within a few years he had put himself at the head of a large establishment and for forty years he carried on one of the largest nurseries in the United States. One of his business friends said of him:

"His success as a nurseryman of national reputation is the result of earnest, industrious effort and of a thorough knowledge of an intricate and scientific business."

In adding to and increasing his business, Mr. Spaulding never tired. He gave the closest attention to the work of his life and was thoroughly familiar with every detail of his nursery and his extensive orchards. When the business was incorporated, he continued to pay the same attention to it and, as the president of the corporation, he was active in the management of the enterprise. When his friends suggested that he had earned and should take a rest, he always replied that he expected to die at his work. "It's much better to wear out, than to rust out," was his cheerful maxim. Never until the fatal stroke of-paralysis, did Mr. Spaulding lose his capacity for or interest in business. He found genuine pleasure in industry.

The village of Spaulding was established through the efforts of Mr. Spaulding. A station was built at the place because of his growing business there, and a post-office was established by the government several years ago.

Mr. Spaulding's company has been regularly represented at the conventions of the American Association of Nurserymen.

SORRY HE BURNED TREES.

Professor Mark V. Slingerland, of the Cornell Experiment Station, Ithaca, N. Y., commenting in the Rural New Yorker upon the plan of a correspondent of using a wire brush to scrape San Jose scale from trees says:

"C. T. is right in saying that, if a tree is worth an effort to save, it should not be burned, no matter how badly infested it may be with the San Jose scale. We are now sorry that we burned a few dwarf apple trees which were found almost incrusted with the scale here on the horticultural grounds. Our experience in treating the remaining less-infested shrubs, leads us to believe that this insect can be controlled just about as easily as many other insect pests; for instance, the pear psylla or the pear midge. The main point in all efforts to control these little foes is thoroughness. There is altogether too much hap-hazard, half-way spraying done by our fruit growers. This San Jose scale has come to stay with our eastern fruit growers; it is so thoroughly distributed now that one hardly dares to hope that it can ever be exterminated in the East. Only the other day, we received a dozen or more pears grown on a young tree in the Hudson River Valley, which were so nearly covered with the scales, that it seemed as though they could not have been grown in the East, where the insect has so recently made its appearance.

"In August, we reported that a very careful examination of the sprayed shrubs here at Cornell, had failed to reveal any living scales. We made another search a few days ago, and after half an hour's closest scrutiny, one young scale just settling down to work was found. Near by, two or three other very young ones were located, and soon the live mother of these was seen only about a foot away on the same branch. Further search on a shrub which had received only the two sprayings with the kerosene-water mixture (the trunks had not been washed with the whale-oil soap), revealed a dozen or more live scales on several branches. Thus the pest was not entirely stamped out here this summer. However, the results already attained are beyond what we had expected when the thousands of living scales were seen massed on the trunks of these shrubs in the spring. If we had not made the mistake of burning the worst infested trees, we are confident that our experiment could have been made still more decisive.

"A good share of our success must be credited to the one who held the nozzle. Mr. Gould, who assists Prof. Bailey in his spraying experiments, understands what spraying means, and he sprays to kill, not to see how quickly he can get the disagreeable job done. I do not attribute so much importance to the kerosene-water mixture that we used as to the thoroughness with which it was done. I believe that equally thorough work with kerosene emulsion, or whale oil soap would have given equally as good results. The kerosene-water mixture has the decided advantage of requiring no trouble to make it. The Deming Co., make several styles of pumps with the kerosene attachment. We shall spray the infested shrubs here at Cornell again this fall as soon as the leaves are off, and, while we can hardly hope to exterminate every solitary specimen, I believe that we will have very hard work to find enough live ones to make a quorum next spring.

"C. T.'s brush plan is good, and will help very materially in the warfare. One cannot hope to exterminate this pest with one or four sprayings, in one week, or one year; but the pest can be controlled and held in subjection, quite as easily as the pear psylla, or many of our common insect pests, providing that the one who holds the nozzle is made of the kind of stuff that pervades our most successful fruit growers. "This San Jose scale is not so big a 'bug-a-boo' as it has been painted. Give it a 'big black eye' this fall, after the leaves are off, with whale oil soap, Leggett brand, two pounds dissolved in one gallon of water. Be sure you hit it in the eye; don't shut both eyes when you shoot, or let the hired man guess at it. Then, before growth begins in the spring, get in another good shot, 'blacking its other eye,' if possible. Perhaps the kerosene-water mixture, one of kerosene to five of water, will prove equally as effective as the whale-oil soap in the fall and spring. I know of one man who has 300 bearing apple trees in the center of a large orchard which he will treat for this pest with the kerosene-water mixture until he gets the upper hand of the chap, or finds that the mixture cannot be depended upon to do the business. Don't let an infested tree go through this winter without a bath of soap or kerosene."

RENEWING TREED LANDS.

Professor L. H. Bailey of Cornell University, recently made some experiments at Dansville, N. Y., which are of general interest among nurserymen as touching a subject upon which much study has been directed. Regarding the matter Professor Bailey, writing to the editor of the Dansville Advertiser, says:

"As to our experiments at Dansville upon nursery stock, I will say that the results have been most gratifying. We started out with the purpose of discovering what value commercial fertilizers may have in renewing lands which have been rendered comparatively unproductive by several crops of trees. The nurserymen of Dansville have taken the greatest interest in the work and have co-operated in the experiments in a most public-spirited way. The experiments were carried on upon the places of Messrs. Morey and Hartman, and those gentlemen have applied the fertilizers and kept the notes, and have done the other necessary work in the most thorough and painstaking way.

"The experiments have now been running three seasons. Upon the Morey patch it was the endeavor to determine what effects the various commercial plant foods might have when applied singly, and also in combination. The plantations have been watched by the nurserymen, and I have also visited them as often as I could; and now when the trees are ready to dig, we are unable to see any difference whatever between any of the plats. That is, the experiment seems to show that upon this piece of land, plant food is not needed so much as some other kind of treatment.

"What that other kind of treatment should be is a matter to be determined; but I think there can be little doubt amongst nurserymen that good cultivation, the use of stable manure, and the occasional use of a green crop would solve the difficulty. Upon Mr. Hartman's place the experiment has been of a somewhat different nature. In the first place, he has endeavored to determine if crimson clover can be practically grown amongst nursery trees and thereby supply the place of the more expensive stable manure. Mr. Hartman is of the opinion that the crimson clover is very useful in the nurseries, and that it is no disadvantage, so far as tillage of the plantation is concerned; but he is very doubtful as to whether it is going to be possible to get a good stand of crimson clover in the latitude of Dansville. In some seasons the crimson clover catches and grows well, and in other seasons it does not. The prob-

ability is that Canada peas will prove to be a more reliable catch crop than crimson clover.

"Mr. Hartman has also made experiments upon the use of nitrogen upon hard land where pear stocks are growing, and this nitrogen fertilizing has been compared with stable manure. The stable manure plat has given the best results. Where nitrate of soda has been applied, the leaves are holding a little longer this fall; where sulphate of ammonia was applied, the leaves are falling about the same time they are on the stable manure plat. These experiments again emphasize those made by Mr. Morey—that the application of plant food itself may not solve the difficulty of the treed lands."

TO MAKE PEAR TREES BEAR.

Fruit trees of any kind frequently grow with great luxuriance. In this they are usually unfruitful. No tree commences to flower and fruit, until its vegetative exhurberance has been somewhat checked. Those who understand the art of fruit culture thoroughly, can bring these wayward trees into a straighter line of duty by root-pruning them. It is affected by digging a trench around the tree, and then filling it up again with the earth that has been thrown out. This cutting off the ends of the roots causes check to the extreme vigor, and the result is the production of flowers instead of branches. The distance from the trunk that the trench should be dug, will of course depend upon the age and size of the tree, as also on its ratio of luxuriance; the aim should be to dig so as to cut off about one-third of its roots. The pear, as well as other fruit trees, is particularly benefited by rootpruning. It can be carried out at any time during the fall or winter season. - Meehan's Monthly.

Foreign Motes.

Immense orchards of apple trees have been planted in Australia. It is a favorite home of the apple. Nearly a hundred thousand cases of apples had been sent from Australia to England up to June 1st, most of them being sent from Tasmania.

Many trees that formerly flourished in the North of France, are no longer found except in the extreme south, and a large number of species have entirely disappeared. The lemon no longer grows in Languedoc, and an orange tree cannot be found in Roussilon. The Italian poplar, so common and picturesque in ancient French etchings, is to-day rarely found on French soil.

Portraits of the sixty distinguished horticulturists upon whom the council of the Royal Horticultural Society of Great Britain conferred the Victoria medal of honor in horticulture were presented as a supplement to the issue of November 20th of the Gardener's Magazine. It is a handsome sheet suitable for framing.

SAN JOSE SCALE ON FRUIT.

Editor NATIONAL NURSERYMAN:

I am more afraid of the spread of San Jose scale on the fruit, than on trees and plants. Some united efforts should be taken to bar the fruits coming from infected districts.

Janesville, Wis. GEORGE J. KELLOGG.

MICHIGAN HORTICULTURISTS.

At the annual meeting of the Michigan State Horticultural Society at Ithaca, December 1-3, Professor M. B. Waite of the National Division of Pomology will treat of plant diseases. The matter of inspection of orchards and nurseries will be presented by Professor Hedrick of the Agricultural College, who is nursery inspector under the law passed last winter. He will tell of his experience in its operation, as well as advance ideas concerning the general subject. Probably some of the nurserymen of the state will be heard from upon the same topic.

R. Morrill, Benton Harbor, Mich., at a recent meeting of fruit growers of Michigan said: "Michigan is getting to a condition where it produces an enormous amount of fruit. We must begin to handle it in carloads. Buyers are looking for that trade everywhere, but are not looking for it in a place where, when they order a thousand baskets of grapes or peaches. they don't know what that means. If they order a thousand fifth baskets of peaches, and it means fifths, sixths, and sevenths when they get them, they are not going to deal there. Other places are taking the business we should have. If the buyer can sit in his office and can telegraph over here to the head of an organization, 'We want a carload of apples, standard barrels and standard packing,' and a man can quote back a price to him, and furnish the fruit immediately, even if collected from a dozen people, and that fruit opens up exactly as the buyer expects, you at once have a trade established. Now, where in Michigan can we do that? But when you have established a standard, and keep working to it, with the transportation facilities you have (unequaled by any fruitgrowing state in the Union), you have the key to the situation. Until that is done we are all at sea. I am sorry that, with 500 fruitgrowers in the vicinity of St. Joseph and Benton Harbor, there are not more here. I wish they were, for all this is a matter of self-preservation. I venture that, unless some calamity happens to our fruit, within ten years many of our people will find it difficult to pay their taxes; many, perhaps, will go out of the business in disgust, unless they are willing to use business-like methods, as do other business men."

CAUSE OF BLIGHT AND YELLOWS.

Dr. Erwin F. Smith, pathologist of the U. S. Department of Agriculture, is satisfied that peach yellows cannot be cured by any methods of culture, fertilization, or other treatment. The only thing to do is to dig out the tree, root and branch, and burn it up. He says that he has proved beyond a possibility of doubt that peach yellows is contagious, and communicated from one tree to another.

An interesting feature of his recent lecture in Rochester was a stereopticon, which showed sections of the leaves and stalks of plants. In these enlarged views, it was seen that through the leaf are veins or canals through which liquids were passing. The veins or tubes were connected with a larger one extending through the branches and body of the tree. In every leaf there are openings on which bacteria gather. These bacteria, increasing with marvelous rapidity, produce an acid which eats away the ends of the leaf tubes. Then the bacteria descend through the tubes into the leaf, and thus journey on into the branches and down to the main stalk or trunk.

Dr. Smith has proved beyond doubt that this is the method of the bacteria which causes blight in the tomato and cabbage. Pear blight also works in this way, and, possibly, this is also the method of peach yellows bacteria. He says, "there is not a particle of doubt that pear blight is caused by bacteria." He has often found germs of bacteria two feet below the diseased part of the limb of the pear, and in cutting out blighted wood, one should cut at least two feet below the lowest darkened point of the bark.

POISON IVY.

A correspondent writes: "We notice in a catalogue an offer of Rhus radicans, known as Ampelopsis Hoggii in England. This is Rhus toxicodendron (or a variety of it, at best) and we think nurserymen should be warned before they order it. There is quite enough of it in America now. We knew Ampelopsis Hoggii, so-called in England, and the year after we started here, we had three plants sent over to compare with Rhus toxicodendron, and could see no difference in anyway between the two. Others who saw them said the same. If you will make some notice in your paper, we think every nurseryman likely to import will be warned."

NEW YORK FLORISTS' CLUB.

The report of the tariff committee of the New York Florists' Club is as follows:

The special tariff committee beg to report that they have given the proper classification of plant and nursery material careful consideration during the time they have had this matter in charge, and in view of the present situation of tariff matters before Congress and the custom authorities, recent legislation, etc., request that the committee be now discharged.

It may be a matter of gratification, whatever the views of individual members may be in favor of either high tariff or low rates of duty, that the principle of uniformity of classification, for which the committee have contended, has been practically adopted in the recent tariff laws.

In asking for their discharge the committee desire to express their thanks and appreciation for the cordial support given to the work of the committee by the officers and members of the club, as they have coperated from time to time toward accomplishing the object for which the committees were appointed. FREDE. W. KELEEY, Chairman.

CANADIAN SCALE CONVENTION.

. A despatch to the New York Sun from Ottawa, dated November 20th, says:

The horticulturist who was commissioned by the Government of Ontario to inquire into the sources whence the San Jose scale has been introduced into the fruit orchards of Ontario, reports that the pest came from stock imported from California. Fruit growers of Ontario are seriously alarmed at the spread of the pest, which will necessitate the destruction of thousands of dollars' worth of fruit trees, and it has been decided to call a general convention early in December.

At this meeting two propositions will be passed, one calling upon the Dominion Government to prohibit the importation of all nursery stock from California, and the other, that the government be asked to appoint competent inspectors to examine all such stock imported from other sections of the United States before it is admitted into Canada.

The Messrs. Veitch & Son, Chelsea, England, have produced new gooseberries, Langley Gage and Langley Beauty. The fruit of the former is described as more than one inch in long diameter, oblong, yellow, slightly hairy, and with a swee flavor, agreeably mixed with a suspicion of acid.

CARE AFTER PLANTING.

Professor H. E. Van Deman calls attention to the modern directions for the care of nursery stock just after planting. Recent study of the subject of conservation of moisture has indicated new methods. He says:

Planting is over for this season and it is to be hoped that those who have had the benefit of the repeated and explicit instructions given in the rural papers regarding how to do it properly, have done their duty in following them. It is possible that some have been so thoughtless or so jealous of the ground the trees are to occupy as to have planted them in wheat fields; or, have sown oats or grass seed among them before or just after planting them. If any of these things have been done, it is a great pity, and serious injury will almost surely result unless prompt and wise action is taken. In fact, time has been already lost, and valuable time, too, for the early part of the growing season is the most important. I know the excuses given, about economizing ground and labor in growing the crop and the trees all together; and I have heard the promises a thousand times (usually unfulfilled) as to how the trees would be dug around or mulched. But the circumstances are against the trees. They can not do nearly so well as if they were in ground that is cultivated all over. It should be thoroughly understood that capillarity works horizontally as well as vertically. This is the philosophy of a cultivated piece of ground being robbed of its moisture by an adjacent one that is not cultivated. One sucks the other dry. We should also fully understand that frequent stirring of the surface soil breaks up the infinitely numerous capillarity tubes, or channels, through which the water escapes to the surface, where it is evaporated and absorbed by the air. The loose surface is a sort of mulch. Where no such dust mulch is on the surface, as in a field of small grain, or grass, the evaporation goes on uninterruptedly. And if there is a little patch of cultivated ground in it, as in case of a tree planted there and dug around, horizontal capillarity will soon draw away its moisture. In addition to natural evaporation from the soil a growing crop of grain, grass or weeds pumps from the soil immense quantities of water which is needed in the functions of its growth, and a large part of it is passed from the leaves into the air. The proper thing to do in case this unwise planting or seeding has been done is to plow up and plant the ground to corn, potatoes, or some other crop that must be cultivated frequently. It is either one or the other, stunted and damaged trees or thorough cultivation.

Where irrigation is possible there need be little or no loss of trees or plants of any kind, if water is applied in moderate quantities and the surface soil kept in a finely pulverized condition. But there is danger of over-irrigation, because the water is so handy that one is likely to use it too freely. I have often seen the ill effects of too much water in the irrigated region of the West. The fruit was of poor quality, and the trees often diseased and sometimes dead from their roots having been "drowned." Where we have to depend on rains or soil moisture, we may be forced to lose some newly set nursery stock, no matter how faithfully we care for it. There are often unfavorable spells, some too dry and some too wet, hail storms, and insect and fungus foes to fight; but we must be sure to do our duty. Nothing short of the most thorough pulverizing of the surface will satisfy. This should be the main object of the season's work after planting; for in it lies the

chief secret of success. The soil beneath the stirred surface should not be wet, neither should it be dry, but moist. In most soils underdraining is not necessary to prevent too much water in the soil; but it should be done wherever there is such danger. The proper plan is, deep plowing before planting, to loosen the soil and make it porous, and then keep the surface for about two inches deep just as loose and dry as it is possible to make it. The more like dust the surface is kept the less will be the evaporation of the moisture from below. Some have an idea that deep cultivation is the proper method, but this has been clearly proven by many carefully conducted experiments to be a mistake. The very best practical fruitgrowers now cultivate very shallow but very often. It is truly surprising to see the benefit to growing trees and plants there is in running over the surface with a light harrow or similar implement. Last summer I visited one of the best fruit farms in the Michigan peach belt, where the Breed weeder and other like tools are used after the first plowing, and I never saw lands nor fruits in better condition. I was told by the proprietor that one man with one horse went over seventy-five acres of peach orchard twice a week with those wide but light implements.

Mulching has its good points also. Where it is very dry, vegetation is in a perishing condition and it is almost the only salvation of newly-planted trees, vines, or bushes. Almost any kind of soft, trashy material that will hold the moisture below it will answer the purpose. All the water from rains or that applied artificially will remain in the soil until consumed by the growing plant.

THE JAPANESE CHESTNUT.

As is now well known among fruit growers, the Japanese chestnut produces nuts of a large size—much larger than the Spanish, or Italian, which in turn is larger than our native sort. It is not, however, so well known that this—the Japanese—is but a small tree, adapted to orchard growth, as are apples and pears. It has not been in cultivation here long enough for it to attain full size, but from its appearance and its fruiting quite young, it evidently is not of as large growth as the others mentioned. Trees of but twelve feet in height are often quite full of flowers; and in this condition are ornamental lawn trees as well as desirable for their nuts.—Mechan's Monthly.

POMELO-NOT GRAPE FRUIT.

We have been asked repeatedly to assist in trying to correct the mispronunciation and conception of the word Pomelo. This most valued fruit is commonly miscalled Grape Fruit by not only those that are unacquainted with its nomenclature, but by very many that should know better. We notice that nurserymen advertise in Florida papers enumerating Grape Fruit among their other specialties. This fruit belongs to the citron family and has no relation to grapes or vines, and bears no resemblance whatever to the fruit of the vine. Let us call this fruit by its proper name, one by which it is known in its habitat—Pomelo. This fruit was introduced into the West Indies by Capt. Shaddock, who brought it from China in the eighteenth century. The proper name is Pomelo, although sometimes improperly called Shaddock.—California Fruit Grower.

Recent Publications.

The West Michigan Nurseries, Benton Harbor, Michigan, catalogue, lists a large variety of fruit and ornamental stock in an attractive manner

Recent Cornell University Agricultural Experiment Station bulletins give interesting studies and illustrations of mushrooms, and present a sketch of the origin and progress of agricultural extension work.

The transactions of the Massachusetts Horticultural Society for 1896 have been published. They are of especial interest as being those of a society incorporated in 1829. The subject matter is comprehensive.

The Massachusetts Fruit Growers Association, is doing excellent work for its members and the fruit growing interests of the state generally. The president is George Cruikshanks, of Fitchburg. The report of the third annual meeting shows work of a very practical nature.

Among recent bulletins issued by the U. S. Department of Agriculture, are the following: "The Camphor Tree" giving conditions and methods for successful cultivation, outlook for future market, etc. "Methods of Curing Tebacco," "Age of Trees and Time of Blazing Determined by Annual Rings,"

An alphabetically arranged postal and telegraphic list of the nurserymen, seedsmen, and florists of Great Britian has been issued by B. Wynne, 1 Dane's Inn, Strand, London. It is divided into a general list comprising 75 pages, a list of telegraphic addresses, and a London trade list. It will prove valuable to all who have dealings with nurserymen of Great Britain.

Frederic V. Colville of the Divison of Botany, U. S. Department of Agriculture, says of the new work on North American flora by Professor N. L. Britton, professor of botany at Columbia University, and Hon. Addison Brown, president of the Torrey Botanical club: "In the line of books bearing the stamp of scientific authority, and at the same time adapted for popular use, this is unquestionably the best work ever issued on the flora of any part of the United States." The work is in three volumes, the first two of which are now ready. Each Imp. 800, \$3. New York: Charles Scriber's Sons.

The Macmillan Company, New York, announces that the compilation of an "Encyclopedia of American Horticulture" has been begun under the editorial supervision of Professor L. H. Bailey of the Cornell University. There has never been a really good and adequate presentation of American horticulture, and this book proposes to make good the want. It is to cover horticulture in its widest sense, pomology, floriculture, vegetable gardening, greenhouse matters, ornamental gardensing, the botany of cultivated plants and the like. The work will consist of signed articles by specialists, profusely illustrated, by engravings made expressly for it. The articles will be arranged alphabetically, and it is expected that the number of entries will be about 6,000, comprised in three large volumes dated 1900. The earnest co-operation

of every student of horticultural pursuits and every lover of rural life is solicited in order that the work may be worthy of the opening of the twentieth century.

There has just been issued by the well-known French editor of scientific works, Octave Doin, 8 Place de l'Odèon, Paris, a "Manuel Pratique et Raisonné des Cultures Spéciales; Plantes racines, Céréales, Plantes fourragères, Plantes industrielles, Assolements, Prairies; rédigé d'après les sources les plus autorisées et basé sur de nombreuses expériences par Paul de Vuyst, Docteur en droit, Ingénieur agricole, Inspecteur adjoint de l'Agriculture. Un volume in 12 de 264 pages avec 29 figures dans le texte; prix. 4 fr. The work is a more or less comprehensive treatise on the preparation of the soil, the growth and treatment of the potato, beet, carrot, parsnip, turnip, wheat, rye, oats, barley, clover, bearded vetch, spurrey, maize and various forage crops; also flax, hops and tobacco; a succession of crops and the treatment of meadows. Diseases of the plants named are discussed and remedies are cited. It is interesting to note the French method of agriculture as detailed in this work, in the introduction to which the author very properly declares that the first object has been to make the book entirely

Among the many horticultural publications of 1897 none is more timely than the excellently arranged volume entitled "The Water Garden", by William Tricker who has spent a lifetime in the propagation and arrangement of aquatics. This work embraces information on the construction of ponds, adapting natural streams, planting, hybridizing, seed saving, propagation, construction of aquatic houses, wintering, correct designing and planting of banks and margins and cultural directions for all ornamental aquatics. It is profusely illustrated with nine plates, eighteen full page descriptive views and numerous other sketches in the text. There is a growing interest in the culture of aquatics and this book will do much to extend the desire to incorporate this important branch of garden craft in plans for the ornamentation of public parks and squares and private estates. A noticeable feature of Mr. Tricker's book is the attention paid to the small as well as the large interests in this connection. In his preface the author says: "Of late years interest in the cultivation of aquatic plants has grown enormously; not only are Water Lily ponds now features of our public parks and larger private gardens, but even in the back yard of the suburban resident one can frequently find a few tubs or a small tank where the cultivation of Water Lilies and of the Lotus is indulged.' Much attention is paid in this work to the surroundings of the water garden, the arrangement of the banks of the ponds. This is a most important part of the general plan. The book gives a descriptive list of Water Lilies with cultural memoranda, including hardy Nymphaeas; tender Nymphaeas, day blooming and night blooming; Victoria and Euryale; Nelumbiums, also miscellaneous aquatic plants, ornamental grasses, bamboos, orchids, pitcher plants, ferns and hardy perennial plants and trees for margins of ponds and lakes and moist ground. The illustrations are particularly attractive. Cloth boards, large 8vo., pp. 120. \$2. New York: A. T. DE LA MARE PTG. & PUBG. Co.

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Apples, Cherries, Figs, Pears, (an extra fine lot of 100,000 standard 2 and 3 years, largely of Kieffer), Paper Shell Pecans, Pluns (Japan) on Marianna, English Walnuts, Grape Vines, etc. Peach Trees in car load lots.

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Two acres in Canna.

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25,000 Japan Plums-One year old from bud.

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100,000 Asparagus-Conover's, Barr's and Palmetto, 2-year old. 20,000 Apple Trees-One and two years old.

2,000 Norway Maples.

4.000 Carolina Poplars.

Peach and Plum Buds ready June 20th.

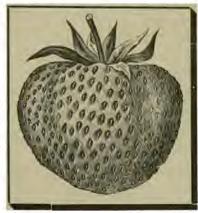
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Plants 🙈



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HE STAR is probably the greatest novelty this season. The plant is vigorous and a strong grower with healthy green foliage. The berry is large and handsome in appearance. It is as near perfection in shape as possible resembling Gandy. Season second early.

Our stock of plants consists of the following varieties and they can be dug any time during the mild weather in the winter months and as late as May 15th, packed in damp moss and in light crates made expressly for this purpose, and our price is away down. Send your list to be priced.

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Heavy cropper and plant hardy. Price very low. Asparagus Roots, Columbian White, Donald's Elmira Palmetto,
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Currants, 2 years strong. North Star, Victoria,
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Plum or Peach Root, 1 year. Red June, Imperial Gage, Chabott, Willard, Kelsey, Abundance, Ogon, Berckman, Burbank and Satsuma.

Plum on Plum Root, Abundance, Burbank and Satsuma principally.

Apple Trees 2 years, both budded and grafted.

PEACH TREES.

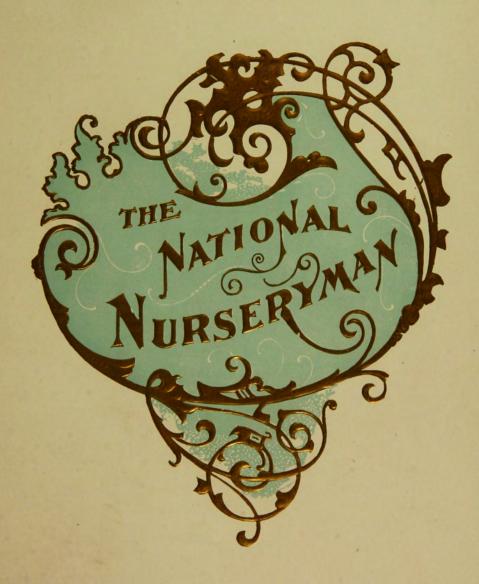
We have cut that block of peach trees more than half in two and the other half must go before May. Do you want a chance? The price is right. Send your list of wants to-day. Varieties left, 1 year from bud, also most of same varieties in June buds. New Prolific, Triumph, Greensboro, McIntosh, Lewis, Fitzgerald, Sneed of the new ones.

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Elberta, Old Mixon, Fox Seedling, Smock Free, Geary's Holdon, Reeve's Favorite, Stephen's R. Ripe, Chair's Choice, C. Late, Moore's Favorite, Yellow St. John, Lemon Free, Champion. Hale's Early, Golden Drop, Mt. Rose, Crosby, Snow's Orange, Bray's Rare Ripe, Waterloo, Troth's Early, Early Rivers, Levy's Late, Stump the World, Ford's Late White, Alexander, Morris White, Walker's Vara Free, Globe, Wager, Salway. Wonderful and Wheatland.

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BERLIN, MD.



January, 1898.

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Superb collections of ORNAMENTAL TREES and SHRUBS, both deciduous and evergreen. HARDY ROSES, HERBACEOUS PLANTS, HERBACEOUS PÆONIES. HARDY PHLOXES.

Fine stock of Gooseberries and Currants.

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APPLE SEEDLINGS -- carefully graded.

PEACH TREES-No Yellows or Rosette in Nebraska.

LARGE SHADE TREES-2 to 8 inch and smaller sizes.

FOREST SEEDLINGS-Black Locust, Box Elder.

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PLUMS. CHERRIES,

CLEMATIS, CURRANTS, GRAPE-VINES. APPLES, QUINCES.

if Needing Std. Pears or Peaches we can interest you. We have a large stock of extra fine strong trees, guaranteed free from scale or disease, and we will not be

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Our stock is of superior quality and most carefully graded. Send us your want list or come and see our stock. We issue no trade price list, but will make low prices by letter.

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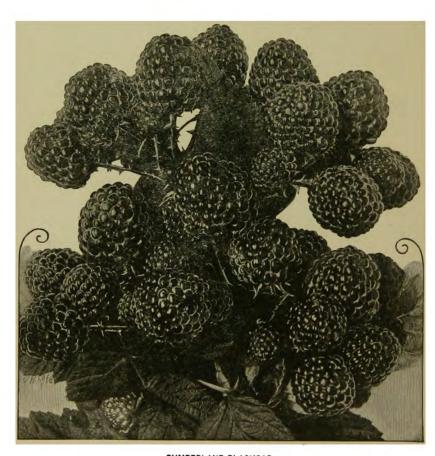
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VOL. V.

ROCHESTER, N. Y., JANUARY, 1898.

No. 12.

THE HORTICULTURISTS.

Proceedings of Annual Meetings of Interest to Nurserymen— Nine of the State Societies Discuss Trees and Fruits— Prominent Nurserymen as Members and Officers.

The president of the Indiana State Horticultural Society, C. M. Hobbs, of the well-known nursery firm of Albertson & Hobbs, Bridgeport, called the thirty-seventh annual meeting of the society to order on December 7th for a three days session. Among those present were Professor M. B. Waite, of Washington; Professor H. E. Van Deman, Parksley, Va.; J. H. Hale, South Glastonbury, Conn.; Professor James Troop, Lafayette, Ind.; E. Y. Teas, Irvington; J. K. Henley, Greenfield; J. C. Grossman, Wolcottville.

President Hobbs in his annual address referred to the wonderful progress made in the cultivation of fruits since the organization of the society 37 years ago. He said:

"We have added many names to the list of pears, so that we have them earlier and later than formerly. Among the native varieties, Tyson, Lawrence, Vermont Beauty, Arnold and others, we have gained hardiness of tree without loss of quality, and have thus extended the northern limit of peargrowing. The cherry for this latitude, the Morello type, has not advanced much beyond the old Early May, or Richmond. We have some valuable additions, however, to the varieties we can grow here in Dyehouse, Montmorency and Late Morello. In plums we have added some good ones from Europe, and recently a distinct class from Japan. The pure Japans as a rule have proved too tender for the climate of Central and Northern Indiana, but the crosses between the native and Japans give much encouragement of great benefits to be reaped. Our native varieties have attracted a good deal of deserved attention; often succeeding where European and Japan varieties fail.

"There has been almost no well-directed scientific effort at improvement in our native fruits. Our native persimmon, paw-paw, chestnut, hickory nut, and walnut have had little done for them either by careful selection or by cross-breeding. The time has fully come when we should have a higher appreciation of these rapidly passing native fruits, and do something for their improvement and perpetuation.

"With our advancing civilization and ready communication with all parts of the world, we have added many desirable varieties of trees, plants, fruits and flowers, and with them many new and destructive insects and fungus diseases. The most dangerous pest with which we have to contend is the San Jose scale. This association should demand state legislation, authorizing competent inspection, treatment and, if necessary, destruction of infested stock. There must be national legislation and concerted action throughout the country if the pest is stamped out. Governor Mount has taken in the situation and appointed our secretary to act as state entomologist. The

place is of sufficient importance to warrant the next legislature in creating such an office."

President C. M. Hobbs, Professor J. Troop and W. W. Stevens were made a committee to draft a bill for presentation before the next 1 gislature for the elimination of the San Jose scale. President Hobbs was appointed delegate to the annual meeting of the State Horticultural Society of Illinois in January, with E. Y. Teas, as alternate.

The following officers were elected: President, C. M. Hobbs; secretary, Professor James Troop, Lafayette; treasurer, Sylvester Johnson; vice-presidents, southern district, Mrs. W. W. Stevens; south-central district, J. A. Burton; north-central district, E. Y. Teas; northern district, George F. Newton.

IOWA.

The Iowa Horticultural Society held its thirty-second annual meeting in Des Moines, December 14th to 17th. Among nurserymen present were: Ex-President Silas Wilson of the American Association of Nurserymen; Hon. C. L. Watrous; M. J. Wragg, Waukee; C. F. Gardner, Osage; William Bomberger, Harlan; Henry Schroeder, Sigourney; B. F. Ferris, J. C. Ferris, Hampton; W. C. Haverland, Fort Dodge; Elmer Reeves, Waverly; Professor J. L. Budd, Ames; A. Bronson, New Sharon; W. H. Guilford, Dubuque; W. E. Chapin, J. W. Hill, Des Moines; George H. Van Houten, Lenox.

President F. M. Powell, of Glenwood, in his annual address, said:

During the year I have received a number of letters asking if the State Horticultural Society had given authority to any tree agents to represent the stock they were selling as being recommended by the society. Complaints have also come to my notice of orchards coming into fruitage, bearing entirely different varieties of apples than what the purchaser bargained for. This sonly a repetition of the old story, but it suggests that continued efforts should be made on the part of the society to suppress the evil. It may be that those agents should be required to present a certificate or license, to sell, with a guarantee from the nursery firm they represent that the stock sold is genuine and true to name. I therefore suggest that the society instruct the legislative committee to take this matter up and draft a bill covering the points involved as far as the constitutional limits will permit, and also write an act and present it to the legislature to protect us from infected nursery stock—San Jose scale and other insects, as far as deemed practical.

The president urged the teaching of horticulture in the public schools and State Superintendent Sabin read a paper on the subject.

·Mr. Haviland, nurseryman and extensive fruit grower of Fort Dodge, gave it as his decided opinion, based upon twenty years of experimenting with many varieties of apple seedlings, that the Wealthy is the best adapted for the climate, soil and environing conditions of Northern Iowa. Mr. Haviland, who owns and has personally superintended the planting and nurture of an orchard of 1,000 trees, from which he sold \$2,000 worth of fruit the present year, said that the superior excellence of the Wealthy apple over the Jonathan, Duchess,

Willow Twig and other common varieties had received ample demonstration at his hands.

A. F. Coleman, nurseryman, of Corning, read a most instructive paper on "Horticulture in the South." J. G. Berryhill, of Des Moines, read a paper on "The Plum." The programme included several other papers.

The following officers were elected: President, C. F. Gardner, Osage; vice-president, M. J. Wragg, Waukee; secretary and librarian, G. H. Van Houten, Lennox, re-elected; treasurer, W. M. Bomberger, Harlan, re-elected.

MAINE.

At the recent meeting of the Kennebec county horticulturists the future policy of Maine fruit growers was considered by Professor Elijah Cook of Vassalboro.

"Farmers seem discouraged at the result of the fruit crop for the past two years, but they should not give up the most profitable occupation man can engage in. Fruit properly handled last year was not disastrous. Shipments from December 23d to March 23d ranged from 14 c nts net per barrel to \$2.10, with an average net price of \$1.19 per barrel. This was one shipper's experience, and he realized over \$1,000 for his crop of apples. Some were a loss, but the average was good. Apple buyers made a good thing last year, and the producer ought to have had it. Orchards need high cultivation. It pays in New York, it will pay in Maine. We have the advantage. A young orchard there of eight acres, nine years after setting, averaged four barrels to a tree. It was treated the same as a cornfield. Mr. Jones, a friend of mine, uses from fifteen to twenty tons barn manure per acre on his orchard besides commercial fertilizers. He picked 176 barrels of fruit from sixteen trees; eleven barrels to a tree. Such treatment gives results. Farmers must put 'can't' out of their vocabulary. Last year's crop will prove a blessing owing to its distribution. There is no such thing as overdoing the business. Consumption is growing rapidly."

E. R. Mayo advocated raising more pears, plums and grapes. There is a demand for them. There is an increase of buyers and a larger market for fruit.

MARYLAND.

The Horticultural Association of Western Maryland was organized last month in Hagerstown, and the constitution and by-laws will be adopted at their next regular meeting this month. The following officers were elected: President, William D. Hughes, Smithsburg; vice-presidents, J. Pearson Loose, Hagerstown, and Samuel Dayhoff, Ringgold; secretary, Arthur Towson, Smithsburg; treasurer, Samuel Welty.

After the election of officers, Professor W. G. Johnson, state entomologist, addressed the association upon the injurious insects of the orchards, and spoke at length regarding his recent tour of inspection through the Blue Ridge Mountain peach belt. Professor M. B. Waite of the division of vegetable pathology, United States Department of Agriculture, made a very strong address upon the diseases of fruit and fruit trees, giving the known remedies for their suppression and control.

Professor W. A. Taylor of the division of pomology, United States Department of Agriculture, delivered an interesting address upon small fruits. On the whole, the meeting was a very interesting one. This is the first permanent organization that has been effected in the important fruit-growing section of the mountain belt of Western Maryland.

It is the purpose of this association to call a meeting of the horticulturists and nurserymen of the state in Baltimore some time in January for the purpose of organizing a state association.

MINNESOTA.

The thirty-first annual meeting of the Minnesota Horticultural Society was held December 7-9 in Minneapolis. President J. M. Underwood of the Jewell Nursery Co., Lake City, presided. Among the nurserymen and prominent horticulturists present were: Wyman Elliot, Minneapolis; J. S. Harris, La Crescent; J. Cole Doughty, Lake City; C. W. Sampson, Eureka; Professor S. B. Green, Minnesota Experiment Station; Clarence Wedge, Albert Lea; O. F. Brand, Faribault. Eightytwo papers on horticultural topics were presented during the nine sessions of the four days' meeting, and in addition there were reports from all the officers, including seven vice-presidents, and from eleven superintendents of trial stations. The society is one of the most active of horticultural societies.

The committee on credentials reported the following present from Iowa: George H. Van Houten, C. M. Wragg, A. Bryant, F. Burnap.

There were ten five-minute papers on raspberries, thirteen on apples, nine on plums, five on grapes, eleven on shelter belts and eight on evergreens. Among the other papers read during the first afternoon were "The Most Profitable Five Crabs and Hybrids in Minnesota," by J. R. Cummins, Washburn, Minn.; "The Seedlings of 1897," by J. S. Harris, La Crescent, Minn.; "Methods of Propagating Apple Trees Described and Compared," by S. D. Richardson, Winnebago City, Minn.; "Girdling to Produce Early Bearing," by E. H. S. Dartt, Owatonna; "A Review of Apple Blight," by Clarence Wedge, Albert Lea, Minn.; "An Enemy We Dread—the San Jose Scale," by Professor Otto Lugger, of the Minnesota Experiment Station, and "Spraying the Orchard," by R. S. Mackintosh, of the Minnesota Agriculture School.

There was a lively tilt between Professor Green and Mr. Brand resulting from the charge of the latter that certain nurserymen controlled the state society. The members of the society expressed their confidence in the management by reelecting most of the officers, as follows: President, J. M. Underwood, Lake City; vice-presidents, E. H. S. Dartt, Owatonna; S. D. Richardson, Winnebago City; Mrs. A. A. Kennedy, Hutchinson; R. S. Mackintosh, St. Anthony Park; Col. J. H. Stevens, Minneapolis; Mrs. Jennie Stager, Sank Rapids; treasurer, C. W. Sampson, Eureka; secretary, A. W. Latham, Minneapolis; executive board, Wyman Elliot, J. S. Harris, Prof. S. B. Green, Clarence Wedge, J. P. Andrews, L. R. Moyer.

OHIO.

The thirty-first annual meeting of the Ohio State Horticultural Society was held at Wooster Dec. 1-3. Among the nurserymen present were J. J. Harrison, Painesville; N. H. Albaugh, Tadmor; E. A. Reihl, Alton; J. Jenkins, Winona; C. L. Whitney, Warren; W. N. Scarff, New Carlisle; W. W. Farnsworth, Waterville; S. R. Moore, Zanesville; L. B. Pierce, Tallmadge; M. Crawford, Cuyahoga Falls; H. H. Aultfather. Minerva; F. E. Carr, Lakewood.

Professor W. J. Green presented fruit notes for the year. Referring to the poor apple crop of the present season, he assigned as the cause the prevalence of the apple scab, which had not

only disfigured the fruit but had injured the foliage so that the fruit could not mature. In point of fact, however, the scab destroyed much of the fruit early in the season. He showed the effect of spraying, by samples from the station orchard, and said that the gain by the treatment had been more than four bushels per tree, taking the average of the whole orchard. The treatment on Baldwin and Northern Spy paid more than \$5 per tree, at a cost of less than 20 cents per tree.

Professor F. M. Webster, state entomologist, presented entomological notes for the year. Insects occur every year and commit their depredations, but it is not the rule that they work continually in the same areas or that the depredations are caused by the same insects. The chinch bug has been destructive for the last four years in Ohio, but during this time it has not been seriously destructive over any wide area two years.

An insect appeared in Southern Ohio and was destroying the Carolina poplars in nurseries, and now there appears another bug that kills the young of the first and is preventing further trouble.

The San Jose scale occurs in 23 counties in Ohio, and there are nearly double that number of outbreaks in the state. These are all being closely watched, and 49 nurseries in the state have been inspected during the last few months. Some prompt state and national legislation was recommended. There was an animated discussion as to what should be done to suppress the San Jose scale. Additional protective legislation to that afforded by the present statute was generally urged. Accordingly, a committee consisting of N. H. Albaugh, J. J. Harrison, W. N. Owen, W. W. Farnsworth, F. M. Webster, A. D. Selby and O. W. Aldrich, was appointed to recommend and secure the passage of needed legislation upon San Jose scale, yellows, black knot and other dangerous diseases or insects.

- F. E. Carr, of Lakewood, read a paper on the varieties of trees, shrubs, plants and vines suitable for use in planting home grounds and methods of using them. The need of beautifying the small city or suburban lots was dwelt upon.
- F. E. Carr exhibited 11 varieties of gourds and E. A. Riehl showed a very fine plate of Nix late cling peaches. The Sirocco Dust Sprayer Co., of Unionville, O., exhibited two spraying machines.

The following officers were elected: E. H. Cushman, president, Euclid; W. M. Scarff, vice-president, New Carlisle; W. W. Farnsworth, secretary, Waterville; N. Ohmer, treasurer, Dayton.

CALIFORNIA.

At the state fruit growers' convention at Sacramento there was much talk of plans for increasing the facilities and decreasing the cost for transportation of fruits from the Pacific coast to eastern markets. It is asked that fruit trains be run on passenger time. A resolution by E. M. Ehrhorn of San Jose, requesting the secretary of agriculture to ask the postmastergeneral to allow inspection of plants sent through the mail to prevent introduction of insect pests, was adopted.

A committee of fifty was appointed to raise a fund of \$10,000 to send an exhibit of fruits to the Paris exposition.

Quarantine Officer Alexander Craw read a paper on horticultural quarantine, in which he said in part: "When the rules and regulations of the State Board of Horticulture of California were adopted and put into force, they created considerable friction and ill feeling among eastern nurserymen and tree and plant importers, who inferred that they were aimed directly at their business, and retaliatory measures were threatened. Time, however, has convinced them that California was justified in such a course and instead of retaliating they are now urging similar regulations for their own states."

He gave the contents of a measure drawn up by a convention of horticulturists in Washington, D. C., last March, criticizing some of its provisions. Evidently Mr. Craw has not heard that those who were most active in proposing the bill suggested at the Washington convention have since declared their intention of supporting a measure prepared at the annual convention of nurserymen at St. Louis last June.

In closing, Mr. Craw said that California's present system of quarar tine and orchard inspection was recently investigated by a representative of the department of agriculture from Washington, D. C., and most favorably reported on.

A. P. Hayne of the state university, said that every one of the millions of vines in the state that are not on resistant stocks are doomed to certain destruction unless a remedy is found, the danger being from phylloxera. The American resistant stocks being used in California are twenty years behind the times, having been tried elsewhere and failed. The Anaheim disease is more to be dreaded than the phylloxera and has already destroyéd over 30,000 acres of the finest vineyards. Its cause is not known and there is no remedy known for it. Cuttings can be cleaned of phylloxera, but rooted vines cannot, neither can the Anaheim disease be killed.

George Hussman of Napa, disagreed with Professor Hayne, stating that if cuttings were taken in the winter time they would not distribute phylloxera and disinfectants would only weaken them.

MICHIGAN.

The twenty-seventh annual meeting of the Michigan Horticultural Society was held at Ithaca, December 1-3.

Special interest was manifested in the inspection of nurseries and orchards. Professor U. B. Hedrick, state inspector of nurseries under the new law, read a paper on the subject, and O. E. Fifield presented the bill prepared and adopted by the American Association of Nurserymen at its convention in St. Louis last June.

When this bill had been read, a resolution fully endorsing it was passed. The secretary was instructed to forward a copy to each Michigan member of congress.

In his paper on "State Inspection of Nurseries" Professor Hedrick said: "There is urgent need of state inspection under the law of 1895, amended in 1897, as a protection against the spread of pests and plant diseases. The one from which the most is to be feared is the San Jose scale, which is devastating orchards of fruit and ornamental trees and shrubbery in other states, notably New Jersey, Ohio and Illinois. Some shipments of infected trees have been destroyed after having been imported from an eastern nursery."

C. N. Sterns, of Kalamazoo, in some observations on fruit growing in 1897, pointed out the great need for more attention being given to pruning and trimming in order to produce a better grade of product, also for a more thorough system of distribution of the fruit. He said the state was getting a bad reputation for unreliable packing of fruits, so that parties buying or selling in large quantities could not guarantee uni-

formity of the whole and that the shippers of eighty car loads of peaches from South Haven would have realized \$4,000 more on their product had they been able to guarantee a uniform grade of quality.

Hon. R. D. Graham, of Grand Rapids, discussed the topic "Successful New Fruits and Failing Old Varieties." He argued that among the larger fruits it can scarcely be said that there are any failing varieties, the several kinds being as good to-day as ever. Conditions of season will account for the variation of the product, but the same cannot be said of small fruits, many kinds having shown marked deterioration, some having become practically extinct. The discussion drifted to the scientific questions as to whether in long-continued propagation by budding and engrafting there is a tendency in the variety to run out, and whether by this process of propagation new varieties could be produced. On these there was a diversity of views.

Professor M. B. Waite, of the Department of Agriculture, gave a valuable lecture illustrated by stereopticon views on fungus diseases of the apple and pear, also giving in detail the method and apparatus for treatment by spraying.

Officers were elected as follows: President, Roland Morrill, Benton Harbor; vice-president, C. J. Monroe, South Haven; secretary, Edwy C. Reid, Allegan; treasurer, Asa W. Slayton, Grand Rapids; librarian, R. L. Hewitt, Lansing; executive committee, C. F. Hale, Shelby; R. D. Graham, Grand Rapids; R. M. Kellogg, Three Rivers.

MISSOURI.

The Missouri State Horticultural Society held its fortieth annual meeting at Moberly, December 7-9. Among the nurserymen present were: N. F. Murray, Oregon and Elm Grove; Judge Samuel Miller, Bluffton; J. P. Sinnock, Moberly; J. A. Durkes, Weston; L. H. Reed, Grand Rapids, Wis.; Wm. Bomberger, Harlan, Ia.; R. J. Bagby, New Haven; S. H. Linton, Mr. Kaup, Marceline; Mr. Wilkerson, Mexico; Mr. Rogerson, Louisiana. Secretary L. A. Goodman, expresident J. C. Evans and others contributed much to the success of the meeting.

Professor J. M. Stedman, Columbia, said the San Jose scale had been distributed by two eastern nurseries, who claimed they had gotten it from a Missouri nursery, and it has so been published. Coming to this state, one of the first works done by Professor Stedman was to inspect nurseries at the expense of the government. He found no scale in any nursery of the state, nor any sign of there having been any. The infected stock received in the East from a Missouri nursery was passed through Missouri and the boxes were not opened. Professor Stedman then sent out a large number of circulars throughout all parts of the state, but didn't find a single scale in answer to these bulletins. However, the scale was found in two orchards in the state by fruit being sent in to see what it was. An effort was made to get money from the legislature to examine orchards, but he could not get a cent. The State Horticultural Society gave \$200 for this inspection. The professor did this work of inspection himself and went as far as the funds permitted. Nineteen different orchards were found infected. Thirty different localities still remain that are not examined.

"It is impossible to imagine the great damage these minute creatures can do until you see an orchard that has been infested," said Professor Stedman. "They are small, hard to see, and especially hard to kill. It is not in any nursery as far as known, but one of the best nurseries in the state is located in St. Louis county not more than half a mile from a badly infested orchard.

"In Jackson county the scale was found on Osage orange and forest trees. The infected portion of the state is through the center portion, from east to west, Jackson county to St. Louis county, extending as far south as Marshfield, but only a small case here. One year ago I thought we could have got rid of it in the state for \$1,000. I think now it will take \$1,000,000. In fact, I think we will have to fight it from now on. The state should furnish money to exterminate this pest, and also make a law to force individuals to try and exterminate it. I think the time will come when the chief subject before the State Horticultural Society will be the San Jose scale."

D. W. Stanton, Richfield, Ill., said he tried to get a law through the Illinois legislature. He failed to do so, but got an appropriation of \$3,000 for use to investigate and locate the scale. The state entomologist is now engaged in spraying infected orchards with whale oil soap solution. He found scale in twenty-nine different places in Illinois, but not in any nursery. He fears that they cannot control the scale in the southern part of the state without a large appropriation. They need a law governing this work.

The following officers were elected: President, N. F. Murray, Oregon; first vice-president, D. A. Robinett, Columbia; second vice-president, Judge Samuel Miller, Bluffton; secretary, L. A. Goodman, Westport; treasurer, A. Nelson, Lebanon.

WESTERN WHOLESALERS.

The Western Association of Wholesale Nurserymen held its sixteenth annual meeting at the Centropolis Hotel, Kansas City, Mo., on December 21st. President A. L. Brooke presided. The usual routine of business was transacted, a prominent and important feature being the condition of trade, supply of stock and prospect for future business. Members generally reported the fall business and collections much better than last year.

The demand for stock for next spring's planting is unusually good and supply light as compared with former years. This is especially the case with commercial varieties of apple trees, which is the main staple in the West. Last year there was a large surplus, but now there is an urgent demand at much higher prices than early in the season, few being obtainable except in connection with other varieties or kinds of stock.

The following officers were elected for the ensuing year: President, A. L. Brooke, North Topeka, Kansas; vice-president, R. H. Blair, Kansas City, Mo.; secretary and treasurer, U. B. Pearsall, Fort Scott, Kan.; executive committee: A. Willis, Ottawa, Kan., chairman; Peter Youngers, Jr., Geneva, Neb.; E. S. Welsh, Shenandoah, Ia.; J. L. Bagby, New Haven, Mo.; W. F. Heikes, Huntsville, Ala.

The next meeting of the association will be held on the Exposition grounds in Omaha, Neb., on the second Tuesday in June, 1898. The following members were appointed a committee to arrange order of business for the next meeting: F. H. Stannard, Peter Youngers, R. J. Bagby.

MARYLAND NURSERIES.

State Entomologist Johnson's Special Report to the NATIONAL NURSERYMAN—Nearly 26,000,000 Trees and Plants in the 39 Nurseries—Improved Conditions

Professor W. G. Johnson, state entomologist of Maryland, has prepared the following statement for the NATIONAL NURSERYMAN:

I have now completed my nursery inspection in the state for 1897, and have on hand some very interesting data that will perhaps be of value to the nursery trade in general. We have within this state thirty-nine nurseries, all of which have stock for sale. We have also a number of smaller concerns which we have not included in our list. These nurseries have for their fall of '97 and spring of '98 trade 3,773,-845 fruit trees, and 1,221,750 ornamentals and miscellaneous material, and of small fruits, 20,478,075, making a total of 25,888,670. This does not include asparagus roots, of which there are 1,003,000.

Of peach there are in these nurseries 2,952,750 trees, and 264,000 June buds; apple, 759,300; pear, 94,100; plum, 169,680 and 5,100 June buds; cherry, 26,525; quince, 7,390; ornamentals, 331,750; miscellaneous stock, 890,000; strawberries, 19,178,000; currants, 17,350; blackberries, 706,300; raspberries, 312,600; grapes, 197,900; gooseberries, 65,025.

The Franklin-Davis Nursery Company, of Baltimore, are the largest individual growers of nursery stock within this state. They are also the largest apple growers, having the present season over 450,000. The total amount of their stock including apple, peach, pear, plum and cherry, is 997,000 trees. This does not include their ornamentals and a very large stock of general miscellaneous material, which aggregate 1,100,000 plants; making a total in their nurseries for this year's trade of 2,097,000.

The largest peach growers in the state are J. G. Harrison & Sons, of Berlin. They have the present season over 1,000,000 trees, and about 75,000 June buds. This does not include their other general nursery stock which they have in their nurseries, making a total of 1,125,000.

These gentlemen are closely followed by William Peters' Sons, of Wesley, who the present season have 900,000 peach trees, and 100,000 June buds. With their other nursery stock, they have 1,030,000 trees.

The Franklin-Davis Nursery Company are also the largest pear and plum growers within the state. William Corse & Sons, of Baltimore, and R. G. Nicholson, of Chestertown, hold the second place as pear growers within the state. The latter is also one of the largest peach growers, having this year over 250,000 trees. The largest number of plum varieties are grown by J. W. Kerr, of Denton, who is considered our best authority on this fruit. J. A. Ramsburg, of Frederick, has the largest block of quince, and is also the second apple grower in the state.

W. F. Allen, Jr., of Salisbury, is the largest strawberry and blackberry grower, having this season over 6,000,000 plants. Of raspberries, J. S. Linthicum, Wellhams, is the most extensive grower. William Corse & Sons are the largest growers of gooseberries, and John Barnhart, of Denton, leads the list in grapes.

I have found the condition of the nurseries very much better

than it was a year ago. I have been in a large number of nurseries, stretching from the Atlantic to the Pacific, and have never seen more thrifty stock growing than we have within the nurseries of this state. From the standpoint of my profession I would say that the nursery trees grown within the State of Maryland will compare very highly with stock from any other equal area within the United States. Our nurserymen, on the whole, are exceedingly careful with their buds, and use better judgment about the selection of their land for planting stock than they did several years ago.

W. G. JOHNSON,
December 22, 1897.

State Entomologist.

AMERICAN POMOLOGICAL SOCIETY.

President C. L. Watrous and Secretary William A. Taylor of the American Pomological Society, have issued a circular under the authorization of the executive committee, calling attention to the fact that the membership fee has been reduced from \$4 to \$2 and urging horticulturists generally to join the society. A life membership may be obtained for \$20.

At the Columbus meeting a strong desire for annual meetings of the society was manifested, and a motion to hold a meeting in 1898, at some suitable and accessible point, was referred to the executive committee for decision. The committee solicits an expression on this subject. This may be communicated to the president, the secretary or the chairman of the executive committee, P. J. Berckmans, Augusta, Ga.

CUMBERLAND BLACK CAP. .

Regarding the subject of the frontispiece of this issue the Rural New Yorker of December 11th said:

"The Cumberland Blackcap plants were received from Jackson & Perkins Co., of Newark, N. Y., during the fall of 1896. July 1, 1897, we made the following notes: Berries large, black with scarcely any bloom, (drupelets small), quality excellent, about the size of Gregg; firm and of far better quality. We do not know of a black-cap of better quality. Among the earliest to ripen; beautiful glossy black berries. Plants very prolific, from ten to fourteen berries in a cluster. Highly promising. The plants stood the winter without injury."

Jackson & Perkins Co., saý: "Referring to what Mr. Carmen, editor of Rural New Yorker says as to the Cumberland's being 'about the size of Gregg'it will be noted that the plants of Cumberland had been received at the R. N. Y. grounds only the fall preceding and it could hardly be expected that they would produce fruit of maximum size without having had a longer time in which to become established. In reality the Cumberland, when at its best, very greatly excels Gregg in the size of its fruit. This is substantiated both by our own experience with it and by the reports of several others who have fruited it, notably that of I. W. Kerr, the well-known Maryland fruit grower and nurseryman, who said 'I have grown Mammoth Cluster and Gregg that were very fine, but this Cumberland is really a marvel. Fifteen-sixteenths of an inch diameter was the measure of as large a berry as I saw, but they were all large. I let the plants carry all the fruit they set and they were very full."

NEW YORK LETTER.

Objectionable Effect of Plant Auctions Upon the Trade—Practices of Unscrupulous Venders on the Streets of the Metropolis—Currants Sold for Roses.

NEW YORK, Dec. 24.—The plant auctions in New York are becoming more and more popular. Foreign nursery stock is at present sold as well as trees grown in America, such as California privet, evergreens, fruit trees and miscellaneous shrubbery. As a matter of fact nurserymen in general complain that those sales effect the trade as a whole and ruin the retail business. In my opinion they do, but the question arises-can this not be abated, or who is to blame for this state of affairs? This query can be answered thus: The consignors of such stock are responsible for the ruin of this business, and it is the common opinion of American nurserymen that only the Holland growers carry on this particular part of the trade. This may be true to a certain extent, but home growers hurt the trade more than all the foreign dealers. The stock which is sold consists principally—with the exception of roses—of plants which are scarcely known to the public. For instance: Azalea mollis, Staphylea colchica, Prunus lusitanica, Aucuba, Periploca græca or similar plants. Private buyers here in America do not even know what they are purchasing, but they give this stock a trial just to see what

Suppose "A" purchases a few plants and places them in his garden. It may happen that some of the plants will really thrive (although as a rule stock bought at auctions does not turn out well), and A is therefore more or less satisfied with the result. Some of A's friends will notice the flowers in his garden; will inquire for the names of the various sorts and in this way such stock is introduced.

Suppose an agent from a reliable house were to call upon A. He offers the same kind of stock as A bought at the auction; of course, as soon as the agent calls he learns that A has purchased the flowers at a public sale, and he informs him that he would have fared much better if he had secured the stock from a nurseryman. He will give a thousand and one reasons to substantiate his statements. A will certainly give the agent an order; and if the latter is sharp he can sell a large quantity of stock in that neighborhood.

There are hundreds of plants which are not known to the people, but as soon as they are introduced they will find ready purchasers. Now let us consider the stock that is sent to a public sale; the stock of this country—so-called home-grown—such as California privet, gooseberries, currants, fruit trees, clematis, paniculata, evergreens, climbing roses, etc. This stock does not require any introduction, everyone is familiar with it, and it finds purchasers always through the agents, notwithstanding the prices are high. The purchaser is aware that California privet and such shrubbery always grows. This line of stock can be disposed of at the auctions, but it will not increase the wants, nor will there be any more sold. However, from every point of view it is very plain that these sales ruin the trade almost entirely.

Last spring those houses received from very eminent growers, large quantities of gooseberries, red currants, climbing roses, etc., which were disposed of at any price and in some instances literally given away. A few enterprising venders purchased the goods, placed a stand on the street containing the plants on which they put a large sign, reading: "Climbing Roses, Crimson Rambler," and, in fact, any name whereby they could make their wares attractive and saleable.

One day the writer was walking on Greenwich street and passed a small stand containing a number of plants on which was written "Crimson Rambler, Yellow Rambler, etc." Upon investigation I found they were really gooseberry and currant bushes. On the next corner a man had a stand containing the very same goods, but he found it more profitable to have them labeled "Pride of California, Standard Hydrangeas and American Beauty Roses." This also goes to show that the consignor of such goods ruins the business; likely his own particular branch of same.

The new tariff law does not effect these sales at all. The auctioneer never loses anything in such transactions. As long as the consignor is willing to send the goods, he will find sale for them even if he only realizes what pays the tariff on them; his expense will be surely deducted from receipts; for the grower however, things are different. While the home growers continue to send in thousands of currants and gooseberry plants, thousand of privets, these public sales will always effect the trade.

A recent law passed in Germany was to the effect that within the city of Berlin no plants of foreign production could be entered, and 'last spring those trying to conduct public sales were stopped by the government. This law was passed owing to the petition made by the growers of Germany, as they were aware that the tariff would have little or no effect on auctions. If this was done here in America it would be better than placing such a high tariff on plants, above all on fancy plants, which it will be necessary to import in large quantities; and this will continue to increase every year. These public sales can only be prevented by an act of the government, an act which would be highly beneficial to the entire trade. And last, but not least, no man in the trade should patronize the sales; but it has been proved that some of the eminent nurserymen of America made bids on this inferior line of goods.

FOREST PLANTING.

Thirteen years ago the late Robert Douglas of Waukegan, Ill., planted a forest of 1,200 acres at Farlington, Kansas, on the Fort Scott and Memphis railroad. The kinds selected for the experiment were black walnuts, cherry, catalpa, ash, osage orange and chestnut. The walnuts are 40 feet in height and two feet in circumference. Next to the walnuts the catalpas have done the best. The ash has not done well. The trees were planted for railroad ties, many are now ready for such use. It is believed, that better results would have been obtained if the trees had been planted six by six feet apart instead of four by four.

The Connecticut legislature has repealed the peach yellows law.

A horticultural quarantine officer at San Francisco claims to have discovered and confiscated a new apple pest which arrived in fruit from Japan on the steamer Coptic, November 6th. It was believed to be larva of Laverna herellera which burrows all through an apple, instead of making but two tunnels as does the codlin moth.

FIFTEEN ACRES OF SCALE.

It was discovered yesterday morning, says the Grand Rapids, Mich., Democrat of December 15th, that the ravages of the San Jose scale have reached within two miles of the Kent county line. A young farmer in Jamestown, Ottawa county, was ordered to cut down and burn fifteen acres of apple orchard containing more than 1,200 trees. He had borrowed money by mortgaging his farm to put out the orchard, which was only five years old and had always received the best of care. The trees have just come into bearing and promised a larger crop the coming year, which was depended upon to meet a portion of the mortgage, which had been extended to meet the crop.

The young man was so shocked when told that his orchard would have to be destroyed that he was put to bed, sick. He had noticed last fall that his trees were not doing well and had written to the Agricultural College to find the cause The

college people promised to look after the orchard, but made no diagnosis till yesterday.

Clinton D. Smith of the college attended a farmers' institute held in the township yesterday, and on his way home visited the orchard and made the discovery. No case of the dreaded disease from this county has yet leen reported. Kent county trees are supposed to be free from the pest, but this case comes near the line and shows the danger.

Fruit men have kept a sharp lookout for this pest for years, and last
winter Mr. Graham succeeded in
creating an office and having a commissioner appointed for the purpose
of fighting it. U. P. Hedrick was
appointed to that office, but up to
date has not investigated any
orchards. He has confined his work
to nurseries, the great distributing
points. The Jamestown case is supposed to have started from a few
trees the owner of the orchard
bought from an eastern nursery two

years ago. So rapidly had it done its deadly work that at present every limb of every tree in the orchard is covered to its tip.

Mr. Smith said he would send the inspector here next week and inspect the surrounding orchards and woods. On the isle of Catawba in Lake Erie the insect attacked the forest trees and large tracts of forest had to be destroyed.

NEW GRUBBING MACHINE.

The new Dansville cultivator and grubbing machine made especially for the use of nurserymen will prove a great laborsaving device if the claims of the inventor are sustained. This machine has been exhibited at Rochester, N. Y., and looks as if it would do all that is claimed for it. It is built to straddle any row of trees in the nursery seven or eight feet high, cultivating perfectly both sides of the row and by the attachment of hillers it throws up a perfect hill or furrow on each side of the row.

But the remarkable part of the machine is the grubbing device, by which the bank or furrow is turned from each side of the row and the comb or bank of dirt between the trees in the row is completely grubbed out as if done by hand labor. This is accomplished with no injury to bark or tree and with but one passage of the row. The inventor claims that one man with team and this machine can cultivate the soil and keep it perfectly free of weeds on thirty acres of nursery per week throughout the season with no help from hand labor.

This is a pretty strong claim, but if it be true it will make a much needed saving to the grower in labor bills and must prove of great value to the trade.

C. M. HOBBS.

The subject of this sketch was born in Paoli, Orange county, Ind, in 1847. His boyhood was spent on the farm in the same county. Early in life he became interested in nature,

especially in tree plants and flowers. His first connection with the nursery business began in his eighteenth year when he sold nursery stock for Oliver Albertson of the Canton nursery. The following year he spent with Abram Trueblood in the Salem nursery. About four years were spent in selling for and working in the Canton nursery during the summer months and attending Blue River Academy during the winter, with an occasional spring term. One year was spent in a wholesale book and stationery establishment.

Returning to the Canton nursery, he has been continuously connected with the nursery business up to the present time.

In 1875 Oliver Albertson established a nursery at Bridgeport, Ind. Mr. Hobbs was placed in charge of the business. In 1876 he married Anna M. Albertson, daughter of Oliver Albertson. In 1881, after the death of Oliver Albertson, Emery Albertson, his second son, and C. M.



C. M. HOBBS.

Hobbs succeeded him in the nursery business under the firm name of Albertson & Hobbs.

The business under this management has grown from small beginnings to the largest business of its kind in the state. The firm has always taken special care as to correctness in varieties and to be trustworthy in every respect. Mr. Hobbs has been prominently connected with the State Horticultural Society the past twenty years. He served the society seven years as secretary, and the past five years as president. The past two years he has given a course of lectures on horticultural topics to the agricultural and horticultural students of Purdue university.

Wisconsin lumbermen have promised to replant their cutover timber lands if the state will enforce the fire law regarding forests. It is estimated that the planting can be done at a cost of \$3 per 1,000 trees, that is per acre.

The National Nurseryman.

C. L. YATES, Proprietor.

RALPH T. OLCOTT, Editor.

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THE NATIONAL NURSERYMAN PUBLISHING CO., 305 COX BUILDING, ROCHESTER, N. Y.

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OFFICIAL JOURNAL OF THE AMERICAN ASSOCIATION OF NURSERYMEN.

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Six Months, -	-		-	-	-		.75
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Payment in advance required for foreign advertisements.

To Drafts on New York or postal orders, instead of checks, are requested.

Correspondence from all points and articles of interest to nurserymen and horticulturists are cordially solicited.

Entered in the Post Office at Rochester, as second-class matter.

ROCHESTER, N. Y., JANUARY, 1898.

A LEADING TOPIC.

This journal devoted considerable space during 1897 to the San Jose scale. The subject became early in the year one of great importance to nurserymen because of legislation, effected and proposed, which bore directly upon their interests. At nearly all the horticultural society meetings the San Jose scale and the nursery business were discussed together; laws governing the sale of nursery stock were proposed in several state legislatures and in some cases were passed, and the subject is now before congress.

As the result of constant watchfulness in presenting the developments in the agitation for the suppression of this scale, the nurserymen of the country were enabled to act intelligently upon the matter at the annual meeting of the American Association in St. Louis last June. The federal bill drafted and approved at that time is now before the people's representatives at Washington. Its provisions govern the sale of nursery stock in such a manner as, it is believed, will guard against dissemination of the scale and at the same time will not unduly interfere with the conduct of the nursery business. It has been fully endorsed by the state entomologists of Maryland and Virginia, which states have been foremost in the endeavor to prevent the spread of the scale in the East.

Hon. C. L. Watrous, Des Moines, Iowa, chairman of the committee on legislation, of the American Association, writes to the NATIONAL NURSERYMAN as follows:

"The committee on legislation, appointed at St. Louis has arranged for a meeting in Washington in January—after the holiday recess of congress—to present the federal bill and try to secure favorable consideration.

"Furthermore, it has carried on a very friendly correspondence with members of other committees interested in procur-

ing legislation for the same purposes. It is a matter for congratulation that good progress has been made towards securing such harmony of views as promises substantial unity of effort before congress."

It is believed that all who are interested in this subject, horticulturists, entomologists and nurserymen, will join in the effort to secure uniformity of laws under which all may operate for the general welfare.

President C. M. Hobbs, of the Indiana State Horticultural Society, member of the well-known nursery firm of Albertson & Hobbs, Bridgeport, Ind., who has been actively interested in proposed legislation on the San Jose scale, writes to the NATIONAL NURSERYMAN:

"Our state society is decidedly in favor of state and national legislation as a help in the suppression of the scale. We are not irrevocably committed to any particular bill, state or national. The interstate or national legislation should be comprehensive enough to cover essential details, but not so much so as to render it impractical in its application.

"The state legislation should be as uniform in all the states as possible. I see no reason why a law that properly covers the ground in one state should not apply equally well in another state. If this hodge podge of state legislation goes on, it will require a Philadelphia lawyer in the nursery offices throughout the country to keep track of the thing

"I see some authorities are questioning the necessity of any legislation. As in many other cases, I think the right lies between the two extremes."

SEND AGENTS FOR NOVELTIES.

Secretary Wilson of the United States Department of Agriculture proposes that not less than \$20,000 of the seed appropriation be used for sending agents abroad to look up new and valuable varieties of fruits, seeds, bulbs, trees and plants, with a view to distributing them among the experiment stations to be carefully tested.

This is an excellent suggestion, inasmuch as congress seems determined to appropriate large sums for the testing of varieties, aside from the work of the experiment stations. It would perhaps be better if the entire seed appropriation were thus expended, for some profit would result in the introduction of additional foreign varieties. The experiment stations, 54 in number, in every section of this country, it would seem, could determine the value of seeds which it is proposed by the government to have the farmers test.

THE MAKECHE.

The New York Sun has discovered a man in New York who says he has imported a beetle called the Makeche, from Central America, which eats metal. Three beetles, he says, bored through the pewter cover of a glass jar in which they had been imprisoned, and the chips of the metal were found in the bottom of the jar. The Sun, with its usual regard for the truth, publishes pictures of the beetle, the metal chips and the pewter cover, showing the holes through which the beetle escaped.

We respectfully suggest that, pending further developments by the San Jose scale, the entomologists turn their attention to this new comer which threatens the destruction of steam boilers and steel vaults.

A BUSINESS MATTER.

During the holiday season there have been many importunities to subscribe for publications intended for amusement entertainment or general information, all of which are well in their place. But the successful business man will not neglect to provide himself with special information pertaining to his trade.

A few years ago the nurserymen of the country were obliged to depend upon the horticultural journals for such information as might there appear relative to their business. That information was exceedingly meager. Indeed, it was only such as happened to get into print. Five years ago the National Nurseryman began the work of gathering and disseminating matter of practical value to the nurseryman and its efforts have been received with much appreciation. It stands to-day the only trade journal for nurserymen, circulating throughout the United States and Canada, and in many foreign fields. Its aim is to present every development of interest to the nurserymen and to serve as a medium for the exchange of ideas and the sale of stock.

The journal during 1898 will maintain its policy which has been highly commended and will seek to add such features from time to time as seem to be of the greatest advantage to its readers. Correspondence and suggestions on topics of interest to the trade are cordially solicited. A constantly corrected mailing list keeps the journal in the hands of the active nurserymen, our facilities for accomplishing this result being unequalled. The subscription price remains the same, \$\mathbb{e}\$ per year and it seems a small investment when it is considered that a single issue of the journal has often proved of much greater value than the entire subscription.

A subscription to a trade journal is a business investment; a subscription to other publications is matter of entertainment.

ARE BETTER PRICES COMING?

Editor NATIONAL NURSERYMAN:

This question is asked by every nurseryman in America. Why should the price of nursery stock be placed in the current of prices with other things, is another question not generally thought of by many nurserymen. Through the panic of the last three years we find fruit of all kinds holding up better than anything else in commerce, and in fact, 'apples have the best showing in prices from 1869 to 1897, together with the best purchasing power of any one commercial product of the farm, and the man who had fruit to sell during the hard times of the last three years, was the man who had the least to say about hard times.

Orchards of 40 acres, six and seven years planted, have produced this season \$3,000 to \$4,000 worth of apples. The same orchards did not cost five cents per tree from planting time up to this time.

Why then cannot the planter duly afford to pay the nurseryman a living price for the trees at least? To produce apple trees at the present prices means hard times to the nurseryman.

S. H. Linton.

Marceline, Mo.

Subscribe for the only trade journal for nurserymen, the NATIONAL NURSERYMAN.

LIVELY TRADE IN MISSOURI.

Editor NATIONAL NURSERYMAN:

We have just closed the largest trade that we have had in any one season since we came to this state, six years ago. We had to work almost day and night to keep up with the demands. But the prices were so low that they scarcely paid expenses of digging and delivering.

Prospects for spring trade are good, with prices a little better. Nursery stock of all kinds went into winter in good condition, as the dry weather in the fall stopped the growth and ripened the stock nicely.

LINTON & KAUP.

Marceline, Mo.

EASTERN NURSERYMEN'S ASSOCIATION.

President William C. Barry presided at a special meeting of the Eastern Nurserymen's Association in Rochester, N. Y., on December 16th. There was an attendance of twenty-five, including R. G. Chase, E. C. Smith and D. H. Henry, Geneva; E. C. Pierson, Waterloo; E. Moody, Lockport.

Irving Rouse, Rochester, N. Y., was delegated to represent the association before congressional committees regarding legislation for the control of the San Jose scale.

A FABLE AND A MORAL.

The Rural New Yorker publishes the following at the head of its editorial page:

"There was once a certain nurseryman who had 25,000 peach trees which he considered good enough to sell, though green buyers could not see the yellows in them. He did sell them, but wanting 5,000 trees for his own planting, he sent off to buy them in a locality where yellows were unknown. Not one of his own trees would do. They were grown for sale. Now, is Wise Scoundrel a good name for this man?"

TWO OF MANY.

From time to time we have published some of the many voluntary expressions regarding the value of the advertising columns of the NATIONAL NURSERYMAN. At the opening of the new year we take pleasure in making prominent two of the latest of these unsolicited commendations:

NATIONAL NURSERYMAN PUB'G. Co., Rochester, N. Y.

Dear Sirs—Your bill for six months of my advertisement of Honey Locust is received and it is with great pleasure that 1 send you draft for amount, as I have received very flattering inquiries for this cold climate hedge plant and want my advertisement continued. Inquiries come even from Manitoba.

Very truly yours

Havana, Ill., Dec. 17, 1897.

A. E. WINDSOR.

NATIONAL NURSERYMAN PUB'G. Co.

Gentlemen:—It may interest you to know that I have just received a large cash order from Australia as a result of my advertisement in your journal. I find the NATIONAL NURSERYMAN a very valuable medium for the sale of nursery stock.

Rochester, N. Y., Dec. 24, 1897.

A. L. Wood.

STOCK IN TRANSIT.

Important Supreme Court Decision Regarding Common Carrier's Liability—Case of Frozen Stock Results in Damages for the Plaintiff—Full Text of the Decision.

Henry A. Siebrecht recently obtained judgment in the New York City court against the Pennsylvania Railroad Co., for damages resulting from the freezing of plants during shipment. The case was appealed to the general term and there the judgment was affirmed. An appeal was taken to the appellate term of the Supreme court with the same result.

In his opinion Judge McAdams of the Appellate division says:

· The action is to recover for damages done to certain plants of the plaintiffs while in defendant's care, caused by alleged unreasonable delay in transportation, during which they were frozen.

It appears that on Friday, February 22, 1895, at 2 r. m., one Burton, a florist and greenhouse keeper at Chestnut Hill, Pennsylvania, shipped by the defendant's road a lot of palms consigned to the plaintiffs at Jersey City, which the defendant agreed to transport with due dispatch. By the bill of lading the defendant was exempted from damage done by freezing while in transit.

In order to recover, therefore, it became necessary for the plaintiffs to establish negligence or breach of duty on the part of the defendant, so that they were bound to prove that the defendant not only unreasonably delayed transportation, but that the plants were frozen during the time of delay and because of it.

The plaintiffs assumed this burden, and proved that the average time of a freight train between the place of departure and the terminus at Jersey City was from eight to twelve hours. This would fix about 2 A. M., on Saturday as the proper time for the arrival of the train at its place of destination, but the plants could not be delivered in any event according to the usual course until the business hours of that day. According to the defendant's evidence they arrived at Jersey City on Saturday at 5 P. M. The plaintiffs had no one at the train at that time to receive the goods. Their employe, Smyth, testified that he telephoned on Saturday about 5 P. M., to the freight yard of the defendant, and received a reply that it would be impossible for the plants to get in until 5 o'clock on Sunday morning; that he drove over on Sunday morning about eight o'clock, and received the plants in a frozen condition.

Of course the defendant, if free from neglect, was not responsible for the weather. It agreed simply to transport the plants with due care and despatch, and if within the reasonable time allowed for transportation the weather became so cold that the plants were not able to withstand it, the loss under the bill of lading would have to be that of the shipper or consignees.

The defendant produced the United States weather report, which is a contemporaneous record kept by trained public servants, upon whose returns the government weather bureau founds all its forecasts, and proved by this record that from February 22, at 2 P. M., to February 24, at 8 P. M., the weather was coldest between midnight of the 22d and 8 A. M., of the 23d, the thermometer having fallen to a minimum of 16 degrees at New York and 20 degrees at Philadelphia; and that from the hight of the 23d (Saturday) until the morning of the 24th (Sunday) the thermometer highered, registering, however, some degrees below freezing.

The defendant claimed that this established that the freezing of the plants occurred between Friday at 2 P.M., and Saturday morning, when they ought to have arrived in Jersey City, and upon this theory requested the court to charge that "if the jury believe that by usual dispatch the plants would have reached Jersey City on the morning of February 23d, and that the coldest weather after the shipment occurred in the twelve hours preceding the morning of the 23d, then there is no evidence that the plants were injured because of the longer time occupied in transportation"; to which the trial judge replied: "I refuse to charge as requested, but will leave the fact to the jury to say upon all the evidence when the freezing of the plants took place."

Of course it was for the jury to say when the freezing took place, and if the request had been that if they found that the freezing occurred during the usual period of transportation the defendant would not be liable, it would no doubt have been charged. But the defendant went further and asked for a binding instruction that if the coldest weather after the shipment occurred in the twelve hours preceding the morning of Saturday the 23d, then there was no evidence that the plants were injured because of the longer time occupied in transportation. This result did not necessarily follow, for according to the record offered in evidence by the defendant the mercury stayed below the freezing point on Saturday and during that night and Sunday morning. This was of itself some evidence bearing on the question and material to its determination in view of the expert evidence introduced.

Experts testified that plants are safely shipped during all seasons of the year, and that those in question were properly packed to resist freezing for twenty-four hours. It was for the jury to say whether they might not have successfully defied freezing if they had not been longer exposed to the elements. It is common knowledge that with the natural heat in live plants, like that in human bodies, they may resist low temperature for a given time before freezing, and that the hardiest plant or body, however well protected, may finally perish if exposed long enough to a rigorous winter temperature. This feature had to be considered by the jury in reaching a result.

The risk of freezing after the usual time for transportation expired was on the defendant, and the evidence was sufficient to require the submission to the jury of the question whether the freezing occurred while the defendant was in default, and they found that it did occur during that period from causes for which by reason of its neglect the defendant became liable.

Negligence is in general a conclusion from the facts in evidence, to be drawn by the jury under instructions from the court, and is always so when the facts and conclusions rest in doubt. When the inferences to be drawn from the testimony are not clear and incontrovertible, and men of ordinary judgment and discretion might differ as to its significance, it is the exclusive province of the jury to pass upon the questions involved.

Where the injury may have resulted from one of two causes, one of which would establish liability, and the other excuse the defendant, and absolute certainty as to which did cause it is unattainable, the verdict of a jury is conclusive.

We have not referred to the plaintiff's proofs as to temperature, because the exception presented for review is to the refusal to charge, which was founded exclusively on the defendant's evidence as to temperature, conditioned upon the finding that it was true.

In view of the facts established and the inferences to be drawn from them, with the inherent probabilities—all of which were to be considered by the jury—the trial judge properly disposed of the request to charge, and as his refusal to make it is the only ground upon which the exception urged was taken, the judgment must be affirmed, with costs. All concur.

HOOVER & GAINES CO.

The Hoover & Gaines Co., Dayton, O., went into the hands of a receiver on November 17th. Claims held by the Dayton national banks aggregating \$12,500 were presented. J. W. McNary was appointed receiver.

The appraisement of the property and assets of the company considerably exceed the liabilities. There are no preferences or liens of any kind on the property of the company, all the creditors standing on an equal footing. It is furthermore a double liability company, so that there is no question that all claims will be paid in full within a reasonable time.

GETS A GOOD DEAL OUT OF 1T.

J. O. Barksdale, Red Hill, Va.—"I enclose \$1 for a year's subscription to your journal. I get a good deal of valuable information from it."

JAPANESE PLUMS.

Professor Balley's Third Report—His Earnest Effort to Classify a Confusing List—The Foreigners are Here to Stay— The Latest Impressions of some Tested Varieties.

Much interest has been manifested by nurserymen in the investigations of the Japanese plums by Professor L. H. Bailey of Cornell University. The professor has just issued his third report upon these plums. In it he says:

"In two bulletins (Nos. 62 and 106) we have made reports upon the history and varieties of plums which have recently come into this country from Japan. A crop of many of the varieties upon the Cornell grounds in 1897, enables us to make a third report. The nomenclature of this class of plums is in the greatest confusion, and the plums themselves are too little understood to warrant unqualified recommendation. It will be several years yet before we can expect thoroughly to classify our knowledge of them. This confusion is of itself a strong reason why these reports should be made, for, while we do not expect that we have arrived at a full knowledge of the varieties, the confusion would increase rather than diminish if no attempt were made to record the tests from year to year. The confusion among these plums has arisen because the Japanese class-names have been retained in this country, and because various parties have disseminated the varieties under numbers or without names. The writer has, therefore, given new names to varieties which are passing under class-names and numbers; but the renaming of any variety is not to be regarded as a recommendation of it. At first it was intended to include in this report copious extracts from the current press respecting the varieties of Japanese plums, but it so frequently happens that persons have different varieties under the same name that there is danger of adding to the confusion rather than diminishing it by too free quotations from contemporaneous writings. We have merely set down the behavior of such varieties as have fruited with us this year, making such corrections of nomenclature as seem to be necessary in order to clarify the subject.

"I am still convinced that the Japanese plums have come to stay. By this I do not mean that they are destined to supplant the domestica and native plums, but that they are bound to supplement those types with varieties that are adapted to particular purposes and conditions. As a class, they are vigorous, hardy and productive in tree, and the fruit is handsome, long keeping, and covers a long season.

"These plums are now beginning to attract attention in Europe, and the following report comes from South Africa (E. Tidmarsh, in Rep. Grahamstown Botanic Gardens, 1895, 5): 'The Japanese plums, although not quite equal in flavor to the best sorts grown in Europe, have valuable properties for this climate. For one thing, these varieties, so far as I have tried them, grow freely grafted on the peach. A number of the European sorts refuse to grow on the peach, and this is a drawback in two ways. First, the peach stock is, on the whole, best adapted to this climate, and secondly, it is a difficult matter to raise suitable plum stocks in this country.'

"Persons in the South should consult bulletin 85, Alabama Experiment Station, on Japanese plums, by F. S. Earle.

"Thus far the Japanese plums have been comparatively free from black-knot, and until this year our trees have not been seriously attacked by the shot-hole fungus or leaf-blight. During the past season, however, this leaf-blight has been much worse upon the Japanese varieties than upon the domesticas alongside them, and this, too, in spite of the fact that they were thoroughly sprayed. The leaves did not drop to any extent, however, even though they were badly riddled by the fungus.

"In many cases these notes are made from the first crop on young trees. But they record the present state of our knowledge respecting this new and much confused type of fruits. It is our habit to set the wood of new varieties (either as buds or grafts) in the tops of Lombard plums, and several of the varieties have been fruited only in this way.

"A most perplexing feature of the Japanese plums is the variation in the season of ripening in different years. In our first Japanese plum bulletin, we said that the Burbank is from two to four weeks later than the Abundance. We had not then fruited the varieties side by side. In our second bulletin we said that the difference in ripening was only a week or two. and added that upon our grounds the Burbank, in 1895, was less than a week later than Abundance. These same trees were compared this year (1897), and the Burbank was fully three weeks later than Abundance. In 1895 the Red June ripened from July 28th to August 1st; this year the fruit upon the same tree was not ripe for eating until August 23d. These differences may be due to the differences in the two seasons, for in 1895 the late summer was hot and dry and this year it was cold and wet; but one would not expect that season would make so great comparative difference between any two varieties as we found between Abundance and Burbank.

ABUNDANCE—The best known of the Japanse plums, although it is not yet clearly distinguished from some of its allies. We have two types. The Abundance is a good plum, considering its season (ripened with us this year about August 25th, being about two weeks later than hitherto), beauty and productiveness. It must be thinned if good specimens are desired. It is also subject to fruit-rot. Its quality is fully equal to that of the Lombard.

BAILEY—A handsome plum, with a soft flesh, and of medium to good quality. Tree a speading grower. Two weeks later than Abundance this year

BURBANK—Now too well known to need comment. The best single variety of Japanese plum yet thoroughly tested in this state. Ripe with us this year from the 10th to the middle of September.

CHABOT—The tree is a strong upright grower, productive, and the fruit is handsome, very firm, and of good quality. I can detect no difference betweeh Chabot, Bailey, Chase and Yellow Japan, and the same also passes as Hattonkin; but Chabot, being the oldest name, must hold.

DOUGLAS—Sometimes called Sweet Botan. This is the plum which I called Munson in Bulletin 62, but which Price renamed Douglas (Bull. 32, Texas Exp. Sta.) because there was already a Munson plum, one of the natives, upon the lists.

Georgeson—Most of the plums passing as Hattankio belong here. It seems to be the only clear yellow Japanese plum known in this state, except Ogon. It assumes various forms. Best yellow variety that I know.

Hale—A handsome globular, red and speckled plum, parting easily from the stem; flesh rather soft and juicy, of good quality and a peachy flavor, tending to be sour rather than sweet; tree moderately spreading, and a good grower, and evidently productive.

LOUISIANA—A curious fruit, in some respects suggesting Kelsey. Falls from the tree very early. Perfectly hardy with us thus far. Mr. Normand says that it is a "seedling of a Japanese crossed with a native plum."

Ogon—A handsome clear yellow freestone plum, already well known, and fully described in Bulletins 62 and 106. It is very early

ripening at Cornell this year about August 10. It is excellent for canning. The Ogon is generally regarded as a shy bearer, but our little trees were loaded this year. The fruit often cracks badly on the tree.

RED JUNE—Surely an excellent plum, maintaining the high character—for earliness, beauty and productiveness—which we gave it two years ago. The quality is not so good as that of the Burbank or Chabot. At Cornell this year, trees upon hard clay land ripened their fruits twelve days later than trees upon gravelly loam.

SATSUMA—One of the best marked of all Japanese plums; the fruit being dark dull red and the flesh blood-red. It is late, ripening from the middle to the last of September this year. The color of the fruit is against it for a general market plum, but its keeping qualities, and excellence for culinary uses, make it worth a place in the orchard. The quality is austere until fully ripe, when the fruit becomes fairly sweet-Tree a vigorous spreading-upright grower. Fairly productive with us, but reported as unproductive by others.

Wickson—Although we have this plum growing, it has not borne; but since we have tested fruit of it grown by E. Smith & Sons, on Seneca Lake, we give it place in this report. They write as follows: "Our experience with this plum is limited, but we are more than pleased with its habits and characteristic points. We find it a good grower, also very hardy, and the size of fruit superior to any of the Japanese plums. The quality we find a little under the average, but good enough to warrant us in planting. We have 100 trees of them, planted out one year ago in orchard form, and will set at least 500 more." I am impressed with the Wickson and expect to find it an acquisition to New York.

WILLARD—We have no new report to make upon this variety. Its only merit is earliness. The quality is very poor. It is a very strong, tall grower, but shed its leaves early with us this year.

In conclusion Professor Bailey says: "Correspondents are asking what varieties of Japanese plums I recommend. In reply I will say that I never recommend varieties of any fruit for anyone to plant. For myself, I should still adhere to my list of four varieties of two years ago—Red June, Abundance, Burbank, Chabot. I should place as second choice Douglas, Berckmans, Satsuma, Hale and Wickson and should expect that the last two would rise, upon further acquaintance, to a place in the first rank. If I wanted a yellow plum, I should take Georgeson, with Ogon for early. If I wanted the earliest varieties, without respect to size or quality, I should choose Berger, Engre, Earliest of All and Willard."

Obituary.

J. L. Hopkins, South Haven, Mich., died of apoplexy on December 13th.

Henry E. Boardman, a retired nurseryman, died in Rochester, N. Y., December 14th, aged 57 years.

A. R. Whitney, one of the most prominent members of the American Association of Nurserymen, died at his home at Franklin Grove, Ill., on December 15th, aged 73 years. He was born February 22, 1824, at Albion, N. Y., and had lived at Franklin Grove since 1838. Bringing apple seeds with him from Ohio, he began the raising of apples that afterwards made him famous. He started the first nursery in Northern Illinois in 1843, but he devoted most of his attention for a time to the production of cider and vinegar. He was very successful in the production of Whitney's No. 20 crab.

Mr. Whitney was one of the organizers of the American Association of Nurserymen and was its treasurer for fifteen years, from 1876 to 1890.

Subscribe for the NATIONAL NURSERYMAN-a business investment.

Among Growers and Dealers.

The Deming Co., Salem, O., have the Bordeaux nozzle.

S. C. Moon, Morrisville, Pa., offers a large stock of ornamentals.

Coniferae are a specialty with R. Douglas & Sons, Waukegan, Ill.

Raffia can be had of Thomas Meehan & Sons, Germantown, Pa.

D. Baird & Son, Baird, N. J., have peach trees by the 1,000 or carload.

Small fruits of all kinds can be had from A. L. Wood, Rochester. N. Y.

G. L. Taber, Glen St. Mary, Fla., has a splendid stock of Japan plums.

Jackson & Perkins, Newark, N. Y., offer choice specialties for nurserymen.

Japan plums are a specialty with the Griffing Brothers Co., Macclenny, Fla.

Roses on own roots are offered by Phœnix Nursery Co., Bloomington, Ill.

Apple seedlings are wanted in exchange by W. T. Hood & Co., Richmond, Va.

Samuel Kinsey & Co., Kinsey, O., are long on peach, quince, currants, gooseberries, arborvitæ.

Peach trees is the subject of an interesting statement on another page by Harrisons, Berlin, Md.

L. C. Bobbink, Boskoop, Holland, has H. P. roses, tree roses, hardy azaleas, rhododendrous, etc.

The Spaulding Nursery Co., Spaulding, Ill., offer fruit stock of all kinds and nurserymen's supplies.

P. J. Berckmans, Augusta, Ga., on December 13th was elected a director of the Florists' Fire Association.

The seventh annual meeting of the American Carnation Society will be held in Chicago, February 17th and 18th.

J. C. Grossman, Wolcottville, Ind., says: "Trade is 75 per cent. better in retail sales here than a year ago. Largely apple."

Hiram T. Jones, Elizabeth, N. J., returned from Europe last month. He has several carloads of imported stock just received from across the water.

The Iowa legislature has appropriated \$10,000 for a fruit exhibit of the state at the Omaha exhibition, and this exhibit will be in the charge of A. F. Coleman, a nurseryman of Corning, Ia.

M. E. Hinkley, Marcus, is the vice-president of the Northwestern Iowa Horticultural Society, which held its annual meeting at Sac City December 7-9. C. F. Gardner, of Osage, was present.

Professor U. P. Hedrick of the Michigan Agricultural college, state inspector of orchards and nurseries, has been appointed professor of horticulture in Utah's agricultural college. He entered upon his duties Jan. 1.

Judge Gaynor, of Sioux City, Ia., has decreed that Jonathan W. Brown, receiver of the Sioux National Bank, has no right to use the name "The Sioux City Nursery and Seed Company" in conducting the business formerly operated under that name.

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(And there are none better grown.)

APPLE, STB. PEAR

AND CHERRY.

OUR GOLDEN ANNIVERSARY.

THE MONROE NURSERY.

I. E. Ilgenfritz' Sons

MONROB.

MICH.

50 years in business proves our reliability.

You will want them for your SPRING TRADE.

One Hundred Thousand HARDY ROSES

Low Budded and Tree Roses in best known varieties. Extra Hardy Rhododendrons, Hardy Azaleas, Strong Rooted Clematis. Standard and Dwarf Hydrangeas, Snowballs, Magnolias, Etc. . . . Notwithstanding the high tariff, I am in a position to supply the trade at very low prices.

SEND ME AT ONCE AN ESTIMATE YOUR WANTS.

C. H. JOOSTEN, Importer,

For the Boskoop-Holland Nursery Association,

193 GREENWICH ST.,

NEW YORK.

PEACH TREES. CURRANTS.

Do you Wish to Purchase Nursery Stock?

Try the KINSEY NURSERIES.

A long established firm, and see if the varieties you get do not prove true to name, and also whether you will not be entirely satisfied with your purchase in other respects.

WE GUARANTEE SATISFACTION TO OUR CUSTOMERS.

We grow a general line of nursery stock, but are especially long on *

Peach, Quince, Currants, (2 and 3 years old), Houghton Gooseberries, Rhubarb, Asparagus, Silver-Leaved Maple, Siberian Arborvitæ, Pyramidalis Arborvitæ and Balsam Fir.

We solicit correspondence.

SAMUEL KINSEY & CO., KINSEY, O.

We Put Up_

That Will Grow,

We make a specialty of putting up grafts for the wholesale trade, either Piece Root or Whole Root. Special prices on large early orders.

F.W. WATSON & CO.

Box 58.

TOPEKA, KAN.

P. J. BERCKMANS L. A. BERCKMANS. ESTABLISHED IN 1858.

R. C. BERCKMANS.

Fruitland Nurseries,

P. J. BERCKMANS, Prop.,

AUGUSTA.

Over One Acre under glass.

GA. 350 Acres in Nursery Stock.

Our Trees and Blants

Have been fully tested in every section of the United States during the past 40 years. The stock now growing is up to the usual past high grade, all of thrifty growth, no old rubbish, and free from scale or disease.

Fruit Department.

Apples, Cherries, Figs, Pears, (an extra fine lot of 100,000 standard 2 and 3 years, largely of Kieffer), Paper Shell Pecans, Plums (Japan) on Marianna, English Walnuts, Grape Vines, etc. Peach Trees in car load lots.

EVERBEARING PEACH

A valuable novelty now offered for the first time.

Ornamental Department.

150,000 Amoor Privet—Unsurpassed as an evergreen hedge plant. 50,000 Citrus Trifoliata—Japan Hardy Lemon; best defensive

hedge plant, stands 15 degrees below zero.

150,000 Roses—Field grown, including 30,000 Marchael Niel budded upon Manetti, 3 to 5 feet.

Two acres in Canna.

Azaleas (home grown).

Broad leaved Evergreens, etc., etc., Biota Aurea Nana, Cedrus Deodora, Retinosporas and other rare conifere.

Greenbouse Department.

100,000 Palms—(An especially fine lot of Latanias, Phonix; Pandanus and Cocos Weddelliana.)
Ficus, Decorative Plants, Crotons, Bedding Plants, 10,000 Cam-

phor Trees, Sub-Tropical fruits, etc.

Send for trade list and descriptive Catalogue.

Millions of Trees And Plants

are offered for sale by the

urseries

FOR FALL OF 1897 AND SPRING 1898.

600,000 Peach Trees-One year old from bud (embracing over 70 varieties.)

Strawberry Plants-From 30 acres set this spring (means millions of plants.)

25,000 Japan Plums-One year old from bud.

20,000 Grape Vines-One and two years old.

100,000 Asparagus—Conover's, Barr's and Palmetto, 2-year old. 20,000 Apple Trees-One and two years old.

2,000 Norway Maples.

4,000 Carolina Poplars.

Peach and Plum Buds ready June 20th.

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Having 30 acres in Peach Seedlings from Tennesee seed, planted fall 1896, will contract to grow June Budded Peach Trees at special low price. Correspondence solicited. Special inducements offered to purchasers in car load lots.

W. M. PETERS SONS. WESLEY, Worcester Co., MD.

When writing to Advertisers mention The National Nurseryman.

ESTABLISHED 1866 BY BLAIR BROS.

R. H. BLAIR & CO.

Office N. W. Cor. 11th and Walnut Sts., - Kansas City Mo.

Proprietors of the LEES SUMMIT NURSERIES

Apple and Peach, new and leading varieties by the car lots.
Russian and American Apricots and native Plums by oar lots.
Pears, Cherries and a general assortment of Small Fruits and Ornamentals.
We are not surpassed by any Nursery in the west, in number of acres or
quality of stock. We have the only practical box-clamp in use. Price reduced.

.PEAGN TREES . By the 100, 1000 or Carload.

150,000 of the best leading varieties, including Elberta, Greensboro, Sneed, Triumph and Prolific. Also about 50 of the best old kinds, grown from natural southern Tennessee and Georgia pits, free from disease and scale. 10000 Apples, Baldwin. Ben Davis, Wolf River, Gano, M. Blush, Red Astrachan, etc. 20000 Quince Meech's Champion, Orange, Rees' M. 100000 Asparagus, Barr's Mammoth, 2-3 vr. 150000 Blackberry Plants, Wilson, Jr., Early Harvest, Wilson E. 50000 Raspberry Plants, Miller's Red, Cuthbert, Turner. We are prepared to make low prices on the above.

Stauton B. Cole, Prop.

WEST JERSEY NURSERY CO., BRIDGETON, N. J.

P. SEBIRE & SONS, NURSERYMEN,

USSY, Calvados, France.

A general assortment of Fruit Tree Stocks, such as Apple, Pear, Myrobolan Plum, Mahaleb and Mazzard Cherry, Angers Quince, Small Evergreens, Forest Trees, Ornamental Shrubs, Roses, Etc. The largest stock in the country. Prices very low. Packing secured. Send for quotations before placing your orders elsewhere. Catalogue free. Agents for U. S. America and Canada.

C. C. ABEL & CO., P. O. Box 920, NEW YORK.

ALL OLD AND NEW VARIETIES.

Immense Stock, Warranted True.

QUALITY UNSURPASSED. Prices lower than ever before. Send list of wants for prices.

CURRANTS, GOOSEBERRIES,

SMALL FRUIT PLANTS. S. HUBBARD CO. FREDONIA, N. Y.

The Sparta Nurseries have to offer their Usual stock of dry baled Moss, both burlap and wired bales, and of the finest quality of the market. Also a full line of small fruit plants, high hush Cranberry, Juneberry and Huckelberry ncluded. Ask for prices and terms. Z. K. JEWETT & CO., Sparta, Wis-

IMPORTATIONS

From France, Holland and Japan now in cellar, and stock ready for Immediate Shipment.

ASSORTMENT VERY COMPLETE. ASK FOR SAMPLES AND PRICES.

HIRAM JONES,

Union County Nurseries,

ELIZABETH, N. J.

Urnamenta

FLOWERING SHRUBS in great variety.
and Price-List free.

Descriptive Catalogue

SAMUEL C. MOON, Morrisville, Bucks County, Pa.

still continues to be a subject of interest. Of no less importance to Nurserymen is their supply of labels for the coming season. Order early and avoid the rush. Samples and prices on application to

BENJAMIN CHASE,

15 Mill Street, Derry, N. H.

Apple Seedlings.

THE KLONDIKE . . .



I have an elegant stock of upland grown Apple Seedlings to offer for the coming season. Will make favorable prices on large or small lots to early buyers. Grades and prime condition on arrival guaranteed. Eighteen years experience in the business.

Address J. A. GAGE, Fairbury, Neb.

SHENANDOAH·NURSERY,

Largest stock in the West

PEAR, PLUM AND CHERRY STOCKS.

Osage Orange, Russian Mulberry and Forest SEEDLINGS. Nursery grown.

Apple, Pear, Plum, Peach and Cherry Trees by the car load. Acres of Shade and Ornamental Trees of all sizes.

Small Fruits, Ornamental Shrubs and Evergreens in quantity to suit the purchaser.

Scions, large surplus. Grafts of any style made to order.

Our stock has made a fine growth, and is free from all injurious insects, and includes all the leading varieties and will be graded up to the highest standard grades. By WHITE FOR PRICES.

D. S. LAKE, PROPRIETOR,

SHENANDOAH, IOWA.

TREES FOR IMMEDIATE SHIPMENT.

50,000 Elberta Peach Trees, 41 to 6 ft. Ps up.

10,000 Hill's Chili Peach Trees, 41 to 6 ft. 18 up.

100,000 Other Sorts, strong on, Reeves Favorite, Globe, Chair's Choice, Triumph and Crawford.

10,000 Japan and European Plums, mostly Willard, Abundance, Burbank, Wickson, German Prune and Lincoln, on Plum Root.

50,000 Marianna Plum Seedlings, 1 in. up, home grown, and free from those troublesome root galls or knots.

PRICES UPON APPLICATION, ALSO SAMPLES.

J. G. PATTERSON & SONS, STEWARTSTOWN,

FLEMER & FELMLY, SPRINGFIELD, N. J.

OUR SPECIALTIES PEACH AND PLUM.

JAPAN WALNUT, SHADE TREES, CAL. PRIVET and SHRUBBERY. STOCK GOOD AND PRICES RIGHT.

EVAVASSEUR

(Calvados) AND ORLEANS, FRANCE

Largest Growers and Exporters of all kinds of

Nursery Stocks to the United States.

Best Grading, Quality, and Packing. Send your List of Wants for Special Prices to

HERMAN BERKHAN, Sole Agent, 39 and 41 Cortland Street, NEW YORK. Sole Agent for the United States and Canada.

BREWER & STANNARD.

Ottawa Star Nurseries.

OTTAWA, KANSAS.

Offer a full and complete stock of FRUIT and ORNAMENTAL TREES, and call your attention especially to

APPLE-Well rooted; good assortment in all grades.

PEAR-Standard and Dwarf, 2-years; good assortment.

PLUM ON PLUM-One and 2-years; American, Japan and European sorts.

PEACH-A fine lot and good assortment.

APRICOTS-Russian and American sorts.

GOOSEBERRIES—2-year; strong plants, mostly Houghton and Down-

CURRANTS-One and 2-years; good assortment, very fine.

FOREST SEEDLINGS—Russian Mulberry, Maple, Box Elder, Black Locust, Ash, Elm, Catalpa and Osage Hedge.

APPLE SEEDLINGS—All grades, fine healthy plants.

ORNAMENTAL TREES-Strong on Mountain Ash and Maple, 5 to 6 and 6 to 8 feet.

We have also a good assortment of Ornamental Shrubs. Roses and Vines.

For a more complete list we refer you to our semi-annual trade list and solicit correspondence.

PETERS & SKINNER,

North Topeka, Kansas.

CAPITAL NURSERIES.

APPLE SEEDLING

Japan Pear Seedling, Russian Mulberry, Box Elder, Silver Maple, Elm, and Osage Seedling.

APPLE, PEACH, CHERRY, TREES.

Keiffer, Garber and Koonce Pear.

BECHTEL'S DOUBLE FLOWERING CRAB.

Remember we are extensive growers of APPLE TREES and APPLE SEEDLING, and can supply in large lots.

PETERS & SKINNER, * NORTH TOPEKA, KANSAS.

Japan Plums! Japan Plums!

Abundance. Burbank. Red June. Wickson, Hale, Etc., Etc.

To be Shipped from Philadelphia, Pa., during March and April.

Our stock is packed at the home nursery in January and shipped to Philadelphia where it is held in cold storage until our customers are ready to have same forwarded to them in the spring. We successfully sold eight carloads last season in this manner, all of which gave perfect satisfaction.

All orders should be received at the home nursery by February 1st, 1898.

Order early while our stock is complete, and you can get what you want in both varieties and sizes. We also offer a full line of Peaches in all the leading varieties.

Handsome Wholesale and Retail Catalogues. Write for Copies.

Address all correspondence to

The Griffing Bros. Co.,

POMONA NURSERIES.

MACCLENNY. FLORIDA.

Certificate from Entomologist.



Kieffer, Garber, &c. Cherry, Apple.

And a general line of well grown stock. Quality-The True Test of Price

Supplies Tying Cordage, Sewing Twine, Burlans, Etc. Manufacturers Agt. for

WRITE MS

And find out our special inducements.

SEND LIST OF WANTS.

Old Dominion Nurseries.

We Offer for Spring:

Japan Pear Seedlings, 1 year. 20,000 ¼ up. Extra fine. 10,000 Å to ¼. 10,000 Å to Å.

100,000 Peach Trees.
•100,000 Peach Seedlings from Natural Pits.
Natural Peach Pits.

A general line of Nursery Stock.

Wanted-Apple Seedlings in Exchange.

W. T. HOOD & CO.. - - RICHMOND. Va.

All on Own Roots.

Our Own Growing.

A splendid list of Hybrid Perpetuals, Mosses and Climbers, field grown, dormant, 2 years.

A superb list of Hybrid Perpetuals, Hybrid Teas and Everblooming, in 4 inch pots. List of varieties and prices on application.

P. O. Box 625. Established 1852. PHOENIX NURSERY CO. BLOOMINGTON, ILLINOIS.

THE SEDCWICK NURSERY CO.

SEDGWICK, KANSAS.

(Successor to CHAUNCEY A. SEAMAN,)

Offer SHADE TREES in car lots at bottom prices.

High Grade Nursery Stock for Spring of '98.

Apples, Standard and Dwarf Pears, Cherries, Plums, Quinces, Cut-Leaf Weeping Birch, Purple-Leaf Birch, Silver Maple, Elms, Catalpa, Black Walnut and Butternut.

Write for Special Prices.

JAY WOOD, KNOWLESVILLE, N.Y.

Nurscry Stocks of all kinds and Varieties,

Such as Maples, Alder, Althea, Aucuba, White Birch, Catalpa, Honeysuckies, Nuts, Japan Quince. Deutzia. Ash, Broom, Walnut, Ligustrum, Philadelphia, Acacia, Currants, Willows, Sambucus, Spirea, Lilacs, Tamarix, Viburnum, Weigelia, and all sorts of Fruit Tree Stocks. all 1, 2 and 3 years old or stronger plants, now offered at very low prices by

TRANSON BROTHERS NURSERIES. BARBIER BROS. & SONS, Succrs.,

ORLEANS, FRANCE. For Price List Apply to

KNAUTH, NACHOD & KUHNE, 13 William St., NEW YORK.

NURSERYMEN Should read this, I have just

what you want. Always in stock, a nice clean article of dry baled SPHAGNUM MOSS. No delay or freight charges from branch roads. Orders for less than large car load shipped the first day received.

L. G. THOMPSON.

Weite me for easy terms and prices.

TOMAH, WIS.

PARAFFINE PAPER

For Nurserymen's use. Write for prices and samples stating sizes required.

R, M. MYERS & CO., Wholesale Paper Dealers, Rochester, N. Y.

Honey Locust Hedge, Most Ornamental for Parks and Lawns.

Strong and handsome for farm fencing. Hardy for cold climates. Easy seller at good profits. Put your agents on to it. Plates of this beautiful Hedge to sell from, furnished cheap. Osage Osange Hedge and plates also. WRITE FOR PRICES AND TRY THEM.

HAVANA, ILLS. A. E. WINDSOR. ī._

SPECIALTIES for '97-'98.

POMONA CURRANT: 1 and 2 yrs. No. 1. 50,000 POMONA CURRANT cuttings.

LOUDON RASPBERRIES, suckers and transplants.

MUNGER, the new, large BLACK CAP RASPBERRY.

OHMER and ELDORADO BLACKBERRIES.

Ornamental Trees and Shrubs. Pæonias, Hardy Herbaceous Plants, &c.

INSPECTION OF STOCK DESIRED.

E, Y. TEAS. IRVINGTON, IND, (near Indianapolis).

LBS. ARAUCARIA IMBRICATA SEED. 400

Very fine seeds. New crop. 50 lbs. \$80.00, 100 lbs. \$50.00 for cash to

LETELLIER, SON & CO,

CAEN (CALVADOS), PRANCE.

C. H. JOOSTEN, 193 GREENWICH ST., NEW YORK CITY.

OLUMBIAN RASPBERRY SETS.

8000 quarts per acre. A fine stock of plants. Conrath, Cuthbert and other stock.

T. G. ASHMEAD, Nursery, Williamson, N. Y.

Apple, Peach, Standard Pears, Plum Apricots. Grapes, Shade Trees,

Evergreens.

Shrubs.

HEADQUARTERS FOR NURSERY STOCK.

Baltimore and Richmond Nurseries, BALTIMORE, MD.

FRANKLIN DAVIS NURSERY CO.

50 YEARS. Tennessee Natural Peach Pits and selected Smock. 1000 ACRES. LOW PRICES ON PEACH TREES FOR EARLY ORDERS.

Nut Trees Japan Pear Seedlings, Gooseberries. Roses, Raffla General Supplies, &c., &c., &c.

Strawberries.

One Thing at a Time

is said to be a good way to advertise a specialty.

We have in stock and wish to call your attention to

87,000 JAPAN PLUMS

Divided as Follows:

ABUNDANCE, -		-		-	15,000
BABCOCK, -	-		_		2,500
BAILEY, -		-		-	1,000
BERCKMANS,	-		-		9,500
BURBANK		-		-	12,000
CHABOT, -	-		-		500
CHASE, -		-		-	2,000
HALE, -	-		-		4,000
KELSEY, -		-		-	9,000
MIKADO, -	-		-		300
NORMAND, -		-		-	300
OGON, -	-		-		1,000
RED JUNE, -		-		-	8,200
RED NAGATE.	-		٠-		7,500
SATSUMA, -		-		-	3,000
WHITE KELSEY,	-		-		300
WICKSON,		-		-	6,000
WILLARD, -	-		-		4,500
YEDDO, -		-		-	400

The only reason that we don't mention Peaches, Peurs, Japan Persimmons, the hardy Citrus Trifoliata and Oranges and Kumquats grafted on it: as well as other things, that we have in large supply, is because we wish to stick to our text of "One Thing at a Time."

Add them up, 87,000

We believe that ours is the finest stock of Japan Plums on the market to day.

We say this after having grown them in large quantities for many years—they are all on Marianna plum stocks.

Sizes run from 7-16 to 3-4 inch and over in caliper, and in height from 3 to 8 feet. All the larger sizes are heavily branched.

In requesting quotations please be as definite as possible as to numbers, varieties and sizes wanted. Also as to time of shipment.

Prices—We do not quote them here, but will make them right on a definite list, as per above.

Please note our large stock of the standard kinds, and also of the new varieties. Hale and Wickson.

Hale, judging from our sixteen years experience with Plums, is the strongest grower ever placed on the market.

Amongst the newest new kinds we can supply, are a few each of White Kelsey, Yeddo and Mikado. We have not fruited them yet.

Red June and Red Nagate are now generally considered to be identical, and we concur in this belief. We continue to list them separately, however, each as originally introduced.

Freedom from Insects—All of our stock is perfectly clean. Certificate of inspection to this effect will accompany each shipment.

Nomenclature of everything offered is correct and varieties are guaranteed true.

Samples of standard sorts will be furnished on application. If you see the samples you'll want the trees.

Orders placed now can be booked to be shipped direct from here, or go into cold storage in New York and be re-shipped later.

Let us hear from you in relation to any part of the 87,000 Plums, and—incidentally—to other things.

Glen St. Mary Nurseries,

Glen St. Mary, Florida.

G. L. TABER, Proprietor.

PEACH TREES IN SURPLUS.



You had better order them now or you will be too late to catch them.



	5 to 6 ft.	4 to 5 ft.	3 to 4 ft.	2 to 3 ft.	1 to 2 ft.		5 to 6 ft.	4 to 5 ft.	8 to 4 ft.	2 to 3 ft.	1 to 2 ft
Amsden June		100	1,000	1.000	500	Moore's Favorite	5.000	5,000	5,000	3,000	1,000
Bray's R. Ripe	3,000	10,000	10,000	3,000	1,000	McIntoch	200	200	100		
Crawford's Late	5,000	18,000	18.000	20,000	500	Morris' White	1,000	2,000	1,000	500	300
Champion			5.000	300	300	Mt. Rose		1,000	5,000	2,000	1,000
Chair's Choice	1,000	30,000	8,000	1,000	500	New Prolific	1.000	2,000	500	1,000	
Crosby		1.000	5,000	2,000	1.000	Old Mixon Free	5,000	9,000	5,000	5,000	1,000
Elberta	10,000	10,000	10,000	5,000	2,000	Reeve's Favorite	10,000	10,000	1,000	3544 4	1.02.1
Early Rivers		1,000	1,000	1,000	500	Stephens R. Ripe	8,000	5,000	3,000	2,000	300
Fox Seedling	5,000	5,000	5,000	8,000	1.000	Smock	5,000	4,000	5,000	5,000	2,000
Ford's L. White		1,000	500	300		Snow's Orange		8,000	2,000	1,000	500
Geary's Holden		10,000	5,000	8,000	1,000	Stump the World	5,000	9,000	5,000	4,000	1,000
Greensboro		2,000	1,000	500	300	Sneed		2,000	1,000	1,000	200
Gold Drop		3.000	2,000	1.000	500	Triumph		1.000	4,000	2,000	500
Globe	1,000	2,000	5,000	8,000	1,000	Troth's Early	500	1.000	500	500	200
Hill's Chili		100	100	200	100	Wonderful	1.000	2,000	2,000	300	1.000
Hale's Early			500	500	200	Wheatland		1,000	1,000	500	300
Kalamazoo		100000000	100	300	1 7 7 7 7	Wager		100	200	300	100
Lemon Free		1,500	3,000	1,000	500	Walker's G. Free.	300	2,000	2.000	1.000	800
Lewis	1,000	1,000	1,000	300	300	Yellow St. John		1,000	3,000	2,000	500

The above is a rough estimate of what are not sold; actual count will be made later. We also have a few hundred each of several other varieties not in the above list. **Peach** are getting **scarcer** and now is the time to place your orders.

PLUM ON PEACH—Good assortment of varieties and the price is right.
PLUM ON PLUM—Abundance and Burbank.



STAR

is large and handsome in appearance, measuring 6 to 7 inches in circumference; it is as near perfect in shape as possible, resembling Gandy. One of the best we have eaten. It matures all its berries in a dry season, possessing the greatest drought-resisting qualities of any berry. The plant is a vigorous and strong grower; second to ripeu. APPLE TREES-2-year, fine. General assortment.

CURRANTS—2-year. North Star, Cherry, Red Dutch and Victoria.

ASPARAGUS ROOTS—Columbian, White, Donald's Elmira, Palmetto, Conover's and Barr's. 2-year and 1-year roots.

STRAWBERRY PLANTS-63 new and standard varieties, Lomprising the best varieties grown. Principally Glen Mary, Wm. Belt, Clyde and Brandywine.



Wholesale list now ready, also descriptive catalogue and retail prices.

HARRISONS' NURSERIES,

Send your list of wants at once.

BERLIN, MD.

